

THE SECRETS OF ECONOMIC INDICATORS

Hidden Clues to Future Economic Trends and Investment Opportunities

THIRD EDITION



"Bernard Baumohl brilliantly, clearly, and yes, entertainingly, describes what every investor and business partner should know about economic indicators. This is an extraordinary and insightful work."

—Robert Hormats,
Former Vice-Chairman,
Goldman Sachs
(International)

BERNARD BAUMOHL

“Bernie Baumohl has written a must-read educational and reference book that every individual investor will find indispensable for watching, monitoring, and interpreting the markets. The daily flow of high-frequency economic indicators is the stuff that makes financial markets move and that can signal the big trends that make or break investor portfolios. Most important, Bernie’s long experience in reporting economics for *Time Magazine* helps make the ‘dismal science’ lively and interesting.”

—**Allen Sinai**, CEO and Chief Global Economist, Decision Economics, Inc.

“This is the most up-to-date guide to economic indicators and their importance to financial markets in print. The coverage of less-reported indicators, especially those from non-government sources, is hard to find elsewhere. The inclusion of the actual published tables helps the newer student of the markets find the data in the public release. For anyone trying to follow the economic data, this should be next to your computer so that you can understand and find the data on the Internet.”

—**David Wyss**, Former Chief Economist, Standard and Poor’s

“Bernie Baumohl has accomplished something of real value in *The Secrets of Economic Indicators*. He has successfully demystified the world of financial and economic news that bombards us in our daily lives. Both professional investors and casual observers of the world of finance and economics will be grateful for what he has done. The constant stream of heretofore bewildering news from the world of business and finance can now be easily understood. Every businessperson or investor should keep a copy of Baumohl’s book close at hand as he or she catches up on the business, stock market, and economic events of the day. It is great, at long last, to have someone who has eliminated what may have been so perplexing to so many and to have done so with such remarkable clarity.”

—**Hugh Johnson**, Chairman and Chief Investment Officer of Hugh Johnson Advisors

“Economic statistics, employment data, Federal Reserve surveys. Think they are boring? Think again! They can drive markets into a frenzy, causing billions of dollars to be made or lost in an instant. Bernie Baumohl brilliantly, clearly, and, yes, entertainingly describes what every investor and business manager should know about economic indicators: which ones move markets, how to interpret them, and how to use them to spot and capitalize on future economic trends. *The Secrets of Economic Indicators* is an extraordinary and insightful work—an enormously important contribution to the body of financial literature. Read it and then keep it on your desk. Consult it the next time you are deluged with a flurry of economic statistics. Your understanding certainly will be enhanced, and your portfolio will likely be as well.”

—**Robert Hormats**, Former Vice Chairman, Goldman Sachs (International)

“If you want to make money investing, this is an essential trend-tracking tool that will help get you to the bank. This book is the real deal. Bernard Baumohl miraculously breathes life into deadly economic indicators and boring statistics...he knows what he’s talking about, and his expertise proves it.”

—**Gerald Celente**, Founder, The Trends Research Institute

“Baumohl has a gift for taking a complicated subject and allowing it to read like a fast-moving novel. My confidence in reading and understanding economic indicators as portrayed in this book made me realize the possibilities this information holds for improving my personal net worth as well as navigating my business toward higher profits. I recommend this book if you care about your future finances.”

—**Morris E. Lasky**, CEO, Lodging Unlimited, Inc.; has managed and consulted on more than \$7 billion in problem hotel assets; Chairman, Lodging Conference; Chairman, International Hotel Conference

“I find Baumohl’s writing fascinating. In addition to the famous indicators, he includes many that I hadn’t heard of. I really appreciate that he tells you exactly where to find each indicator on the Web. Just about anyone who’s serious about understanding which way the economy is headed will want to read this book. It could be a classic.”

—**Harry Domash**, Columnist for MSN Money and Publisher, Winning Investing Newsletter

“I think this is an excellent book. It’s well written, accessible to a variety of readers, deals with an interesting and important subject, and covers the topic well. It deserves to get a lot of notice and use.”

—**D. Quinn Mills**, Alfred J. Weatherhead, Jr., Professor Emeritus, Harvard Business School

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INDICATORS

THIRD EDITION

BERNARD BAUMOHL

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*To my mother, Eva Baumohl, a Holocaust survivor;
and in memory of my father, Naftali Baumohl*

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Acknowledgments

One gratification that comes with completing a book is that I now get a chance to thank those whom I relied on for advice, contacts, and support along the way. To be sure, there are many people to thank—so many, in fact, that mentioning all their names would greatly lengthen this book. Still, there are some who deserve special mention because they were so giving of their time and their counsel.

I must begin by breaking with tradition. It is customary in these pages to reserve thanking your family until the end. However, that order makes little sense to me in this case. My family deserves top billing here because I relied on their support the most these past two years. From day one I expropriated a room in our home and turned it into an impassable maze of documents, newspapers, and boxes. Indeed, we can no longer recall the color of the carpet underneath. Moreover, during the past two years, when I was writing or traveling, the burden of overseeing family and household matters fell largely on my wife, Debbie. She was the one who got our three girls off to school every morning, prepared their lunches, helped with their homework, chauffeured them to playdates, met with teachers, accompanied them to doctor checkups, got them ready for bed, paid the bills, and so much more. Without a doubt, this book would not have been possible without her support and love. Nor will I ever forget how my daughters, Ashley, Rachel, and Nicole, tried to help me in the first days by printing “Do not disturb” signs and taping them outside my door. From beginning to end, my family provided the best home environment for me to carry out this project, and for that I will always be grateful.

I am also indebted to Carolina Buia (writer and television journalist) and Marc Lieberman (NYU economics professor). Both listened to my concept for this book and read its initial treatment, and opened some very important doors to the publishing world. I also benefited greatly from the experience and wisdom of others, including Adam Cohen (the *New York Times*), Jordan Goodman (personal finance author), Dan Kadlec (*TIME*), Jeffrey Liebenson (KMZ Rosenman), Larry Moran (Bureau of Economic Analysis, Commerce Department), Michael Panzner (HSBC Securities), David Skidmore (Federal Reserve Board), Sue Hensley and Gary Steinberg (Department of Labor), Sam Slater (Fidelity International), Chris Williamson (Markit), Joel Prakken and Ben Herzon (Macroeconomic Advisers, LLC), Douglas Offer (ADP, Inc.), James Pedderson (Challenger, Gray & Christmas), Frank Streshley (Nevada Gaming Control Board) Caroline Zimmerman (National Association of Credit Management), Nell Callahan (Association of American Railroads), and Frank Cirimele (Cass Information Systems).

There are two people I'd like to name who were not involved in the preparation of this book, but were nevertheless enormously important to me because I learned so much from them about economic journalism. They are Bill Saporito, *TIME*'s exceptionally gifted business editor, and the late George Church (*TIME* and the *Wall Street Journal*), who was a brilliant writer on

all topics, but none more so than on economics. I view the work of both of them as the benchmark in excellent writing and editing.

Finally, one of the luckiest things to have happened to me was to work with Jim Boyd, my editor at Pearson Education. As with the first and second editions, Jim made the process of orchestrating this third edition so much easier with his intelligent guidance and sense of humor. It has always been a privilege working with him. I am also deeply indebted to Betsy Harris, the project editor at Pearson Education, who supervised the production of this rather complicated third edition with great skill and prodigious patience.

Let me make one last note. Though I made every effort to make sure this book is accurate, I alone am responsible for any follies that might have slipped through.

About the Author

Bernard Baumohl, Chief Global Economist at The Economic Outlook Group, oversees its forecasts of economic trends and geopolitical risks. He also conducts seminars on how corporate leaders and investors can use forward-looking economic indicators to stay ahead of the business cycle. He has lectured on economics at New York University, Duke University, and the New York Institute of Finance.

Baumohl was also an award-winning *TIME* magazine economics reporter who covered Wall Street, the Federal Reserve, and the White House. As an economist for European American Bank, he conducted research on the global economy. He also served as an analyst with the Council on Foreign Relations. Baumohl has a Master's degree in international affairs and economics from Columbia University.

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What's New in the Third Edition?

When it comes to spicing up a subject like economic indicators, no one described it more colorfully than the late Business Professor Aaron Levenstein: “Statistics are like a bikini. What they reveal is suggestive, but what they conceal is vital.”

That intriguing analogy sums up fairly well the challenge of this book. From the beginning, I had two goals in mind. The first is to make readers more comfortable working with economic indicators. Why are they important to follow? Where can they be found on the Internet? And how can these barometers on the economy improve the decision-making process for investors and business leaders? The second objective is to find out what they conceal about the future. How does one uncover the hidden clues in these weekly and monthly reports that give us fresh insights on the outlook for consumer and business spending, jobs, inflation, and interest rates?

Both goals have been the primary mission of this book. While this mission has always been clear, the task of keeping a book on economic indicators properly updated and useful has proven to be a daunting task. Just look at what has transpired in just the past few years. The U.S. economy suffered the most devastating recession since the Great Depression. Overseas, the spotlight has shifted to Europe, where a sovereign debt crisis has gripped the region and even threatens to affect many other economies outside that continent. Then there is China, the second-largest economy, which is having growing pains of its own, worrying many nations that depend on the Chinese market. Equally stunning is that many long-held beliefs by economists and investors either have been ditched or are being viewed with fresh skepticism. For instance, many people now question the safety of holding foreign government bonds, the wisdom of owning a home as a secure investment, and even the effectiveness of monetary policy by the Federal Reserve. It is absolutely remarkable how much has changed since the second edition of this book.

Adding yet another layer of complexity has been the cascade of geopolitical shocks that have lately erupted across North Africa, the Middle East, and parts of Asia. Worries about disruptions in oil supplies, U.S. military engagements in the Persian Gulf, and terrorists acquiring weapons of mass destruction seem to play a larger role in the dialogue about the economic outlook.

All this upheaval has immensely complicated both forecasting and policymaking. American business leaders, for example, are moving much more cautiously when it comes to hiring workers or giving the green light to major capital spending projects. Investors, faced with an unstable global financial and political environment, continue to toil over how to protect their money, or the funds of their clients—yet still earn a reasonable return. Policymakers in Washington are struggling more than ever to come up with new strategies that would promote faster growth without planting the seeds of a new crisis down the road, like inflation or another crippling debt mess.

The one constant throughout this turmoil has been the role of economic indicators. These metrics continue to serve as critical optics that tell us how the economy is performing and even where it is likely heading. But to keep those optics polished and precise demands constant fine-tuning too. Some of the metrics noted in earlier editions no longer exist. Others have undergone changes in methodology that should improve their predictive value. Finally, several promising new economic indicators have been introduced in this edition that I believe warrant the attention of readers. The criteria they all must meet is simple: Do these indicators help business managers, investors, and policymakers better understand the economic outlook?

In addition, some key changes were made in Chapter 2 on the nature of the business cycle itself and how it can affect the price of commodities, stocks, and bonds during an upswing and downswing. Though much has been said on the events that led up to the 2008–09 Great Recession, I added my own brief history of how that calamity unfolded.

Several new indicators were introduced in Chapter 3. We start with the hot topic of the U.S. job market by adding releases such as the Job Openings and Labor Turnover (JOLT) report, a revamped Help-Wanted Online Advertising publication by the Conference Board, and weekly reports from the Federal Reserve of bank loans to consumers and businesses, and even introduced some novel ways to gauge consumer confidence like tracking Las Vegas Gaming Revenues. Other new indicators focus on how busy trucks and railroads are carrying goods around the country. I have also highlighted a promising metric from the folks at Google, called Google Insights.

Chapter 4 deals with the international economy, and it has been expanded. A number of indicators underwent revisions, and I have also highlighted several new foreign economic measures. Both Chapters 5 and 6 were totally revisited to make sure that all Web sites are valid and to also insert new ones—including a list of free cellphone apps now available that help you monitor the latest economic news and indicators wherever you are.

As for the charts displayed in this edition, you will see they refer to different years. That's because I chose not to redo those charts that appear essentially the same. Only those charts that were substantially reconfigured, by either the government or trade groups, were replaced for this edition. So at times you will see tables with years that appear current next to others that are several years old. Remember, the point of these charts is to familiarize readers with how the data is presented in these economic reports. That familiarity will come in handy when readers go online to examine the very latest release.

Finally, I have to end by sharing a deep concern with readers. As pressure builds on Washington to cut government spending, there is a growing danger that the agencies who produce so many vital economic indicators (such as Bureau of Labor Statistics, Bureau of Economic Analysis, and the Census department) will be in the cross hairs of budget cutters. Any action that deprives these agencies of the resources they need to properly collect information on the economy is foolhardy and will ultimately backfire. When CEOs and investors have a better grasp of the economic outlook, the decision-making process

becomes more productive and there are typically fewer miscalculations. That, in turn, paves the way for a stronger, more sustainable period of economic growth. However, any attempt to slash the budgets of the statistical agencies risks undermining the integrity of economic indicators, and that will weaken their value. In that case everyone loses—consumers, investors, business managers, and ultimately policymakers in Washington, too. The benefit of having access to the best set of economic statistics in the world easily outweighs the cost savings the government may achieve. One can only hope that wisdom prevails where all agree that detailed and accurate federal economic statistics are absolutely indispensable to the proper function and growth of the U.S. economy.

Bernard Baumohl

May 2012

Princeton, New Jersey

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Preface

“You want to write a book about *what? Economic indicators?* How did you come up with this death wish?”

That was the first response I got after telling a colleague at *TIME* what I was up to. She, too, was a financial journalist, so I expected some sage advice and support. We continued our conversation over lunch. “Did I hear you correctly?” she asked, still incredulous. “We *are* talking about your writing a book on economic statistics, right?” Yes, I nodded, and then went on to explain why this idea had been percolating in my mind for months. I knew it was a tough topic to write about, but I was ready to take it on. She listened patiently to my reasoning and then let loose a barrage of suggestions.

“First, let’s get real here. To make this work, a book on economic indicators has to be sexy. Edgy. Really funny. Get in some lurid details about consumer prices. Tell some lascivious tales about industrial production and capacity utilization. Toss in lots of jokes on durable goods orders. Then there’s the humor that just springs at you when writing about foreign trade and non-farm productivity. And...hey, shouldn’t you be taking notes on all this?”

The appetite I came to the restaurant with was suddenly gone. Not because she was poking fun at the idea. Just the opposite. Beneath all that sarcasm was a genuine message that I knew had to be taken seriously. The subject of economic indicators can be lethally boring because of its impenetrable jargon and reliance on tedious statistics. I realized from that brutal lunch encounter that my biggest challenge in writing this book was not simply to identify and describe the world’s most influential economic indicators, but to make the whole subject approachable and even—dare I say it—interesting. My purpose from the start was to reach out to those who had little or no experience navigating the maze of key economic statistics and to dispel the notion that you need an economics degree, an MBA, or a CPA to understand what these indicators tell us about the economy and how we can use them to make better investment and business decisions.

The broader question, of course, is why do this book at all? Why should anyone outside the economics profession even care about economic indicators? Why is it important for the ordinary person to know how many new homes are under construction, whether factories produced more or fewer goods in the latest month, or whether executives charged with buying raw material for their companies are increasing their orders or cutting back? Why bother with any of this stuff? Why not let the experts sort out the mish-mash of economic numbers and tell us what it means?

Indeed, most Americans have little desire to follow such esoteric measures. They are content to rely on the insights of their investment advisers or hear television pundits muse endlessly about the economy and the financial markets. Other than that, few show interest

in probing any further. However, that attitude changed abruptly after Americans confronted two bone-chilling shocks in the first years of the new century. The first was the collapse of the dot.com bubble in 2000, which happened after individual investors and professional money managers made a mad rush to acquire Internet-related stocks—even though most of these companies never earned a single penny. That lemming-like stampede into technology and software equities catapulted prices to unsupportable levels, which eventually set the stage for a severe implosion in stock market values that resulted in \$2 trillion in losses.

But it was the second shock that became truly historic in the devastation it wrought worldwide. The 2008–09 recession brought the U.S. and international economy to its knees. It was triggered by a voracious addiction to leverage and aggravated by the flawed notion that real estate values will always move in one direction: up. The reckless use of debt and blind worship of real estate eventually so mutilated the workings of the economy that they produced a horrific crash that rivaled the Great Depression. (A brief outline on the events that led to the “Great Recession of 2008–09” can be found at the end of Chapter 2, “A Beginner’s Guide: Understanding the Lingo.”)

The two shocks traumatized many Americans. Investors were sickened and angered by the resulting loss of tens of trillions of dollars in personal wealth. It made no difference whether the money was in one’s personal savings, a 401(k), a pension, or real estate, like a home. No investment escaped unscathed. The decimation was universal, and for Americans it became a painful and sobering reminder of just how much one’s financial well-being is staked to the risky business of stocks, bonds, and property.

Perhaps the most troubling revelation to come out of this awful experience was how utterly dependent ordinary investors had allowed themselves to become on so-called “experts” for virtually all investment advice. It turned out that these very “experts”—portfolio managers and longtime professional market watchers—failed miserably in their responsibility to help protect the assets and curb the losses of their investing clients. Worse still, investors became justifiably furious when they realized they were also being lied to by some of the companies they had invested in and even by the brokerage firms with whom they had entrusted their hard-earned money.

The result was predictable. Disillusioned by the ineffectual advice of their brokers, the seemingly endless revelations of corporate fraud, Ponzi schemes, and the biased research reports put out by some well-known Wall Street firms, a growing number of Americans have since decided to venture into the investment world by themselves, trusting their own instincts rather than someone else’s. These investors are emboldened by the fact that they can now instantaneously access a mind-boggling assortment of information resources from home and work, day or night. The profusion of laptops, tablets, smartphones, and Wi-Fi pockets means they can even access financial and economic news while sunning on a remote island beach. In addition, Americans now have more investment vehicles to choose from. They can buy individual stocks or purchase an Exchange

Traded Fund (ETF), which allows anyone to buy a basket of U.S. or international stocks, much like a mutual fund, except that they have the right to sell them anytime, which cannot be done easily with a mutual fund. The popularity of ETFs has exploded in recent years because they give investors extraordinary flexibility (with access to stocks, bonds, currencies, futures, and commodities) and come with lower fees. How do the economic indicators fit into all this? Why should investors—or business executives, entrepreneurs, and ordinary workers—pay particular attention to these reports? Because they are the vital barometers that tell us what the economy is up to and, more important, in what direction it is likely to go in the future. These indicators describe the economic backdrop that will ultimately affect corporate earnings, interest rates, and inflation. They can also influence the future cost of financing a car or house, the security of our jobs, and our overall standard of living. Even business leaders are under pressure to monitor economic indicators more closely. Knowledge of economic conditions in the U.S. enables CEOs to make decisions with greater confidence about whether to buy more equipment, increase inventories, hire workers, or raise fresh capital. In addition, for firms competing in the global marketplace, international economic indicators are of particular importance, because they allow executives to assess business opportunities abroad.

But how do you begin to evaluate these economic reports? There is such a bewildering variety of economic statistics in the public domain that following them all can be harmful to your health. New sets of economic numbers come out every day, week, month, and quarter, and they often tell conflicting stories about what's going on in the U.S. In addition, stocks, bonds, and currencies react differently to economic indicators. Some economic news can cause tremors in the financial markets, while other news produces no reaction at all. Many indicators have no forecasting value whatsoever, yet others have established an impressive track record of being able to predict how the economy will behave during the next 12 months.

Moreover, different indicators originate from different sources. The U.S. government pumps out loads of economic data through agencies such as the Commerce Department's Bureau of Economic Analysis and the Federal Reserve Board. However, numerous private groups also release market-moving indicators. One of the best known is the Conference Board, known for its Consumer Confidence and Leading Economic Indicators series. In addition, the National Association of Realtors reports monthly data on existing home sales, and Challenger, Gray & Christmas, the outplacement firm, tallies the number of announced corporate layoffs and hiring plans each month. Note that these sources gauge just U.S. economic activity. When you look at the assortment of economic indicators released by other countries, the quantity of information available becomes mind-numbing.

Clearly there is too much economic information out there, and not all of it is useful. So what do you focus on? How does an investor, a CEO, or even an economist decide which of the many gauges of business activity are worth tracking? Which indicators pack the greatest wallop in the financial markets? Which ones are known for doing the best job

of predicting where the economy is heading? These are the key questions I try to answer in this book.

The book is organized in a way that I believe makes the most sense for you. Chapter 1, “The Lock-Up,” begins with the drama that typically surrounds the release of a sensitive economic indicator. After the embargo is lifted and the economic report flashes across computer screens around the world, reaction to the latest news by global money markets can affect the financial well-being of every American.

One cannot successfully write a book on economic indicators without at least gently introducing a few basic economic terms. In Chapter 2, “A Beginner’s Guide: Understanding the Lingo,” I try to define as painlessly as possible those key phrases and concepts that are essential to know when reading about economic indicators. The chapter ends with a brief account of what led to the calamitous 2008–2009 recession.

The essence of the book begins with Chapter 3, “The Most Influential U.S. Economic Indicators.” Here, all the major U.S. economic indicators are evaluated, and each one is discussed in a format designed to answer these vital questions:

- Why is this indicator important to know?
- How is it computed? (Sure, not everyone will want to get into the nitty-gritty details of how economic indicators are put together. Nevertheless, by understanding the underlying methodology of how they are calculated, one is better able to appreciate the usefulness of these indicators, as well as their shortcomings.)
- What does the economic indicator have to say about the future? The purpose of this question is twofold. First, you are shown how to interpret the official report and its accompanying tables. Particular emphasis is placed on the most interesting and useful data points in the economic release. Second, guidance is given on how to locate valuable clues in the tables that might offer you a heads up on how the economy might perform in the months ahead. To make this task easier, copies of actual releases are included with most indicators covered in this book. Virtually all the economic releases mentioned are available on the Internet free. You can read them on their respective Web sites or download the releases as PDF files. (Note that Internet addresses for the economic indicators are included in this book.)
- How might bonds, stocks, and the dollar react to the latest economic reports? The financial markets often respond differently to economic data. Much depends on the specific indicator released, how timely it is, whether investors are surprised by the news, and what else is going on in the economy at the time.

Chapter 4, “International Economic Indicators: Why Are They So Important?” examines the most influential foreign economic indicators. Because the U.S. economy and its financial markets are closely integrated with the rest of the world, one can no longer afford to ignore measures of economic activity in other countries. If the economies of other nations are growing, they’ll buy more from U.S. producers. On the other hand, poor

growth abroad bodes ill for many large U.S. companies and their employees. In addition, American investors interested in buying foreign stocks and bonds for their own portfolios should track foreign economic indicators to identify those countries and regions in the world that might offer the most attractive returns.

Chapter 5, “Best Web Sites for U.S. Economic Indicators,” is evidence of how much times have changed. Not too long ago, anyone interested in obtaining a set of current and historical economic statistics had to purchase them from a private number-crunching firm. The more stats you wanted, the more costly it was. Today, nearly all this data can be accessed instantly on the Internet, free! The democratization of economic statistics gives everyone, from the experienced professional to the weekend investor, the opportunity to download, read, and analyze economic information. In this chapter, I’ve assembled what I think are among the best and most authoritative Web sites for economic data. You will also find a list of cellphone apps that can keep you informed of the latest economic reports no matter where you are. Again, all are free, though some might ask users to register.

Chapter 6, “Best Web Sites for International Economic Indicators,” is a compilation of Web sites that enables you to quickly locate foreign economic data that might otherwise be tough to find. However, there’s one important caveat to keep in mind: No country collects and disseminates as much high-quality economic information as the U.S. Its breadth and integrity make it the gold standard in the world. Although there is a vast amount of international economic data on the Web, one has to approach such sources with caution. There are issues concerning language (many are not in English), comprehensiveness, accuracy, and timeliness. In this chapter, I’ve listed sites on the Internet that in my judgment are the most comprehensive international economic databases—and that are available in English! Once again, every site listed is free (at least at the time of this writing).

Finally, let me close by saying that this book is not meant to be a textbook or some intellectual treatise on the economy. My purpose throughout is to help give you a better understanding of how to look at economic indicators, why they can be so influential, what they might tell us about the future, and how people can best utilize all that information. If I have accomplished this in some way, then it was worth all the swearing and temper tantrums I went through every time my computer crashed in the course of this endeavor.

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CHAPTER 1

The Lock-Up

Shortly after dawn on most weekday mornings, a strange ritual takes place in Washington, D.C. Two dozen select men and women leave their homes, grab their newspapers, and rush off to spend part of the day under virtual house arrest. Yes, house arrest—as in incarceration. Precisely where they go to be confined can vary from day to day. It could be in a dilapidated government building one morning and a high-tech office complex the next. Regardless of the location, what occurs in all these places is always the same. They enter a strict, prison-like setting where contact with the outside world is cut off.

One Friday morning, this same group climbs a long set of steps to the side entrance of a sleek, white-stone building on 3rd Avenue and C Street in the heart of the nation's capital. Armed guards greet them at the entrance for a security check; from this point on, everyone has to wear their ID tags at all times. The visitors proceed across a lobby and down a quiet, narrow corridor, eventually stopping in front of a locked, heavy wooden door. A government official awaits them and quickly opens the door to reveal a drab, windowless, L-shaped room 40 feet long and some 10 feet across. It is empty except for two dozen plain-looking orange-and-chrome chairs, each resting alongside a row of narrow cubicle-like desks. A digital clock high on the wall breaks time down to seconds. It is 7:30:15 a.m., and already 12 people have found their way into the “lock-up” room. More are expected within the next 15 minutes. All who enter dutifully sign their names on a special sheet.

Despite the room's austere appearance, there is an atmosphere of calm in the room, at least for now. Some visitors talk excitedly about the previous night's televised basketball game. Others are either chatting on cellphones or checking for messages. A few keep to themselves by catching up on the morning paper or downing a quick muffin and coffee. Everyone in the room, however, makes a point of always knowing the time, with some people eyeing the digital clock so frequently that their actions might be mistaken for nervous tics.

As the time approaches 8 a.m., there is a palpable change in mood. Gone now are the sounds of light conversation; these sounds are replaced by the din of laptops firing up. Everyone appears to be focused on what is about to occur.

At 7:55 a.m. sharp, a government official walks in and picks up a wall phone to call the Naval Observatory, home to the Vice President of the United States. It is also the location of the ultra-accurate atomic clock. She listens intently for a few seconds and then abruptly hangs up without saying a word. The individual then inserts a key into a lock on the wall, which allows her to adjust the digital clock to the precise second. With the correct time now set, the official then turns around to make a terse announcement.

“Please turn off all cellphones and other communication devices, and disconnect laptops from your telephone lines.”

To make sure everyone complies, the official walks across the room and eyes each desk. Meanwhile, a second federal employee arrives, carrying copies of a highly sensitive government report. Each one is placed facedown on an empty desk.

Then it begins.

At precisely 8 a.m., the door to the lock-up room clicks shut. From this point on, all those inside are out of touch with the rest of the world. No one is permitted to leave. No calls or messages can come into or go out of the room. Security is tight. A guard stands by outside, ready to use force if anyone attempts to sneak out.

What secret is the government protecting? Is the CIA about to begin a classified briefing on intelligence activities? Are Congressional investigators huddling to hear the newest terrorist threat? No. All these precautions are taken for one reason: The government is about to release numbers. Statistics. More precisely, economic statistics. The visitors in the room are business reporters representing news organizations from around the world, and this morning they’re working out of the Department of Labor’s secure press-room.

Why such tight secrecy? Because in the next few seconds, these journalists will be the first to lay their eyes on one of the country’s most sensitive economic measures—the monthly report on employment conditions. It can shed fresh light on whether the U.S. economy is growing or facing a slowdown. Did the number of Americans who have jobs rise or fall in the latest month? Have hourly wages gone up, or did they drop? Did people work more hours or fewer? These statistics might not seem particularly earthshaking to most Americans, but they can and do whip the global stock, bond, and currency markets into a frenzy. For individual investors and professional money managers, the information in the jobs report can mean the difference between a winning and a losing portfolio. It also explains the need for the security measures. Individuals getting such hot figures ahead of time can make a quick bundle of money, because they know something about which no one else in the financial markets is yet aware. To prevent such abuses, the government guards these and dozens of other key economic indicators as tightly as a military base. It also implements a carefully controlled procedure to disseminate sensitive economic news.

8:00:00 The instant the door is shut, reporters dive in to grab the latest release on employment conditions, which up to now has been facedown. They have just 30 minutes

to read, digest, and write their stories on how the job market changed during the previous month. Most of the journalists arrived that morning with the expectation that the employment release would carry dismal economic news, with the number of people without jobs rising—a troubling sign that the economy was weakening. At least that was the opinion of most professional forecasters whom these reporters had consulted just days earlier.

But on this particular morning, the employment report stuns everyone. Those in the lock-up room read with amazement that companies actually hired workers in far greater numbers than anyone expected. Moreover, other figures in the report appear to corroborate signs that the economy is doing quite well. Wages are rising, and factory overtime is increasing. Far from slowing, the latest evidence indicates that the economy is actually picking up steam. It is astounding news of which the rest of the world is yet unaware.

As the digital clock continues its silent countdown, reporters working on the story suddenly face some urgent questions. What's really happening in the economy? Why were so many "experts" caught off guard? What does this mean for future inflation and interest rates? How might the stock, bond, and currency markets react to the news?

Though the latest jobs report was unexpected, these journalists are not completely unprepared. As is their routine, a day or two earlier they showered private economists with questions that covered various hypothetical employment scenarios: What does it mean if the job market worsens? What if it actually improves? Now the reporters are frantically searching through their interview notes to help them file their stories.

8:28:00 A Labor Department worker in the lock-up room notifies television reporters that they can now leave under escort to prepare for their live 8:30 broadcast of the jobs report.

For the remaining journalists in the room, there is just a brief warning: "Two minutes left!" By now, most have pieced together their initial versions of the story—the headline, the opening sentences, key numbers, and the implications for the economy. All that's left are some last-minute fact-checking and a word tweak here and there.

8:29:00 "One minute. You can open your telephone lines—*BUT DO NOT TRANSMIT!*"

The level of tension is not just high in the lock-up room. At that moment, money managers and traders in New York, Chicago, Tokyo, Hong Kong, London, Paris, and Frankfurt are riveted to their computer screens, anxiously waiting for the release of the crucial jobs report. It's a stomach-churning time for them because investment decisions that involve hundreds of billions of dollars will be made the instant the latest employment news flashes across their monitors. Why such worldwide interest in how jobs fare in America? For one thing, many foreign investors own U.S. stocks and bonds, and their values can rise or fall based on what the job report says. Second, the international economy is now so tightly interconnected that a weak or strong jobs report in the U.S. can directly impact business activity in other countries. If joblessness in America climbs, consumers will likely purchase fewer cars from Germany, wine from France, and clothing

from Indonesia. In contrast, a jump in employment means households will have more income to spend on imports, and this can stimulate foreign economies.

8:29:30 “Thirty seconds!” The fingers of reporters hover over their computers’ Send button, ready to dispatch the latest employment news to the world. On-air reporters are also prepared to deliver the news live.

8:29:50 An official counts the final seconds out loud:

“Ten...nine...eight...seven...six...five...four...three...two...one!”

8:30:00 “Transmit!” Reporters simultaneously hit the Send button on their keyboards. In seconds, electronic news carriers, including Bloomberg, AP, Reuters, and Japan’s Kyodo News, release their stories. Television and cable news stations, such as CNBC, Bloomberg TV, CNN, and MSNBC, broadcast the report live. A second or two later, computer screens around the globe carry the first surprising words: “Jobs unexpectedly rose the previous month, with the unemployment rate falling instead of rising!”

For journalists in the lock-up room, the stress-filled half-hour grind is over, and they are now free to leave. But the work has just begun for those in the investment community.

At the Chicago Board of Trade (CBOT), where U.S. Treasury bonds and notes are traded, news of the strong job growth sparks pandemonium. Bond traders were so sure they would see a deterioration in the job market that many had bet millions on such an outcome. These traders bought bonds for clients prior to the government’s release on unemployment and expected to earn a quick bundle of money based on the following strategy: If the number of people employed fell, it would drag down consumer spending. That, in turn, would slow the economy, reduce inflation pressures, and cause bond prices to turn up and interest rates to fall, thereby guaranteeing traders an easy profit.

The strategy was sound, but they bet on the wrong horse. Instead of laying off workers, companies were substantially adding to their workforce. The economy was not slowing, but demonstrating remarkable strength, and those bond traders who had hoped to make a fast buck for their customers now face losing lots of money. With more people getting jobs, household income increases, and that leads to greater spending and borrowing. The presence of a more robust economy heightens concerns about future inflation and rising interest rates. The result: Bond prices begin tumbling and interest rates start climbing. To cut their losses, hundreds of floor traders at the CBOT are now screaming, jumping up and down, flailing hand signals in a desperate attempt to rid themselves of bonds whose values are fast eroding.

Stock investors are also dazed by the news and jump into action. A drop in unemployment is bullish for the economy. More consumer spending translates into higher business sales and fatter corporate profits, which can lift share prices. However, since the New York Stock Exchange, the world’s largest marketplace for equities, doesn’t start trading on the floor for another hour (9:30 a.m.), money managers rush to buy the popular E-Mini S&P 500 stock index futures contracts, which are traded electronically virtually 24 hours a day, five days a week on the Chicago Mercantile Exchange (CME). Action here occurs at lightning speed, with orders being executed in just two-tenths of a

second—faster than the blink of an eye. In the first five minutes after the release of the jobs report, about \$3 billion worth of E-Mini contracts are traded—about ten times the average pace seen in a five-minute interval in the past decade. The enthusiasm of traders in the premarket hours is a harbinger of things to come. By noon that day, stocks across the board reach their highest prices in months.

At the same time, the New York Mercantile Exchange explodes into action. Commodity specialists in the cavernous trading room are also caught off guard by the jobs report and are now gesturing wildly and barking out orders to buy oil and gasoline contracts on the expectation that a resilient economy will drive up demand for fuel in the future. After all, as business activity accelerates, factories operate longer hours and use more electricity. Business and leisure travel should pick up as well. Airlines will use greater amounts of fuel. The positive jobs report will encourage more shopping and weekend getaway trips, resulting in greater gasoline consumption. Thus, moments after the Labor Department releases the news on jobs, the futures prices of gasoline, heating oil, and other types of fuel shoot up.

Meanwhile, in currency markets across Asia and Europe, news of the rebound in U.S. jobs makes the dollar a more attractive currency to own. Foreign investors are always keen on placing their money wherever they can earn a better payoff in the global marketplace. This morning, with U.S. interest rates and stocks both heading higher, owning American securities makes the most sense. Foreigners proceed to load up on U.S. equities and bonds, causing the dollar to climb in value against other currencies.

Back in Washington, hours earlier an emissary from the Labor Department delivered an advance copy of the employment release in a sealed package to the president's top economic adviser. White House officials now huddle to discuss ways to spin the positive jobs report for political gain. How should the president comment on it? Does the employment news require a change in public policy? How can it be used to support the administration's economic plan? What impact might it have on the federal budget?

Unquestionably, the single most important institution to evaluate the crucial employment report is the Federal Reserve. Economists there also see the release before it goes public. They begin to scrutinize the data to detect any stress or imbalance in the labor market that could destabilize the economy. Fed experts ponder whether the unemployment rate is falling so fast that it will drive wages higher and fire up inflation pressures. As they pore over the jobs statistics, a secret but informal discussion commences inside the Fed on whether a change in interest-rate policy is needed.

It has been a hectic morning for investors, policymakers, and reporters. But what about the vast majority of Americans? How did they respond to the turn of events in the employment report? Did they drop everything at 8:30 a.m. and rush off with paper and pen to the nearest television or radio to take notes on how the economy changed the month before? Not likely. In sharp contrast to all the frenetic activity in world financial markets, most households were preoccupied with carrying out the routines of daily life—getting ready for work, sending kids off to school, or doing some early shopping before

the crowds show up at the supermarkets. Let's face it—the data released on jobs is just too remote and abstract to be of much interest to them. However, that doesn't mean the employment news will not affect them; everyone in the country will in some manner be touched by what transpired in the financial markets after the jobs report went public. It makes no difference whether one is a business owner, a retiree, a housewife, an employee, a homeowner, or a renter. All will eventually feel the fallout from the news that came from the Labor Department's pressroom that morning. That fallout will produce a mixture of both favorable and unfavorable developments.

What might the benefits be? Clearly, rising employment is positive for the economy. The more American workers earn, the more they have to spend on goods and services. As long as there's no danger of the economy expanding so fast that it threatens higher inflation, everyone gains from rising employment. Furthermore, the government spends less on unemployment benefits, which eases the strain on the federal budget. Now for the bad news. You'll recall that when the government released its surprisingly strong jobs report, it spooked bond traders into selling Treasury securities, which quickly drove up interest rates. With the cost of credit going up, banks and other lenders have little choice but to raise their rates on home mortgages and car loans. Even homeowners holding variable-rate mortgages now have to dig deeper into their pockets to make higher monthly payments. There's more bad news. Remember how commodity investors at the New York Mercantile Exchange reacted by bidding up the price of oil and other kinds of fuel? That will shortly spill into the retail sector, which means drivers will end up paying extra for gas, and homeowners will shell out more for heating oil. Plane travel becomes more expensive too as airlines boost fares to offset the higher cost of aviation fuel.

Now let's return to positive consequences. In foreign exchange markets, the dollar's value jumped in response to the jobs news. A stronger U.S. currency is good for American consumers because it lowers the price of imports such as foreign-made cars, home electronics, and perfumes. That, in turn, puts pressure on U.S. firms to keep their own prices down, all of which helps contain U.S. inflation. Americans traveling overseas also can purchase more with each dollar. However, here's the flip side to a muscular greenback: If your job depends on selling products in foreign markets, you could be in trouble. A strong dollar makes U.S.-made goods more expensive in other countries, and foreign buyers might want to look elsewhere for better deals.

U.S. ECONOMIC INDICATORS

It might be hard to believe that all this action and reaction can be triggered by just a single statistic. If you multiply that by more than 50 economic indicators that are released every week, month, or quarter, you begin to understand why the stock, bond, and currency

markets are in a perpetual state of motion. Among the other influential economic indicators that can rattle financial markets are consumer prices, industrial production, retail sales, and new-home construction. It is precisely because these indicators can so easily sway the value of investments that the government takes extraordinary steps to control the flow of sensitive economic information.

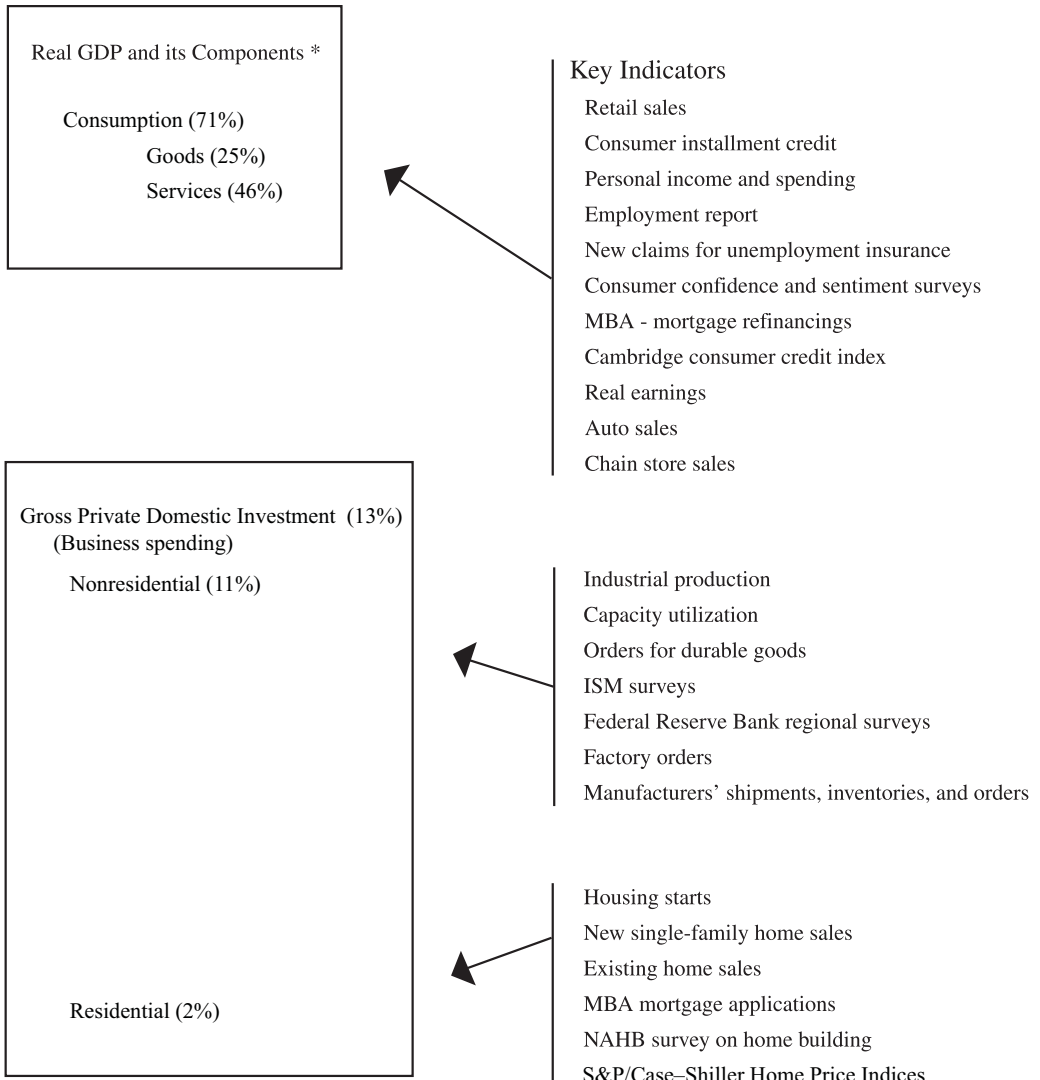
That wasn't always the case. Thirty years ago, barely any guidelines applied to the release of economic reports. A lock-up room was a term reserved for prisons, not press-rooms. The lack of strict ground rules on the publication of these influential statistics created the perfect climate for abuse. Politicians tried to control the release of economic news to score points with voters. When President Nixon heard that the Commerce Department was about to go public with an upbeat figure on housing starts, he pressed the agency to time the release for maximum political effect. On those occasions when economic figures turned out to be a liability, Nixon sought to hold up the report until he believed its release would get little notice.

Even Wall Street firms realized that big money could be made off the economic numbers given the lax supervision of their release. Some brokerages went so far as to dish out large amounts of money to reporters who were willing to leak economic news to the firm's traders before writing about it. Anyone who got an advance peek at the economic statistics stood to gain millions in a matter of minutes by knowing which stocks and bonds to trade. Eventually, this blatant manipulation of the economic indicators led a furious Senator William Proxmire to schedule Congressional hearings in the 1970s on how these reports are released. Later that decade, the government set up a strict calendar that included rigid rules on how economic data would be distributed. Today, nearly every major economic indicator is released under tight lock-up conditions, which has enhanced the integrity of how the public gets such sensitive information. Trading based on inside information of economic indicators is now virtually unheard of.

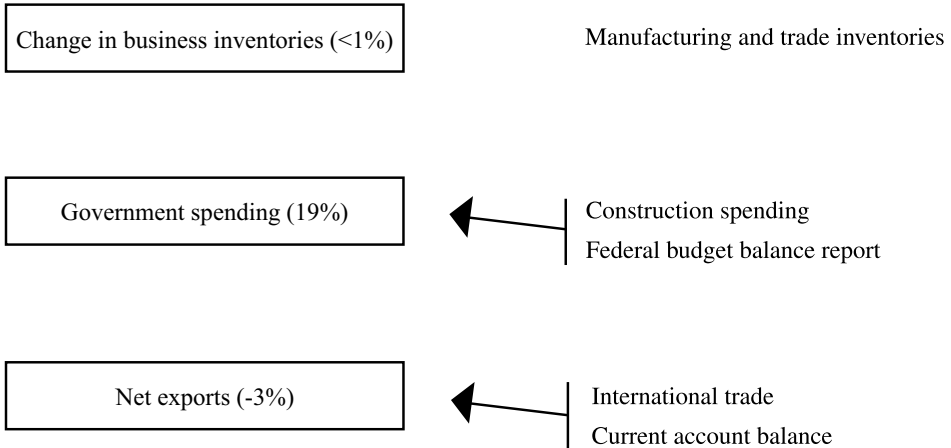
This still leaves us with the most important task of all, though. How do you decipher what all these indicators actually tell us about the economy? After all, at least six key economic indicators are released on a weekly basis, more than 40 every month, and a dozen each quarter. Do we really need so many measures? Absolutely. The U.S. is the largest and most complex economy in the world. No single indicator can provide a complete picture of what the economy is up to. Nor is there a simple combination of measures that provides a connect-the-dots path to the future. At best, each indicator can give you a snapshot of what conditions are like within a specific sector of the economy at a particular point in time (see Table 1A). Ideally, when you piece together all these snapshots, they should provide a clearer picture of how the economy is faring and offer clues on where it is heading.

Table 1A: How Economic Indicators Track the U.S. Economy

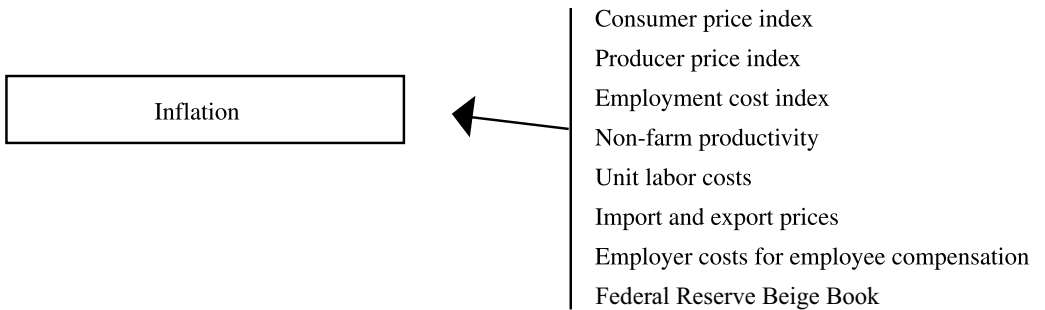
The federal government and private groups release dozens of economic reports on a weekly, monthly, or quarterly basis. Each is a barometer that measures activity in a particular segment of the U.S. economy. By following these indicators, one can get the latest reading on the economy's health and valuable clues on where it is heading.



* Percentages are based on how the economy performed in 2011



Signs of Price Pressures



Yet even if you took the time to absorb every bit of economic information and monitored each squiggle in the indicators, don't expect to uncover a crystal-ball formula that can single-handedly forecast what consumer spending, inflation, and interest rates will do in the months ahead. That's because there are some important caveats when dealing with economic indicators. First, they often fail to paint a consistent picture of the economy. Different indicators can simultaneously flash conflicting signals on business conditions. One can show the economy improving, while another might point to a clear deterioration. For example, the government might report a drop in the unemployment rate, normally a bullish sign for the economy. However, a different employment survey might show a day or two later that companies are laying off workers in record numbers. You're now presented with two contradictory portraits of labor market conditions, both covering the same time period. Which should you believe?

The confusion doesn't stop there. Another complication, one especially maddening to investors and economists, is that people can behave counterintuitively. Just look at two ostensibly related reports: consumer confidence and consumer spending. The first measures the general mood of potential shoppers: If they are upbeat about the economy, it stands to reason they will spend more. If there is widespread gloom and uncertainty about the future, logic would lead you to believe people will curb their spending and save money instead. However, that's not the way it plays out in the real world. There appears to be little relationship between these two measures on a month-to-month basis. During the mild 2001 recession, consumer confidence kept plummeting throughout the year, reaching levels not seen in decades. Yet these same consumers not only refused to cut back on spending that year, but bought homes and cars at a record pace. Just the opposite happened in 2005. Consumer confidence was on the rise, but that did not lead to more shopping. Obviously, one cannot determine the outlook for consumer spending just by monitoring the psychological state of American households. The inclination to spend is influenced by many factors, including personal income growth, job security, interest rates, and the buildup in wealth from the value of one's home and the ownership of stocks and bonds.

There is also the quandary that comes with abundance. Everyone—from the professional money manager down to the mom dabbling part time in the financial markets—can be overwhelmed by the statistical minutia out there. How do you discern which indicators are worth watching and which ones to view with skepticism or even ignore? How does an investor employ economic indicators to help choose which stocks and bonds to buy and sell, and when? Which measures should a business forecaster follow to spot coming economic trends? What key indicators should corporate chiefs rely on to help them decide whether to hire new workers or invest in new equipment?

You can find the answers to these questions in subsequent chapters, but clearly some economic indicators are far more telling than others. Generally, the most influential statistics—those most likely to shake up the stock, bond, and currency markets—possess some of the following attributes:

- **Accuracy:** Certain economic measures are known to be more reliable than others in assessing the economy's health. What determines their accuracy is linked to how the data is compiled. Most economic indicators are based on results of public surveys. Getting a large and representative sample is thus a prerequisite for accuracy. For instance, to measure the change in consumer price inflation (CPI), the government's Bureau of Labor Statistics sends out agents and conducts telephone interviews every month to find out how much prices have changed on 80,000 items and services at 26,000 retail outlets around the country. To calculate shifts in consumer confidence, the Conference Board, a business research organization, polls 5,000 households each month.

Another variable is the proportion of those queried who actually came back with answers. How quickly did they respond? The bigger and faster the response, the better the quality of the data and the smaller the subsequent revisions. If an indicator has a history of suffering large revisions, it generally carries less weight in the financial markets. After all, why should an investor buy stocks or a company hire additional workers when the underlying economic statistic is suspect to begin with? The monthly report on construction spending by the Commerce Department is one that gets substantially revised and is thus often ignored by the investment community. In contrast, consumer price inflation figures are rarely revised, which is why this indicator is taken far more seriously.

- **Timeliness of the indicator:** Investors want the most immediate news of the economy that they can get their hands on. The older the data, the more yawns it evokes. The more current it is, the greater the wallop it packs on the markets. Case in point: Investors pay close attention to the employment situation report because it comes out barely a week after the month ends. In contrast, there's far less interest in the Federal Reserve's consumer installment credit report, whose information is two months old by the time it's released.
- **The business cycle stage:** There are moments when the release of certain economic indicators is awaited with great anticipation. Yet those same indicators barely get noticed at other times. Why do these economic measures jump in and out of the limelight? The answer is that much depends on where the U.S. economy stands in the business cycle. (The business cycle is a recurring pattern in the economy consisting first of growth, followed by weakness and recession, and finally by a resumption of growth. We'll take a closer look at the business cycle in the next chapter.) During a recession, when there are lots of unemployed workers and idle manufacturing capacity, inflation is less of a concern. Thus, measures such as the consumer price index, which gauges inflation at the retail level, do not have the same impact on the financial markets that they would if the economy were operating at full speed. During recessionary periods, indicators that grab the headlines are housing starts, auto sales, and the major stock indexes, because they often provide the earliest clues that an economic recovery is imminent. Once business activity is

in full swing, inflation-related measures like the CPI and industrial capacity utilization take center stage again, while the other indicators recede a bit into the background.

- **Predictive ability:** Among the most closely watched indicators are those that have a track record of successfully spotting turning points in the economy well in advance. We mentioned how housing and auto sales as well as the stock indexes have such characteristics. However, other less-known measures are harbingers of a change in business activity. One such indicator is the advance orders for durable goods. A pickup in orders can lead to greater production and higher employment in the months ahead. Economic gauges known for being ahead of the curve thus carry more weight with investors.
- **Degree of interest:** Depending on whether you're an investor, an economist, a manufacturer, or a banker, some indicators might be of greater interest to you than others. Business leaders, for instance, might focus on new and existing homes sales and employment trends to see whether Americans are in a shopping mood. By monitoring such statistics, companies selling furniture, appliances, and home electronics can decide whether to expand operations, invest in new inventories, or shut down factories.

Those in the forecasting business want to know what's ahead for the economy and thus concentrate on a set of measures known as "leading indicators." These include initial unemployment claims, building permits, the ISM purchasing managers report, and the yield curve.

Investors in the financial markets also have their favorite indicators; the specific measures they watch depend on what assets are at greatest risk. Those trading stocks focus on indicators that foreshadow changes in consumer and business spending because they can affect future corporate profits and the price of shares (see Table 1B). For bond traders, the looming concern is not company profits, but the outlook for inflation and interest rates. Any evidence suggesting that inflation might accelerate can hurt bonds. (Table 1C shows the economic indicators that are of greatest interest to the bond market.) Players in the \$5 trillion currency market look for economic news that can drive the dollar's value up or down. Signs pointing to a robust U.S. economy, for example, normally lure foreigners to invest in this country, especially if the other major economies show comparatively little growth. That lifts the greenback's value against other currencies. (Table 1D identifies the measures most likely to move the dollar.) Finally, we stated earlier that certain economic indicators have demonstrated over time an ability to spot turning points in the economy well in advance. Any unusual movement up or down in these forward-looking measures should tip off investors and business leaders to an upcoming shift in economic activity. The ten indicators listed in Table 1E are particularly noteworthy, because history has shown them to be quite successful in sending early signals

of a change underway in the economy. However, unlike in the other tables, I have chosen not to formally rank the leading indicators, since no single one can act as the perfect crystal ball. The real value here is to see whether two or more of these measures tell a similar story on where the economy is headed. The more these early-warning indicators agree, the greater the confidence in the message they send.

Table 1B Economic Indicators Most Sensitive to Stocks

Rank	Indicator	Page
1	Employment Situation Report	31
2	ISM Purchasing Managers Report—Manufacturing	181
3	Weekly Claims for Unemployment Insurance	55
4	Consumer Prices	305
5	Producer Prices	317
6	Retail Sales	93
7	Consumer Confidence and Sentiment Surveys	112
8	Personal Income and Spending	82
9	Advance Report on Durable Goods	148
10	GDP	130

Table 1C Economic Indicators Most Sensitive to Bonds

Rank	Indicator	Page
1	Employment Situation Report	31
2	Consumer Prices	305
3	ISM Purchasing Managers Report—Manufacturing	181
4	Producer Prices	317
5	Weekly Claims for Unemployment Insurance	55
6	Retail Sales	93
7	Housing Starts	204
8	Personal Income and Spending	82
9	Industrial Production/Capacity Utilization	170
10	GDP	130

Table 1D Indicators That Most Influence the U.S. Dollar's Value

Rank	Indicator	Page
1	Employment Situation Report	31
2	International Trade	269
3	GDP	130
4	Current Account	283
5	Industrial Production/Capacity Utilization	170
6	ISM Purchasing Managers Report—Manufacturing	181
7	Retail Sales	93
8	Consumer Prices	305
9	Consumer Confidence and Sentiment Surveys	112
10	Index of Leading Economic Indicators	196

Table 1E Indicators That Often Lead the Rest of the Economy

Indicator	Page
Yield Curve	349
New Orders for Durable Goods (minus transportation and defense)	149
ISM Purchasing Managers Report—New orders	184
Producer Prices (crude goods without food and energy)	317
Personal Income and Spending—Real purchases of durable goods	89
Housing Permits (single-family houses)	205
Weekly Applications for Mortgages (to purchase a home)	227
Housing Market Index—Traffic into home-builder showrooms	223
Weekly Claims for Unemployment Insurance	55
Employment Situation Report—Hiring of temporary workers and truckers	45

INTERNATIONAL ECONOMIC INDICATORS

Up to now, we've dealt only with U.S. economic reports. Now let's look at the growing importance of monitoring international economic indicators. During much of the twentieth century, Americans had only a remote interest in following the economic affairs of other nations. Few saw a need to take them more seriously. The U.S., after all, possessed the largest and most self-sufficient economy in the world and, by and large, had been impervious to the ups and downs of foreign economic cycles. If Germany or France or even the emerging countries of Asia suffered an economic downturn, barely anyone in the U.S. would care or even notice.

That's not the case any longer. One historic change that has emerged early in the 21st century is the number of powerful new players on the global stage. For instance, the main driving forces of growth in the world today are not the mature industrial countries of the U.S., Eurozone, and Japan, but the developing nations across Asia and Latin America. Their entry has fundamentally reshaped the international economic landscape. Though the U.S. economy still reigns supreme in terms of size and influence, little else remains the same. China's economy, for example, was seventh in size in 1995. It has since grown at hyperspeed, vaulting past the United Kingdom in 2005, Germany in 2008, and Japan in 2010, to become the second largest in the world. Brazil's GDP has surged to seventh place, beating out Canada and Italy. Business activity in India has grown so much that its economy is now bigger than those of the Netherlands, Switzerland, and Austria, *combined!* These astonishing transformations were brought on by a reduction in trade barriers, greater economic liberalization, the modernization of global financial markets, and the extraordinary advances in telecommunications, the Internet, computer technology, and software. The results have reshuffled the economic map. For better or worse, the world economy has become more tightly integrated than ever before.

The implications for the U.S. are huge. Healthy domestic economic performance depends increasingly on how well other nations are doing. Gone forever are the days when this country was immune to financial and political mishaps originating halfway around the world. When OPEC decided to sharply boost oil prices in the mid- to late 1970s, Americans felt real pain. Indeed, U.S. inflation subsequently exploded, ultimately leading to one of the worst U.S. recessions since the Great Depression. Years later, investors took another beating during the Asian financial crisis in 1997 when the Dow plummeted by more than 550 points on October 27 because investors were worried that problems in Asia would hurt the U.S. economy and corporate earnings. In addition, who would have imagined that a bond default by Russia in 1998—a country with an economy the size of Illinois and Wisconsin combined—would be considered so grave a threat to world financial markets that the Federal Reserve was under pressure to orchestrate a global rescue plan to calm investors worldwide? More recently, the U.S. economy and financial markets have shown even greater sensitivity to foreign events. The fear of sovereign debt defaults spreading across Europe and rising anxiety over instability in the Middle East not only pummeled U.S. stocks but helped push America's economy to the brink of recession the first half of 2011.

When it comes to sales and profits, U.S. companies are becoming more dependent on foreign economic activity. The numbers speak for themselves. About half the earnings of S&P 500 firms come from business generated outside the United States. More than 50 million Americans are now employed by firms engaged in foreign trade, according to the U.S. Department of the Treasury. One in three factory jobs is export related, and one in three acres on American farms is planted to satisfy the demand of hungry people overseas. It should not come as a surprise that the export industry has been the best performing sector in the U.S. economy over the past decade.

All this boils down to a crucial new reality: With 95% of the world's consumers residing outside the U.S., foreign economic indicators should be followed with the same regularity, interest, and scrutiny as the domestic indicators. If foreign economies do well, U.S. firms are in a better position to sell more exports, earn more money, and keep millions of American workers employed. By closely monitoring the international indicators, U.S. companies can seek out new foreign markets or decide whether to expand (or shut down) facilities overseas. American investors can diversify their portfolios more smartly by identifying and purchasing those foreign stocks and bonds that might offer a lucrative return.

Another important reason to monitor the performance of other major economies is that it helps us check the mood of foreign investors. As long as they view the U.S. as a safe and attractive place to invest, capital from abroad will continue to flow into this country, and that is vital to the well-being of the U.S. economy. Foreign investors play an indispensable role in financing U.S. economic growth by lending this country an average of \$2 billion a day—money that goes into buying stocks, bonds, and other American assets. Why does the U.S. need to borrow such huge sums from other nations? Because consumers and the federal government together spend so much on cars, computers, military hardware, and healthcare (to name just a few items) that little domestic savings is left over. Yet savings is the lifeblood that keeps an economy healthy. It's used to finance productive investments, such as building efficient factories and funding the research and development of new and better products. Without adequate savings, the U.S. would be incapable of showing healthy long-term growth.

To make up for the shortfall in domestic savings, the U.S. has to lure the surplus savings of other countries. In addition, while all that foreign capital entering the U.S. has kept the economy humming, serious risks come with being so dependent on overseas creditors. Since the 1990s, America's net foreign debt has skyrocketed from \$50 billion to a staggering \$3 trillion—the most of any nation in the world. In the process, foreigners have acquired an unprecedented share of U.S. assets; they own more than 50% of all U.S. Treasury issues, 25% of American corporate bonds, and about 15% of all equities. Should the mood of those investors turn sour on the U.S. market—something that can occur if there is poor expectation of investment returns here as compared with other countries—it could spark a sell-off of American stocks and bonds by foreigners.

For all these reasons, international economic indicators have lately taken on a more prominent role in the formulation of investment and business strategies. However, as with U.S. economic data, literally hundreds of foreign economic measures are released every month. With so much information being thrown at investors and business executives each day, how do you know which of these statistics are worthy of consideration? There is no one simple answer to this question. American companies and investors have different interests and risk exposures in the global economy.

In this book three factors are considered in determining the most influential international economic indicators: First, after the U.S., which are the largest economies in the world? Second, how liquid are the markets in those countries—that is, how easy is it to buy and sell securities on their exchanges? Third, who are the important trading partners of the U.S.? By trade, we're talking about the exchange of goods (such as the sale of trucks, pharmaceuticals, and computers) and the exchange of services (such as insurance, consulting, transportation, and entertainment). The service sector is especially important because it includes the all-important category of investment flows. Table 1F lists the “must watch” international economic indicators.

Table 1F Top International Economic Indicators

Indicator	Page
German Industrial Production	364
German IFO Business Climate Survey	366
German Consumer Price Index	368
China Purchasing Managers Report—Manufacturing	390
China Industrial Production	396
Eurozone Purchasing Managers Report—Manufacturing	385
Japan Tankan Survey	378
Japan Industrial Production	373
India Industrial Production	403
Brazil Industrial Production	410

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CHAPTER 2

A Beginner's Guide: Understanding the Lingo

Every field of study has its own jargon, an assortment of words or phrases with which one has to grow familiar to understand the subject. Economic indicators are no different. You will regularly come across certain terms and expressions when dealing with measures of economic performance. No need to worry, though. The language of economic indicators is fairly straightforward if you give it a chance. In many cases their meaning and significance are surprisingly obvious. So let's proceed with some of the most common concepts you'll encounter when reading about these indicators.

ANNUAL RATES

You're cruising down the highway at 65 miles per hour. Whether your destination is actually 65 miles away is not important. What counts is what your speedometer tells you: If you keep up this driving pace for a full hour, you will travel about 65 miles.

The term "miles per hour" is used to measure relative speed. A similar relationship exists with economic indicators. A common way to compare how fast the economy is growing is to measure changes in activity in the form of annual rates. For instance, the government might report that autos were selling at a 14-million-vehicle annual rate the previous month. That doesn't mean automakers sold 14 million cars and trucks the month before; it's how many will be sold if last month's pace is maintained for each of the next 12 months. Why do it this way? The reason is experts find it easier to look at performance on a yearly basis.

The methodology used to annualize a figure is simple enough: To turn a monthly level into an annual rate, simply multiply it by 12. If you have two months of data that you want to annualize, multiply it by 6. If it's a quarterly change—which is how the GDP is reported—multiply the three-month change in activity by 4. Thus, whenever you see an economic indicator reported in an annual rate, it is telling you what will happen if that pace is sustained for a full 12 months.

BUSINESS CYCLE

Like human nature, the economy has its ups and downs. At times the economy can grow robustly, with household income rising, consumers happily spending, and companies hiring and expanding their businesses. However, there also are periods when the economy looks tired, with growth barely perceptible. There is less consumer shopping and little, if any, new business investment is under way. In the most extreme case, the economy actually shrinks, which is what happens in a recession. Over time, however, recessions give way to a fresh round of economic activity. These swings, from good times to awful times and then eventually back to good times again, are roughly what we mean by a business cycle.

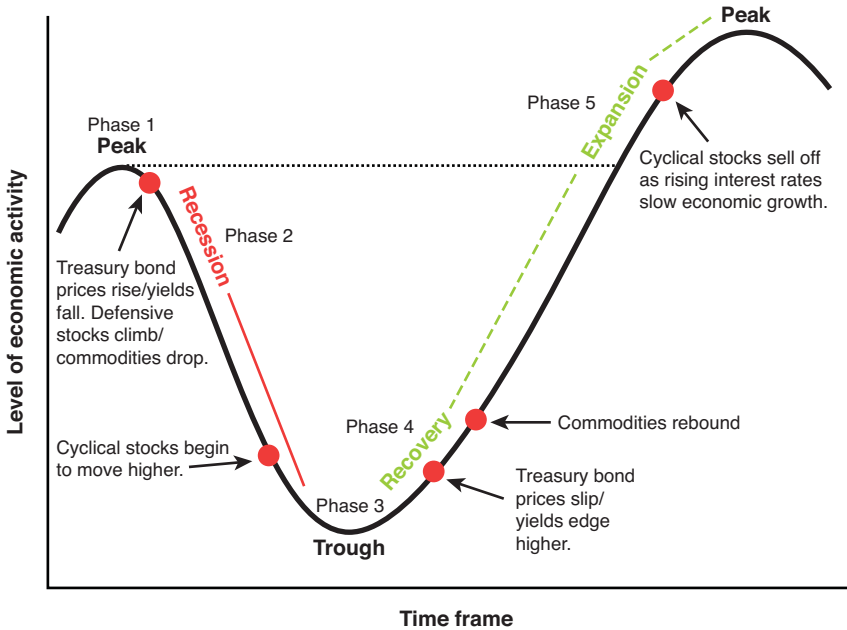
Why does the economy have such cycles? Why not have steady, continuous, nonstop growth? After all, that should make everyone happy.

The reason the economy is condemned to undergo business cycles is that it's only natural. An open economy is essentially a reflection of human behavior, with millions of people making decisions every day. What should they buy? How much can they spend? Is it time to invest in stocks? Corporate leaders face different issues. Is it time to hire workers? Rebuild inventories? Buy another company?

Occasionally consumers and businesses make mistakes or act so recklessly that they can have broader economic consequences. Households might have borrowed so much that they're having difficulty servicing their debt. Banks could see their profits slip as loan defaults rise. Retailers might miscalculate by filling their stockrooms with new goods just when consumers are cutting back on spending. Government officials could commit policy mistakes that can endanger growth. If the errors in judgment are grave enough and widespread, they can lead to an economic downturn, with people being laid off. (A brief history on what caused the historic 2008–09 recession can be found at the end of this chapter.)

Fortunately, the government has several tools at its disposal to revive growth, such as lower interest rates, tax cuts, and greater federal spending.

The business cycle itself has five phases (see Table 2A). The first phase is the highest point of output the economy achieves just before it gets into trouble and turns down. After the peak comes phase two, which is the recession itself, a painful process whereby the economy actually shrinks. It saps the wealth and confidence of households and causes all sorts of financial distress for business. Such economic contractions can last six months or as long as several years. The third phase is reached when the economy finally hits bottom, a point known as the recession trough. The fourth phase occurs after the economy stops shrinking and resumes its growth path, or recovery. Finally, when the level of economic activity (or output) pushes past the previous high point, the business cycle marks the fifth and last phase, often called the expansion.

Table 2A The Business Cycle and Its Impact on Financial Markets

Because a recession is an integral part of the business cycle, it's important to define just what we mean by that term. Many economists and journalists declare a recession when there are two back-to-back quarters of negative GDP growth. Those quarters equal six consecutive months when the economy is shrinking. However, that is a rough, finger-in-the-wind assessment. The real task of determining when a recession begins and ends is left to a select group of academic economists working under the National Bureau of Economic Research (NBER), a nongovernmental and nonpartisan think tank based in Massachusetts. They make the call on whether the economy has turned down or up by evaluating several key economic indicators, such as job growth, personal income, and industrial production, as well as the quarterly GDP figures.

According to the NBER, there have been 33 business cycles in the U.S. since 1854, with the average recession lasting 16 months. Since World War II, there have been 11 complete business cycles, with recessions averaging only 11 months long—which means the economy has managed to enjoy longer periods of growth before getting into trouble. But that trend abruptly reversed course in the first decade of the 21st century, as you can

see in Table 2B. The 2008–09 recession, the twelfth since 1945, turned out to be the longest and most damaging since the Great Depression. Just why the recent economic downturn was so severe continues to be the subject of much debate and controversy among economists. Nevertheless, I have added my own brief description at the end of this chapter.

Table 2B Key Business Cycle Dates: U.S. Recessions (1945 to 2011)

PEAK	TROUGH	CONTRACTION
(Date the economy's output "peaked" just before slipping into recession)	(Date the recession finally ended and the recovery began)	(Duration of recession)
First quarter (February) - 1945	Fourth quarter (October)- 1945	8 months
Fourth quarter (November) - 1948	Fourth quarter (October) - 1949	11 months
Second quarter (July) - 1953	Second quarter (May) - 1954	10 months
Third quarter (August) - 1957	Second quarter (April) - 1958	8 months
Second quarter (April) - 1960	First quarter (February) - 1961	10 months
Fourth quarter (December) - 1969	Fourth quarter (November) - 1970	11 months
Fourth quarter (November) - 1973	First quarter (March) - 1975	16 months
First quarter (January) - 1980	Third quarter (July) - 1980	6 months
Third quarter (July) - 1981	Fourth quarter (November) - 1982	16 months
Third quarter (July) - 1990	First quarter (March) - 1991	8 months
First quarter (March) - 2001	Fourth quarter (November) - 2001	8 months
Fourth quarter (December) - 2007	Second quarter (June) - 2009	18 months

Note: The U.S. economy underwent 12 recessions since 1945, with the average lasting 11 months, and the average growth phase continuing for 59 months. The 2007–2009 recession was the longest since the Great Depression.

Source: National Bureau of Economic Research

CONSENSUS SURVEYS

You're all set to go out for a leisurely walk. Weather forecasters have predicted sunny skies and warm temperatures, so you head out in shorts and leave the sweater at home. Ten minutes later a heavy thunderstorm erupts, followed by colder air. You quickly scramble back for a change of clothing, all the while cursing the forecasters. How could they have gotten it so wrong?

Money managers encounter similar experiences, except that instead of weather reports, they tend to rely on surveys that feature forecasts from experts on what an upcoming economic indicator will report. If the actual economic news falls in line with expectations, there is generally little market reaction to the news because investors

already anticipated it. By getting it right, those forecasters demonstrated that they have a good grasp on what the economy is up to. However, had the news about the economy turned out to be radically different from what private experts predicted, money managers would have rushed in to readjust their investment positions. These abrupt moves can potentially shake up the value of stocks, bonds, and currencies. Why such violent market reactions? Any major departure from expectation means that something is going on in the economy for which the experts failed to account. Naturally, this creates fresh uncertainty about current and future economic conditions. The bigger the gap between consensus expectations and reality, the larger the backlash in the financial markets.

Who puts out these consensus surveys, and how are they done? Many financial wire service organizations, such as Bloomberg, Dow Jones, Reuters, and Market News International, produce their own consensus surveys by polling economists for their predictions on key upcoming economic indicators. These indicators include consumer prices, producer prices, industrial production, retail sales, capacity utilization, and others. The methodology used is fairly simple: The responses of individual business economists are basically averaged out, and that becomes the consensus forecast.

MOVING AVERAGE

There's great temptation to jump to a conclusion about the economy's health from just one month's data, but that's not a wise practice. Economic numbers can be faulty, inaccurate, or, at the very least, misleading because of unusual events such as a major labor strike or severe weather conditions. Such situations can diminish the reliability of an economic indicator in the short term, so it's important to use caution when extrapolating information from just a single month's data.

To get a truer sense of the underlying trend in the economy, it's far better to rely on a moving average of economic numbers. Simply put, a moving average is a computation in constant motion because it always averages data for the most recent fixed number of months. As a result, the average changes with the introduction of each new monthly report. For example, let's say consumer price inflation shot up 1% in the most recent month. Obviously, a rise of that magnitude could raise lots of red flags. However, before anyone panics, it's far more prudent to consider inflation's actual trend by looking at its moving average over the past three or six months. To do this, simply add up the inflation changes over the past three or six months and divide by the total number of months you considered. When the next set of inflation figures is released a month later, recalculate the moving average by including the new figure in the equation and discarding the oldest monthly data so that you are always averaging the latest three- or six-month periods. The virtue of moving averages is that they smooth out random fluctuations and make long-term trends clearer. One disadvantage of a moving average is that it's a lagging indicator. Averages are slower to respond when there's a genuine change in the economy's direction.

NOMINAL DOLLARS VERSUS REAL DOLLARS (ALSO KNOWN AS CURRENT DOLLARS VERSUS CONSTANT DOLLARS)

Anything measured in dollars can be looked at in two ways. Nominal dollars (also referred to as current dollars) represents the actual amount of money spent or earned over a period of time. You'll see stories mentioning how American factory workers received total pay hikes of \$500 million, or a 5% increase, in the past 12 months. Or perhaps you read that company A reported that income from sales of sweaters climbed to \$220 million that year, up from \$200 million the year before, or a jump of 10%. These figures are based in nominal dollars.

However, nominal (or current) dollars gives you only part of the story. What's missing is how inflation can distort such numbers. Let's go back to the example of the earnings of factory workers. They might have seen their pay jump by 5% in nominal terms, but before anyone celebrates, someone should ask this question: "What if the price of goods and services (that is, inflation) rose by 4% during that same period?" In that case, the wages of these workers rose by a less-than-impressive 1% in real (or constant) dollars. In other words, the actual increase in purchasing power these workers gained from their pay hike was far smaller than 5%.

Let's now look at company A. It noted that sales revenue jumped by 10%. However, that doesn't necessarily mean it sold 10% more sweaters. In fact, the firm ended up selling the same number of sweaters both years. The only reason it received more money in the second year is because the company raised the price of sweaters by 10%. Thus, the increase in real (constant) dollar sales was actually zero!

Nominal dollars simply reflects the present value of goods and services exchanged in the marketplace. However, real dollars tells you the true value of goods and services produced or sold, because it strips out the effects of inflation. When economists and investors want to compare the economy's performance over different time frames, they generally look at both measures—nominal and real. They note the change in the size of the economy in nominal dollars because that points to what individuals, businesses, and the government actually spent. However, to find out whether the economy genuinely expanded by producing more in quantity or volume, economists and investors look at the numbers in real-dollar terms.

REVISIONS AND BENCHMARKS

Traders and money managers are always hungry for the very latest piece of economic news. The more timely the information, the more influential it is; and the faster investors can get their hands on it, the quicker they can act.

Therein lies the problem. Government agencies and private groups that supply economic data to the public are under tremendous pressure to get it out quickly, and that's not easy. Every week or month, depending on the economic indicator, statisticians follow

a rigid schedule to query sources in the field, collect the raw responses, organize the data, readjust for seasonal factors, perhaps recalculate the numbers to adjust for inflation, and then write some introductory comments about the results before finally releasing the data to the public. It's a hurried process in which accuracy and completeness at times take a back seat to getting the information out on deadline. For this reason, the first release of many economic indicators contains pieces of data that are far from reliable and thus are considered preliminary.

Of course, to many investors, it makes little difference whether the initial data is reliable. They trade on these numbers anyway, because the figures represent the very latest information they can get on the economy. Later, though, as more information is received and after statisticians have had a chance to review their computations, the preliminary figures undergo one or more revisions. Though investors also see the revisions to earlier data, they generally do not spark much trading because by then the information refers to a time period that has long since passed. Investors usually focus on the future, not the past. Economists, however, take revisions more seriously because the new figures can affect their forecasts of economic activity.

Benchmark changes are different from monthly revisions. The latter are an ongoing effort to make the statistical results more accurate, especially if there was insufficient time to gather all the data. In contrast, benchmark changes occur about once a year or so, when the government introduces new seasonal adjustment factors or decides to undertake a formal change in the methodology itself. Benchmark revisions can affect economic data going back five, ten, or even more years to allow for historical comparisons.

SEASONAL ADJUSTMENTS

Before most economic indicators are released, they are calculated to reflect seasonal adjustments. What are seasonal adjustments? The simplest way to answer this question is with an example. It's no surprise that consumers do a lot more shopping during the November/December holiday period than at other times of the year. In addition, when the Christmas shopping season is over, retail sales often slow in January and February. These seasonal shifts in consumer spending patterns are quite common. They're temporary changes that have nothing to do with the business cycle.

Let's look at another example. In the spring when schools let out, the number of people getting jobs surges as students enter the workforce to earn money over the summer. By mid-August, the process is reversed, and employment drops off as students leave the workforce and return to school. Again, these fluctuations in employment are perfectly normal and do not indicate a fundamental change in the economy's health. Even industrial production tends to fall in July as automakers shut down plants that month to retool their assembly lines for the new model year. No one should conclude that this slowdown in industrial output means that the manufacturing sector is in trouble. These are all routine seasonal shifts that take place in the economy.

How do you differentiate changes that are the result of normal seasonal factors from those that represent a more serious problem in the economy? That's where the seasonal adjustment process comes in. Government experts look at economic data going back five to ten years to identify recurring trends. These trends are changes in economic activity that have nothing to do with the broader business cycle but that can be explained by short-term external factors (such as summers, winters, and major holidays). After observing such patterns, officials come up with a formula that factors out variations in the economic numbers attributable to seasonal changes. This enables private economists and investors to distinguish economic events that should be viewed as normal from those that are out of the ordinary.

Seasonal adjustments, however, are far from perfect. You could have abnormal economic data even after seasonal adjustments are considered, and it still doesn't necessarily signal a turning point in the economy. Blizzards, floods, terrorism, labor strikes, and major bankruptcies are all unpredictable shocks that can have an impact on economic output, but their effects are almost always short-lived. Moreover, these incidents are easy to identify as the cause of any sharp deviation in business activity. By and large, seasonal adjustments are important to analysts because they can help identify true deviations from the normal course of activity in the economy.

Now that we have reviewed some of the most widely used terms that accompany economic indicators, we're ready to move on to the next chapters. What are the world's most influential economic indicators, and how do you get the most out of these statistics? How do you locate them? Interpret them? Most important of all, where can you find the clues that can tip you off to how the economy might perform in the future?

The Great Recession of 2008–2009

The cause and severity of the Great Recession (December 2007 to June 2009) can be traced to acts of colossal human folly. These acts, which include fraud, recklessness, greed, and the laxness of regulators, so damaged the U.S. economy that they left more than 15 million people jobless, destroyed \$16 trillion in household wealth, forced a record 46 million Americans into poverty, and caused an unprecedented number of families to lose their homes. You might well ask, “How could this have happened to a modern, high-tech, presumably well-informed economy?” The answer is disturbingly plain: Though the U.S. economy has many great attributes, hubris and stupidity inevitably trump all.

Though economic historians will long debate the precise origins of this recession, here is a rough sequence of events that doomed the economy to its most destructive fall in more than half a century:

1. For years Americans blissfully went on a shopping spree, buying far more than what the country actually produced. That meant the U.S. had to import an increasing number of cars, toys, computers, printers, entertainment systems, clothing, and appliances. Paying for it proved no problem. Consumers took out loans from banks and handed over credit cards. Even foreigners happily lent money to the U.S. to finance all that spending, since it kept their own citizens working and economies growing.
2. One major country that helped fuel all this American consumption was China. By artificially holding down the value of its own currency, the Asian giant kept the prices of exports well below those of most competitors. The result: All those sales to the U.S. earned China huge trade surpluses and a vast treasure chest of dollars. The Chinese central bank then took those dollars and plowed them back into the U.S. by buying Treasury securities. This massive inflow of money to the U.S. from China drove U.S. interest rates down, much to the chagrin of the Federal Reserve, which liked to think it has some control over the cost of credit.
3. With interest rates low, Americans loaded up on debt and eschewed savings. They rushed out to buy homes and cars in record numbers. U.S. companies found the cost of borrowing so attractive that they jumped at the opportunity to issue long-term bonds and lock in on the lower rates.
4. Not everyone was happy, however. Those who relied on interest income, such as individual investors, insurance companies, and pension funds, became increasingly upset with the skimpy returns they received. Low interest rates were great for borrowers, but not for those who relied on fixed incomes to achieve certain financial goals. They were hungry for investments that promised much higher yields.
5. U.S. financial institutions, sensing an opportunity to earn large fees, gladly obliged those disgruntled investors. The major investment banks proceeded headlong to acquire low-quality subprime mortgages because they generated higher interest payments. What happened next was truly staggering. These

pools of high-risk mortgage-backed assets were alchemized into murky, generally incomprehensible securities that somehow passed muster with the major credit rating agencies, who classified them Triple-A safe investments. The imprimatur of a Triple-A rating gave large money managers and institutional investors (both U.S. and foreign) the green light to rush out and buy these securities for themselves and clients—even though they understood little about these investments.

6. As public demand for these arcane but high-yielding securities surged, banks hurried to bundle even more of them. They urged mortgage originators to ramp up the pace of loans made to home buyers. The originators were happy to accommodate since they got paid based on the volume of loans issued. What followed was an absolute collapse in lending standards. Mortgages were handed out to virtually anyone, even borrowers with damaged credit histories. Applications were often approved without confirming employment or income. Nor did it matter whether those purchasing a home could even make a down payment. Simply put: If you could fog up a mirror, you qualified for a loan.
7. The easy availability of mortgages, in turn, fired up the housing market as never before. Home prices leaped higher and further entrenched the view that real estate prices can move in only one direction: up.
8. With credit ample and cheap, consumption of all sorts surged. Adding to the ebullience was that households were also feeling wealthy, since both the stock market and real estate jumped in value. It seemed everyone was in high spirits—everyone except for a few money managers and economists who began to voice alarm that a dangerous housing and debt bubble was in the works.
9. The party started to unravel after the Federal Reserve began to lift the federal funds rate. The benchmark rate slowly (arguably too slowly) rose from 1% in 2003 to 5.25% in 2006. This increase made adjustable-rate mortgages more expensive to service. As that debt became more burdensome, the number of households with money problems escalated. Overextended Americans saw their finances deteriorate so rapidly that they went from being delinquent on their IOUs, to defaulting outright, to ultimately walking away from their financial obligations and abandoning their homes. The result: Trillions of dollars in mortgage-backed securities that investors blindly bought for their expected income suddenly stopped performing, making those investments essentially worthless.
10. A disaster was also looming with the rating agencies. They came to realize that the models used to judge the risk and quality of mortgage-backed paper were horribly wrong. What followed is still mind-numbing. More than 90% of the Triple-A ratings given to mortgage-backed securities between 2006 and 2007 were downgraded to junk status virtually overnight.

11. The dam had now broken wide open. Investor confidence in the rating agencies, banks, and mortgage originators collapsed. Tens of trillions of dollars in real estate values and mortgage-backed securities went up in smoke. Americans were now in financial panic. Banks reacted by slamming shut their lending windows. Home builders froze new construction and consumers went into hibernation. The economy was now in a frightening free-fall.
12. The bursting of the housing and debt bubble was so violent that no corner of the globe was unscathed. The U.S. economic collapse engulfed Europe, Asia, and Latin America. Less than a decade into the new century, the world was forced to confront the most catastrophic financial meltdown since the Great Depression. The steep 2008–09 economic downturn finally ended after Washington carried out the most aggressive monetary and fiscal policies in American history. Though the Great Recession technically ended the summer of 2009, its fallout continues to reverberate around the world.

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CHAPTER 3

The Most Influential U.S. Economic Indicators

EMPLOYMENT SITUATION

Market Sensitivity: Very high.

What Is It: The most eagerly awaited news on the economy. Are jobs being created? What's the latest unemployment rate? It has great economic and political significance.

Most Current News Release on the Internet:

<http://stats.bls.gov/news.release/pdf/empisit.pdf>

Home Web Address: *www.bls.gov*

Release Time: 8:30 a.m. (ET); generally announced on the first Friday of each month and covers the month just concluded.

Frequency: Monthly.

Source: Bureau of Labor Statistics, Department of Labor.

Revisions: Can be major. Revisions often go back two months with each release. The government does benchmark changes for the establishment (or payroll) survey every June. Benchmark changes for the household survey are rare—about every ten years or so.

WHY IS IT IMPORTANT?

This is the big one! No single economic indicator can jolt the stock and bond markets as much as the jobs report. The reason? To begin with, the employment news is very timely. It's released just a week after the end of the month being reviewed. Second, the report is rich in detail about the job market and household earnings, information that can help forecast future economic activity. Third, let's face it—we're talking about the well-being of American workers. Wages and salaries from employment make up the main source of household income. The more that workers earn, the more they buy and propel the

economy forward. If fewer people are working, spending drops off and business suffers. Because household spending accounts for more than two-thirds of the economy's total output, you can see why the investment community and the Federal Reserve pay such close attention to the employment report.

There is another reason it has such a hold on financial markets and policymakers. The job numbers often contain surprises. Experts have a difficult time trying to predict the unemployment figures because so little other information is out yet for that month.

The highlight of the jobs report is, of course, the unemployment rate, which is the percentage of the civilian workforce that is unemployed. What do we mean by civilian workforce? By definition it is anyone 16 years or older who is classified as employed or unemployed (excluding the population in the military, prisons, mental hospitals, and nursing homes). Economists measure monthly changes in the job market from two sources. One is based on the *household survey*, which the government conducts by telephone and mail interviews of households. The other is the *establishment (or payroll) survey*, in which companies are directly queried about recent changes in staffing. Together, the two surveys paint a sweeping picture of the labor market and, more broadly, the state of the economy's health.

HOW IS IT COMPUTED?

Household Survey

It's from the household survey that we derive the widely reported unemployment rate. Each month the government contacts 60,000 homes, a population that includes farm as well as non-farm workers, the self-employed, domestic helpers, and—believe it or not—even U.S. residents who commute to jobs in Mexico and Canada. (The point of the latter is that these Americans still earn money, make payments to the IRS, and are close enough to the U.S. to spend part of their income here.) Here's a sample of the questions asked in these surveys: Are you working? Was the job full- or part-time? If you had a part-time job, was it because you couldn't find suitable full-time work? If you are not working, how many weeks have you been unemployed? How long have you been looking for work? Did you make an attempt in the last four weeks to find a job?

The response rate from households is fairly high—about 95% of those queried do respond. Thus, out of 60,000 households, some 57,000 come back with answers, while 3,000 are not heard from. All the interviews are done either in the week that contains the 12th day of each month or just days later. Based on the information received, the size of the civilian labor force is calculated, along with how many of these people currently have jobs. Then comes a simple equation: Divide the number of those over the age of 16 who are not working by the total number of people in the civilian labor force, and *voilà!*—you have the unemployment rate. If the size of the civilian labor force is 100 million, and 5 million of them are out of work, the nation's unemployment rate is 5%.

Although it's not rocket science to identify someone who is jobless, there is a bit more confusion about who is actually included in the labor force. Normally we do not count the military because everyone in uniform has a job, which is to protect the U.S. So the civilian labor force is the main measure used to quantify the pool of labor available in the economy. However, after that, the definitions get a little cloudy. Among the unemployed, the government includes in its labor force only those who are actively looking for work. What is meant by "actively looking for work"? Simply this: The individual must have made a specific effort to find employment within the preceding four weeks. Any jobless person who is so discouraged by the poor employment prospects that he or she is not actively seeking employment is excluded from the labor-force count and thus is not reflected in the main unemployment rate. (To be fair, the employment report does publish a separate unemployment rate that includes even discouraged workers, but this little-known figure is buried deep in the 35-page release. You'll see precisely where in the later section, "The Tables: Clues on What's Ahead for the Economy.")

The data in the household survey can be quite valuable to anyone doing research on demographics and marketing. It breaks down the population of those who have jobs—and those who do not—by age, sex, ethnicity, educational achievement, and marital status. The highest jobless rate is usually found among teenagers, both male and female. That's followed by blacks, Hispanics, and then whites. The lowest unemployment has traditionally been married men. Another interesting pattern is the link between joblessness and education. The unemployment rate is nearly always highest for those with less than a high-school diploma—and then steadily drops as the level of education increases. The workforce that consistently has the lowest unemployment rate is the group that possesses at least a four-year college degree.

Clearly, lots of useful information can be gleaned from the data. However, one should bear in mind that the household jobs survey has one serious vulnerability. Its integrity is based on the answers given by household members, and they might not always be accurate. For example, some people may be too embarrassed to admit they are unemployed and instead describe themselves as "consultants."

Establishment Survey

The establishment survey—often referred to as the payroll survey—is considered by many to be a better employment measure than the household survey. Consequently, it has grabbed most of the attention of the press and money managers around the world. What's special about it? The information it gathers on the job market comes directly from business establishments, not households. The Bureau of Labor Statistics (BLS) gets in touch with 440,000 corporate and governmental work sites. These entities employ more than 50 million workers, or about one-third of total non-farm employment. The information is obtained by both mail and telephone, and it is collected using the same midmonth schedule as the household survey. Given the large number of places to contact, only 60%–70%

of the responses make it back in time for the first scheduled release of the employment numbers. The reason for the initial low response is that small businesses are notorious for being late with their replies, yet these firms traditionally are the first to hire and fire workers. As more of them eventually submit their answers, the response rate climbs to the mid-80% range, which forms the basis of subsequent revisions in each of the next two months. (Incidentally, you can see what the collection rate is for a particular month here: www.bls.gov/web/empsit/cesregrec.htm.)

The establishment survey includes all persons on the payroll of non-farm businesses; nonprofit groups; and local, state, and federal government offices. Even residents of Mexico and Canada who travel to their jobs in the U.S. are counted. That last group might strike some as bizarre. Remember, however, that all the establishment survey does is tally the number of jobs created or lost in the U.S. business and government sectors, regardless of who filled those posts. The only groups excluded from the establishment survey are farm workers, the self-employed, and domestic help.

What makes the establishment survey such a favorite among economists and investors is that it contains a veritable gold mine of data on the latest changes in employment and income—information that can reveal much about how well the U.S. economic machine is working. To give you a sense of the richness of the data in the payroll numbers, the government looks at more than 500 industries. Among the most important statistics from the report is the net number of new jobs formed or lost in the latest month. How long did the average workweek last? How much overtime was generated? What were the average hourly and weekly earnings in the month, and how do they compare to earlier periods? The establishment survey also breaks down many of these issues by geographic location and specific industry, so you can quickly tell which businesses and regions in the country are doing well and which appear to be in a slump.

An interesting question arises at this point. Because the household and establishment surveys are based on two different sources, to what extent do they agree with what's happening in the employment market? It should come as no surprise that they occasionally tell conflicting stories. For instance, if the unemployment rate, a figure derived from the household survey, drops one month, it gives the impression that the economy is improving and that more people are finding jobs. Yet the establishment survey might simultaneously report that tens of thousands of jobs were actually lost that month.

Why do the two measures occasionally diverge? The reason is they each probe the job market from different perspectives. The household survey collects data on working-age individuals, while the establishment survey doesn't bother with age. It merely asks companies whether they hired new workers. Second, the two surveys have separate guidelines. The household poll includes both farm and non-farm workers, the self-employed, and domestic help. In contrast, the establishment survey covers a narrower population segment by looking only at non-farm workers in the economy; it excludes the others.

Another key difference between the two surveys is that the establishment report makes no distinction between full- and part-time work. Remember, its main focus is to

report how many jobs were created. If an individual has two part-time jobs, the household survey counts that as one employed person, but the establishment survey classifies it as two jobs. Thus, if 100 new positions were created according to the establishment survey, this doesn't necessarily mean that 100 people found new employment. One individual could be holding multiple part-time jobs. Another key difference is the treatment of those who are self-employed; they are counted in the household series but not in the establishment series. Thus, it is easy to see why the two reports might conflict. However, that doesn't undermine their validity. Each survey has important information about the economy that the other lacks. In any event, over the long run, both the household and the establishment numbers move in tandem.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

Let's look at the nuggets of information in the official release that can provide fresh insight into current labor-market conditions and what they say about the economy's future direction.

• **Table A** Summary of Household Data

This page boils down the monthly employment report to some key numbers. The figures here are based solely on responses from households, and it is well worth devoting some time to become familiar with how it is presented.

HOUSEHOLD DATA
Summary table A. Household data, seasonally adjusted
 [Numbers in thousands]

Category	Feb. 2011	Dec. 2011	Jan. 2012	Feb. 2012	Change from: Jan. 2012-Feb. 2012
Employment status					
Civilian noninstitutional population.....	238,851	240,584	242,269	242,435	166
Civilian labor force.....	153,302	153,887	154,395	154,871	476
Participation rate.....	64.2	64.0	63.7	63.9	0.2
Employed.....	139,551	140,790	141,637	142,065	428
Employment-population ratio.....	58.4	58.5	58.5	58.6	0.1
Unemployed.....	13,751	13,097	12,758	12,806	48
Unemployment rate.....	9.0	8.5	8.3	8.3	0.0
Not in labor force.....	85,550	86,697	87,874	87,564	-310
Unemployment rates					
Total, 16 years and over.....	9.0	8.5	8.3	8.3	0.0
Adult men (20 years and over).....	8.8	8.0	7.7	7.7	0.0
Adult women (20 years and over).....	7.9	7.9	7.7	7.7	0.0
Teenagers (16 to 19 years).....	23.9	23.1	23.2	23.8	0.6
White.....	8.0	7.5	7.4	7.3	-0.1
Black or African American.....	15.4	15.8	13.6	14.1	0.5
Asian (not seasonally adjusted).....	6.8	6.8	6.7	6.3	-
Hispanic or Latino ethnicity.....	11.6	11.0	10.5	10.7	0.2
Total, 25 years and over.....	7.6	7.2	7.0	7.0	0.0
Less than a high school diploma.....	13.7	13.8	13.1	12.9	-0.2
High school graduates, no college.....	9.5	8.7	8.4	8.3	-0.1
Some college or associate degree.....	7.8	7.7	7.2	7.3	0.1
Bachelor's degree and higher.....	4.3	4.1	4.2	4.2	0.0

(1) This section starts off with the latest count on the size of the “civilian noninstitutional population.” Okay, few terms in economics can induce sleep as quickly

as this phrase, but bear with me. Imagine a number that represents the broadest number of people in the U.S. that are *potentially available* for work. Why potentially available? Clearly not every single person in the country is employable. By “available” we mean everyone 16 years of age or older—except those on active military duty, in prisons, mental hospitals, or some other institutional facility, since they are effectively unavailable to do work. The civilian noninstitutional population is thus the total pool of labor that employers can theoretically tap.

Below that you will see a category called the “civilian labor force,” which at first glance might seem identical to what was described previously, but it’s not. The “civilian labor force” is the sum of all who already have jobs—plus those unemployed who are actively searching for work. The operative term here is “actively,” which the government defines as individuals who have applied for a job at least once in the past four weeks. Those unemployed who chose not to seek a job during the past four weeks are no longer counted as part of the civilian labor force (though they remain part of the civilian noninstitutional population). To put it another way, the civilian labor force combines the number of those working plus all who are able and willing to work and who show it by seeking employment every month.

Next is the participation rate (commonly known as the labor-force participation rate). Here we get a little more perspective on what is going on in the job market. It tells us what proportion of the entire “working age” population (which is civilian noninstitutional population) is actually employed or ready and able for work (known as the civilian labor force).

Why is this ratio followed so closely? Simple. As a nation, we want to see as many people as possible on the job, or at least diligently looking for work. What we do not want is a situation where the unemployed become so discouraged about the economy that they have simply given up looking for work. This group will likely cut back on spending and restrain economic growth. Nor will they contribute much in paying taxes.

In a typical business cycle, the labor-force participation rate rises when the economy is growing robustly. The reason the rate increases is because as the prospect for employment and pay improves, those who stopped looking for work out of frustration will resume filling out applications. By doing so actively, they have reentered the labor force. Conversely, a falling participation rate points to a faltering economy. When the outlook for jobs becomes grim, more of the unemployed choose to stop looking for work. As a result, these individuals fall off the labor-force roll. They may choose to live off their savings, travel,

return to school and learn a new trade, or enter the underground economy, all of which reduces the labor-force participation rate.

Let's add some historical context here. The labor-force participation rate has been on the rise since the 1960s as more women have entered the job market. The rate jumped from 59.1% at the start of that decade to 66.9% by 2000. But the lingering effects of two major recessions since then have hurt the job market enough to pull the labor-force participation rate back down to around 64%.

The household employment figure reflects the number of people who have jobs. This measure can be a sensitive leading indicator of an economy turning up, because it also captures the self-employed and the people they hire, something the payroll survey doesn't do. Both the number of self-employed and those working for small start-up firms tend to increase at a faster rate than the rest of the labor market in the early stages of a recovery. Thus, as a recession nears its end, keep an eye on household employment; it may start to climb well before the payroll statistics do.

Below that is another noteworthy metric, the employment-population ratio, and it tells us whether the economy is generating enough new jobs for a growing population. A high or rising employment-population ratio indicates that firms are hiring at a pace that keeps up with the increase in population. With more of the U.S. population at work, household incomes will rise, and that leads to greater consumer expenditures and stronger economic growth. On the flip side, a significant drop in the ratio can spell trouble. It means that the economy is not producing enough jobs to absorb an ever-increasing pool of potential workers. Not only does that hurt the unemployed, it punishes even those who are working. After all, if the supply of people seeking work swells, but hiring does not, then employers acquire more leverage to limit pay increases.

How has the employment-population ratio performed in the past? Overall, it has been inching higher since the end of WWII as double-income households have become more prevalent. The ratio fluctuated around 55% from the late 1940s to the 1960s, then marched toward 60% by the end of the 1970s, and finally topped out at 64.7% in 2000. But within this long arc of history, the employment-population ratio fluctuates up and down during business cycles. Those swings allow us to draw conclusions about the path of the economy. For instance, the severity of 2008–09 recession forced so many people out of work that the employment-population ratio collapsed to below 60%, and it has remained there for years. By closely monitoring changes in this ratio, we can better foresee shifts in the job market, worker income growth, and the underlying strength of the economy.

- (2) Here you'll find the latest monthly unemployment rates for all workers, along with a demographic breakdown of that population. Many economists often refer to the unemployment rate as a lagging indicator, which means it responds slowly to changes in the economy. As a result, they say, one can divine little from it about the future. However, that's not quite the case. By and large, the unemployment rate itself is of little use in forecasting an economic recovery. Joblessness can remain stubbornly high as long as two years after a recession ends because most employers are reluctant to add to their payrolls until they're convinced the economy is genuinely on a solid growth path. Another reason for the slow rebound in job creation is that companies have made great strides in operating more efficiently. Thanks to the widespread use of computerized equipment, better inventory management, and greater foreign outsourcing of production, employers can more easily raise output without hiring back U.S. workers in the numbers they once did.

Where the unemployment rate can serve as a leading indicator is by warning of an impending downturn in economic activity. Since the early 1980s, the increased use of sophisticated software and information technologies has allowed firms to respond much more quickly than in the past to changes in the demand for goods and services. As soon as executives detect signs of a softening in business activity, they act faster to control costs. Because labor is the single largest expense for companies, layoffs are now occurring months before the onset of a recession. In the 1990–91 recession, the jobless rate turned higher more than a year *before* business activity turned down. When the 2001 recession started, the unemployment rate had bottomed out 11 months earlier. A similar pattern emerged prior to the the 2008–09 downturn, when the jobless rate began its climb seven months before the economy began to sink. Thus, this indicator can act as an early-warning system of an economy headed for trouble.

One last point about the unemployment rate: Roughly 150,000 new people of working age enter the labor force every month simply because of the nation's population growth, immigration, and students who graduate. This means that the economy needs to create at least as many jobs each month, on average, just to keep the unemployment rate from rising. Most economists seem to agree that to produce that many new positions month after month, the economy must over time expand by at least a 3%–4% annual rate. Should growth fall below that pace, fewer jobs will be created, and the unemployment rate will climb higher.

- **Table B** Summary of Establishment Data

Unlike Table A, which sought out the views on employment conditions from households, we get in this table the latest statistics on job creation from the perspective of companies.

ESTABLISHMENT DATA
Summary table B. Establishment data, seasonally adjusted

Category	Feb. 2011	Dec. 2011	Jan. 2012 ^a	Feb. 2012 ^b
EMPLOYMENT BY SELECTED INDUSTRY (Over-the-month change, in thousands)				
Total nonfarm.....	220	223	284	227
Total private.....	257	234	285	233
Goods-producing.....	73	62	83	24
Mining and logging.....	3	8	10	6
Construction.....	33	26	21	-13
Manufacturing.....	37	28	52	31
Durable goods ¹	29	30	42	31
Motor vehicles and parts.....	2.6	7.4	7.7	5.6
Nondurable goods.....	8	-2	10	0
Private service-providing ¹	184	172	202	209
Wholesale trade.....	12.8	14.7	14.5	8.4
Retail trade.....	5.4	6.8	26.1	-7.4
Transportation and warehousing.....	25.1	5.1	16.1	10.6
Information.....	-4	1	-20	-1
Financial activities.....	3	5	-1	6
Professional and business services ¹	49	72	76	82
Temporary help services.....	13.8	18.7	32.1	45.2
Education and health services ¹	29	33	37	71
Health care and social assistance.....	16.1	29.5	43.0	61.1
Leisure and hospitality.....	57	28	46	44
Other services.....	5	6	7	-6
Government.....	-37	-11	-1	-6
WOMEN AND PRODUCTION AND NONSUPERVISORY EMPLOYEES AS A PERCENT OF ALL EMPLOYEES ²				
Total nonfarm women employees.....	49.5	49.3	49.3	49.3
Total private women employees.....	48.1	47.8	47.8	47.8
Total private production and nonsupervisory employees.....	82.4	82.5	82.6	82.7
HOURS AND EARNINGS ALL EMPLOYEES				
Total private				
Average weekly hours.....	34.3	34.5	34.5	34.5
Average hourly earnings.....	\$ 22.88	\$ 23.25	\$ 23.28	\$ 23.31
Average weekly earnings.....	\$784.78	\$802.13	\$803.16	\$804.20
Index of aggregate weekly hours (2007=100) ³	93.2	95.3	95.5	95.7
Over-the-month percent change.....	0.2	0.5	0.2	0.2
Index of aggregate weekly payrolls (2007=100) ⁴	101.7	105.6	106.0	106.4
Over-the-month percent change.....	0.3	0.6	0.4	0.4
HOURS AND EARNINGS PRODUCTION AND NONSUPERVISORY EMPLOYEES				
Total private				
Average weekly hours.....	33.6	33.7	33.7	33.8
Average hourly earnings.....	\$ 19.33	\$ 19.59	\$ 19.61	\$ 19.64
Average weekly earnings.....	\$649.49	\$660.18	\$660.86	\$663.83
Index of aggregate weekly hours (2002=100) ³	100.4	102.4	102.7	103.3
Over-the-month percent change.....	0.9	0.2	0.3	0.6
Index of aggregate weekly payrolls (2002=100) ⁴	129.6	134.1	134.6	135.6
Over-the-month percent change.....	0.9	0.3	0.4	0.7

(3) Want to know which economic statistic generates the most excitement in the stock and bond markets every month? It's the monthly change in non-farm employment from the establishment data. All the figures in this section are derived from payroll records and represent the strongest evidence of whether the country is creating jobs. Many analysts evaluate the economy's strength on the basis of how many net new positions have been formed. However, one has to be careful about jumping to conclusions. The change in the number of non-farm jobs created includes positions in government. To find out what is happening in the private business sector, one has to subtract the government's contribution from total non-farm payroll. Here's an illustration of why that could be important. Let's say the establishment survey shows that the net number of non-farm jobs dropped by a net 50,000 workers in one month. A troubling sign for the economy? Not necessarily. It could be that the business community actually

hired 30,000 net new jobs in the month, but that was offset when the government laid off 80,000 people in the same period (30,000 – 80,000 = –50,000). In this example, the business community was healthy enough to add 30,000 workers, but that was overshadowed by cutbacks in government jobs. Thus, it’s important to keep an eye on how federal, state, and local governments influence overall non-farm employment.

- (4) At the bottom of Table B are the average hourly and weekly earnings for the month. The value of these measures should be obvious. If worker incomes rise, it bodes well for future spending. More elaborate information on hourly and weekly earnings can be found in Table B-3 (not shown), which looks at pay by selected industries. Rising earnings can reveal those industries that are doing well and where there might be a growing scarcity of experienced workers.

• **Table B-2** Average Weekly Hours and Overtime of All Employees on Private Non-Farm Payrolls by Industry

ESTABLISHMENT DATA

Table B-2. Average weekly hours and overtime of all employees on private nonfarm payrolls by industry sector, seasonally adjusted

Industry	Feb. 2011	Dec. 2011	Jan. 2012 ^p	Feb. 2012 ^p
AVERAGE WEEKLY HOURS				
Total private.....	34.3	34.5	34.5	34.5
Goods-producing.....	39.8	40.2	40.4	40.5
Mining and logging.....	44.1	44.7	45.3	45.1
Construction.....	37.7	38.4	38.6	38.9
Manufacturing.....	40.5	40.7	40.9	41.0
Durable goods.....	40.8	41.1	41.3	41.4
Nondurable goods.....	39.9	40.0	40.3	40.3
Private service-providing.....	33.2	33.3	33.3	33.3
Trade, transportation, and utilities.....	34.5	34.7	34.7	34.8
Wholesale trade.....	38.5	38.8	38.8	38.8
Retail trade.....	31.5	31.9	31.9	32.0
Transportation and warehousing.....	38.8	38.3	38.3	38.1
Utilities.....	41.3	41.1	41.5	41.3
Information.....	36.6	36.6	36.7	36.7
Financial activities.....	37.1	37.3	37.4	37.3
Professional and business services.....	35.7	35.8	35.8	35.8
Education and health services.....	32.7	32.8	32.8	32.8
Leisure and hospitality.....	25.9	26.1	26.1	26.1
Other services.....	31.7	31.6	31.6	31.6
AVERAGE OVERTIME HOURS				
Manufacturing.....	3.2	3.3	3.4	3.4
Durable goods.....	3.2	3.3	3.4	3.4
Nondurable goods.....	3.3	3.2	3.4	3.3

^p Preliminary

- (5) Differences in hours worked is another advance indicator of future economic activity. If you want to get a preview of the economy’s direction, follow the changes in average hours worked in a week. It correlates very closely with overall output (GDP) and also changes in personal income. If the number of hours worked increases for three consecutive months, it’s a strong sign that business will soon accelerate hiring. Should the number of hours worked show a prolonged decline, expect layoffs and cutbacks in business and consumer spending.

The number of hours worked in manufacturing is especially sensitive to any shift in the public's demand for goods. When average weekly manufacturing hours dips below 40, it's often an indication that the economy is struggling, whereas 40.5 hours and above suggests that business activity is moving into higher gear. In recent history, average hours worked in manufacturing has ranged from a recession-level 38.5 to a robust 41 hours.

You'll also find in this table average weekly hours worked for nearly two dozen major industry groups. This information can tip off investors on the health of specific sectors in the economy. For example, if average weekly hours in the construction industry drops, it could lead to a fall in housing starts, cause higher unemployment among workers in real estate, and hurt other firms whose fortunes are linked to home building. Indeed, anyone considering whether to buy or sell stocks of home-building companies should monitor these economic indicators. They can signal a change in revenues and profits with major home builders months before these firms release their quarterly earnings statements.

Overtime hours are another excellent indicator of future employment and GDP trends. During periods of economic uncertainty, instead of hiring new workers, companies might ask existing employees to put in extra hours. If overtime increases and that pace is sustained for at least three months, firms will be under pressure to consider hiring again. Overtime can be quite costly to a company, and, let's face it, at some point you will exhaust your present employees and diminish the quality of their work. Thus, rising overtime is a precursor to new permanent hires. Weekly manufacturing overtime normally fluctuates within a narrow range of between 2.1 and 3.5 hours. If it slips below 3.0 hours a week for a few months, layoffs might increase. A consistent reading above 3.3 overtime hours presages new hiring.

One other note: The Bureau of Labor Statistics' online database—which is freely available to all—drills down average weekly hours worked and overtime each month with much greater industry detail. Visit www.bls.gov/data/.

• **Table A-8** Employed Persons by Class of Worker and Part-Time Status

- (6) Figures on part-time employment tell an interesting tale that analysts often miss. When it's hard to get suitable full-time work, many people have no choice but to accept part-time employment. This table shows the number of people in the non-farm economy who have accepted part-time work for economic reasons, which means they could not locate suitable full-time positions. A steady upward trend in the numbers suggests that the economy is still weak and unable to generate enough full-time posts to satisfy job seekers. Should the number of forced part-time workers decline, it means that enough full-time jobs are becoming available to encourage part-timers to leave their posts.

HOUSEHOLD DATA
Table A-8. Employed persons by class of worker and part-time status
 [In thousands]

Category	Not seasonally adjusted			Seasonally adjusted					
	Feb. 2011	Jan. 2012	Feb. 2012	Feb. 2011	Oct. 2011	Nov. 2011	Dec. 2011	Jan. 2012	Feb. 2012
CLASS OF WORKER									
Agriculture and related industries.....	2,097	2,042	2,030	2,247	2,257	2,262	2,349	2,208	2,185
Wage and salary workers ¹	1,233	1,259	1,238	1,337	1,317	1,359	1,429	1,376	1,353
Self-employed workers, unincorporated.....	849	765	767	901	864	849	874	800	814
Unpaid family workers.....	15	18	26	—	—	—	—	—	—
Nonagricultural industries.....	135,996	137,902	138,654	137,388	138,167	138,304	138,411	139,491	139,945
Wage and salary workers ¹	127,336	129,299	130,204	128,610	129,531	129,604	129,662	130,569	131,365
Government.....	20,985	20,519	20,772	20,874	20,516	20,434	20,616	20,583	20,617
Private industries.....	106,351	108,780	109,432	107,731	108,977	109,159	109,064	109,966	110,778
Private households.....	688	569	621	—	—	—	—	—	—
Other industries.....	105,663	108,211	108,811	107,003	108,177	108,485	108,407	109,353	110,138
Self-employed workers, unincorporated.....	8,573	8,491	8,343	8,666	8,553	8,628	8,587	8,769	8,477
Unpaid family workers.....	87	112	106	—	—	—	—	—	—
PERSONS AT WORK PART TIME²									
All industries									
Part time for economic reasons ³	8,749	8,918	8,455	8,383	8,790	8,469	8,098	8,230	8,119
Slack work or business conditions.....	6,051	6,025	5,790	5,661	5,839	5,578	5,305	5,372	5,446
Could only find part-time work.....	2,402	2,479	2,338	2,410	2,538	2,496	2,419	2,551	2,404
Part time for noneconomic reasons ⁴	18,669	18,958	19,358	18,280	18,401	18,363	18,372	18,636	18,827
Nonagricultural industries									
Part time for economic reasons ³	8,633	8,747	8,302	8,293	8,664	8,358	7,952	8,083	7,988
Slack work or business conditions.....	5,974	5,922	5,694	5,595	5,762	5,502	5,199	5,278	5,356
Could only find part-time work.....	2,388	2,464	2,313	2,376	2,566	2,518	2,423	2,563	2,365
Part time for noneconomic reasons ⁴	18,321	18,596	18,980	17,930	18,003	17,941	17,969	18,298	18,399

• **Table A-11 Unemployed Persons by Reason for Unemployment**

HOUSEHOLD DATA
Table A-11. Unemployed persons by reason for unemployment
 [Numbers in thousands]

Reason	Not seasonally adjusted			Seasonally adjusted					
	Feb. 2011	Jan. 2012	Feb. 2012	Feb. 2011	Oct. 2011	Nov. 2011	Dec. 2011	Jan. 2012	Feb. 2012
NUMBER OF UNEMPLOYED									
Job losers and persons who completed temporary jobs.....	9,212	8,234	7,866	8,337	7,924	7,599	7,602	7,321	7,209
On temporary layoff.....	1,718	1,892	1,526	1,261	1,226	1,181	1,216	1,284	1,135
Not on temporary layoff.....	7,495	6,342	6,340	7,076	6,699	6,418	6,386	6,037	6,075
Permanent job losers.....	6,005	4,948	4,923	5,687	5,308	5,033	5,089	4,807	4,755
Persons who completed temporary jobs.....	1,489	1,395	1,416	1,389	1,391	1,385	1,296	1,230	1,320
Job leavers.....	888	957	1,032	904	1,068	1,005	953	939	1,031
Reentrants.....	3,338	3,276	3,337	3,354	3,387	3,355	3,399	3,325	3,361
New entrants.....	1,103	1,074	1,196	1,315	1,291	1,276	1,280	1,253	1,392
PERCENT DISTRIBUTION									
Job losers and persons who completed temporary jobs.....	63.4	60.8	58.6	59.9	58.0	57.4	57.4	57.0	55.5
On temporary layoff.....	11.8	14.0	11.4	9.1	9.0	8.9	9.2	10.0	8.7
Not on temporary layoff.....	51.5	46.8	47.2	50.9	49.0	48.5	48.3	47.0	46.7
Job leavers.....	6.1	7.1	7.7	6.5	7.8	7.6	7.2	7.3	7.9
Reentrants.....	23.0	24.2	24.8	24.1	24.8	25.3	25.7	25.9	25.9
New entrants.....	7.6	7.9	8.9	9.5	9.4	9.6	9.7	9.8	10.7

(7) There are two key metrics of note here. The first refers to the percentage of those unemployed who are “not on temporary layoff.” It can say a lot about the severity of an economic downturn. Many industries temporarily shut down some operations and lay off workers when demand for goods and services declines. Once business conditions improve, many of those laid off are called back to

work. There are also times when companies dismiss workers who have no chance of returning. Some firms close their doors for good. Others restructure their operations or relocate factories to other countries where labor is cheaper. And then there is the churning that comes with mergers and acquisitions where workers are let go to eliminate duplicate jobs and reduce other operating costs. During periods of economic strength, the percentage of unemployed that is “not temporary” can slip to below 30%. However, that share can surge to more than 50% when the economy is in serious decline, as we saw in the 2008–09 downturn.

The other statistic in this table, a particular favorite by Federal Reserve officials, is the “quit rate.” This term is jargon for what is formally listed in the table as “job leavers.” The reason this particular measure is popular with policymakers is the logic behind it. Of all those unemployed, the “job leavers” ratio represents the percentage of workers who *voluntarily* left their jobs to seek higher-paying opportunities. These people deliberately quit one job without immediately acquiring another, confident that they will find more lucrative employment relatively quickly. Normally, job leavers in this table fluctuate between 10% and 15% of the unemployed. When the job leavers rate declines, it is a sign that fewer workers are willing to quit, because they see a deterioration in the job market. If the rate increases, it suggests that the economy is generating enough new jobs for workers to feel more comfortable about giving up their current posts and searching for something better.

• **Table A-12** Unemployed Persons by Duration of Unemployment

HOUSEHOLD DATA
Table A-12. Unemployed persons by duration of unemployment
 [Numbers in thousands]

Duration	Not seasonally adjusted			Seasonally adjusted					
	Feb. 2011	Jan. 2012	Feb. 2012	Feb. 2011	Oct. 2011	Nov. 2011	Dec. 2011	Jan. 2012	Feb. 2012
NUMBER OF UNEMPLOYED									
Less than 5 weeks.....	2,263	2,923	2,366	2,408	2,676	2,510	2,669	2,486	2,541
5 to 14 weeks.....	3,801	3,106	3,454	3,080	3,285	2,896	2,858	2,884	2,807
15 weeks and over.....	8,478	7,512	7,609	8,208	7,869	7,766	7,628	7,498	7,397
15 to 26 weeks.....	2,420	1,915	2,199	2,195	2,029	2,087	2,039	1,980	1,971
27 weeks and over.....	6,058	5,597	5,411	6,014	5,839	5,680	5,588	5,518	5,426
Average (mean) duration, in weeks ¹	36.7	38.2	39.1	37.4	39.2	40.9	40.8	40.1	40.0
Median duration, in weeks.....	20.6	19.2	19.3	21.1	20.8	21.5	21.0	21.1	20.3
PERCENT DISTRIBUTION									
Less than 5 weeks.....	15.6	21.6	17.6	17.6	19.4	19.1	20.3	19.3	19.9
5 to 14 weeks.....	26.1	22.9	25.7	22.5	23.8	22.0	21.7	22.4	22.0
15 weeks and over.....	58.3	55.5	56.7	59.9	56.9	59.0	58.0	58.3	58.0
15 to 26 weeks.....	16.6	14.1	16.4	16.0	14.7	15.8	15.5	15.4	15.5
27 weeks and over.....	41.7	41.3	40.3	43.9	42.2	43.1	42.5	42.9	42.6

8 ▶

- (8) Another very good barometer of economic activity can be found in Table A-12, which shows not just the size of the unemployed population, but how long they've been without jobs. In the table, the length of time unemployed ranges from less than 5 weeks to 27 weeks and more. A sharp increase in the number of persons out of work 5 weeks or less means that companies are laying off workers in greater numbers. Also noteworthy is the other end of the jobless extreme, those unemployed 27 weeks and more. That's because by then most unemployment insurance benefits have expired, and this can have all sorts of implications for society. There is a likelihood of more crime, greater homelessness, and additional spending on public welfare programs. A falling trend in the duration of the unemployed is a portent that the worst of the economy's troubles are over and that a recovery might be under way. (To avoid such social dislocations, Congress may approve extending unemployment benefits for additional weeks.)

One data point in this table that has been especially successful in predicting turning points in the economy is the number of people unemployed for "15 weeks and over." Without fail, this number starts to climb well before the economy officially turns south. It generally bottoms out on average 10 months before the onset of a recession, but can range from 5 to 13 months. In the recession of 2008–09, this metric began its climb a full year before the downturn began.

Nearby is another important statistical clue: the average length of time of being jobless. During the booming 1990s, the average duration of unemployment was just 14 weeks; an economic slump can extend that idle period to more than 40 weeks.

• **Table A-15** Alternative Measures of Labor Underutilization

- (9) The main unemployment rate gets a lot of play in the press. However, as mentioned earlier, it excludes those who are jobless and too discouraged to even look anymore. The headline unemployment rate also does not factor in full-time workers who lost their jobs and have since grudgingly accepted part-time employment just to earn a few dollars. However, this table recalculates the unemployment rate to include these other categories (see U-5 and U-6), and the results can be startling. When you add other groups of discouraged workers to the equation, the broader unemployment rate can be as much as 7 percentage points above the more common headline rate.

HOUSEHOLD DATA
Table A-15. Alternative measures of labor underutilization
 [Percent]

Measure	Not seasonally adjusted			Seasonally adjusted					
	Feb. 2011	Jan. 2012	Feb. 2012	Feb. 2011	Oct. 2011	Nov. 2011	Dec. 2011	Jan. 2012	Feb. 2012
U-1 Persons unemployed 15 weeks or longer, as a percent of the civilian labor force.....	5.6	4.9	4.9	5.4	5.1	5.0	5.0	4.9	4.8
U-2 Job losers and persons who completed temporary jobs, as a percent of the civilian labor force.....	6.0	5.4	5.1	5.4	5.1	4.9	4.9	4.7	4.7
U-3 Total unemployed, as a percent of the civilian labor force (official unemployment rate).....	9.5	8.8	8.7	9.0	8.9	8.7	8.5	8.3	8.3
U-4 Total unemployed plus discouraged workers, as a percent of the civilian labor force plus discouraged workers.....	10.1	9.4	9.3	9.6	9.5	9.3	9.1	8.9	8.9
U-5 Total unemployed, plus discouraged workers, plus all other persons marginally attached to the labor force, as a percent of the civilian labor force plus all persons marginally attached to the labor force.....	11.1	10.5	10.2	10.6	10.4	10.2	10.0	9.9	9.8
U-6 Total unemployed, plus all persons marginally attached to the labor force, plus total employed part time for economic reasons, as a percent of the civilian labor force plus all persons marginally attached to the labor force.....	16.7	16.2	15.6	15.9	16.0	15.6	15.2	15.1	14.9

NOTE: Persons marginally attached to the labor force are those who currently are neither working nor looking for work but indicate that they want and are available for a job and have looked for work sometime in the past 12 months. Discouraged workers, a subset of the marginally attached, have given a job-market related reason for not currently looking for work. Persons employed part time for economic reasons are those who want and are available for full-time work but have had to settle for a part-time schedule. Updated population controls are introduced annually with the release of January data.

• **Table B-1 Employees on Non-Farm Payrolls by Industry Sector and Selected Industry Detail**

ESTABLISHMENT DATA
Table B-1. Employees on nonfarm payrolls by industry sector and selected industry detail
 — Continued
 [In thousands]

Industry	Not seasonally adjusted			Seasonally adjusted					Change from: Jan. 2012 - Feb. 2012 ²
	Feb. 2011	Dec. 2011	Jan. 2012 ²	Feb. 2012 ²	Feb. 2011	Dec. 2011	Jan. 2012 ²	Feb. 2012 ²	
Administrative and waste services - Continued									
Administrative and support services ¹	6,966.6	7,533.7	7,159.7	7,220.3	7,284.4	7,477.0	7,523.1	7,571.5	48.4
Employment services ¹	2,762.8	3,163.4	2,910.7	2,981.2	2,897.9	3,047.9	3,089.5	3,150.6	61.1
Temporary help services.....	2,147.1	2,505.8	2,280.5	2,334.8	2,259.3	2,396.3	2,428.4	2,473.6	45.2
Business support services.....	814.6	838.8	823.4	822.1	811.5	819.9	822.2	818.7	-3.5
Services to buildings and dwellings.....	1,606.0	1,702.1	1,621.7	1,617.9	1,770.9	1,780.5	1,784.4	1,781.6	-2.8
Waste management and remediation services.....	353.8	365.5	364.6	364.3	362.8	367.9	371.4	372.9	1.5
Education and health services.....	19,829	20,236	19,985	20,304	19,725	20,079	20,116	20,187	71
Educational services.....	3,365.0	3,396.8	3,189.6	3,436.8	3,219.9	3,278.9	3,273.1	3,282.2	9.1
Health care and social assistance.....	16,463.7	16,839.2	16,795.2	16,867.3	16,505.0	16,800.3	16,843.3	16,904.4	61.1
Health care ³	13,872.5	14,204.4	14,183.2	14,235.1	13,917.9	14,185.4	14,228.7	14,277.7	49.0
Ambulatory health care services ¹	6,048.7	6,249.3	6,227.6	6,264.3	6,066.5	6,230.0	6,255.5	6,283.7	28.2
Offices of physicians.....	2,320.0	2,402.3	2,388.6	2,398.4	2,324.8	2,389.9	2,394.2	2,403.7	9.5
Outpatient care centers.....	614.7	639.8	640.9	647.0	615.2	637.9	642.3	646.6	4.3
Home health care services.....	1,119.2	1,160.0	1,159.7	1,168.8	1,124.1	1,160.0	1,166.7	1,171.7	5.0
Hospitals.....	4,686.1	4,775.7	4,784.3	4,797.6	4,697.0	4,774.3	4,791.2	4,806.6	15.4
Nursing and residential care facilities ¹	3,137.7	3,179.4	3,171.3	3,173.2	3,154.4	3,174.1	3,182.0	3,187.4	5.4
Nursing care facilities.....	1,656.9	1,664.7	1,661.1	1,654.0	1,666.8	1,661.4	1,664.9	1,662.5	-2.4
Social assistance ³	2,591.2	2,634.8	2,612.0	2,632.2	2,587.1	2,614.9	2,614.6	2,626.7	12.1
Child day care services.....	859.0	854.6	843.7	852.4	846.4	841.5	837.2	841.0	3.8
Leisure and hospitality.....	12,614	13,116	12,826	12,954	13,195	13,464	13,510	13,554	44
Arts, entertainment, and recreation.....	1,704.8	1,746.7	1,698.7	1,719.9	1,903.7	1,911.0	1,926.1	1,925.9	-0.2
Performing arts and spectator sports.....	369.3	373.3	357.3	364.1	399.9	392.9	400.2	395.4	-4.8
Museums, historical sites, and similar institutions.....	118.7	128.1	122.3	122.5	130.6	135.4	135.0	134.7	-0.3
Amusements, gambling, and recreation.....	1,216.8	1,245.3	1,219.1	1,233.3	1,373.2	1,382.7	1,390.9	1,395.8	4.9
Accommodation and food services.....	10,909.5	11,369.2	11,127.3	11,233.7	11,291.1	11,552.5	11,583.5	11,628.0	44.5
Accommodation.....	1,690.9	1,734.9	1,706.4	1,716.8	1,774.5	1,802.0	1,802.5	1,806.2	3.7
Food services and drinking places.....	9,218.6	9,634.3	9,420.9	9,516.9	9,516.6	9,750.5	9,781.0	9,821.8	40.8
Other services.....	5,284	5,336	5,294	5,309	5,337	5,359	5,366	5,360	-6
Repair and maintenance.....	1,145.1	1,156.9	1,149.6	1,150.9	1,156.1	1,165.3	1,166.8	1,161.5	-5.3
Personal and laundry services.....	1,262.5	1,289.9	1,271.3	1,275.7	1,277.8	1,292.3	1,291.5	1,291.4	-0.1
Membership associations and organizations.....	2,876.2	2,889.0	2,872.6	2,882.6	2,903.4	2,901.1	2,907.5	2,907.5	0.0

ESTABLISHMENT DATA

Table B-1. Employees on nonfarm payrolls by industry sector and selected industry detail
 — Continued
 [In thousands]

Industry	Not seasonally adjusted				Seasonally adjusted				Change from: Jan. 2012 - Feb. 2012 ^a
	Feb. 2011	Dec. 2011	Jan. 2012 ^a	Feb. 2012 ^b	Feb. 2011	Dec. 2011	Jan. 2012 ^a	Feb. 2012 ^a	
Retail trade - Continued									
Electronics and appliance stores.....	524.5	541.8	516.2	509.5	530.6	514.8	513.4	513.9	0.5
Building material and garden supply stores...	1,084.3	1,108.2	1,086.7	1,099.2	1,131.6	1,141.8	1,143.0	1,143.4	0.4
Food and beverage stores.....	2,781.0	2,874.5	2,838.4	2,822.7	2,811.2	2,848.5	2,854.1	2,856.8	2.7
Health and personal care stores.....	970.6	999.9	988.9	988.9	975.9	984.2	989.5	993.8	4.3
Gasoline stations.....	808.8	827.2	817.1	815.0	822.2	830.5	828.4	828.0	-0.4
Clothing and clothing accessories stores.....	1,295.5	1,527.9	1,366.0	1,309.5	1,345.0	1,384.5	1,369.3	1,367.7	-1.6
Sporting goods, hobby, book, and music stores.....	568.0	603.2	560.5	561.1	579.2	558.2	553.6	566.0	12.4
General merchandise stores ¹	2,997.2	3,337.1	3,158.8	3,023.1	3,061.2	3,116.0	3,138.8	3,103.4	-35.4
Department stores.....	1,505.0	1,734.6	1,626.9	1,523.0	1,538.0	1,567.1	1,593.0	1,568.0	-25.0
Miscellaneous store retailers.....	751.9	778.0	750.0	757.6	762.1	761.5	766.1	770.1	4.0
Nonstore retailers.....	418.9	466.9	441.7	430.4	428.0	435.7	439.2	439.5	0.3
Transportation and warehousing.....	4,202.5	4,435.0	4,294.6	4,293.8	4,261.4	4,321.8	4,337.9	4,348.5	10.6
Air transportation.....	452.2	455.1	455.8	454.7	454.0	457.1	457.8	456.0	-1.8
Rail transportation.....	223.4	231.4	230.8	231.0	225.0	231.7	232.2	232.3	0.1
Water transportation.....	61.2	63.0	64.1	64.6	64.3	63.3	65.6	66.3	0.7
Truck transportation.....	1,248.3	1,315.6	1,292.2	1,295.5	1,284.2	1,318.1	1,321.3	1,331.5	10.2
Transit and ground passenger transportation.....	446.2	449.3	447.1	445.5	435.3	433.5	436.5	435.1	-1.4
Pipeline transportation.....	42.2	43.5	43.8	43.7	42.3	43.4	43.5	43.7	0.2
Scenic and sightseeing transportation.....	20.3	24.4	22.1	23.0	27.3	29.6	30.3	31.0	0.7
Support activities for transportation.....	554.8	575.7	573.4	572.1	557.6	574.1	577.2	575.4	-1.8
Couriers and messengers.....	517.6	618.2	521.0	517.7	526.8	521.9	522.6	524.3	1.7
Warehousing and storage.....	636.3	658.8	644.3	646.0	648.6	650.1	650.9	652.9	2.0
Utilities.....	551.2	557.1	558.0	558.1	552.9	559.1	559.6	560.4	0.8
Information.....	2,663	2,660	2,600	2,617	2,674	2,645	2,625	2,624	-1
Publishing industries, except Internet.....	749.2	749.9	739.1	740.3	751.6	746.1	742.0	740.9	-1.1
Motion picture and sound recording industries.....	352.1	367.2	330.8	349.0	359.7	363.8	350.3	356.0	5.7
Broadcasting, except Internet.....	283.7	281.0	279.5	278.7	284.5	279.6	279.8	278.4	-1.4
Telecommunications.....	888.2	851.9	846.9	842.5	885.6	846.9	846.6	840.2	-6.4
Data processing, hosting and related services.....	241.2	243.7	237.9	241.7	242.7	242.5	240.3	242.2	1.9
Other information services.....	148.7	166.5	165.3	165.1	149.5	166.5	166.2	166.5	0.3
Financial activities.....	7,624	7,707	7,647	7,656	7,669	7,696	7,695	7,701	6

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(10) One of the best forward-looking clues on where the economy and certain industries are headed can be found in this detailed table. One cannot overstate the value of information provided here. For example, one statistic worth tracking for clues about future employment measures shifts in the hiring of temporary workers. Keep in mind that temp work has become an increasingly important segment of the labor economy because it allows companies to operate with greater flexibility. More than 25% of all new positions filled by business in 2010 were temporary jobs. Fifteen years earlier, temp employment accounted for just 6% of all new private-sector jobs. The reason one should carefully monitor the temporary workforce is that it also serves as an excellent forecasting tool. Temps are the first to lose their jobs when an economy gets into trouble, a trend that can begin as early as 12 months before the onset of recession. Once the economy makes the important turn from recession to recovery—a transition that is difficult to identify in real time—businesses will prefer to employ temporary help first before taking the more expensive step of permanently hiring and training new full-time employees. Once employers

trust that the recovery is real, they feel more comfortable about recruiting permanent workers. (In addition to the Bureau of Labor Statistics monthly numbers on temp employment, a weekly measure can be found at the American Staffing Association's Web site, www.americanstaffing.net/statistics/staffing_index.cfm.)

A second great metric to follow is employment in "truck transportation." The demand for truck drivers is highly sensitive to booms and busts in the economic cycle. If retailers and manufacturers sense that demand is slacking or see their inventories swelling, they will reduce new orders from their own suppliers. Since most basic commodities and finished consumer products get shipped to their final destination by trucks, a decline in orders will reduce demand for truck drivers and even lead to layoffs. On the other hand, if customer demand improves and inventories get too thin, new orders will rebound and that increases the need for truckers.

A third useful data point is to track monthly swings in employment in the "child-care services" industry. As conditions in the job market improve, the number of working parents increases and they will make arrangements to place their young children with child-care centers. Many states have strict laws on the ratio of teachers to infants and toddlers, which means these centers will be obligated to hire more people to be in legal compliance. Should economic conditions deteriorate and layoffs accelerate, child-care centers will see demand for their service decline, and this has typically led to dismissals of caretakers.

MARKET IMPACT

Bonds

Traders get quite agitated when there's a strong jobs report, especially if it's unexpected. The news can portend accelerating inflation and rising interest rates, both of which are anathema to bondholders. Thus, be prepared for a sell-off in fixed-income securities when job creation is surging. How far bond prices will fall and how much yields will rise depends on many factors, but the most important is where the economy happens to be in the business cycle. If the U.S. has just managed to climb out of recession, a jump in employment will likely have only a modest effect on bond prices, because there's no immediate danger of inflation. However, if employment accelerates when the economy is already operating at or near peak capacity, prepare to see a steep drop in bond prices and sharply higher interest rates.

In contrast, a series of weak employment reports reflects a more sluggish economy, which is bullish for bond prices and means interest rates will head lower.

Stocks

News of robust employment can make equity investors positively giddy. As the number of people holding jobs increases and the workweek expands, employees easily slip into the role of consumers and spend more money. The result: Expectations rise that business sales and profits will pick up in the future. This can set the stage for a rally in the equity market. The only exception is if the economy is overheating, with interest rates and inflation turning up. The higher cost of borrowing will hurt companies and undermine stock prices.

Little or no growth in employment is generally seen as bad for stocks. The worry is that households will be less inclined to shop. Weak sales can shrink corporate income and earnings, thereby reducing the incentive to own shares.

Dollar

Employment news can greatly influence the dollar's value in currency markets. A vigorous jobs report could drive interest rates higher and rally stocks, which makes the dollar more attractive to foreign investors. They can now earn more interest income by owning U.S. Treasury securities and gain from higher equity values. On the other hand, an anemic jobs report softens demand for U.S. currency, because it spells trouble for American stocks and puts downward pressure on rates, both of which make the dollar less appealing to foreigners.

JOB OPENINGS AND LABOR TURNOVER

Market Sensitivity: Low.

What Is It The report captures the churning that takes place in the labor market. It publishes the the total number of new hires and layoffs in the month, as well as how many job openings remained in that period.

Most Current News Release on the Internet: www.bls.gov/news.release/pdf/jolts.pdf

Home Web Address: www.bls.gov

Release Time: 10:00 a.m. (ET); published about five to six weeks after the reference month.

Frequency: Monthly.

Source: Bureau of Labor Statistics, Department of Labor.

Revisions: With each release, the government makes revisions to the previous month, though they tend to be minor. Benchmark revisions are done once a year, usually in March, and can go back two years.

WHY IS IT IMPORTANT?

You might have taken notice that we began this chapter with the most anxiously awaited economic report of the entire month: the Employment Situation report. But even that major market-moving indicator lacks some vital information about what is happening on the job front. For example, the Employment Situation report says *nothing* about how many people were actually hired in the latest month. Nor does it tell us the number of jobs eliminated. Surprised? All the headline statistic in the main Employment Situation report (aside from the unemployment rate) is just the month-to-month “change” in the number of people on corporate and government payrolls, which is simply the “net” difference between the number of jobs created and the number of jobs eliminated. That’s it! So if the government announces that payrolls increased by 250,000 in a particular month, that figure merely reflects the difference in the aggregate number of new hires, less all the jobs that were lost. What you don’t see is the actual “gross” number of positions filled and eliminated.

Why are the gross numbers so important? There is no better measure of the economy’s health than its ability to create new positions. And the fact is that the U.S. economy actually generates far more jobs than most of us think. How much more? This may surprise you. On average, 4 million to 5 million new positions are filled *every single month* in sectors like construction, manufacturing, retail, services, and the government. Even during the lowest point of the 2008–09 Great Recession—when the Employment Situation reported horrific “net” job losses month after month—another less-well-known economic indicator showed that more than 3.5 million new positions were filled during

those same months. The problem was that an even greater number of jobs disappeared, which accounts for the net figure showing large losses in payrolls.

For us to really understand what is going on in the labor market, we have to follow not only the Employment Situation release but also its lesser-known cousin with the awkward title of “Job Openings and Labor Turnover,” often referred to by its acronym as the JOLT report. What makes the JOLT report so useful to investors, business leaders, and policymakers is that it provides a fuller picture of the churning that occurs in the workforce.

HOW IS IT COMPUTED?

The government’s Bureau of Labor Statistics breaks down the JOLT numbers into three main sections: job openings, hires, and separations (and the last of these is further differentiated by quits, layoffs, and discharges). To get data on each section, the BLS randomly contacts 16,000 non-farm business establishments each month from a universe of 9.1 million firms. The sample covers factories, offices, and retailers, as well as federal, state, and local government agencies in all 50 states. Questionnaires about job market activity are sent out and the answers come back by telephone, fax, e-mail, or regular mail, or via Web-based responses.

Based on the survey responses, the BLS presents the data in the following format:

Job Openings: It represents the number of jobs available on the last day of each month. These are positions that firms are actively recruiting from outside the company. It makes no difference whether the positions are full-time, part-time, temporary, or permanent. All are included.

Hires: This is the total number of positions filled that entire month.

Separations: The column aggregates the number of jobs eliminated during the entire month. However, there are several subgroups in this category, since “separations” can happen for a number of reasons. They can occur because of *layoffs and discharges*, both of which are involuntary dismissals. (Layoffs and discharges are often the result of mergers, downsizing, or closings, or for a specific cause, such as employee theft.) *Quits* are when employees voluntarily chose to terminate their employment. People might quit because of dissatisfaction with their work or because they are hopeful of getting better employment opportunities elsewhere. The final subgroup is called *Other Separations*, which covers retirements, deaths, and those who left due to disability.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

The JOLT report is a fairly new series with data going back no further than December 2000. Nevertheless, it has already shown some usefulness as a forecasting tool.

- **Table A** Job Openings, Hires, and Total Separations by Industry, Seasonally Adjusted

- (1) This column reflects the total the number of job openings and their origins—the private sector and government. The data can serve as an important analytical tool for economists and investors since it tells us something about the demand for workers, how it changes month to month, and in what industries. In many ways it represents the ultimate gauge of how optimistic (or worried) employers are about the economic outlook, since labor is the costliest investment companies make.

Where it gets interesting is that the number of job openings turns markedly lower well in advance of when an economy slips into recession. For example, job openings peaked nine months before the U.S. economy turned down in December 2007. This trend of hitting a high and then plummeting long before a recession commences also occurred in 2001, following the dot.com bust. It is a pattern that is likely to be repeated in future business cycles because firms are highly sensitive to a softening in demand for goods and services and will quickly pull back on job postings.

- (2) Hires: Here we have the total number of positions filled that month. It also is broken down by sectors. As noted previously with job openings, companies will typically slow the pace of hiring if they suspect that the economy is losing steam. Just how sensitive is this metric to downswings in business activity? The number of hires peaked more than a year before the beginning of the 2008–09 recession. Although the series on “hires” hasn’t been around for very long, there is some empirical evidence of its value as a predictive tool.
- (3) Separations: This column contains the total count of separations, which includes quits, layoffs, discharges, and other reasons for separations. It tells us little about the economy since embedded in this category are two contradictory messages. For example, a surge in large layoffs and discharges can certainly warn of rising economic problems. On the other hand, a big jump in the number of quits typically portends just the opposite. In a more vibrant economy, where jobs are more plentiful, dissatisfied workers might be more willing to quit one job and seek another. To better understand what is behind these separation numbers, we go to Tables B and C.

Industry	1			2			3		
	Job openings			Hires			Total separations		
	Jan. 2011	Dec. 2011	Jan. 2012 ^P	Jan. 2011	Dec. 2011	Jan. 2012 ^P	Jan. 2011	Dec. 2011	Jan. 2012 ^P
	Levels (in thousands)								
Total	2,860	3,540	3,459	3,934	4,188	4,158	3,816	4,023	3,944
Total private ¹	2,536	3,188	3,107	3,671	3,889	3,835	3,560	3,695	3,619
Construction.....	67	78	82	288	315	307	309	303	290
Manufacturing.....	212	252	285	259	269	246	223	239	213
Trade, transportation, and utilities ²	502	574	554	834	812	822	784	773	810
Retail trade.....	282	323	317	568	517	552	533	509	566
Professional and business services.....	478	785	729	827	818	779	772	792	705
Education and health services ³	506	605	611	439	494	499	423	468	481
Health care and social assistance.....	443	552	554	358	414	419	355	402	398
Leisure and hospitality	294	441	437	621	743	768	624	695	708
Arts, entertainment, and recreation.....	37	44	79	95	141	146	104	133	125
Accommodation and food services.....	257	397	358	527	602	622	520	562	582
Government ⁴	325	352	352	263	299	323	256	328	325
State and local government.....	258	301	302	231	270	303	227	292	299

• **Table B** Layoffs and Discharges, Seasonally Adjusted

(4) An acceleration in layoffs and discharges can cut household spending and hurt the economy. Conversely, a sustained decline in these numbers can boost consumer confidence and encourage more shopping. Having said that, it is important to add that there can be a lot of noise in this series. Layoffs can occur in large numbers throughout the business cycles as firms merge, go out of business, outsource to foreign countries, and downsize. Correctly interpreting a trend here requires that it be corroborated with other economic indicators, such as those found in Table 4, as well as changes in applications for unemployment insurance (page 55).

Table B. Layoffs and discharges, seasonally adjusted

Industry and region ¹	Levels (in thousands)			Rates (percent)		
	Jan. 2011	Dec. 2011	Jan. 2012 ^P	Jan. 2011	Dec. 2011	Jan. 2012 ^P
	Total.....	1,659	1,685	1,646	1.3	1.3	1.2
Total private.....	1,577	1,572	1,517	1.5	1.4	1.4
Government.....	821	121	29	0.4	0.5	0.6

^P = Preliminary

- **Table 4** Quit Levels and Rates by Industry and Region, Seasonally Adjusted

- (5) One can obtain a more accurate assessment on current economic conditions by monitoring the size of quits over time. As you can imagine, employees, no matter how unhappy they might be at their work, are reluctant to walk away from their jobs and risk losing income if the labor market is awful. The propensity to quit is naturally much greater in a growing economy where employment opportunities are brighter. Thus the quit numbers tend to be highest during periods of robust economic activity and lowest during a recession when employers are not in a hiring mood.

That's why the levels of quits and job openings often move in tandem. For instance, the number of workers who voluntarily left their job started to decline about a year before the onset of the 2008–09 recession, and did not pick up again until well after the recovery had started.

One last point: Some people may wonder what the difference is between the quit levels in the JOLT report and the number of “job leavers” in the Employment Situation release. Both count how many people have opted out of their jobs. The answer is that they come from different sources. The monthly figure on “job leavers” is based on inquiries made to households, whereas the level of quits reflects responses from firms. Which is a more accurate reflection of such departures? Understandably, the quit numbers in the JOLT report portray a more reliable picture of labor-market turnover, in part because some individuals in the household survey may be reluctant to admit to being laid off and prefer instead to say they left of their own accord.

- **Ratio of Unemployed to Job Openings (No Chart)**

One useful metric that is not found in this report but can easily be calculated is to determine how many unemployed workers are competing for each job opening. Let's assume that the number of unemployed in the labor force (as listed in Summary Table A of the Employment Situation release) came to 14 million. At the same time, the JOLT report's Table A noted that there were 3 million job openings. This tells us there are about 5 unemployed individuals vying for each job opening. By tracking this ratio over time, we can see whether labor-market conditions are getting better or worse. In the five years prior to the 2008–09 recession, the ratio of job seekers to available positions averaged 2:1, which means there were two jobless people for every open position. But that ratio jumped to nearly 7:1 in the spring of 2009 when the recession was at its worst. While this entire series is relatively new, it appears that during periods of healthy economic growth, the ratio settles in the range of 2:1 to 3:1. When the

Table 4. Quits levels ¹ and rates ² by industry and region, seasonally adjusted

Industry and region	Levels ³ (in thousands)						Rates							
	Jan. 2011	Aug. 2011	Sept. 2011	Oct. 2011	Nov. 2011	Dec. 2011	Jan. 2012 ^e	Jan. 2011	Aug. 2011	Sept. 2011	Oct. 2011	Nov. 2011	Dec. 2011	Jan. 2012 ^e
Total	1,803	2,048	2,015	1,983	1,976	2,008	1,972	1.4	1.6	1.5	1.5	1.5	1.5	1.5
INDUSTRY														
Total private ⁴	1,693	1,932	1,902	1,869	1,860	1,867	1,843	1.6	1.8	1.7	1.7	1.7	1.7	1.7
Construction.....	65	69	80	80	91	76	71	1.2	1.3	1.4	1.5	1.7	1.4	1.3
Manufacturing.....	96	99	99	105	121	113	95	.8	.8	.8	.9	1.0	1.0	.8
Trade, transportation, and utilities ⁵	377	439	456	461	413	447	437	1.5	1.8	1.8	1.8	1.6	1.8	1.7
Retail trade.....	275	327	336	330	294	331	325	1.9	2.2	2.3	2.2	2.0	2.2	2.2
Professional and business services.....	355	387	395	368	380	363	339	2.1	2.2	2.3	2.1	2.2	2.1	1.9
Education and health services ⁶	231	270	244	242	247	265	274	1.2	1.4	1.2	1.2	1.2	1.3	1.4
Health care and social assistance.....	201	223	215	215	225	233	245	1.2	1.3	1.3	1.3	1.3	1.4	1.5
Leisure and hospitality	370	439	403	374	370	388	396	2.8	3.3	3.0	2.8	2.8	2.9	2.9
Arts, entertainment, and recreation..	36	45	45	41	36	48	40	1.9	2.4	2.4	2.1	1.9	2.5	2.1
Accommodation and food services..	334	394	358	334	335	340	356	3.0	3.4	3.1	2.9	2.9	2.9	3.1
Government ⁷	110	116	114	114	116	141	130	.5	.5	.5	.5	.5	.6	.6
State and local government.....	102	106	104	102	106	131	121	.5	.6	.5	.5	.6	.7	.6
REGION ⁸														
Northeast.....	253	283	281	288	275	279	333	1.0	1.1	1.1	1.1	1.1	1.1	1.3
South.....	699	831	877	782	830	816	783	1.5	1.7	1.8	1.6	1.7	1.7	1.6
Midwest.....	441	495	425	477	443	469	442	1.5	1.7	1.4	1.6	1.5	1.6	1.5
West.....	410	439	433	436	428	445	415	1.4	1.5	1.5	1.5	1.5	1.5	1.4

5 ▶

¹ Quits are the number of quits during the entire month.
² The quits rate is the number of quits during the entire month as a percent of total employment.
³ Detail will not necessarily add to totals because of the independent seasonal adjustment of the various series and because not all series are shown.
⁴ Includes mining and logging, information, financial activities, and other services, not shown separately.
⁵ Includes wholesale trade and transportation, warehousing, and utilities, not shown separately.
⁶ Includes educational services, not shown separately.
⁷ Includes federal government, not shown separately.
⁸ See footnote 8, table 1.
^e = Preliminary
 NOTE: Data have been revised to incorporate the annual updates to the Current Employment Statistics employment estimates, the JOLTS seasonal adjustment factors, and a revised birth/death model.

ratio moves above 4:1, however, it serves as another warning that economic growth has slowed and that labor-market conditions are tightening. This will have repercussions for household spending in the months ahead.

MARKET IMPACT

Bonds

By the time this report comes out, a dozen other job-related surveys for the same reference period have already been released. As a result, bond traders do not react much to the publication of the JOLT series.

Stocks

Investors in the equity market take a different approach. Although JOLT won't ignite much new trading, there is increasing interest in what this report says about the total number of hires, job openings, and level of quits. This information is not available elsewhere and can thus add to our knowledge of current economic conditions and how it might affect revenues and earnings with specific industries.

Dollar

There is no measurable reaction from currency traders to the JOLT report.

WEEKLY CLAIMS FOR UNEMPLOYMENT INSURANCE

Market Sensitivity: High.

What Is It: Tracks new filings for unemployment insurance benefits.

Most Current News Release on the Internet:

www.ows.doleta.gov/unemploy/claims_arch.asp

Home Web Address: *www.ows.doleta.gov*

Release Time: 8:30 a.m. (ET) every Thursday; covers the week ending the previous Saturday.

Frequency: Weekly.

Source: Employment and Training Administration, Department of Labor.

Revisions: Minor changes.

WHY IS IT IMPORTANT?

Experts have paid closer attention to this indicator in the past few years even though it has been around since 1967. Improved monitoring by the Labor Department has made the series more accurate in gauging labor-market conditions. The main appeal of the jobless claims report is its timeliness. Figures on new filings for unemployment benefits are released every week and are based on actual reports from state agencies around the country. As a result, analysts view this statistic as a good coincident indicator, meaning it accurately reflects what is presently going on in the economy. However, its greatest value is how first-time claims for unemployment insurance can influence future economic activity. If a large number of people are losing their jobs every week and applying for unemployment compensation, this will eventually dampen consumer spirits, slash their spending, and cause business to pare back investments. For this reason, the weekly claims report for unemployment benefits is one of the components in the forward-looking Index of Leading Economic Indicators. (See the section “Index of Leading Economic Indicators [LEI],” later in this chapter.)

But let’s take a step back for a moment. What exactly do we mean by “new claims for unemployment benefits”? Whether the economy is growing or not, it’s a fact of life that people lose jobs every day. Companies close money-losing factories, get bought out by competitors, outsource to other countries, and in some instances just go belly up. Many of their former employees are eligible to collect unemployment insurance for as long as 26 weeks in most states. Occasionally, laws are passed that extend the benefit period. The real issue, however, is that if the number of people filing for unemployment benefits increases every week or remains at a high level, it’s a worrying sign that the economy is ailing. In contrast, a sustained decline in initial claims for benefits points to an economy on the mend.

In addition to counting new filers for benefit payments, this report also keeps tabs on the overall number of jobless workers who are receiving state unemployment benefits, a category known as “insured unemployment.” It’s important to point out that not everyone who is jobless is entitled to unemployment benefits. Labor economists estimate that more than 10% of initial claim applications for benefits are rejected because they do not meet eligibility requirements. In some industries, such as agriculture, as many as half of those who have lost jobs don’t qualify for such benefits. Recent graduates who have entered the workforce but are unable to find employment are also ineligible to receive benefit payments. Moreover, not all states have the same eligibility requirements; some are stricter than others. What all this means is that many who are unemployed receive no benefits at all. During 2011, 14 million people were without jobs, according to the household survey of the employment report. But less than half of them actually collected state unemployment benefits. That’s an enormous gap, one that can have significant social and economic consequences over time.

HOW IS IT COMPUTED?

Every state, including the District of Columbia, offers jobless insurance programs that must conform to rules set down by federal law.

The states count all first-time filers for a given week ending on Saturday and then transmit the data to the Labor Department in Washington, which releases the figures to the public the following Thursday.

Information on “insured unemployment”—that is, the total number of unemployed currently receiving benefits—is published with a two-week lag.

THE TABLES: CLUES ON WHAT’S AHEAD FOR THE ECONOMY

The initial unemployment claims report has shown an ability to predict when the economy approaches a turning point. For instance, first-time claims can hit their peak two to three months before the economy finally bottoms out in recession and begins its recovery phase.

- **Table** Unemployment Insurance Data for Regular State Programs

- (1) This is the number of new claims filed for unemployment insurance benefits during the most recent week covered. A general rule of thumb is that when first-time claims stand above 400,000 for several weeks, it’s symptomatic of an economy that’s losing steam and in danger of slipping into recession. Such a pace also drives the official unemployment rate higher. On the flip side, a number that’s persistently below 375,000 suggests that a recovery is under way and companies are laying off fewer workers. In addition, for the establishment survey to show any meaningful jump in payroll employment, first-time claims must remain below 325,000.

- (2) Do not use a single week’s data on initial claims to interpret a trend. The weekly series can be quite erratic. Weeks containing holidays can easily distort the data on filings. A four-day workweek, for example, can reduce claims by as much as 20,000, only to have them surge the following week because they now include those who didn’t have a chance to apply before. The solution is to look at initial claims based on a four-week moving average, which is reported here. The four-week average smooths out the volatility of the weekly numbers.
- (3) Another big issue for economists and politicians is whether the total number of persons collecting unemployment insurance has been increasing or decreasing over time. A figure of 3 million to 3.5 million and climbing indicates a malfunctioning economy. Consumer confidence suffers in such an environment, as does business investment. Economists also wonder what effect all these benefit payments will have on federal and state budgets. Perhaps the gravest concern, though, involves those who lost their jobs and are ineligible to receive unemployment aid for one reason or another. Jobless workers collecting unemployment insurance at least have some funds to spend, which can soften the harmful effects of an economic downturn. However, if total unemployment climbs (in the household survey) at a faster rate than those collecting unemployment insurance, it means a growing proportion of people out of work may have to get by without any state financial support, and that could lead to serious social dislocations. Without the safety net of benefit payments, many turn to the underground economy or even to crime for money.
- (4) The “insured unemployment rate” is another statistic worth mentioning, albeit briefly. It’s the proportion of those currently collecting unemployment insurance compared with the total number of American workers who would be eligible to receive these benefits. Although the investment community mostly ignores this figure, a few economists follow its performance so that they can compare it with the official unemployment rate in the household data.

UNEMPLOYMENT INSURANCE DATA FOR REGULAR STATE PROGRAMS						
WEEK ENDING		Advance March 27	March 20	Change	March 13	Prior Year
Initial Claims (SA)	1 ▶	342,000	345,000	-3,000	333,000	432,000
Initial Claims (NSA)		295,820	305,243	-9,423	312,067	371,692
4-Wk Moving Average (SA)	2 ▶	340,250	340,250	0	342,000	420,500
WEEK ENDING		Advance March 20	March 13	Change	March 6	Prior Year
Ins. Unemployment (SA)	3 ▶	3,062,000	3,030,000	+32,000	3,077,000	3,572,000
Ins. Unemployment (NSA)		3,398,430	3,518,006	-119,576	3,551,292	4,939,370
4-Wk Moving Average (SA)		3,056,500	3,071,000	-14,500	3,100,250	3,534,250
Ins. Unemployment Rate (SA) ²	4 ▶	2.4%	2.4%	0.0	2.4%	2.8%
Ins. Unemployment Rate (NSA) ²		2.7%	2.8%	-0.1	2.8%	3.1%

MARKET IMPACT

Bonds

The fixed-income market reacts favorably when the number of new filings for unemployment insurance picks up, especially if it jumps by more than 30,000 applications. A rise in first-time claims points to a weaker economy and diminishing inflation pressures. What unnerves bond investors is a continuous drop in claims, because it hints at a sturdier economic climate ahead. That can prompt fresh concerns about future inflation and lead to lower bond prices and rising yields.

Stocks

Equities tend to fare badly when there's a persistent increase in jobless claims. Though such a report would lower interest rates, which is normally a positive for stocks, evidence of a serious deterioration in the labor market augurs poorly for the economy, corporate profits, and share prices.

Dollar

Falling interest rates make the dollar less attractive to hold, especially if yields are higher in other countries. Thus, a steady climb in initial claims that stems from a languishing domestic economy might turn foreign investors away from U.S. securities and thereby weaken the dollar's value in foreign exchange markets.

HELP-WANTED ONLINE ADVERTISING

Market Sensitivity: Low.

What Is It: A measure of job openings posted on the Internet.

Most Current News Release on the Internet:

www.conference-board.org/data/helpwantedonline.cfm

Home Web Address: *www.conference-board.org*

Release Time: 10:00 a.m. (ET); released around the 1st of each month and covers the previous month.

Frequency: Monthly.

Source: The Conference Board.

Revisions: Revisions are done annually, usually in January.

WHY IS IT IMPORTANT?

Why track help-wanted ads? It turns out to be a reasonable predictor of the economy's direction. When the number of these ads increases, it signifies growing confidence in the business community about upcoming sales and profits. The brighter the outlook, the more likely employers will accelerate hiring. Should the number of ads for jobs shrink, it is an indication that companies are getting nervous about the future. Concerns that business might turn sour in the months ahead will cause firms to postpone or cancel hiring plans.

The Conference Board, a New York business research group, has been tallying job advertisements since the Truman Administration (1951), and for many decades that metric was the only leading indicator of labor demand in the economy. Month after month for more than half a century, the organization counted classified job ads in leading newspapers from around the country. It then computed a monthly index based on the volume of such ads.

However, by the early 2000s that method became less effective as a labor forecasting tool. That's because the number of jobs posted in newspapers declined as firms turned increasingly to the Internet to fill job openings. The Web proved to be a less costly and more efficient way to find new, qualified workers. By 2005, help-wanted ads online became the most common way job seekers found employment and the preferred method by firms to publish job openings. That same year the Conference Board began to publish its monthly Help-Wanted Online reports. Three years later, the research group ceased publishing its monthly count from print ads, and replaced it with an expanded and more comprehensive Help-Wanted Online series.

HOW IS IT COMPUTED?

The Conference Board, in conjunction with the data collecting firm of Wanted Technology, counts online ads from more than 1,200 job boards in the U.S. They include both newspaper-placed Internet ads and job openings posted on online boards. The task of counting such ads is complicated by the fact that the same posting might appear on numerous Web sites. So every effort is made to remove duplicate ads in order to get a more precise measure of current labor demand.

The methodology used by the business research group is fairly straightforward. All job ads are given the same weight regardless of whether each listing seeks one employee or several, part-time or full-time, a CEO or a minimum-wage fast-food worker. What is especially noteworthy is the timing of when these counts take place. The Help-Wanted Online survey computes the posted ads from the middle of one month to the middle of the next month, which is the same survey period conducted by the Bureau of Labor Statistics when it prepares the market-sensitive monthly employment report. The Conference Board then breaks down the data into great detail, dividing them by location (national region, state, and major metropolitan cities) and even occupation. Another important distinction they make is to highlight how many of the total ads counted have appeared for the first time that month. By tracking changes in the volume of new ads posted, we can draw some conclusions about the state of the overall economy and its ability to generate jobs.

Unlike the original series of help-wanted ads in newspapers, which culminated in an index number for the month, the Help-Wanted Online series looks at the full universe of online job vacancies and releases a total count each month. This is a far superior approach because it avoids sampling errors that can mar the quality of other statistical surveys. Finally, the Conference Board applies seasonal adjustment factors to the counts to permit more meaningful analysis.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

Although this series is relatively new and needs to be observed over several business cycles to determine its predictive value, the online job count already shows promise as a sensitive leading indicator of economic and employment trends. After all, you would expect help-wanted ads to peak before an economy enters recession, since employers shut down hiring fairly quickly if they suspect a softening business climate ahead. That is precisely what we have seen so far with the Help-Wanted Online ads. According to the Conference Board's historical data (available on its Web site), the number of both new and total online help-wanted ads peaked eight months prior to the 2008–09 recession, and

ten months before the Bureau of Labor Statistics' payroll series turned south. This metric thus has the potential to warn investors well in advance that labor-market conditions are deteriorating, a precursor to an economy that is struggling.

Can this indicator also predict the end of a recession? No. Companies do not rush to post job advertisements the instant economic activity revs up. Instead, they first seek to push existing employees to work longer hours in the early stages of a recovery. Beyond that, many firms will try to rehire those who were initially laid off, since the former employees are familiar with the work and require little new training. Companies will ramp up new hires if the outlook for business sales justifies that investment.

Nevertheless, one trend that has been observed going back even to the days of job-wanted ads in newspapers is that once the listings increase, it is followed about three to six months later with an upturn in hiring. The reason is that it takes a while for people to respond to such advertisements, be interviewed, have their credentials checked, and finally get hired. Thus, the job-ads count, both total and new, can serve as a leading indicator of payroll growth (from the establishment survey), which the financial markets watch very closely.

- **Table A** State Labor Demand, Selected States, Seasonally Adjusted

- (1) The monthly report lists the total national count of online job ads. The Conference Board strips out all duplicate ads to get a more precise measure of the change from one month to the next.
- (2) This column shows the change in the total count from the previous month.
- (3) The supply/demand rate helps analysts see how tight labor-market conditions are. By taking the total number of unemployed and dividing it by the number of advertised vacancies, you can see the supply of available workers per each job listing.

- **Table 1** National/Regional Total Ads New Ads (Levels), Seasonally Adjusted

- (4) Here one can view both the total count of online jobs posted over the past two months, and how many of those are brand-new ads.

	1 ↓	2 ↓	3 ↓	
Table A: State Labor Demand, Selected States, Seasonally Adjusted				
Location	Total Ads¹ (Thousands) Feb-12	M-O-M Change (Thousands) Feb-Jan 12	Supply/ Demand Rate² Jan-12 for U.S.; Dec-11 for Regions and States	Recent Trend³
United States	4,423.3	39.9	2.91	→ 11/11
NORTHEAST	850.8	26.7	2.65	
Massachusetts	128.9	1.3	1.88	↓ 6/11
New Jersey	139.5	2.7	2.88	→ 9/11
New York	254.7	2.9	3.04	→ 9/11
Pennsylvania	189.1	12.1	2.74	→ 9/11
SOUTH	1,479.2	23.8	3.21	
Florida	234.3	6.5	3.79	→ 8/11
Georgia	115.3	-2.5	3.94	↑ 9/11
Maryland	102.4	3.8	1.94	↓ 3/11
North Carolina	116.5	1.8	3.82	→ 7/11
Texas	313.6	0.6	3.11	↑ 8/11
Virginia	142.0	1.2	1.92	↓ 4/11
MIDWEST	954.4	-2.7	2.85	
Illinois	165.9	-3.1	4.09	↑ 9/11
Michigan	119.1	1.3	3.48	→ 5/11
Minnesota	105.9	-0.5	1.54	→ 7/11
Missouri	84.8	2.5	2.89	↓ 3/11
Ohio	173.2	4.9	2.77	→ 11/11
Wisconsin	95.3	-1.9	2.22	→ 4/11
WEST	1,001.8	21.0	3.58	
Arizona	78.7	-0.9	3.45	↑ 8/11
California	508.5	18.4	4.36	→ 11/11
Colorado	91.3	3.6	2.52	↑ 8/11
Washington	102.9	-3.2	2.87	↓ 8/11

Location ³	Total Ads ¹ (Thousands)			M-O-M Change (Thousands)	New Ads ² (Thousands)			M-O-M Change (Thousands)
	Feb-11	Jan-12	Feb-12	Feb-Jan 12	Feb-11	Jan-12	Feb-12	Feb-Jan 12
United States	4,107.7	4,383.4	4,423.3	39.9	2,389.4	2,730.8	2,748.2	17.4
New England	259.6	263.5	266.7	3.2	148.0	166.0	164.8	-1.2
Middle Atlantic	554.6	560.6	584.1	23.5	326.8	367.3	363.8	-3.5
South Atlantic	837.6	835.1	855.4	20.3	491.3	529.1	538.2	9.1
East North Central	567.6	618.5	621.7	3.2	311.8	387.2	371.5	-15.7
East South Central	168.2	178.9	183.1	4.2	97.1	109.0	113.0	4.0
West North Central	302.2	338.6	332.7	-6.0	167.6	203.7	197.6	-6.1
West South Central	390.3	441.4	440.7	-0.7	214.8	271.9	266.9	-5.0
Mountain	291.4	302.4	306.6	4.2	175.3	201.0	199.3	-1.7
Pacific	652.4	678.4	695.2	16.8	396.0	439.8	446.2	6.4

MARKET IMPACT

Bonds

There has not been much reaction to the release of this measure so far. But that could easily change as evidence builds that it can serve as a reliable leading indicator of changes in labor market conditions and of economic activity. What also makes this metric attractive is its timeliness; it is typically released at the end of the reported month.

Stocks

For reasons stated above, the equity market has yet to respond to the Help-Wanted Online series. But analysts can extract valuable clues about specific industries that appear to be doing well enough to seek out more workers.

Dollar

This report has virtually no impact on the foreign exchange markets.

CORPORATE LAYOFF AND HIRING ANNOUNCEMENTS

Market Sensitivity: Low.

What Is It: Counts the number of planned job cuts and hirings announced by public companies.

Most Current News Release on the Internet:

www.challengergray.com/press/press.aspx

Home Web Address: *www.challengergray.com*

Release Time: 7:30 a.m. (ET); published the first week after the end of the reference month.

Frequency: Monthly.

Source: Challenger, Gray & Christmas.

Revisions: No revisions are made to previously released data.

WHY IS IT IMPORTANT?

Since the 1980s, there has been a continuous wave of mergers, plant closings, restructurings, and consolidations. Such corporate changes are to be expected in an open, competitive, and dynamic economy. But one very painful byproduct of all this activity has been massive layoffs. Displaced workers now must spend weeks and months, sometimes even longer, trying to find new jobs. The resulting loss of income can devastate the financial health of households and sharply curtail consumer spending. Even those still clinging to their jobs tend to grow uneasy as they wonder about their own security. Such widespread uncertainty and stress can put consumers in a very sour mood, and if this mood is felt on a large enough scale, layoffs can even drag an economy into recession.

Of course, corporate plans to shrink payrolls tell only part of the job market story. For at the same time, there are also companies that want to expand their operations and are ready to ramp up hiring. It is this incessant churning of jobs that makes the U.S. economy so resilient and provides money managers with investment opportunities. After all, by tracking which specific sectors are laying off workers and which are actively employing, investors can better identify areas of strength and weakness in the business community. But who has the time to collect corporate announcements on jobs? Fortunately, there is a firm that not only compiles such statistics each month but also makes them available to the public on a timely basis.

Challenger, Gray & Christmas (CGC), an outplacement firm based in Chicago, scans public information records for announcements on corporate layoffs and hiring. The firm compiles the numbers, then breaks them down by industry and geography, and even cites the reasons behind the latest corporate announcements. (For instance, were jobs eliminated because of outsourcing, bankruptcy, cost cutting, labor disputes, or some other cause?) By organizing the statistics in this manner, the report can help clarify those sectors in the economy that appear to be growing and those possibly facing financial stress.

HOW IS IT COMPUTED?

CGC culls a variety of sources for announced layoffs and employment plans, including press releases, newspapers, SEC filings, and trade papers, and then adds them up. Both publicly traded and private firms are included in the search. The firm begins a new count at the start of each month and continues until three days or so before the end of that month.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

The value of this report is that it provides both a macro and a micro picture of the single most important report card on the economy—the performance of the job market. However, one has to be careful in interpreting the data presented in this release. What might seem intuitive at first could turn out to be misleading. For example, layoff announcements cannot be utilized as a leading indicator of turning points in the economy. That's because since the 1980s, job-elimination programs have become a permanent part of the American business landscape and layoffs now occur in significant numbers at every stage of the business cycle. Just look at the last two decades: Not only did we see companies shed workers during the recession of the early 1990s, but we also saw them continue to slash payrolls during the powerful growth years later that decade. Indeed, between 2004 and 2006, when the economy averaged more than 3% growth a year, layoffs actually accelerated to *twice* the pace of the 1990s.

Nor is the Challenger data meant to correlate with the government's own monthly report on employment, or weekly claims for unemployment benefits. The reason is that announced job eliminations are usually not carried out in a matter of weeks, but are spread out over many months or even years, and often through attrition or early retirement. Moreover, should the economy bounce back during that time, some of these announced layoffs might not happen at all. Finally, the geographical regions listed in the Challenger report are based mostly on the location of the company's headquarters, yet many of these layoffs and hirings can take place elsewhere, even outside the U.S.

Having said all that, this report does provide some useful clues for investors. It tells which industries are doing well enough to add to their payrolls, and point to those that are forced to proceed with layoffs. A second distinction is that while most economic indicators look back at what happened in previous months, the CGC release tends to be more forward-looking because it reflects a company's future plans.

- **Table 1** Job Cuts by Industry

Here you have the latest monthly tally on planned layoffs based on announcements made among nearly 30 industries. The numbers, which are presented by month as well as year-to-date totals (YTD), can be used to corroborate other leading indicators on labor-market trends, such as the employment component in the ISM manufacturing and services reports. Obviously, if a consistent pattern emerges across these job-related indicators, investors can take action with greater confidence.

**CHALLENGER, GRAY & CHRISTMAS, INC.
JOB-CUT ANNOUNCEMENT REPORT**

JOB CUTS BY INDUSTRY

	May 2012	YTD
Computer	27,754	32,599
Transportation	5,419	24,193
Financial	4,424	17,284
Education	3,536	18,246
Industrial Goods	3,479	12,144
Food	3,165	9,938
Health Care/Products	2,353	12,177
Retail	1,927	20,983
Telecommunications	1,800	9,221
Consumer Products	1,712	21,846
Energy	846	8,262
Automotive	823	6,440
Aerospace/Defense	820	10,922
Legal	643	815
Entertainment/Leisure	543	6,425
Government	543	9,393
Utility	359	720
Electronics	357	3,520
Services	253	4,408
Construction	229	1,402
Pharmaceutical	212	5,042
Chemical	171	1,534
Non-Profit	134	938
Insurance	130	3,363
Media	120	1,829
Apparel	70	942
Real Estate	65	280
Commodities		674
TOTAL	61,887	245,540

Source: Challenger, Gray & Christmas, Inc., used with permission.

• **Table 2** Job-Cut Reasons

Layoffs can occur for many reasons and it's important to discern the reasons. Job eliminations due to a "demand downturn" have to be interpreted differently than layoffs that result from "government regulation." The former clearly points to a

weakening economy, whereas the latter can take place even with robust economic growth. Certain government regulations can raise compliance costs so much that they force firms to reduce other operating expenses, such as labor. This chart lays out 24 possible explanations for why firms were forced to announce job cuts. Although there is some overlap among them, the list does highlight the kinds of pressures U.S. companies presently face.

**CHALLENGER, GRAY & CHRISTMAS, INC.
JOB-CUT ANNOUNCEMENT REPORT**

JOB CUT REASONS

	MAY	YEAR-TO-DATE
Restructuring	35,787	96,399
Closing	11,214	51,957
Cost-Cutting	7,953	42,886
Voluntary Severance	2,107	6,216
Merger/Acquisition	1,249	6,222
Bankruptcy	879	19,385
Economic Conditions	858	5,704
Loss of Contract	637	5,615
Demand Downturn	520	7,597
Relocation	451	1,882
Funding Loss	229	229
Firing	3	3
Outsourcing		432
Government Regulation		135
Technological Update		438
Competition		400
Legal Trouble		40
TOTAL	61,887	245,540

Source: Challenger, Gray & Christmas, Inc., used with permission.

• **Table 3** Announced Hiring Plans

One of the newer statistics in this report covers the hiring plans announced by companies each month, information that can guide money managers toward sectors that are growing. Another reason this data is noteworthy is that there are few other sources that organize corporate hiring plans the way CGC does. Companies are under no obligation to make pronouncements if they want to employ more people.

However, they are required to do so in the event of large workforce reductions. Firms with 100 employees or more are mandated by federal regulations (the Worker Adjustment and Retraining Notification Act, or WARN) to announce mass layoffs two months in advance.

**CHALLENGER, GRAY & CHRISTMAS, INC.
JOB-CUT ANNOUNCEMENT REPORT**

ANNOUNCED HIRING PLANS

Industry	MAY	YTD
Automotive	2,474	10,962
Industrial Goods	925	7,332
Financial	212	6,151
Computer	225	5,875
Health Care/Products	1,846	4,178
Retail	225	2,552
Energy	373	1,805
Aerospace/Defense	105	1,540
Pharmaceutical		1,369
Insurance		1,326
Transportation		1,145
Services	75	1,009
Consumer Products	40	945
Government	84	742
Education	600	732
Chemical	115	504
Entertainment/Leisure		498
Food		382
Commodities	300	300
Construction	90	240
Media		187
Telecommunications		165
Apparel		90
Real Estate		57
Non-Profit	13	48
Electronics	20	45
Legal		15
TOTAL	7,722	50,194

Source: Challenger, Gray & Christmas, Inc., used with permission.

MARKET IMPACT

There was a time when investors barely took notice of the Challenger report. That is changing. It is being studied with greater interest by money managers and the business media. The change is due to two factors. First, investors have become much more sensitive to any forward-looking indicator on the labor market. The data inside may be based on previous corporate announcements, but by aggregating upcoming layoffs and hirings, this release adds another perspective on where the job market is headed. Second, the report contains a lot more information now than it had a decade or two ago, and this makes it more useful. Indeed, the report was not even made available on its Web site for public viewing a few years ago. It now is online and this gives everyone an opportunity to view and analyze the data.

Bonds

For more than a decade, layoffs have taken place in significant numbers without regard for the business cycle, so it is unlikely that fixed-income investors will actively trade on this report. However, a large and unexpected jump in layoffs that accompanies other economic indicators showing economic weakness can serve as a bullish sign for the bond market.

If the Challenger report noted a large upturn in hiring plans, it would unnerve fixed-income investors. But they would probably wait for the government's main employment report, which is released a few days later, before taking action.

Stocks

While equity investors do not react much to this report, it can be used as an important research tool to assess which sectors and companies are flourishing, and identify those that are compelled to shed workers.

Dollar

This report has no impact on the foreign exchange markets.

MASS LAYOFF STATISTICS (MLS)

Market Sensitivity: Low.

What Is It: Measures actual layoffs in business and government.

Most Current News Release on the Internet: www.bls.gov/mls

Home Web Address: www.bls.gov

Release Time: 10:00 a.m. (ET); this report is out four weeks after the end of the month.

Frequency: Monthly.

Source: Bureau of Labor Statistics, Department of Labor.

Revisions: There are no revisions in the monthly report. However, the BLS does update its seasonal adjustment factors annually, usually with the January release, and then amends the data for the last five years.

WHY IS IT IMPORTANT?

There are presently two major sources of information on layoffs. One is the Challenger, Gray & Christmas survey, which was discussed in the preceding section (“Corporate Layoff and Hiring Announcements”). Its data, however, covers only announced corporate layoffs; it doesn’t follow up to see whether these job-elimination plans were fully carried out. Yet companies have been known to reduce or even cancel publicized job cuts once business improves. A more useful metric might be one that tallies layoffs that actually occurred! To locate data on actual layoffs, you have to turn to the government’s Bureau of Labor Statistics, which releases a monthly report appropriately titled “Mass Layoff Statistics (MLS).” Though this indicator is not widely known to investors and economic researchers, it contains information that can have a direct bearing on future household spending and economic growth.

The MLS report tracks “mass layoff events.” An “event” is defined as each time a company or a government agency lays off 50 or more workers at a single location within a five-week period. (For example, if GM lets go 70 workers in its Detroit auto plant and another 100 at a second GM plant in Ohio, and American Airlines in Chicago cuts its payroll by 200, all in the same workweek, the BLS counts them as three “events” involving 370 jobs.) The agency totals all mass layoff events each month, along with the number of jobless workers who filed for unemployment insurance as a result of those job cuts. In addition, the agency categorizes layoffs by their duration (30 days or less out of work versus 31 days or more). It then breaks down all the data by industry and geographic location. There’s a lot of information here that can be of value to investors and business leaders who want to track the magnitude of actual layoffs, see which industries and regions in the U.S. are ailing, and find out where there may be a surplus of skilled, but unemployed, workers.

HOW IS IT COMPUTED?

The BLS first contacts state agencies for the latest initial unemployment insurance claims. It then sorts through the data to find out how many of those who filed a claim were the result of mass layoffs. Companies and government agencies are also contacted to see how many of the job eliminations lasted 31 days or longer. After compiling the numbers, the BLS publishes two reports. One is the monthly “Mass Layoff Statistics,” which is what this section is about, and the other is a quarterly release known as the “Extended Mass Layoffs” report. The latter deals with employees who have been separated from their jobs for more than a month. (This report is released quarterly and published on the same Web site.)

THE TABLES: CLUES ON WHAT’S AHEAD FOR THE ECONOMY

During the past 20 years, job cutbacks involving large numbers have occurred at virtually every stage of the business cycle, thus diminishing the value of layoff reports as a forecasting tool. Nevertheless, while it lacks use as a leading indicator, the MLS report has other valuable information that cannot be found elsewhere.

- **Table 1** Mass Layoff Events and Initial Claimants for Unemployment Insurance
 - (1) The Events column tells you how many instances there were of mass layoffs in the month. Each instance is defined as a single action that led to the elimination of at least 50 employees during a five-week period, regardless of the duration of their separation.
 - (2) Here’s where you’ll find the monthly totals for the number of persons who put in claims for unemployment insurance as a direct result of those event-triggered layoffs. This column might look puzzling at first, because monthly totals for initial claims for unemployment benefits appear way below what you would expect, given the higher number of people filing for jobless benefits each week (see the section “Weekly Claims for Unemployment Insurance”). The reason for this is that only 10% of all first-time claims for benefits are the result of mass layoff events involving at least 50 people within a five-week period. Most layoffs that lead to unemployment claims represent numbers that are less than 50 persons per incident.
 - (3) The far-left column, labeled “Total,” combines mass layoff activity in both the private and government sectors. To get a more accurate sense of job losses in the private business community, it’s necessary to view “Private non-farm.” Within that category falls manufacturing, which is highly sensitive to changes in the business cycle. Should mass layoff events in manufacturing turn substantially higher, it can corroborate other economic evidence that business activity is slowing and that factories are under pressure to slash payrolls.

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Table 1. Mass layoff events and initial claimants for unemployment insurance, February 2003 to January 2007, seasonally adjusted

Date	Total		Private nonfarm		Manufacturing	
	Events	Initial claimants	Events	Initial claimants	Events	Initial claimants
2003						
February	1,848	192,197	1,664	178,963	650	81,370
March	1,787	174,936	1,592	159,242	610	73,015
April	1,707	172,348	1,557	162,117	634	82,756
May	1,731	184,479	1,550	170,984	635	87,049
June	1,733	164,442	1,523	147,609	638	68,976
July	1,649	164,146	1,443	148,650	567	72,023
August	1,498	169,799	1,362	156,687	546	74,509
September	1,562	147,054	1,370	132,262	479	57,332
October	1,536	158,137	1,328	140,298	420	52,105
November	1,366	138,079	1,223	126,597	377	49,716
December	1,412	139,423	1,243	127,356	445	50,923
2004						
January	1,428	146,692	1,232	128,191	394	45,544
February	1,320	134,626	1,170	122,329	367	40,849
March	1,372	139,716	1,237	130,737	401	59,987
April	1,374	140,190	1,202	124,962	349	38,197
May	1,209	113,091	1,047	99,615	330	38,965
June	1,403	141,048	1,231	128,137	366	47,015
July	1,330	137,484	1,180	126,106	372	51,424
August	1,394	127,671	1,224	113,376	345	36,963
September	1,277	125,351	1,154	115,343	338	46,955
October	1,288	132,250	1,172	122,831	362	47,571
November	1,314	130,558	1,171	118,904	378	46,276
December	1,170	114,641	1,013	103,434	301	33,022
2005						
January	1,489	160,986	1,353	150,640	383	56,133
February	1,172	123,377	1,045	112,752	358	45,794
March	1,219	132,035	1,079	122,013	377	55,061
April	1,263	137,381	1,132	126,747	398	60,826
May	1,226	133,221	1,085	120,899	382	54,886
June	1,194	126,834	1,074	117,712	359	57,018
July	1,248	131,500	1,101	118,800	353	47,136
August	1,109	123,125	986	111,879	338	46,915
September	2,217	292,177	1,998	246,227	419	56,289
October	1,098	108,665	977	99,402	321	44,666
November	1,167	115,803	1,036	104,576	330	43,307
December	1,253	135,721	1,125	124,632	372	48,592
2006						
January	1,112	109,429	984	99,277	282	29,911
February	1,065	112,742	973	105,055	329	46,548
March	1,105	120,954	1,003	112,730	335	50,149
April	1,175	121,376	1,041	111,369	365	48,038
May	1,098	113,195	982	103,839	297	42,993
June	1,130	123,558	1,007	113,037	331	40,500
July	1,160	118,843	1,038	109,509	372	49,069
August	1,218	131,105	1,083	120,923	367	58,983
September	1,158	120,795	1,043	111,876	392	46,802
October	1,186	119,914	1,069	111,036	401	55,795
November	1,220	136,340	1,111	127,286	411	60,599
December	1,201	133,818	1,099	124,526	390	53,828
2007						
January	1,237	126,368	1,095	115,615	389	51,141

• **Table 3** Industry Distribution: Mass Layoff Events and Initial Claimants for Unemployment Insurance (Not Seasonally Adjusted)

This table, which is only partially shown here, tells how widespread these layoffs are across different industries and in government.

Table 3. Industry distribution: Mass layoff events and initial claimants for unemployment insurance, not seasonally adjusted

Industry	Mass layoff totals				Average weekly mass layoffs ¹			
	Events		Initial claimants		Events		Initial claimants	
	February 2011	February 2012	February 2011	February 2012	February 2011	February 2012	February 2011	February 2012
Total ²	1,024	895	85,585	73,974	256	224	21,396	18,494
Total, private	976	865	82,230	71,884	244	216	20,558	17,971
Agriculture, forestry, fishing and hunting	57	45	3,512	2,808	14	11	878	702
Total, private nonfarm	919	820	78,718	69,076	230	205	19,680	17,269
Mining	4	7	322	510	1	2	81	128
Utilities	(³)	-	(³)	-	(³)	-	(³)	-
Construction	104	81	7,003	5,395	26	20	1,751	1,349
Construction of buildings	23	12	1,751	760	6	3	438	190
Heavy and civil engineering construction	35	19	2,302	1,319	9	5	576	330
Specialty trade contractors	46	50	2,950	3,316	12	13	738	829
Manufacturing	222	196	18,471	16,555	56	49	4,618	4,139
Food	58	45	5,115	4,208	15	11	1,279	1,052
Beverage and tobacco products	5	4	287	199	1	1	72	50
Textile mills	5	7	468	638	1	2	117	160
Textile product mills	4	4	270	512	1	1	68	128
Apparel	5	4	693	379	1	1	173	95
Leather and allied products	(³)	-	(³)	-	(³)	-	(³)	-
Wood products	22	13	1,872	1,292	6	3	468	323
Paper	12	6	750	397	3	2	188	99
Printing and related support activities	6	9	679	634	2	2	170	159
Petroleum and coal products	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
Chemicals	7	(³)	759	(³)	2	(³)	190	(³)
Plastics and rubber products	5	9	262	547	1	2	66	137
Nonmetallic mineral products	16	7	1,141	505	4	2	285	126
Primary metals	8	6	794	428	2	2	199	107
Fabricated metal products	8	10	446	699	2	3	112	175
Machinery	11	9	897	994	3	2	224	249
Computer and electronic products	13	15	847	1,008	3	4	212	252
Electrical equipment and appliances	4	7	1,078	590	1	2	270	148
Transportation equipment	19	20	1,275	1,725	5	5	319	431
Furniture and related products	9	13	533	1,095	2	3	133	274
Miscellaneous manufacturing	(³)	4	(³)	467	(³)	1	(³)	117
Wholesale trade	24	17	2,187	1,594	6	4	547	399
Retail trade ⁴	114	135	9,346	12,716	29	34	2,337	3,179
Building material and garden supply stores	12	7	1,102	494	3	2	276	124
Food and beverage stores	19	26	1,450	2,735	5	7	363	684
Clothing and clothing accessories stores	16	19	1,137	1,390	4	5	284	348
General merchandise stores	42	57	4,182	6,096	11	14	1,046	1,524
Transportation and warehousing ⁴	49	32	5,630	3,506	12	8	1,408	877
Truck transportation	12	3	1,052	154	3	1	263	39
Transit and ground passenger transportation	20	17	3,272	2,561	5	4	818	640
Support activities for transportation	3	3	198	184	1	1	50	46
Information	58	42	8,959	4,456	15	11	2,240	1,114
Finance and insurance	22	22	1,407	1,891	6	6	352	473
Real estate and rental and leasing	7	5	369	305	2	1	92	76
Professional and technical services	43	25	3,729	1,931	11	6	932	483
Management of companies and enterprises	(³)	5	(³)	344	(³)	1	(³)	86
Administrative and waste services	166	155	13,894	11,920	42	39	3,474	2,980
Educational services	8	6	474	341	2	2	119	85
Health care and social assistance	28	26	1,685	1,686	7	7	421	422
Arts, entertainment, and recreation	11	19	629	1,442	3	5	157	361
Accommodation and food services	50	37	4,088	3,814	13	9	1,022	954
Accommodation	15	8	1,115	493	4	2	279	123
Food services and drinking places	35	29	2,973	3,321	9	7	743	830
Other services, except public administration	4	7	161	526	1	2	40	132
Unclassified	-	3	-	144	-	1	-	36
Government	48	30	3,355	2,090	12	8	839	523
Federal	5	5	384	337	1	1	96	84
State	17	10	1,029	715	4	3	257	179
State government education	6	7	383	531	2	2	96	133
Local	26	15	1,942	1,038	7	4	466	260
Local government education	10	6	1,032	377	3	2	258	94

- **Table 4** Region and State Distribution: Mass Layoff Events and Initial Claimants for Unemployment Insurance (Not Shown)

This is a state-by-state breakdown of large layoff events and the number of people who filed for unemployment benefits.

MARKET IMPACT

This report has no impact to speak of on the bond, stock, or currency markets. It comes out too late in the month for money managers, who are more interested in getting cutting-edge news on economic conditions.

ADP NATIONAL EMPLOYMENT REPORT

Market Sensitivity: High.

What Is It: A timely report that can serve as a preview of the government's monthly employment release.

Most Current News Release on the Internet: www.adpemploymentreport.com

Home Web Address: www.adpemploymentreport.com

Release Time: 8:15 a.m. (ET); published just two days before the Bureau of Labor Statistics puts out the Employment Situation report.

Frequency: Monthly.

Source: Automatic Data Processing, Inc. (ADP), and Macroeconomic Advisers, LLC.

Revisions: Each release will contain minor revisions in payroll numbers for the prior month.

WHY IS IT IMPORTANT?

For space scientists, the ultimate goal is to find life elsewhere in the universe. For biblical archeologists, the supreme achievement might be to recover the ark of the covenant. For traders in the stock and bond markets, the great aspiration is nothing less than to accurately predict the monthly employment numbers by the Bureau of Labor Statistics.

Okay, there might be some hyperbole here, but not as much as you think. Money managers have been scrambling for years to devise a statistical measure that promises to correctly forecast the government's jobs report. That endeavor has proven to be quite difficult. Yet investors keep trying because the news generated from the official employment release has a history of rocking global stock, bond, and currency markets. Traders will thus devote lots of time, money, energy, and whatever else is needed to get a heads up on the latest developments in the U.S. labor markets.

Just look at the variety of employment indicators out there already. The Conference Board counts jobs advertised on the Internet. Other analysts seek out clues in the weekly claims for unemployment insurance. The Institute for Supply Management (ISM) tracks job activity in both its manufacturing and service surveys. Challenger, Gray & Christmas chooses to study employment trends by adding up corporate announcements on job layoffs and hiring. There's also a plethora of consumer confidence polls that include questions on job availability and security. All these reports take different approaches to determine whether labor-market conditions are improving or deteriorating. Unfortunately, the signals they send often conflict with one another, or they just do not come close to serving as an effective precursor for the market-moving BLS report. Perhaps this shouldn't come as a surprise. These indicators mostly rely on surveys, opinion polls, job

advertisements, and corporate intentions—everything *but* actual payroll data. Wouldn't it be nice to have at least one early measure that is based on national payroll statistics?

Well, now there is, and this new economic indicator has quickly grabbed the attention of investors and the business press. Launched in May 2006, the *ADP National Employment Report*[®] has all the attributes of a news-making statistic. To begin with, it is a product of what appears to be an ideal partnership between ADP, the nation's leading provider of payroll-related services—it processes the payrolls of one out of six employees in the U.S. private sector—and Macroeconomic Advisers, LLC, a major economic forecasting firm. What's unique about the ADP report is that its monthly employment estimates are based not on a survey but on a sampling of real payroll data collected from around the country. ADP's huge database, combined with the number-crunching abilities of Macroeconomic Advisers, has given the ADP jobs report credibility in its ability to anticipate the government's own job numbers. To be sure, it's not foolproof. The ADP jobs report has had a spotty record since it went public, but the fact remains that ADP, Inc., has a unique perspective on labor-market conditions because of its payroll services. Moreover, the payroll services giant and Macroeconomic Advisers have recently refined their methodology to enhance the report's predictive validity, especially when it comes to picking up trends. So the ADP jobs report has the potential to come closer than any other indicator in effectively predicting the BLS's own monthly estimates on private, non-farm hiring.

HOW IS IT COMPUTED?

The manner in which the *ADP National Employment Report* is put together has intrigued the financial markets. ADP processes payrolls for more than 500,000 firms, spanning many different industries across the country. For its *ADP National Employment Report*, however, the firm takes a sample payroll of about 350,000 private, non-farm companies that covers more than 21 million workers. (In contrast, the BLS attempts to survey 400,000 establishments each month, representing roughly 50 million employees.) ADP then collects payroll information on those companies on a weekly basis, strips out all information that identifies these companies to maintain client confidentiality, and hands the data to Macroeconomic Advisers. Economists there focus specifically on the payroll data that includes the 12th of each month—the same week the BLS carries out its survey. Experts from Macroeconomic Advisers crunch the numbers to correct for volatility and seasonal adjustments and then sort the job figures by key categories—total, goods versus services, company size, and employment in manufacturing.

By tapping ADP's wealth of payroll information and replicating some methods used by the government, the giant payroll firm and Macroeconomic Advisers believe they have come up with a jobs report that should closely correlate with the BLS's figures for private, non-farm payrolls each month.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

The *ADP National Employment Report* available online consists of three parts:

- There is a summary table that contains the total level of non-farm, private employment for each of the last six months, as well as job numbers for key segments of that workforce. You should be aware that these figures by definition *do not* include government hiring, a category the BLS *does* include in its headline payroll number. Why concentrate on trends in nongovernment employment? The reason is that when one is trying to assess the economy's health, the focus should be on what's occurring in the private sector. After all, government agencies can hire or dismiss workers regardless of what's going in the overall economy. They are not concerned about making profits. But corporations do need to record profits. Given the high cost of wages and benefits, private-sector employers are likely to hire only when they have confidence in the economy's strength—specifically, in the demand for the products they sell.
- The release also comes with four charts that record the latest percentage change in the growth of the monthly job numbers for total private non-farm employment and its key components. To gain some historical perspective, the data includes figures that go back to 2001. Comparisons can also be made between estimates computed by ADP and the official series by the BLS.
- Finally, accompanying the table and graphs is an analysis of what occurred in the labor markets the preceding month.
- **Table 1** Employees on Non-Farm Private Payrolls by Selected Industry and Size

- (1) *Total non-farm private*: This top heading reflects ADP's estimates of the "true" level of non-farm private employment for each of the past six months. What is meant by "true" in this case? As pointed out earlier, the BLS tries to gather employment information from some 400,000 establishments each month, and it has to do so under a very tight deadline. This is a daunting task since not all companies queried can respond so quickly. By the time the government announces the market-moving preliminary job numbers the first Friday of each month, it is based on a sample that usually represents about two-thirds of those establishments. It can take more than a year before the BLS has the data it needs to announce the final or "true" numbers for that month. In contrast, ADP believes that its rich payroll database and proprietary methodology enable it to forecast the BLS's true employment numbers much sooner.

The far-right column in this table contains the latest net change in private non-farm payroll employment for all the categories.

DERIVED FROM ADP PAYROLL DATA

Table 1. Employees on nonfarm private payrolls by selected industry sector and size*
(In thousands)

Industry / Size of Payroll	Seasonally Adjusted						Change from: Jan.2012 - Feb.2012p
	Sep. 2011	Oct. 2011	Nov. 2011	Dec. 2011	Jan. 2012p	Feb. 2012p	
Total nonfarm private	109,225	109,367	109,593	109,860	110,033	110,249	216
Small (1-49).....	48,991	49,059	49,174	49,297	49,390	49,498	108
Medium (50-499).....	42,344	42,412	42,505	42,622	42,698	42,786	88
Large (> 499).....	17,890	17,896	17,914	17,941	17,945	17,965	20
Goods-producing	18,004	18,013	18,038	18,080	18,104	18,150	46
Small (1-49).....	6,615	6,619	6,633	6,649	6,659	6,677	18
Medium (50-499).....	7,863	7,875	7,889	7,912	7,925	7,948	23
Large (> 499).....	3,526	3,519	3,516	3,519	3,520	3,525	5
Service-providing	91,221	91,354	91,555	91,780	91,929	92,099	170
Small (1-49).....	42,376	42,440	42,541	42,648	42,731	42,821	90
Medium (50-499).....	34,481	34,537	34,616	34,710	34,773	34,838	65
Large (> 499).....	14,364	14,377	14,398	14,422	14,425	14,440	15
Addendum:							
Manufacturing.....	11,701	11,700	11,703	11,719	11,735	11,756	21

p = preliminary; subject to revision

* All size data included in the ADP National Employment Report is based on size of payroll. In some cases, small and medium-size payrolls belong to businesses employing more workers than indicated by the size grouping.

Source: Automatic Data Processing, Inc.; Macroeconomic Advisers, LLC; reprinted with permission. The ADP National Employment Report is a trademark and service mark of ADP of North America, Inc.

Broadly speaking, two groups closely follow the job numbers every month. The first are bond traders (and, to a lesser extent, equity investors), who react instantly to the employment news by buying or selling securities. Their goal is to anticipate the financial market's reaction to the job numbers and make a quick profit on the news, regardless of whether the numbers are preliminary or final. The other group consists of economists and business managers, who rely on employment reports to gain an understanding of the current health of the economy—and how it might perform in the future. The primary goal of this group is not to make a fast buck in the markets, but to get a better grasp of the fundamentals that help determine what consumer spending, business investments, inflation, and interest rates will be in the months and quarters ahead.

The value of the ADP report is that from its rich database of real-world payroll information, it can offer both traders and business leaders a truer sense of labor-market conditions, arguably even better than the BLS's "preliminary" release

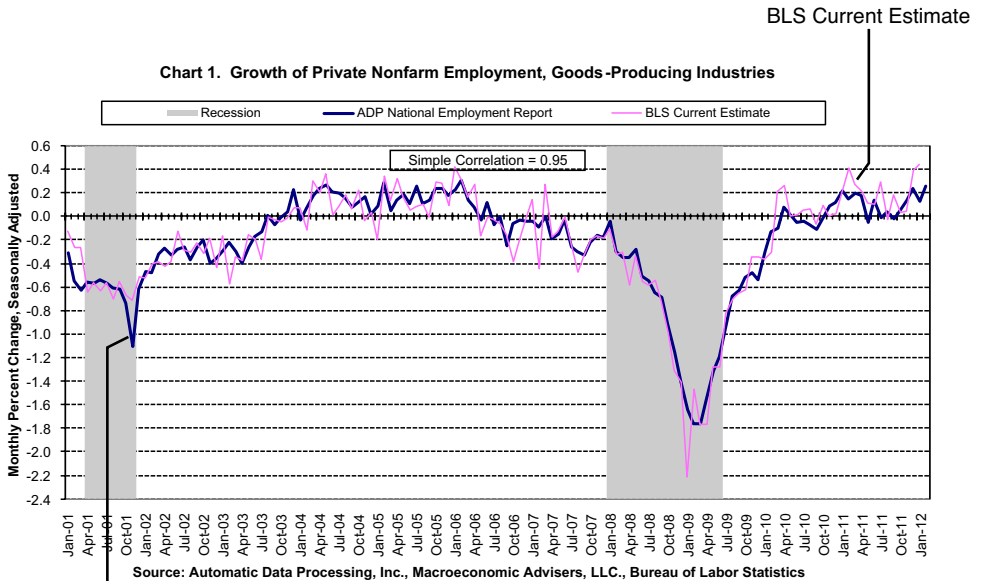
for the month. The ADP report itself breaks down total non-farm private payrolls into its two major categories—the goods-producing and service-producing sectors. It then differentiates each of those by company size (small, medium, and large). What defines the size is the number of employees, with 1 to 49 employees classified as a small firm, 50 to 499 as medium, and above 499 as large.

What forecasting values does this entire subsection have? First of all, the goods-producing sector in the U.S.—particularly manufacturing—has traditionally been much more sensitive to the ups and down of the business cycle than the service sector. If the economy sours and demand weakens, it can cause inventory levels of goods to swell at retail stores, wholesalers, and factories. As stockrooms and back lots fill up with unsold microwaves, refrigerators, large-screen televisions, and cars, producers have less need to hire workers and might even lay off existing employees. In contrast, demand for services and service workers rarely experiences such volatility. When households face tough economic times, they may postpone purchases of expensive consumer products, but they will still pay for the services of doctors, dentists, barbers, and public transportation. Thus, by monitoring hiring activity at goods-producing companies, you can get an early read on whether the economy is in the early stages of weakening or is entering an expansionary phase.

Moreover, since small and medium-size goods producers tend to be more nimble than large companies when it comes to hiring and layoffs, monitoring changes in their employment patterns can serve as a valuable leading indicator of turning points in the economy. Indeed, about 70% of all new hires take place with small and midsize firms.

- **Chart 1** Growth of Private Non-Farm Employment, Goods-Producing Industries

Among the graphs supplied in the *ADP National Employment Report* is one that depicts the monthly percentage change in employment in the goods-producing industries (which include manufacturing). We noted previously how hiring trends with goods producers can help foretell changes in economic output. In Chart 1, ADP plots its payroll estimates with this sector as well as those from the BLS so that you can compare the two series since the start of 2001. What stands out is that during this time frame, ADP has demonstrated a remarkable 0.95 correlation with the government's own series. (A correlation of 1.0 means the two series move perfectly in tandem.) Whether ADP can maintain such a high correlation in the future remains to be seen, but if it holds close to this relationship, the *ADP National Employment Report* will be viewed as offering the best early snapshot of what's going on in the labor market and in the overall economy.



ADP National Employment Report

Source: Automatic Data Processing, Inc.; Macroeconomic Advisers, LLC; reprinted with permission.

MARKET IMPACT

Bonds

Though fairly new, the monthly ADP report is already making waves in the investment community. Precisely how the bond market reacts to the ADP jobs release, though, depends largely on two factors. First, how much did the report’s estimate veer from consensus expectation? Investors in the fixed-income market typically worry about statistical surprises, particularly with indicators linked to job creation. An unexpected surge in employment puts bonds in a vulnerable position.

Second, and perhaps more important, the ADP estimates have to be viewed in the context of where the U.S. economy stands in the business cycle. A strong report indicating lots of hiring at a time when the economy is emerging from recession or a period of weakness will probably not agitate bond traders. Remember, at this stage in the cycle, the economy still has lots of slack, and wage pressures are muted. As a result, bond values should remain fairly steady. But if that same report were issued after years of robust economic and job growth, it would unnerve fixed-income traders, who would worry that the upcoming employment report by the BLS would show similar strong employment trends. Active hiring so late in the expansion puts pressure on labor and industrial resources.

This normally causes higher wage and commodity price inflation, something the Federal Reserve is sure not to ignore. Such a scenario will undoubtedly be detrimental to bonds.

Stocks

Expectations of lively job growth are usually viewed as bullish for stock prices. If more people are working, household income rises, and that fosters more consumer spending and leads to greater corporate profits—all good for equities. But there is an important caveat here. As with bonds, investors in the stock market know there will come a time when persistent vigorous growth will strain the economy and rouse inflation pressures. This increases the likelihood that the Federal Reserve will intervene and raise interest rates, which of course is anathema to the stock market.

At the other extreme, if the ADP report consistently and correctly estimates that few new jobs are being created, it will slash projections of corporate earnings. In those circumstances, investors typically respond by lightening their portfolio of stocks.

Dollar

Investors in the foreign exchange market have also caught on to the significance of the ADP jobs report. Much of the focus here rests on what impact the report's estimates will have on U.S. interest rates. At the very least, international investors will use the ADP announcement to better position themselves for the BLS release on payroll jobs. Generally, when monthly non-farm, private payrolls increase by an average of 150,000 or more, it can lead to a firming of U.S. interest rates and thus make dollar-denominated assets a more attractive investment. Job growth of less than 100,000 a month suggests a soft or weakening economy, in which case foreign investors might conclude that interest rates are likely to fall in the future. This can undermine the dollar's value, particularly if investors see more lucrative returns outside this country.

PERSONAL INCOME AND SPENDING

Market Sensitivity: High.

What Is It: Records the income Americans receive, how much they spend, and what they save.

Most Current News Release on the Internet:

www.bea.gov/newsreleases/national/pi/pinewsrelease.htm

Home Web Address: *www.bea.gov*

Release Time: 8:30 a.m. (ET); data is made public four weeks after the end of the reported month.

Frequency: Monthly.

Source: Bureau of Economic Analysis (BEA), Department of Commerce.

Revisions: After the initial release, data on income, spending, and savings undergo revisions for the next several months as more complete information comes in. The magnitude of the changes is usually modest. Annual revisions normally are done every summer (in July or August), and benchmark changes occur every four or five years to incorporate new data as well as changes in methodology.

WHY IS IT IMPORTANT?

Consumers rule the economy, plain and simple. Without their active participation, business activity would quickly come to a standstill. Consumer expenditures are the main driving force of sales, imports, factory output, business investments, and job growth in the U.S. But to be able to spend, people need a reliable stream of income. As long as personal income rises at a healthy clip, so will spending. If income growth turns sluggish, consumers will curb their shopping. Though other factors, such as inflation and the change in household wealth due to stock and real estate values, can influence when and how much consumers spend, the most important determinant over time is personal income.

The government breaks down the personal income and spending report into three major categories: personal income, expenditures, and savings.

Personal Income

Personal income represents the money households receive before taking out taxes. Of course, what really counts is how much spendable money consumers have left after personal taxes and nontax payments are removed. This is known as disposable personal income (DPI). Income itself can originate from several sources:

- **Wages and salaries:** What companies pay employees. It's the largest single contributor, representing 51% of all income.
- **Proprietors' income (8%):** A fancy term for self-employed that includes both farm and non-farm businesses, such as store owners, private-practice doctors, independent plumbers, lawyers, and consultants.
- **Rental income (3%):** Represents earnings people receive from renting or leasing real estate (as long as this is not their primary business).
- **Dividend income (5%):** Money stockholders get from corporations.
- **Interest income (8%):** Comes from investments in interest-bearing securities such as Treasury securities and corporate bonds.
- **Transfer payments (17%):** Payments received from federal and state governments, such as Social Security payments, unemployment benefits, and food stamps.
- **Other labor income (8%):** A catchall that includes employer-paid contributions like worker life insurance, health plans, and pensions.

Excluded from personal income are any profits households receive from the sale of assets such as stocks, bonds, or real estate.

Personal Spending, Formally Known as “Personal Consumption Expenditures”

There are just two things you can do with your income: You either spend it or save it. Traditionally, the average household spends about 95 cents of every dollar received, and this high level of consumption fuels two-thirds of all economic activity. It's the reason personal consumption expenditures (PCE) grabs the big headlines when the personal income report comes out. PCE is not only the most comprehensive measure of consumer spending (far more than retail sales) but also the largest component in the GDP. Thus, swings in PCE can lead to major shifts in the business cycle.

What are people spending their money on? Three broad product categories are highlighted under PCE: durable goods, nondurable goods, and services. Durable goods are often expensive products that last three or more years. They can include cars, refrigerators, washing machines, and so on. Because these items are costly and last a long while, durable goods make up the smallest share of consumer spending, some 10%–15%. Nondurable goods have a life span of less than three years and cover commodities such as food, clothing, and books. Purchases of nondurable goods account for 20%–25% of all spending. The third category—services—is the fastest-growing component of consumer purchases, jumping from 40% in the 1960s to about 65% now. Services includes medical treatment, haircuts, legal fees, movies, air travel, and so on.

Personal Savings

Savings is what's left after spending on goods, services, and interest payments on credit cards and loans. Subtract all these monthly outlays from disposable personal income, and the remainder is what's left for savings. This money usually ends up in savings accounts, bank CDs, money market accounts, stocks, and bonds.

In addition to the dollar amount of savings, it's also useful to know the percentage of disposable personal income that is saved; this is known as the personal savings rate. For instance, if you save \$5 out of every \$100 in disposable personal income, the savings rate is 5%. Back in the 1960s and early 1970s, households were relatively thrifty and maintained a savings rate often above 8%, which meant they saved at least \$8 out of every \$100 of after-tax income received. Since then, however, the savings rate has plummeted like a stone as Americans have shown little desire to set aside much of their take-home pay. In 1996, the rate slipped to 4%. By 2005 and 2006, personal savings fell into *negative* territory as households routinely spent more than their income. So in addition to spending their entire paycheck, Americans borrowed more money and then even dug into savings they had accumulated from past years to finance all that shopping. One of the most startling illustrations of how hooked consumers have become on living beyond their means can be seen by doing a simple calculation from this table. Look at the annualized amount of wages and salaries earned in a particular month, and compare that with what consumers actually spent (personal consumption expenditures) for that same period. Back in 1980, wages and salaries paid for nearly 80% of all spending, with the rest (20%) being financed by debt and from withdrawing from past savings. By the summer of 2006, wages and salaries financed barely 65% of all expenditures, which meant consumers had to borrow more than ever before as well as tap some savings to fill the gap between income and spending.

Can the deterioration in the savings rate continue indefinitely? Of course not. By depleting their savings and going deeper into debt, Americans put themselves at grave risk once the economy weakens and generates more layoffs. The resulting squeeze in household finances along with worries over job security will force consumers to curb spending and preserve savings so they at least have some cash on hand for emergencies. That is precisely what happened during the 2008–09 recession, when the savings rate jumped from less than 2% in 2005 to more than 7% in 2009.

There are other reasons Americans choose to increase their savings. At some point interest rates will begin to climb. The higher cost of credit should not only constrain shopping but also increase the incentive for Americans to save since they can now earn a bigger return on money invested in CDs or Treasury bills. Finally, with the future solvency of Social Security and private pension plans so uncertain, Americans are grudgingly beginning to realize they will have to rely more on their own savings to ensure a comfortable retirement.

HOW IS IT COMPUTED?

Gathering data for the personal income report is a hellish statistical task. The Bureau of Economic Analysis, the agency whose job it is to calculate personal income and spending, has to collect information from many sources in and out of government. For instance, numbers on wages and salaries come from the monthly employment report. Transfer payments, such as Social Security income, veterans' benefits, and unemployment insurance, are derived from the Social Security Administration, the Veterans Administration, and the Treasury and Labor Departments. Income from stock dividends is extrapolated from the U.S. Census Bureau, IRS records, and quarterly income statements filed by corporations. Interest income is based on Treasury publications as well as figures from the Federal Reserve's Flow of Funds. Money earned from self-employment and rental income has to be estimated from other government sources. All this just to compute personal income!

For numbers on personal spending, the agency looks at retail sales data (excluding autos). The amount Americans spend on motor vehicles is based partly on reports from auto manufacturers. Expenditures on services are also complicated. Consumer spending on air travel comes from the Air Transport Association; healthcare outlays are based on the Labor Department's employment data. In some cases, such as payments for dental services and haircuts, the BEA's only recourse is to do a simple straight-line calculation that assumes an automatic increase for such outlays each month. This might not be the most precise measure of consumer expenditures, but the methodology is supported by years of testing and practice. In any event, the government eventually revises all these numbers as more complete data becomes available.

Both personal income and personal consumption expenditures are seasonally adjusted and are presented in both current dollars (which is not adjusted for inflation) and constant dollars (which removes the effects of inflation). The monthly figures are also annualized to show how they would perform should the trend continue for a full year.

As for the savings level, no fancy tricks here. It's strictly a residual number; savings is whatever remains after you subtract total consumer outlays from personal disposable income.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

- **Table 1** Personal Income and Its Disposition (Months)

- (1) This first table records monthly dollar amounts of personal income and outlays in current dollars and at annualized rates. Each of the major contributors to income is presented here: wages and salaries, other labor income (from fringe benefits at work), proprietors' income (self-employment), rental income, dividend income, and transfer payments. The latest figures on income are accompanied by seven months of previous data so that you can see how they've changed over time.

Table 1.—Personal Income and Its Disposition (Months)

[Billions of dollars]

		Seasonally adjusted at annual rates							
		2002	2003						
		Dec.	Jan.	Feb.	Mar.	Apr. ^r	May ^r	June ^r	July ^r
	Personal income	9,047.4	9,069.1	9,096.0	9,119.2	9,137.3	9,172.9	9,206.6	9,226.0
	Wage and salary disbursements	5,039.5	5,050.9	5,074.1	5,083.4	5,082.5	5,095.7	5,109.9	5,109.4
	Private industries	4,172.2	4,175.1	4,191.9	4,198.4	4,195.6	4,206.3	4,215.5	4,218.6
	Goods-producing industries	1,110.0	1,109.5	1,111.0	1,113.5	1,111.7	1,114.5	1,116.9	1,114.1
	Manufacturing	751.8	751.3	752.7	752.9	748.9	749.1	749.5	747.0
	Distributive industries	1,116.7	1,114.5	1,117.8	1,118.5	1,118.3	1,119.7	1,121.7	1,121.5
	Service industries	1,945.5	1,951.1	1,963.1	1,966.4	1,965.6	1,972.1	1,976.9	1,982.9
	Government	867.3	875.8	882.2	885.0	886.9	889.4	894.4	890.9
	Other labor income	634.4	637.0	639.4	641.1	642.0	645.2	646.9	647.0
1 ▶	Proprietors' income with inventory valuation and capital consumption adjustments	774.6	783.3	782.3	787.7	794.7	803.2	814.6	823.6
	Farm	10.2	12.3	14.4	15.9	16.1	15.6	15.6	15.5
	Nonfarm	764.4	771.0	767.9	771.7	778.7	787.7	798.9	808.2
	Rental income of persons with capital consumption adjustment	127.9	127.5	126.9	126.2	127.1	116.0	110.6	116.4
	Personal dividend income	446.0	448.6	451.2	453.7	456.4	459.1	461.5	463.9
	Personal interest income	1,083.1	1,079.4	1,075.8	1,072.2	1,076.9	1,081.6	1,086.3	1,086.4
	Transfer payments to persons	1,329.8	1,333.9	1,339.6	1,349.9	1,356.3	1,367.1	1,372.9	1,374.9
	Old-age, survivors, disability, and health insurance benefits	717.6	718.2	722.4	727.1	729.6	737.3	738.5	740.0
	Government unemployment insurance benefits	63.3	60.9	61.5	63.6	64.8	65.7	67.5	67.2
	Other	548.9	554.8	555.7	558.1	561.9	564.1	566.8	567.5
	Less: Personal contributions for social insurance	388.0	391.6	393.2	394.0	394.1	395.1	396.1	396.3
	Less: Personal tax and nontax payments	1,092.2	1,070.1	1,078.3	1,083.1	1,083.1	1,085.9	1,090.0	988.1
	Equals: Disposable personal income	7,955.2	7,998.9	8,017.7	8,036.1	8,054.2	8,087.0	8,117.6	8,237.9
	Less: Personal outlays	7,704.1	7,707.7	7,705.4	7,769.8	7,776.2	7,815.4	7,863.1	7,922.4
	Personal consumption expenditures	7,491.2	7,493.4	7,490.3	7,553.9	7,556.8	7,592.7	7,637.2	7,696.9
	Durable goods	915.9	866.3	845.7	871.7	894.1	899.0	907.8	927.1
	Nondurable goods	2,162.1	2,193.3	2,203.7	2,223.3	2,193.4	2,197.5	2,215.5	2,234.3
	Services	4,413.2	4,433.8	4,441.0	4,458.9	4,469.3	4,496.2	4,513.9	4,535.4
4 ▶	Interest paid by persons	180.1	180.9	181.7	182.5	185.8	189.0	192.3	191.9
	Personal transfer payments to the rest of the world (net)	32.8	33.4	33.4	33.4	33.6	33.6	33.6	33.6
	Equals: Personal saving	251.1	291.2	312.3	266.4	270.0	271.6	254.4	315.5
	Addenda:								
2 ▶	Disposable personal income:								
	Total, billions of chained (1996) dollars ¹	7,105.9	7,131.0	7,118.2	7,109.1	7,140.6	7,176.3	7,187.9	7,279.8
	Per capita:								
	Current dollars	27,557	27,688	27,733	27,774	27,813	27,903	27,982	28,370
	Chained (1996) dollars	24,615	24,684	24,622	24,571	24,658	24,760	24,778	25,071
	Population (thousands) ²	288,682	288,893	289,098	289,335	289,579	289,828	290,096	290,370
5 ▶	Personal saving as a percentage of disposable personal income	3.2	3.6	3.9	3.3	3.5	3.4	3.1	3.8

By studying the growth in personal income, you can get some insight into future trends in consumer spending. But one has to be careful about generalizing here. The relationship between income and spending is not as simple as it once was. Since the mid-1990s, consumer outlays have also been greatly influenced by one's perception of personal wealth. Spending can accelerate if households see the value of their financial and real estate investments growing, a phenomenon known as the wealth effect. For example, economists estimate that for every dollar increase in the value of one's stock portfolio, consumers spend an additional 3 to 6 cents. A one-dollar rise in the value of other types of wealth (such as real estate) raises spending by 2 to 4 cents. Of course, when the economy looks bleak and the value of these assets starts to tank, you get the negative wealth effect, in which a loss in household wealth can result in a dramatic cutback in spending—especially if personal savings have been depleted. Thus, changes in household wealth can play an important role in determining consumer spending behavior.

Two other points need to be made about personal income. Year-end wages and salary amounts can be distorted because that is when companies distribute bonuses, which often causes a brief spike in monthly income. Second, transfer payments, such as Social Security, produce a blip in personal income data in January when the government tacks on extra dollars to reflect a cost-of-living adjustment (COLA). The precise increase in the COLA amount depends on the yearly change in consumer prices (see the section “Consumer Price Index (CPI)” later in the book). The methodology to compute the COLA has changed recently. The most recent law requires the Social Security Administration to total the inflation index numbers for each month during the latest third quarter—and then calculate the percentage increase from the year-ago third-quarter total. If inflation rose by 3% over those four quarters, Social Security recipients will see a similar increase in their checks the following January.

- (2) A better portent of future consumer demand can be found in real disposable personal income, which is labeled near the bottom of the table as chained dollars. This is monthly income left over after taxes (and other nontax payments to the government) and then adjusted for inflation. It's the best measure of true consumer purchasing power. Here's why. Suppose disposable personal income climbed by 1% the previous month, but the general price level (or inflation) also rose by the same amount. In that scenario, one really gains nothing from the rise in income since prices jumped by an identical rate. Thus, real disposable personal income growth is effectively zero. However, if income climbed by 1% and inflation inched up just 0.2% that month, real purchasing power grew by 0.8% ($1\% - 0.2\% = 0.8\%$). Studies have shown that changes in real disposable personal income foreshadow changes in consumer spending patterns.

- (3) Now let's look at spending details. The second half of this table deals with personal outlays by components (personal consumption expenditures, interest paid, and personal transfer payments). Personal consumption expenditures (PCE) is arguably the most important figure in the entire report. This figure represents the total amount that individuals have spent on durable and nondurable goods and services. Because consumer expenditures account for nearly 70% of the GDP, any change in spending behavior has a palpable impact on the overall economy.
- (4) On occasion, households spend more than what they bring home in income, forcing families to dig into savings or borrow money to make up the difference. However, this is not sustainable in the long run because at some point consumers will deplete their savings or acquire too much debt, or both. Any of these actions can lead to a sharp retrenchment in spending and throw a wrench in the economic expansion.

What are the warning signs? One tripwire is the amount of interest being paid to creditors. While looking at a category called Personal Outlays, you'll notice a subset labeled Interest Paid by Persons. (This measure does not include interest payments on mortgage debt or on home equity loans because such debt is viewed as more of an investment expense than a consumption expense.) Is there a point at which the interest debt becomes so burdensome that it can threaten future spending? Yes, but experts do not agree on where this threshold is. One popular barometer is based on a simple calculation of debt service as a proportion of disposable personal income ($\text{interest paid} / \text{DPI} \times 100$). Historically, interest payments have stayed within the range of 2%–2.5% of disposable personal income. If this exceeds 2.5% over a prolonged period of time, it means households might be experiencing financial stress, and that can depress future spending.

- (5) Further down the table is the personal savings rate. This figure is interesting but not of great forecasting value. By definition, savings does not include any appreciation in the value of one's stocks, bonds, or real estate portfolio. Thus, anyone who invested in real estate or in the equity market over the past 20 years would have seen their household wealth increase, yet that wealth would not show up as part of personal savings.

Does it pay to track savings at all? Only if there's a precipitous change up or down in savings. An abrupt movement in either direction can indicate a growing concern among households over their financial future. A sudden climb in the savings rate occurs when people become increasingly nervous about their income and job security. And the more money that is put away for savings, the less that is available for shopping. By the same token, a sharp fall in the personal savings rate can be troubling as well. If spending continues to outpace

income, households raid their savings to make up the difference, and that too can have ominous consequences for the economy down the road. So a sharp climb or fall in the personal savings rate should be investigated further. By itself, it's unclear what impact it will have on the economy in the short term.

• **Table 2** Personal Income and Its Disposition (Years and Quarters) (Not Shown)

This table lists the same categories as Table 1 but presents the data in year totals and quarters. This enables you to avoid the short-term volatility in the numbers.

• **Table 5** Personal Income and Its Disposition, Percent Change from Preceding Period

Table 5.—Personal Income and Its Disposition, Percent Change from Preceding Period (Months)
(Percent)

	Seasonally adjusted at monthly rates							
	2002	2003						
	Dec.	Jan.	Feb.	Mar.	Apr. ^r	May ^r	June ^r	July ^r
Personal income	0.4	0.2	0.3	0.3	0.2	0.4	0.4	0.2
Wage and salary disbursements	4	2	5	2	0	3	3	0
Other labor income	7	4	4	3	3	4	3	1
Proprietors' income with inventory valuation and capital consumption adjustments	5	1.1	-1	.7	.9	1.1	1.4	1.1
Rental income of persons with capital consumption adjustment	-2.1	-3	-5	-6	-3.6	-4.7	-4.6	5.2
Personal dividend income	5	6	6	6	8	6	5	5
Personal interest income	2	-3	-3	-3	4	4	4	0
Transfer payments to persons	9	3	4	7	5	8	4	1
Less: Personal contributions for social insurance	4	9	4	2	0	3	3	1
Less: Personal tax and nontax payments .....	.3	-2.0	.8	.4	0	.3	.3	-9.3
Equals: Disposable personal income .....	.5	.5	.2	.2	.2	.4	.4	1.5
Addenda:								
Personal consumption expenditures	1.1	0	0	.8	0	.5	.6	.8
Durable goods	6.0	-5.4	-2.4	3.1	2.6	5	1.0	2.1
Nondurable goods	6	1.4	5	9	-1.3	2	8	8
Services	2	5	2	4	2	6	4	5
Disposable personal income, based on chained (1996) dollars	4	4	-2	-1	4	5	2	1.3

6 ▶

(6) Table 5 has one category that deserves particular attention: expenditures on durable goods. It consists of high-priced consumer products (such as cars and appliances) that last three years or more. Because they tend to be pricey and often involve financing, orders for consumer durable goods are extremely sensitive to swings in the economy. Rising wages and job stability stimulate orders for durable goods, which, in turn, leads to a step-up in production by business. However, durable goods orders drop like a stone if there's just a whiff of trouble ahead for the economy. For that reason, this product group has become an excellent predictor of economic turning points. Orders for durable goods begin to trail off about 6 to 12 months before the onset of a recession, and they pick up a month or two before a recession ends and recovery begins.

• **Table 7** Real Personal Consumption Expenditures (PCE) by Major Type of Product

Table 7.—Real Personal Consumption Expenditures by Major Type of Product (Months)

	Seasonally adjusted at annual rates							
	2002	2003						
	Dec.	Jan.	Feb.	Mar.	Apr. ^a	May ^a	June ^a	July ^a
	Billions of chained (1996) dollars							
Personal consumption expenditures	6,691.4	6,680.3	6,649.9	6,682.5	6,699.6	6,737.7	6,762.6	6,801.7
Durable goods	1,062.9	1,008.7	987.6	1,079.8	1,048.6	1,080.5	1,074.3	1,099.7
Nondurable goods	1,982.0	1,984.4	1,972.0	1,990.4	1,970.8	1,988.6	1,996.1	2,008.1
Services	3,708.1	3,716.2	3,714.2	3,714.2	3,718.5	3,731.2	3,736.1	3,743.9
	Change from preceding period in billions of chained (1996) dollars							
Personal consumption expenditures	66.1	-11.1	-30.4	32.6	17.1	38.1	24.9	39.1
Durable goods	71.2	-54.2	-21.1	32.2	29.8	11.9	13.8	25.4
Nondurable goods	12.0	22.4	-12.4	8.4	-9.6	15.8	9.5	12.0
Services	-6	8.1	-2.0	0	4.3	12.7	4.9	7.8
	Percent change from preceding period in chained (1996) dollars at monthly rates							
Personal consumption expenditures	1.0	-.2	-.5	.5	.3	.6	.4	.6
Durable goods	7.2	-5.1	-2.1	3.3	2.8	1.1	1.3	2.4
Nondurable goods .....	.6	1.1	-.6	.4	-.5	.8	.5	.6
Services	0	.2	-.1	0	.1	.3	.1	.2

7 ▶

(7) Up to this point, all figures on personal spending (PCE) were based on current dollars, which is not adjusted for inflation. This table presents real (inflation-adjusted) spending on a monthly basis, a subcategory that is particularly informative because it helps predict the pace of economic growth. Remember that some two-thirds of the GDP is based on real PCE. All you have to do is look at the latest three-month changes in real PCE and you can observe how the largest single component in the economy has performed. It's a good indicator of what the GDP will do in the current quarter and beyond.

• **Tables 9 and 11** Price Index for Personal Consumption Expenditures

(8) When it comes to discussing inflation in the economy, most everyone refers to the CPI (consumer price index). However, a growing number of economists and policymakers, including those at the Federal Reserve, believe the best measure of consumer inflation in the economy is the PCE price index. It's also used to help convert personal spending from current dollars (which is not adjusted for inflation) into constant dollars (which is adjusted for inflation). Most investors and business executives (as well as the Social Security Administration), however, still prefer the CPI, which is fine. In the end, there's really not much of a statistical difference between these two inflation measures. The reason the PCE price index is mentioned at all is because the Federal Reserve considers this measure when setting interest-rate policy.

Table 9.—Price Indexes for Personal Consumption Expenditures: Level and Percent Change From Preceding Period (Months)

		Seasonally adjusted							
		2002	2003						
		Dec.	Jan.	Feb.	Mar.	Apr. ^r	May ^r	June ^r	July ^r
		Chain-type price indexes (1996=100)							
	Personal consumption expenditures	111.95	112.17	112.64	113.04	112.80	112.69	112.94	113.16
	Durable goods	86.14	85.86	85.60	85.46	85.24	84.74	84.47	84.28
	Nondurable goods	110.19	110.53	111.74	112.26	111.30	110.62	110.99	111.26
	Services	119.02	119.31	119.57	120.05	120.19	120.51	120.82	121.14
	Addendum								
	Personal consumption expenditures less food and energy	111.42	111.47	111.52	111.64	111.71	111.76	111.92	112.17
		Percent change from preceding period in price indexes at monthly rates							
8 ▶	Personal consumption expenditures .....	.1	.2	.4	.4	-.2	-.1	.2	.2
	Durable goods	-.4	-.3	-.3	-.2	-.3	-.6	-.3	-.2
	Nondurable goods	-.1	.3	1.1	.5	-.9	-.6	.3	.2
	Services .....	.3	.2	.2	.4	.1	.3	.3	.3
	Addendum								
	Personal consumption expenditures less food and energy .....	.1	0	0	.1	.1	0	.1	.2

Table 11.—Percent Change From Month One Year Ago in Chain-Type Price Indexes for Personal Consumption Expenditures

		2002	2003						
		Dec.	Jan.	Feb.	Mar.	Apr. ^r	May ^r	June ^r	July ^r
9 ▶	Personal consumption expenditures	2.0	2.1	2.3	2.4	1.7	1.7	1.8	1.8
	Durable goods	-3.1	-3.1	-2.5	-2.4	-2.5	-3.1	-3.1	-3.1
	Nondurable goods	2.3	2.3	3.0	2.9	1.0	1.0	1.3	1.5
	Services	3.0	3.0	2.9	3.2	3.0	3.0	3.0	3.0
	Addendum								
	Personal consumption expenditures less food and energy	1.7	1.8	1.4	1.5	1.3	1.2	1.2	1.4

(9) This table contains the yearly change in inflation for each month based on the PCE price index. On average, the annual PCE price inflation tends to be about 0.3 percentage points lower than the CPI. One reason for this divergence is the different assumptions behind the two price measures. The headline CPI, for instance, does not consider the possibility that consumers might substitute products month-to-month if it's in their interests to do so. If beef is too expensive, a person might switch to less-costly chicken. The CPI does not take into account such changes in buying habits. It will continue to follow beef prices even though people might have altered their eating habits. The PCE price index, on the other hand, allows for substitution, which is why its inflation rates tend to be lower than the CPI.

MARKET IMPACT

Normally, an economic indicator that comes out as late in the month as this one does would not get much attention from the financial markets. Investors have already received some news on individual income and spending from the employment report and through the retail sales data. But one statistic in this report greatly preoccupies money managers and policymakers: the core PCE price index. The Federal Reserve has publicly stated that it wants to see this important inflation measure rise 1.75%–2.0% per year. A pace markedly above or below that range has very real implications for interest-rate policy.

Bonds

Fixed-income investors prefer to see listless growth in both income and spending. Any data that affirms sluggishness in the economy is expected to support higher bond prices and lower yields. On the flip side, accelerating gains in income and especially in personal consumption can agitate bond traders because it suggests more rapid economic growth ahead and possibly higher inflation. Such a scenario might eventually force the Federal Reserve to raise short-term interest rates. Thus, a larger-than-expected jump in household spending can induce a sell-off in the bond market, with the price of fixed incomes dropping and yields climbing.

Stocks

Investors in the equity market can be expected to react differently from their colleagues in bonds. Higher personal income and spending are viewed favorably in the stock market because they fuel more economic activity and fatten corporate profits. That's a far better scenario than anemic income growth and weakening expenditures, which portend a struggling economy and soft profits.

Of course, there is an important caveat here. Stock investors will run from the markets if the data shows personal consumption surging when the economy is already operating at or close to maximum speed. This raises the prospect of accelerating inflation and higher interest rates, which are anathema to both stock and bond investors.

Dollar

Foreign exchange investors are likely to respond to the personal income and spending numbers. A healthy increase in both bodes well for the U.S. dollar. High consumer demand encourages more growth and puts upward pressure on interest rates. That makes the dollar more attractive to foreign investors, particularly if it results in a greater return on investment than other currencies. A weaker-than-expected report on consumer spending presages lower interest rates, and that's often bearish for the dollar.

RETAIL SALES

Market Sensitivity: High.

What Is It: The first report of the month on consumer spending; capable of big surprises.

Most Current News Release on the Internet: *www.census.gov/retail*

Home Web Address: *www.census.gov*

Release Time: 8:30 a.m. (ET); available about two weeks after the month ends.

Frequency: Monthly.

Source: Bureau of the Census, Department of Commerce.

Revisions: Can be huge from month to month. Each release also contains broad revisions of the two previous months to reflect more complete information. Annual benchmark changes are released in March and can go back three years or more.

WHY IS IT IMPORTANT?

Remove three legs from a table and, well, it isn't much of a table after that. If you imagine the U.S. economy being the table and consumer spending accounting for three of the four legs, you'll understand why the investment community is superattentive to any indicator that provides insight into the mood and behavior of shoppers. Consumer spending makes up 70% of all economic activity—and retail sales account for a hefty one-third of that. If consumers can keep cash registers ringing, it is a sign of overall economic growth and prosperity. To monitor such expenditures, the Census Bureau calls on thousands of retailers each month for their latest sales numbers. As a result, investors and economists see the retail sales report as one of the best indicators of change in consumer spending patterns. An unexpected swing in its numbers can sway the price of stocks and bonds.

But retail sales also has certain shortcomings. It represents only spending on goods, such as those found at department stores, auto dealers, gas stations, and food service providers such as restaurants. The report tells us nothing about what's being spent on services such as air travel, dental care, haircuts, insurance, and movies. Yet the service business makes up about two-thirds of all personal expenditures. Furthermore, retail sales is measured only in nominal dollars, which means that no adjustment is made for inflation. That makes it difficult to tell whether consumers actually purchased additional goods or simply paid more to cover the higher prices charged by merchants. Finally, the initial monthly retail sales releases, known as the advance report, tend to be extremely volatile and thus misleading. It's not unusual for the government to report that retail sales fell one month, only to revise the report later to show an increase.

Nonetheless, the government has made some progress in modernizing this economic series. For instance, the retail sales report now includes purchases made through the Internet, but it does not break down those online numbers in this release. To find how much consumers bought over the Internet, one has to look at the Commerce Department's quarterly E-Commerce report (see the next economic indicator, "E-Commerce Retail Sales").

HOW IS IT COMPUTED?

Surveys are sent out randomly to 5,000 large and small retailers around the country. These establishments receive them about three days after the month ends and are supposed to respond within a week or so. However, fewer than 50% of the retailers mail them back in time. Still, the government reviews the data to prepare the advance retail sales report—the first of three releases for that month. This advance report offers a quick-and-dirty assessment of changes in consumer spending patterns. Another 8,000 retailers are polled days later to develop a more complete picture of what shoppers are doing. Results from that survey lead to the first statistical revision, which is known as the preliminary version. Four weeks later comes the final report, with additional revisions based on the inclusion of all who responded. Generally, of the 13,000 surveyed, 70%–75% respond.

Dollar figures are compiled from total receipts of retail sales, after subtracting for rebates and merchandise returned by customers. Also excluded are sales taxes, excise taxes, and finance charges from department store credit cards.

The dollar amounts in the report are not annualized; what you see represents the amount consumers spent on goods during that particular month. Retail sales figures, however, are adjusted for seasonal variations, such as how many holidays there were in the month and the impact winters traditionally have on retail sales.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

There's a risk in relying too much on advance estimates of retail sales because they are based on a relatively small sampling. A more accurate sense of the underlying trend in consumer spending patterns can be discerned by monitoring sales on a three-month moving average basis or by looking at the last three months' worth of data and comparing it with the same three-month period the year before.

- **Table 2** Estimated Percent Change in Advanced Monthly Sales for Retail and Food Services, by Kind of Business

Table 2. Estimated Change in Monthly Sales for Retail and Food Services, by Kind of Business

(Estimates are shown as percents and are based on data from the Advance Monthly Retail Trade Survey, Monthly Retail Trade Survey, and administrative records.)

	NAICS code	Kind of Business	Percent Change ¹					
			Jan. 2007 Advance from --		Dec. 2006 Preliminary from --		Nov. 2006 through Jan. 2007 from --	
			Dec. 2006 (p)	Jan. 2006 (r)	Nov. 2006 (r)	Dec. 2005 (r)	Aug. 2006 through Oct. 2006	Nov. 2005 through Jan. 2006
1 ▶		Retail & food services,						
		total	0.0	2.3	1.2	5.7	0.9	4.1
2 ▶		Total (excl. motor vehicle & parts)	0.3	3.4	1.3	6.0	0.9	4.6
		Retail	0.1	2.0	1.0	5.3	0.7	3.8
	441	Motor vehicle & parts dealers	-1.3	-1.7	1.0	4.7	0.8	2.4
	4411, 4412	Auto & other motor veh. dealers ..	-1.2	-1.4	1.0	5.1	1.0	2.8
	442	Furniture & home furn. stores	0.8	-0.2	0.0	4.9	-0.8	2.9
	443	Electronics & appliance stores	-1.2	3.5	1.8	12.6	5.9	8.0
	444	Building material & garden eq. & supplies dealers.....	0.8	-3.1	0.7	2.5	0.2	0.2
	445	Food & beverage stores.....	0.7	6.3	0.6	5.5	1.8	5.7
	4451	Grocery stores	0.6	6.0	0.7	4.8	1.7	5.1
	446	Health & personal care stores	0.6	8.1	0.2	8.2	1.9	8.3
3 ▶	447	Gasoline stations	-0.7	-2.9	3.6	3.6	-2.1	-0.3
	448	Clothing & clothing accessories stores	1.0	4.6	1.1	6.1	0.3	5.1
	451	Sporting goods, hobby, book & music stores.....	0.5	-3.1	-0.5	2.5	-2.3	0.9
	452	General merchandise stores.....	1.3	5.6	1.2	5.8	2.0	5.1
	4521	Department stores (ex. L.D.).....	1.4	0.3	0.5	-0.1	1.0	-0.5
	453	Miscellaneous store retailers	-1.1	1.9	0.4	8.9	0.9	5.6
4 ▶	454	Nonstore retailers	0.5	8.4	-0.7	5.9	0.0	7.5
	722	Food services & drinking places	-0.7	5.3	3.1	9.4	2.1	7.0

- (1) Just how much more—or less—did people buy from retailers in the past few weeks? This answer can be very revealing. Shifts in consumer spending behavior can provide useful insight into the present mood of American households. This column records the percentage change in retail spending by shoppers in each of the last two months and for the latest 12-month period. However, keep in mind that these figures are all in nominal dollars; there is no adjustment for inflation. Because economic performance is based on real (inflation-adjusted) growth rates, we have to see whether there has been a genuine increase in the volume of retail goods sold. One way to do this is to use the monthly or yearly percentage change in consumer prices and subtract that from the equivalent change in retail sales. The result is a good approximation of the real percentage change in retail sales. For example, if retail sales increased by 6% in the latest 12-month period, and inflation as measured by consumer prices climbed 3% during this time frame, one could surmise that consumers actually purchased 3% more goods in the past year and that the remaining 3% rise in retail sales simply came from paying higher prices.

Aside from getting a sense of how well retailers are doing, this section also gives you a heads up on what future GDP growth might be. The retail sales figure is used to compute Personal Consumption Expenditures (see the section “Personal Income and Spending”), which is the most important component in calculating the nation’s GDP. In fact, changes in real GDP correlate well with changes in real retail sales.
- (2) Roughly 20% of total dollars spent on retail sales goes toward purchases of motor vehicles and auto-related products. This auto category, however, can be extremely volatile from month to month and can distort the larger retail sales picture. To offset this, there is a separate line in the report (“Total, excluding motor vehicle and parts”) where the government strips out the auto spending component so that one can better track the underlying trend in consumer spending.
- (3) Because geopolitical events and domestic oil refining capacity can greatly influence how much drivers pay for gasoline, it is wise to monitor this category of spending as well and see how it affects total retail sales. For instance, a jump in consumer outlays is not necessarily indicative of healthy economic growth if it’s the result of a surge in gasoline prices. Indeed, over time, high gas prices depress spending in other retail sales sectors.
- (4) Traditional in-store purchases have always dominated the overall retail sales market. But there are other ways consumers can buy goods that do not involve going to stores or malls. In this category, called *nonstore retailers*, the government tallies up how much Americans spent buying goods from other sources, such as mail-order catalogs, the Internet, door-to-door vendors, vending

machines, and the telephone (after viewing infomercials or cable shopping networks). True, these purchases still represent a small percentage of total retail sales. But given the cost of gasoline, which discourages driving to stores, and the growing ease of at-home shopping, the proportion of sales from nonstore retailers has been consistently climbing. For example, nonstore retail sales accounted for more than 10% of all retail purchases (excluding autos) in 2011, compared to less than 7% a decade ago. Clearly, the Internet is playing a more important role in the retail sales industry.

- (5) This main column shows how various consumer-based industries fared from changes in retail sales. By looking at the performance of individual producers, you can see which sectors benefited the most in the latest period and whether one or two industries were chiefly responsible for the rise or fall in overall retail sales. It is particularly useful to monitor sales of goods classified as discretionary, or purchases that are not essential for households. We know that spending at food and beverages stores, as well as health and personal-care stores, does not decline much during difficult economic times. After all, people have to feed their families and dispense medicines when ill. But there are other categories of spending in this report that are quite sensitive to shifts in the business cycle. Consumers worried about job and income security may hold off purchases of electronics and appliances since these are usually expensive items, often bought on credit. During a recession, Americans might eat less frequently at restaurants (food services and drinking places) and postpone purchases of costly furniture. This section thus offers some very good clues on the state of consumer spending overall and also helps identify specific retail groups that are doing well versus those that have seen a slump in sales.

MARKET IMPACT

Though it may be subject to significant revisions, the advance report on retail sales still manages to stir up the financial markets.

Bonds

Money managers in the fixed-income market get all nervous when shoppers are having too good of a time in stores. A jump in retail sales suggests that consumers are in a buying mood. This could accelerate economic growth, a scenario that's likely to lower bond prices and lift yields. A weak or falling retail sales report can set the stage for bond prices to rise.

Stocks

Participants in the equity markets closely monitor activity in the consumer sector of the economy. Healthy retail sales increase corporate revenues and profits, both of which are

positive for stock prices. If retail sales are paltry, however, it raises questions about what consumers are up to and whether business earnings can be sustained. Such uncertainties place downward pressure on stock prices.

Dollar

Players in the currency markets find the retail sales report a tricky indicator to analyze. While foreigners prefer to see American consumers in a shopping mood because that firms up interest rates (which is bullish for the dollar), an overly strong retail sales number can also spell trouble for the greenback because many of these goods are imported. Given the already-massive U.S. trade deficit, a jump in imports also increases demand for nondollar currencies to pay for all these foreign products—and that can potentially hurt the dollar.

E-COMMERCE RETAIL SALES

Market Sensitivity: Low.

What Is It: Measures sales of retail goods purchased through the Internet.

Most Current News Release on the Internet:

www.census.gov/retail/mrts/www/data/pdf/ec_current.pdf

Home Web Address: *www.census.gov*

Release Time: 10:00 a.m. (ET); released about seven weeks after the end of the quarter being covered.

Frequency: Quarterly.

Source: Census Bureau, Department of Commerce.

Revisions: Each report comes with revisions for the prior quarter.

WHY IS IT IMPORTANT?

The bursting of the Internet bubble on Wall Street in 2000 eviscerated the portfolios of many investors. However, those who thought the dot-com collapse would also scare people away from shopping online turned out to be flat wrong. The ubiquitous use of laptops, iPad-like tablets, and smartphones, plus the proliferation of wireless high-speed broadband services, have made the experience of shopping online more efficient and rewarding. There's no need to worry about traffic jams, sitting through red lights, wasting gasoline, and battling for parking spots. You can do comparison shopping as well as purchase products online right from your home or office, or even bathtub, and many merchants provide free shipping. The government has been tracking online retail sales since late 1999, and the data shows that Internet purchases have been steadily climbing, grabbing a bigger slice of consumer dollars in the process.

There is one downside risk, however. Consumers give up a lot of personal information when ordering online, and they worry that their electronic identities will be either misused by vendors or stolen. This concern should eventually fade with the use of more sophisticated security software that can protect sensitive data and from new legislation that sharply restricts what online retailers can do with your personal records.

Although the main monthly retail sales report by the Census Bureau already includes e-commerce sales, the government does not break out that data separately. Sales by *barnesandnoble.com* are counted in the general merchandise component along with all other sales made by Barnes & Noble bookstores. Sales of Internet-only stores, such as Amazon, are mixed in with other types of nonstore retailers, such as mail-order catalog firms.

It's only in this quarterly e-commerce sales report where the details of online shopping are featured. One point to keep in mind is that not all online sales are included in this report. Just as the monthly retail trade data excludes services (such as travel agencies and financial services), they are also kept out of the e-commerce sales data.

Besides the Census Bureau, it's helpful to know that other private organizations occasionally provide free reports on Internet commerce:

- Forrester Research (*www.forrester.com*)
- comScore Networks (*www.comscore.com*)
- The Nielsen Company (*www.nielsen-online.com*)

HOW IS IT COMPUTED?

Online sales estimates by the Census Bureau are based on the same monthly survey used for the general monthly retail trade report. Some 12,500 retail firms are asked to separate their e-commerce sales. By definition, an e-commerce sale is counted only when customers place the order online. It's not necessary for them to actually pay for the items over the Internet. If they mail a personal check as payment for what was purchased online, it is still considered an e-commerce transaction. Online auctions are also classified as e-commerce sales, but only commissions and fees generated from the auction are included, not the value of the products auctioned.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

- **Table 1** Estimated Quarterly U.S. Retail Sales: Total and E-Commerce

E-commerce retail sales are expected to become an important marker for the retail trade industry. A quick study of this table tells why. By comparing total retail sales and the e-commerce component, it becomes clear that online sales are capturing an ever-increasing share of all retail sales. While e-commerce still accounts for a small percentage of total retail sales, its growth is expected to dramatically accelerate in the next five to ten years and become an important indicator of consumer spending trends.

MARKET IMPACT

Bonds

This report has no impact on the fixed-income market.

Stocks

Generally, news of e-commerce sales produces no meaningful reaction in the equity markets. Internet purchases still represent a very small proportion of all retail sales. Yet it would be a mistake to dismiss this release as unimportant. As e-commerce sales rise in volume, this report is expected to become much more influential, especially with tech-heavy stock indexes, such as NASDAQ.

Dollar

There is no measurable reaction from currency traders to e-commerce sales.

Table 1. Estimated Quarterly U.S. Retail Sales: Total and E-commerce¹
 (Estimates are based on data from the Monthly Retail Trade Survey and administrative records.)

Quarter	Retail Sales (millions of dollars)		E-commerce as a Percent of Total	Percent Change From Prior Quarter		Percent Change From Same Quarter A Year Ago	
	Total	E-commerce ¹		Total	E-commerce	Total	E-commerce
Adjusted²							
4th quarter 2006(p)	990,835	29,286	3.0	-0.2	6.3	4.6	24.6
3rd quarter 2006(r)	992,603	27,544	2.8	0.8	4.7	5.3	21.1
2nd quarter 2006	984,548	26,304	2.7	0.8	4.4	6.5	22.8
1st quarter 2006	976,652	25,190	2.6	3.1	7.2	8.2	25.2
4th quarter 2005(r)	946,903	23,506	2.5	0.4	3.3	6.2	22.8
Not Adjusted							
4th quarter 2006(p)	1,034,272	33,854	3.3	4.1	32.2	4.0	25.0
3rd quarter 2006(r)	993,749	25,608	2.6	-0.8	3.4	4.8	20.4
2nd quarter 2006	1,002,064	24,758	2.5	10.5	1.0	6.9	22.9
1st quarter 2006	906,635	24,509	2.7	-8.8	-9.5	8.0	25.5
4th quarter 2005	994,452	27,080	2.7	4.9	27.3	6.0	23.1

WEEKLY CHAIN STORE SALES REPORTS

Market Sensitivity: Medium.

WEEKLY CHAIN STORE SALES SNAPSHOT

What Is It: A weekly report on retail sales at major department stores.

Most Current News Release on the Internet:

<http://reports.wxtrends.com/reports/icscweekly.pdf>

Home Web Address (of the report's author): *www.icsc.org/*

Release Time: 7:45 a.m. (ET); the weekly survey is released on Tuesday for the week ending the prior Saturday.

Frequency: Weekly.

Source: ICSC-GS (International Council of Shopping Centers/Goldman Sachs).

Revisions: Figures are not revised on a weekly basis, but a more comprehensive set of statistics is released every month, and it can include some revisions.

THE JOHNSON REDBOOK INDEX

What Is It: A quick glance at weekly sales at key department and chain stores.

News Release on the Internet: No free access. Available only to paid clients. See press stories for the latest chain store sales.

Home Web Address: *www.redbookresearch.com*

Release Time: 8:55 a.m. (ET) every Tuesday for the week ending the prior Saturday. The monthly report is released the first Thursday of the new month.

Frequency: Weekly.

Source: Redbook Research.

Revisions: Not on weekly figures. Redbook does release a monthly report in which the numbers are revised as more data arrives.

WHY IS IT IMPORTANT?

Want immediate feedback on how consumer spending has fared the past few days? Who wouldn't, given the critical role shoppers play in the economy? Two competing reports try to provide near-real-time weekly assessments of consumer buying activity in large retail chain stores. One is the Johnson Redbook Index, which is produced by Redbook Research. The other is a joint undertaking by the International Council of Shopping Centers and Goldman Sachs, a global financial services firm, and is called the ICSC-GS

Weekly Chain Store Sales Snapshot. Both reports take a similar approach to getting a read on consumer shopping. They contact department and discount chain stores every week for a quick assessment of sales performance. Both release their reports on Tuesday and cover the week ending the previous Saturday. Both also publish monthly chain store sales data. The two surveys look at comparable store sales, which means that to be included in the survey, the stores have to be open for at least a year. What is different between the two surveys is the number of stores represented in their results and their precise methodologies.

One question that bubbles to the surface is how much do these chain store surveys differ from the government's official monthly retail sales report? The answer is they're very different. The retail sales release put out by the Census Bureau represents a broad sample of retailers, both large and small, whereas the chain store results are based mainly on purchases at department stores that have multiple outlets around the country. These stores include Macy's, Sears, Wal-Mart, and Target. A second point to consider is that while investors are always hungry for the most current news on consumer spending, department store sales make up less than 5% of all household expenditures. People lay out lots more money on cars, vacations, entertainment, healthcare, food, and a host of other goods and services. Thus, chain store sales, while a good gauge of current shopping trends, are not a very effective indicator of future consumer spending. Nevertheless, investors and economists like to follow the chain store series because not many reports describe sales activity with such immediacy.

HOW IS IT COMPUTED?

International Council of Shopping Centers and Goldman Sachs (ICSC-GS)

This weekly report first became available in 1994 and is based on hard sales data by just two large department stores, Wal-Mart and Target. Information is then extrapolated to reflect probable sales activity for about 80 chain stores. ICSC-GS then creates an index that reflects changes in sales for the past week and also from year-ago levels. A seasonal adjustment calculation allows for some week-to-week analysis, though year-to-year comparisons are more reliable.

Unlike the weekly report, the monthly chain store sales survey is based on hard sales data from close to 80 establishments, including specialized chains such as The Gap and Abercrombie & Fitch. Because they have broader coverage, the monthly chain store figures can serve as a rough leading indicator of future non-auto retail sales in the government series. The first set of numbers on the monthly sales is preliminary because not all the retailers have released their data. A month later, however, the ICSC produces a final number that is based on more-complete data.

The Johnson Redbook Average

The Johnson Redbook Average monitors weekly sales trends by contacting a handful (the precise number is not revealed) of large general-merchandise retailers. For example, by contacting Wal-Mart, the Redbook can get sales information not only from Wal-Mart's main brand stores, but also from its affiliated discount chain, Sam's Club. All told, the Johnson Redbook Index is derived by contacting retailers that have more than \$250 billion in annual sales. With the data in hand, Redbook puts together a sales-weighted average index and produces two main reports. One is weekly and is used primarily for year-on-year comparisons. Though it is possible to monitor sales performance from week to week, these numbers are not seasonally adjusted, so it is hard to make any meaningful comparison given the volatility in this series.

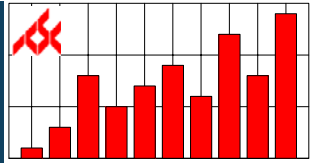
The monthly numbers are seasonally adjusted, making comparisons between months and for the year more meaningful. Yet even the monthly index can bounce around quite a bit, especially during key seasons, such as in August with back-to-school shopping and in December with holiday shopping. Most investors focus on the weekly figures because they are current and can provide an early glimpse of whether consumers are in a shopping mood. Those who follow the monthly reports tend to be more interested in the financial health of retailers for stock-picking purposes. They are not necessarily interested in the reports' value as a broader economic indicator.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

- **ICSC-GS Weekly Chain Store Sales Snapshot**
 - (1) This graph gives you an idea of how weekly sales have been performing relative to a 16-week, moving-average trend line.
 - (2) The table lists the results of the latest weekly sales activity, how it compared to previous weeks, and the year-ago performance.
- **The Johnson Redbook Index**

Survey reports and charts are available only to clients. Others can find the Redbook results in the press.

Weekly Chain Store Sales Snapshot



International Council of Shopping Centers

FOR PUBLIC RELEASE AT 7:45 AM (ET)

March 13, 2012

Latest Week's Sales Snapshot

Week-to-Week Change: **0.7%** from prior week

Year-over-Year Change for the Week: **2.3%** from prior year

The ICSC-Goldman Sachs (ICSC-GS) weekly chain store sales index rose by 0.7% in the latest week through March 10 and year-over-year sales improved modestly to a 2.3% pace. More color in fashion and the unleashing of some pent-up demand for apparel seemingly are helping apparel stores. The ICSC-GS consumer tracking survey found an impressive pickup in apparel business over the last week. The channel-tracking survey found that grocery stores and dollar stores had improvement in business over the past week as well. On the other hand, the survey suggested that discount stores saw business recede somewhat. According to **Weather Trends International (WTI)**, the national average temperature over the past week ending Saturday was 2.8°F warmer than last year and 3.2°F warmer than its long-term average. As bouts of warmer than normal weather continue, that also should continue to help spring apparel demand. Meanwhile, gasoline prices continued to march higher and pare potential consumer discretionary purchasing power. The average price of a gallon of regular-grade gasoline at the pump rose by 3.6 cents to \$3.829 on March 12, according to the **U.S. Energy Information Administration**. The price of regular-grade gasoline rose 7.3% in the latest week from the same week of the prior year and was the highest since May 23, 2011 (\$3.849 per gallon). The average regular-grade gasoline price was 60.0 cents higher per gallon since Christmas 2011. So far, an improving economy is offsetting the drag from rising gasoline prices.

March Sales Expectations

U.S. comparable-chain-store sales for February rose by 4.1% on a year-over-year basis, based on ICSC final composite tally of 22 retailers. Excluding drug stores, industry sales rose by 6.7% in February compared with the same month of 2011. The intermittent bouts of cold weather between a generally unseasonably warm-weather February seemed to help the winter clearance, while the relative warmth seemed to spur spring merchandise interest. Also, perfume sales were helped by Valentine's Day. Discount business improved in February as well. Looking ahead to March sales reports, ICSC Research forecasts an industry comparable-store sales gain of between 3% and 5% compared with a 2.0% gain in March 2011. The March-April Easter shift may be a bit more subdued since Easter will be April 8, 2012 vs. April 28, 2011.

Fiscal Month Sales Tracking (Based on ICSC-GS Weekly Index)

Year/Year % Change Current Fiscal Month (MTD) = **2.0%**

Month/Month % Change Current Fiscal Month (MTD) **1.8%**

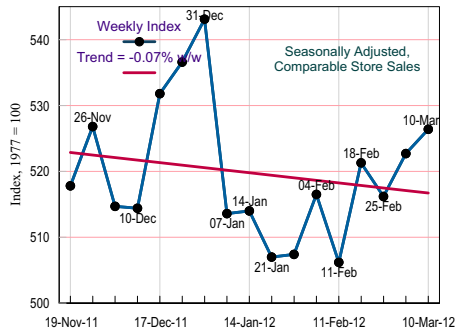
Selected Monthly Comparable Store Sales Tracking Estimates

TGT = +3.5% M = +5.0%

Kohl's = +1.0% LTD = +8.0%

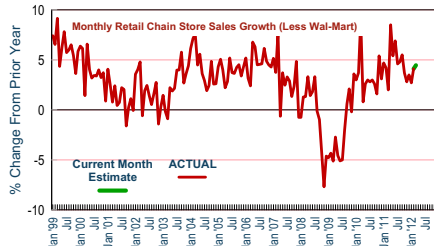
r=revised; (-) or (+) indicate the direction of the change in monthly sales expectations from the previous week.

Chart 1
ICSC-Goldman Sachs Weekly U.S. Retail Chain Store Sales Index
Through the Week Ending Saturday March 10, 2012



Week Ending	Index 1977=100	Year/Year Chg.	Weekly Chg.
10-Mar-12	526.4	2.3%	0.7%
03-Mar-12	522.7	1.7%	1.3%
25-Feb-12	516.2	2.7%	-1.0%
18-Feb-12	521.3	3.2%	3.0%
11-Feb-12	506.2	2.8%	-2.0%
04-Feb-12	516.5	3.5%	1.8%
28-Jan-12	507.4	3.9%	0.1%
21-Jan-12	507.0	2.8%	-1.4%
14-Jan-12	514.0	3.0%	0.1%

Chart 2
Monthly Retail Chain Store Index
January 1999 - December 2012



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MARKET IMPACT

Bonds

Participants in the fixed-income market monitor, if casually, the Redbook and the ICSC-GS chain store sales reports because they are a good finger-in-the-wind measure of consumer spending behavior. If you know what consumers are doing at shopping malls, it tells you something about their appetite to spend. Strong department store sales can make bond investors queasy because of their implications for the economy and inflation. On a slow financial news day, such a report can depress bond prices and cause yields to creep higher. However, traders are usually looking at other larger economic or political news, so the chain store sales report often slips into the background.

Stocks

Investors in equities pay more attention to chain store numbers than their colleagues in the bond market. The weekly and monthly sales figures can set the tone for the retail industry as a whole. Healthy chain store sales growth could result in bigger corporate profits, and that often translates into higher stock prices. Second, these statistics provide some insight into which retailers are doing well and which are ailing, allowing investors with exposure in the retail sector to shift their money accordingly.

Dollar

Currency markets do not react to the chain store sales numbers.

CONSUMER CREDIT OUTSTANDING

Market Sensitivity: Low.

What Is It: Tracks monthly changes in consumer installment debt.

Most Current News Release on the Internet:

www.federalreserve.gov/releases/g19/current/g19.pdf

Home Web Address: *www.federalreserve.gov*

Release Time: 3:00 p.m. (ET) approximately five to six weeks after the month being reported.

Frequency: Monthly.

Source: Federal Reserve Board.

Revisions: Can be large from month to month.

WHY IS IT IMPORTANT?

The consumer installment debt release usually evokes little more than a yawn from the investment community. For one, it comes out quite late—nearly two months after the fact. By then, numerous other reports on consumer outlays for the same month have already come out. Moreover, the release itself arrives midafternoon, just as traders are looking to close their orders for the day. So it shouldn't be surprising if these professional investors find it hard to get worked up about news on consumer credit. Nevertheless, it would be a mistake to dismiss this report, for it has lots of useful information that can add to our understanding of the financial health of consumers and the future course of the economy.

By definition, consumer installment debt is virtually any debt taken on by individuals that is not secured by real estate. What kind of debt are we talking about? There are essentially two types. One is revolving credit, with which most everyone is familiar. It includes credit cards issued by banks, retail stores, and gasoline companies. Whether you pay all your credit card balance at once without incurring interest charges or spread the payments out for months with finance charges, it is all considered revolving credit. However, credit card usage makes up only 35% of all consumer installment debt. The rest is nonrevolving credit. This consists of outright loans to finance the purchase of autos, boats, mobile homes, vacations, home improvement, and education. It also includes the refinancing of existing debt. Consumer installment credit does not include any loan that is collateralized by real estate, so home mortgages and home equity loans are not counted in this series. Motor vehicle leases are also excluded.

If the amount of consumer credit outstanding increases for the month, it means households have borrowed more than they paid off in that period and reflects greater personal spending. When households feel secure about their jobs and income, they become more comfortable with taking on new debt. On the other hand, if the economic climate worsens, people tend to be far more cautious about borrowing. Historically, consumer

borrowing and spending tend to rise and fall together. In the short term, though, personal debt can fluctuate quite a lot because of other factors, such as prices, temporary loss of income, and changes in consumer confidence levels.

However, a vital piece of information is missing in this report. The Federal Reserve does not explicitly quantify how much new credit was extended to consumers or the amount of debt that was paid off. It publishes only the net change in indebtedness. Thus, analysts are left wondering whether the monthly change in credit outstanding occurred because people took out lots more debt or cut back on their repayments, or both. For example, say the total amount of outstanding consumer debt increased from \$100 billion to \$103 billion in one month, a net rise of \$3 billion. However, it's unclear whether people borrowed an additional \$3 billion more and made no repayment on earlier loans or borrowed as much as \$15 billion that month but also repaid \$12 billion in old loans for a net change of, once again, \$3 billion. This crucial missing piece of data keeps analysts from drawing any firm conclusion about future spending patterns.

Another factor that prevents consumer installment debt from being a reliable leading indicator of household spending is that consumers prefer using credit cards simply because they're more convenient to carry than money. If credit users pay off their entire balance every month, all they're doing is replacing cash with credit. In the data, this can register as a temporary increase in revolving credit, but it won't necessarily result in greater spending.

HOW IS IT COMPUTED?

To compile the consumer installment numbers, the Federal Reserve obtains information from banks, finance companies, S&Ls, credit unions, and other types of lending institutions. The data is then totaled and seasonally adjusted. The dollar amounts are not annualized; they represent the actual outstanding balance at the end of the month. Revisions on consumer installment debt can be substantial, so use the preliminary figures with caution. To better detect a genuine shift in the pace of borrowing, one has to evaluate the data over a three- to six-month time frame.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

- **Table** Consumer Credit Outstanding

- (1) This line shows total consumer credit outstanding in dollar amounts as of the end of the past several months, quarters, and years. Below that is the breakdown of the two main components: revolving and nonrevolving debt.

FEDERAL RESERVE statistical release



G.19

CONSUMER CREDIT December 2003

For release at 3 p.m. (Eastern Time)
February 6, 2004

Consumer credit increased at an annual rate of 5-1/4 percent in 2003. In the fourth quarter, consumer credit grew 3-3/4 percent, down from a 6-1/4 percent rate in the third quarter. In December, consumer credit increased at an annual rate of 4 percent.

CONSUMER CREDIT OUTSTANDING¹ Seasonally adjusted

		2002					2003							
		1999	2000	2001	2002	2003 ^D	Q4	Q1 ^F	Q2 ^F	Q3 ^F	Q4 ^D	Oct ^F	Nov ^F	Dec ^D
2 ▶	Percent change at annual rate ^{2,3}													
	Total	8.0	10.7	8.1	4.4	5.2	1.3	4.3	6.2	6.2	3.7	5.9	1.1	3.9
	Revolving	4.9	11.6	6.8	1.8	3.6	-2.6	4.5	2.7	4.2	2.8	5.2	0.6	2.6
	Nonrevolving ⁴	10.1	10.2	8.9	6.1	6.2	3.8	4.2	8.3	7.5	4.2	6.4	1.4	4.7
1 ▶	Amount: billions of dollars													
	Total	1,512.8	1,686.2	1,822.2	1,902.7	2,001.7	1,902.7	1,923.2	1,953.0	1,983.5	2,001.7	1,993.3	1,995.1	2,001.7
	Revolving	590.5	658.9	703.9	716.7	742.5	716.7	724.8	729.7	737.3	742.5	740.5	740.9	742.5
	Nonrevolving ⁴	922.3	1,027.4	1,118.3	1,186.0	1,259.2	1,186.0	1,198.4	1,223.3	1,246.1	1,259.2	1,252.8	1,254.2	1,259.2

TERMS OF CREDIT AT COMMERCIAL BANKS AND FINANCE COMPANIES⁵ Percent except as noted; not seasonally adjusted

Institution, terms, and type of loan

3 ▶	Commercial banks													
	Interest rates													
	48-mo. new car	8.44	9.34	8.50	7.62	6.93	7.34	7.11	7.05	6.75	6.82	n.a.	6.82	n.a.
	24-mo. personal	13.39	13.90	13.22	12.54	11.95	12.24	11.70	12.19	11.95	11.97	n.a.	11.97	n.a.
	Credit card plan													
	All accounts	15.21	15.71	14.89	13.43	12.74	13.13	13.20	12.90	12.49	12.36	n.a.	12.36	n.a.
	Accounts assessed interest	14.81	14.91	14.44	13.09	12.92	12.78	12.85	12.82	13.11	12.91	n.a.	12.91	n.a.
	New car loans at auto finance companies													
	Interest Rates	6.66	6.61	5.65	4.29	3.40	3.18	3.65	2.61	3.55	3.80	3.92	3.93	3.56
	Maturity (months)	52.7	54.9	55.1	56.8	61.4	57.4	59.1	61.1	63.0	62.5	63.5	62.9	61.3
Loan-to-Value Ratio	92	92	91	94	95	96	96	97	94	94	94	94	94	
Amount financed (dollars)	19,880	20,923	22,822	24,747	26,295	26,283	25,486	27,468	25,733	26,493	26,067	26,306	27,105	

This release is issued around the fifth business day of each month. The exact date and time may be obtained by calling (202) 452 - 3206. Footnotes appear on reverse.

Consumer Credit Outstanding

A couple of pointers here. Growth in consumer credit can have positive as well as negative consequences for the economy. We've already noted that a significant expansion in borrowing can lead to greater spending and thus stimulate economic activity. On the flip side, if households accumulate too much debt relative to their income growth, they slash spending and use a greater portion of their future income to pay off some of this swollen debt, a shift that can reduce sales and slow the economy. The question becomes, at what point does the level of debt get so high as to strain household finances? Experts disagree on this. One indication of trouble can be seen by comparing total consumer installment debt with the annualized amount of personal income that month (see the section "Personal Income and Spending"). Since the 1960s, consumer debt has generally settled within a range of 14%–18% of personal income. By the 2008–09 recession, however, it jumped to 21%. Generally, when the ratio exceeds 20%, credit card delinquencies start to accelerate, and this serves as a warning that households are beginning to struggle with their debt load.

If household debt levels are high at a time when interest rates are climbing or as unemployment increases, the ramifications for the economy can be quite serious. Loan applications for nonrevolving credit will quickly plummet, because consumers are reluctant to purchase expensive items, such as a car or a boat, given the high cost of borrowing and the uncertain outlook for their income. However, there's an interesting twist here. Revolving credit will likely stay strong even under such unsettling conditions. Why is that? Because consumers initially loathe the notion that they have to lower current living standards even if the economic clouds look threatening. It's not easy to suddenly cut back on discretionary activities such as dining out, taking weekend trips, and going to malls and the movies. Most of these activities are paid for with revolving credit. In addition, households can't give up spending on staples such as cellphone usage, pharmaceuticals, and food. But it is very possible to see a drop in nonrevolving credit in the early stages of economic or financial stress, even as revolving credit shows little or no slowdown.

- (2) The percent change is annualized in this part of the table, and that allows you to make quick comparisons over time and see whether the pace of indebtedness is accelerating, slowing, or falling.
- (3) Generally, the greater the demand for consumer credit, the greater the pressure on interest rates to rise. In this table, we see what level of interest rates financial institutions charge for different types of borrowing. Credit card debt carries the highest interest rate, and during difficult economic times, the burden of servicing that debt can pinch household balance sheets. The result: Credit card delinquencies and even personal bankruptcy filings begin to increase.

To get the latest reading on credit card delinquencies, go to the American Bankers Association site, which publishes this data every January, April, July, October, and December: www.aba.com/Press+Room/PR_ReleasesMenu.htm.

For the most current numbers on personal bankruptcy filings, check out the American Bankruptcy Institute's site: www.abiworld.org/am/template.cfm?section=press_release.

MARKET IMPACT

The consumer credit outstanding data arrives nearly two months late, long after other consumer spending reports are out. That's why this economic indicator doesn't set the markets on fire when it's released.

Bonds

Though fixed-income investors normally do not react to these debt numbers, an unexpected jump in borrowing can upset the bond market. It means households are more willing and able to buy consumer goods, which can accelerate economic growth, raise the prospect of higher inflation, and place upward pressure on interest rates.

Stocks

The equity market's response is mostly muted. Eyebrows go up, however, if the consumer installment credit report shows a sustained contraction in borrowing. It hints of rising household financial stress, which could lead to cutbacks in spending and thus fewer sales.

Dollar

The U.S. currency is unaffected by the data on consumer installment debt. Foreign exchange traders have adjusted their portfolios well in advance of this indicator because of other, more timely reports on consumer expenditures.

CONSUMER CONFIDENCE INDEX

Market Sensitivity: Medium, but can be high at turning points in the economy.

What Is It: Examines how consumers feel about jobs, the economy, and spending.

Most Current News Release on the Internet: www.conference-board.org/data/consumerconfidence.cfm

Home Web Address: www.conference-board.org/

Release Time: 10:00 a.m. (ET); announced the last Tuesday of the month being surveyed.

Frequency: Monthly.

Source: The Conference Board.

Revisions: Minor revisions can occur as more survey results are collected.

WHY IS IT IMPORTANT?

Happy consumers are good for business. They are more likely to shop, travel, invest, and keep the economy on a roll. An unhappy and insecure consumer is lousy for business, and if the number of malcontents is large enough, it can derail economic activity. Thus, any sign of failing confidence can immediately set off alarms in Washington and Wall Street because consumer expenditures account for well over half of the economy's total demand. For that reason, economists, government policymakers, and professional money managers carefully track the temperament of households.

Presently, no fewer than three organizations regularly check the mood of consumers. Among the best known are the Conference Board and its monthly Consumer Confidence Index, the University of Michigan's Consumer Sentiment Survey, and the weekly Bloomberg Consumer Comfort Index. Of course, all these groups consider their own data an important leading indicator of the economy. The fact is that all have certain disadvantages that limit their effectiveness in predicting consumer spending.

The Consumer Confidence Index, which claims to be based on responses from 5,000 households, is a volatile series with a spotty link to household expenditures. The University of Michigan's Consumer Sentiment Survey polls a much smaller population; it queries 500 adults. Bloomberg's Consumer Comfort measure is based on answers from 250 new people every week (though the index represents a four-week moving average of 1,000 responses) but asks only about current economic conditions, not future expectations.

Furthermore, you would think that the two best-known surveys—Consumer Confidence and Consumer Sentiment—would show similar performances month to month, but they often don't. One might point to a pickup in confidence among consumers, while the other might show a decline. Why such conflicting signals? For one

thing, the surveys pursue different approaches. Conference Board questionnaires place more emphasis on household reaction to labor-market conditions, while the University of Michigan gauges consumer attitudes on financial and income situations. This puts the Conference Board survey somewhat at a disadvantage as a leading indicator. The labor market is very slow to react to economic changes. For instance, just before a recession bottoms out, stock prices and consumer spending often rebound. But the unemployment rate tends to stay stubbornly high even long after the recovery has started. In addition, there might be a bias in the Consumer Confidence Index because the questionnaires are mailed out around the time the government releases the unemployment report. So there may be some psychological spillover when respondents fill out the survey. That's less an issue with the University of Michigan's Sentiment Survey because it dwells on personal income expectations, which ultimately are the most important driving force behind consumer spending. Indeed, the University of Michigan's Consumer Expectations component is included in the Conference Board's Index of Leading Economic Indicators (see the section "Index of Leading Economic Indicators [LEI]").

Another crucial difference between the two surveys is that the Conference Board queries an entirely new group of people every month, whereas the Michigan survey goes back to interview many of the same individuals it initially polled. This makes the Consumer Confidence Index more erratic on a month-to-month basis compared to the Sentiment Survey. The two also cover different time frames in their questions. The Conference Board seeks expectations over the next six months; the University of Michigan allows for a much longer period in its expectations component—one to five years.

The bottom-line question with these consumer surveys is, Can they divine future household spending? Not very well, unfortunately. Emotionally based surveys should be analyzed with caution. A single negative report on the economy can lead to mood swings that influence how households respond to a survey. Yet it is unlikely to alter spending patterns in the short run. Indeed, history has shown there is little relationship between consumer confidence and spending on a month-to-month basis. For that matter, there is no methodology, mathematical construct, or statistical model that can successfully predict how human beings will behave in a given circumstance.

This doesn't mean the Consumer Confidence Index is not without some forward-looking merit. It's certainly reasonable to conclude that when households are uncertain about their future, they are more watchful of every dollar spent. By the same token, if Americans are upbeat about the economic outlook, it's logical to think they feel more comfortable about spending. In fact, while the short-term correlation between confidence and spending is pretty slim, it does strengthen over the long term. A six-month or nine-month moving average of consumer confidence levels has proven to be a better indicator of future household outlays. The best advice here is to put less weight on what consumers tell pollsters about their expectations of the future and focus instead on what people are doing with their money right now. The strongest evidence of confidence can be found at

one place: the cash register. The most succinct description on the value of consumer confidence surveys can be found in a 1993 report by the Federal Reserve Bank of Minneapolis, which noted that for economic forecasters, confidence “is a little like having a mild case of the common cold. You can’t afford to ignore it, yet it doesn’t seem to change things very much.”

HOW IS IT COMPUTED?

The Conference Board’s Consumer Confidence Index began as bimonthly in 1967 and turned monthly in 1977. The index itself has been benchmarked to the year 1985 and assigned the reference mark of 100. What’s special about 1985? Nothing really. The purpose here was to anchor the index when the confidence level was neither at its peak, nor at its lowest point. It’s based on an attempt to survey approximately 5,000 households nationwide every month. Rarely, however, do that many respond. About 3,000 make it in time to be included in the preliminary release of the index. A month later, a revision is published. It includes another 1,000 or so late responses. In the end, though, the difference in outcome between the first report and the follow-up revision is usually insignificant.

Here are the key questions asked in the survey:

1. How would you rate the present general business conditions in your area? Good, normal, or bad?
2. Six months from now, do you think they will be better, the same, or worse?
3. What would you say about available jobs in your area right now? Plenty, not so many, or hard to get?
4. Six months from now, do you think there will be more jobs, the same, or fewer jobs?
5. What would you guess your total family income to be six months from now? Higher, the same, or lower?

The Conference Board often throws in additional questions based on current economic conditions. For example, in a climate of falling interest rates, it might ask households if they plan to refinance their mortgage in the next six months.

With all the data in hand, the Conference Board produces three headline indexes, all of which are seasonally adjusted. One is the Present Situations Index, and it reflects consumers’ attitudes about current conditions. The second is the Expectations Index, which represents how consumers feel conditions might change in the next six months. Finally, you have the overall Consumer Confidence Index, which is based on a composite of the main five questions. It is weighted so that expectations make up 60% of the index while opinions about the current situation account for the remaining 40%.

THE TABLES: CLUES ON WHAT’S AHEAD FOR THE ECONOMY

The Conference Board is a subscription-based service, so it provides only a limited amount of free information on its Web site. Those seeking more details from the latest

consumer confidence survey need to subscribe. The fee-based data contains demographic breakdowns by age and income groups, responses from nine geographic regions around the country, and a list of major goods and services that consumers will purchase in the next six months.

The screenshot shows the website for The Conference Board. The main heading is "Consumer Confidence". Below the heading, there is a section titled "Please see the Consumer Research Center Website for:" with three bullet points: ">> detailed consumer confidence data", ">> additional consumer information", and ">> benefits of center membership".

The main content area features a press release titled "The Latest Press Release" and "U.S. Consumer Confidence Index Holds Steady in May" dated "May 25, 2004". The text of the press release states: "The Conference Board's Consumer Confidence Index, which had improved last month, was virtually unchanged in May. The Index now stands at 93.2 (1905=100), up slightly from 93.0 in April. The Present Situation Index is now 90.3, compared to 90.4 in April. The Expectations Index edged up to 95.2 from 94.8." It also mentions that the survey is based on a representative sample of 5,000 U.S. households and is conducted by TNS NFO.

To the right of the text is a line graph titled "Consumer Confidence Index" showing the index value from November to May. The y-axis ranges from 90 to 100. The data points are approximately: Nov (92.5), Dec (93.0), Jan (93.2), Feb (93.0), Mar (93.0), Apr (93.0), May (93.2).

At the bottom of the page, there is a quote from Lynn Franco, Director of The Conference Board's Consumer Research Center: "The recent upturn in the Present Situation Index is being spurred by strong employment gains in March and April," says Lynn Franco, Director of The Conference Board's Consumer Research Center. "This has made consumers more positive about short-term prospects in the months ahead. The pickup in the job market is offsetting the impact of rising gas prices and escalating tensions overseas."

Source: The Conference Board, used with permission.

- Press Release on Consumer Confidence

The free online press release has the latest numbers for all three indexes—Consumer Confidence, Expectations, and Present Situations—along with a brief comment on how much they changed from the previous month and why.

One of the Conference Board's most important questions to respondents each month is whether they think jobs are easier or harder to find. The percentage of people who say jobs are plentiful minus the percentage who believe jobs are hard to get is a very good statistic that can be used to corroborate other data on whether labor-market conditions are becoming tighter or more lax.

MARKET IMPACT

Bonds

Though questions abound regarding its efficacy as a predictor of household spending, a sharp and sustained rise in consumer confidence is nevertheless worrisome to fixed-income investors. This could lead to an acceleration in borrowing and shopping, factors that can fuel faster economic growth and stoke inflation. Bond traders prefer to see consumer confidence less ebullient about the future or an outright decline in the index. This would suggest a retrenchment in spending and more modest economic activity ahead.

Stocks

Crumbling confidence by consumers is not favorable to equities because it can presage declining business sales and fading profits. Shareholders hope consumer confidence stays high to encourage more spending, which is bullish for stocks.

Dollar

A depressed consumer makes foreign investors with exposure in the U.S. markets a bit nervous. It raises the prospects of falling interest rates and a weakening business climate, both of which bode ill for the dollar's value. Foreign investors might sell the U.S. currency in search of higher yields and a stronger economy elsewhere. On the other hand, an upbeat consumer can lift U.S. interest rates and stock market returns to levels that promise a higher return relative to other regions in the world. This normally has the effect of increasing demand for dollars.

SURVEY OF CONSUMER SENTIMENT

Market Sensitivity: Medium, but can be high at turning points in the economy.

What Is It: Near-real-time assessment of consumer attitudes on the business climate, personal finance, and shopping.

Most Current News Release on the Internet: www.sca.isr.umich.edu/press-release.php

Home Web Address: www.sca.isr.umich.edu/main.php

Release Time: 9:55 a.m. (ET); preliminary numbers are released on the second Friday of each month. Final figures come out the last Friday of the same month. Only the results of the final survey are published on the Web site.

Frequency: Semimonthly.

Source: Thomson Reuters/University of Michigan.

Revisions: Low. Preliminary numbers, out midmonth, are revised two weeks later.

WHY IS IT IMPORTANT?

This is the granddaddy of all consumer attitude surveys. Since 1946, the University of Michigan has been interviewing consumers about their finances and their opinions on national economic conditions. Some experts believe this to be a better predictor of household spending than the Conference Board's Consumer Confidence Survey. Indeed, one component of the Michigan Sentiment Survey—Consumer Expectations—is included in the Conference Board's own Index of Leading Economic Indicators. The rationale behind these attitude surveys is the widespread belief among economists that while it's virtually impossible to predict consumer behavior with any precision, Americans do seem more adept at picking up early signs of an economy that is starting to sputter than they are at identifying the beginning of a recovery. Experts think that this is because households are more acutely sensitive to losing money than gaining it. Whatever the reason, over the years consumers have demonstrated a pretty good track record of predicting economic downturns. As a result, many brokerage firms, lenders, and retailers are willing to spend big bucks to subscribe to the Sentiment Survey.

The University of Michigan publishes its information twice a month. A preliminary reading of the survey (incorporating about 60% of the 500 respondents) is released to clients midmonth on a confidential basis through a conference call and via fax. These results are not meant for widespread distribution, but the release is regularly leaked to the press and thus is known to the financial markets. A final report is issued on the last Friday of the month. Although that comes out after the Conference Board announces its Consumer Confidence Index, the Sentiment Survey arguably carries more influence among investors. Some analysts view it as a better real-time measure of consumer moods because the data includes interviews conducted up to a day or two before the official release.

HOW IS IT COMPUTED?

The surveys are taken on weekends with a total of 500 individuals. The University of Michigan uses a rotating interview strategy. Each month, 60% of the consumers polled are new to the survey, with the remaining 40% being interviewed a second time. The questions are broader in scope than those raised by the Conference Board. People queried are told to respond to 50 questions about their current and expected personal finance conditions and their buying plans for big-ticket items. They are also asked about the likely direction of the U.S. economy, interest rates, inflation, and jobs over the next year and for the next five years.

The main Index of Consumer Sentiment is based on the results of two subset indexes: the Index of Current Economic Conditions, which explores consumers' thinking about their current finances and buying plans, and the Index of Consumer Expectations, which is designed to gauge consumers' outlook on their finances and buying plans over the coming one- and five-year periods.

The survey has five core questions, which are used to calculate all these indexes:

1. Are you and your family (living with you) better off or worse off financially than you were a year ago?
2. Do you think that a year from now you and your family living there will be better off financially, worse, or just about the same as now?
3. Do you think that during the next 12 months we'll have good times financially, bad times, or otherwise?
4. Looking ahead, what is more likely: that in the country as a whole, we'll have continued good times during the next five years or so, or that we will have periods of unemployment and depression, or otherwise?
5. About the big things people buy for their homes, such as furniture, a refrigerator, stove, television, things like that. Generally speaking, do you think now is a good or bad time to buy major household items?

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

The index on current economic conditions essentially gauges how consumers feel "here and now." However, when it comes to anticipating changes in consumer spending patterns, the expectations index has a much higher predictive value. Indeed, it carries a 70% correlation with household expenditures over the next six months to a year—especially in the area of big-ticket items such as autos and homes.

As for accessing the full report on the Web, most details on the monthly Consumer Sentiment Survey are reserved for subscribers. The organization does provide, free on its Web site, a one-page press release of the Sentiment numbers along with a brief analysis, but only at the end of the month when the final figures are published. As for viewing

historical tables and charts, nonsubscribers can see previous data, except that of the last six months.

MARKET IMPACT

Bonds

Fixed-income investors worry about consumer exuberance because that can translate into greater spending and faster economic growth.

Stocks

Equity managers prefer to see consumers upbeat because they then have a greater propensity to spend on goods and services. This can increase revenues, corporate profitability, and stock values as well.

Dollar

Foreign demand for dollars will be strong as long as the U.S. economy is growing and interest rates are attractive compared to other countries. Because consumer expenditures account for more than \$6 out of every \$10 spent in the economy, foreigners favor seeing a happy American consumer.

BLOOMBERG CONSUMER COMFORT INDEX

Market Sensitivity: Low.

What Is It: A timely survey of consumer attitudes.

Most Current News Release on the Internet: [www.bloomberg.com/
consumer-comfort-index/](http://www.bloomberg.com/consumer-comfort-index/)

Home Web Address: www.bloomberg.com

Release Time: Every Thursday at 9:45 a.m.

Frequency: Weekly.

Source: Bloomberg News.

Revisions: No revisions.

WHY IS IT IMPORTANT?

The Bloomberg Consumer Comfort Index (CCI) is not known to animate the investment community very much, especially given the existence of two major competitors: the University of Michigan's Consumer Sentiment Survey and the Conference Board's Consumer Confidence Index. However, this relatively new kid on the block does have at least one advantage: It's the only major consumer poll that comes out on a weekly basis, making it more timely than the other two.

The index itself has had an interesting history. Back in 1985, ABC News combined forces with *Money* magazine to provide information on consumer attitudes more frequently than once a month. When *Money* backed out in 2005, it was the *Washington Post* that joined with ABC News. But in February 2011, Bloomberg took over the entire series and its name has been on the index ever since. Though the Consumer Comfort Index has changed hands, the questions in the survey remain essentially the same. Persons interviewed are asked questions on matters of personal finance, the current state of the economy, and whether they are in a spending mood. So how does this weekly measure stack up against its two better-known rivals? Well enough to provide an early peek at how the monthly surveys will do when they are released. Since its origin, the Consumer Comfort Index has been very highly correlated with both the University of Michigan's Sentiment Survey and the Conference Board's Consumer Confidence Index. In statistics, a correlation of 1 indicates the strongest possible relationship between two variables. The correlation between the Bloomberg CCI and Michigan has been .88, and with the Conference Board, .91.

HOW IS IT COMPUTED?

The methodology used to come up with the Consumer Comfort Index is somewhat unusual. From Wednesday to Sunday of each week, 250 new adults are interviewed by

telephone. Respondents are asked to comment on three topics. The first two are whether they feel better or worse about the nation's economy and their personal finances. The third topic probes whether they are presently in a buying mood. Results from this poll are combined with the 750 responses accumulated during the previous three weeks so that in any given week, the Bloomberg Consumer Comfort Index is based on a rolling four-week average for a total sample of about 1,000 people.

Calculating the index is straightforward. The negative responses to each index question are subtracted from the positive responses. The results of the three questions are then added and divided by 3. The index can range from +100 (meaning everyone is positive on all three measures) to -100 (everyone is negative on all three measures).

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

- Bloomberg's Release of the Consumer Comfort Index

Anyone can access the results of the latest survey by going online to Bloomberg's CCI Web site (see the link at the top of this section). It contains a year-to-date graph on the weekly gauge of confidence, an analysis of the results, and full access to its tables, including how various demographic and socioeconomic groups have responded.

Bloomberg also makes available an interactive chart of the CCI that investors can utilize (www.bloomberg.com/apps/quote?ticker=COMFCOMF:IND#chart).

What is useful about the Consumer Comfort measure is that it can corroborate other economic trends. Forecasters have observed how measures of consumer moods have a good track record of foreseeing the start of recessions, but they seem to fail when it comes to anticipating the beginning of recoveries. For investors, the real value in the weekly Consumer Comfort Index is that it offers a heads up on the outcome of the more market-sensitive Consumer Confidence and Consumer Sentiment measures.

MARKET IMPACT

Bonds

Investors often comment on the results of the Bloomberg Consumer Comfort Index but generally don't act on it in any measurable way. There are only two circumstances when this report can cause a stir in the bond market, and they might have to occur simultaneously. One is when the Consumer Comfort indicator comes out on an otherwise slow news day as traders are groping for a reason to trade. The second is when the survey results swing sharply in one direction or the other. Given the two events, market reaction to the Consumer Comfort news will be much the same as for the Consumer Confidence and Sentiment Surveys.

Stocks

The Comfort Index is of only modest interest to equity traders. More attention is paid to the better-known monthly indexes on consumer attitudes.

Dollar

Currency traders largely ignore the report. It has no appreciable impact on the dollar.

GOOGLE INSIGHTS

Market Sensitivity: None.

What Is It: An online database from Google that tracks the volume of specific keyword searches. By monitoring the frequency of certain search terms, analysts may be able to foresee changes in consumer spending patterns.

Home Web Address: www.google.com/insights/search/

Release Time: Always available.

Source: Google.

WHY IS IT IMPORTANT?

For an increasing number of consumers, the Internet has instinctively become the go-to place to do research on products they plan to buy. They use the Web to do comparison shopping and read product reviews. This raises an interesting question. If one could compile these Internet searches and see what consumers are inquiring about, could the results serve as a tool to forecast sales trends? Is it possible, for example, that aggregate counts of online searches for, say flat-screen TVs, refrigerators, or washing machines, can foreshadow changes in retail sales, perhaps even warn of swings in corporate revenues long before their quarterly income statements are released?

A number of economic studies have looked into the predictive value of online search data, and they have concluded that monitoring such queries can greatly improve the ability to forecast shifts in household expenditures, employment, and many other important economic indicators.

But where do you go to find Internet search counts? Enter—who else—Google again, the world's largest search engine. The company not only tracks the volume of specific online inquiries, but actually makes such information available to the public at no cost through a Web site called Google Insights. In essence, Google Insights provides not only information on the popularity of specific keyword queries, but also the geographical origin of these searches and the dates on which they were made.

Here's a quick example: You might want to know how many people have recently searched for "washing machines." Why washing machines? Because many consider that product fairly pricey and discretionary, an item that households are willing to purchase if they are confident about their jobs and finances. One can expect to see fewer searches for washing machines if the economy is struggling and unemployment is rising. By monitoring changes in the volume of such a query, one can better foresee swings in overall consumer demand (perhaps even anticipate changes in the revenues of firms that make and sell washing machines). Now imagine the variety of possible queries with Google Insights: One can monitor recent interest in goods and services, such as electronic tablets, vacation cruises, motorcycles, electric cars, and single-family homes.

Yet this barely scratches the surface of how Google Insights can be utilized. Market researchers, for example, can judge the effectiveness of a television advertising campaign by immediately afterward tracking changes in the number of Internet queries initiated for that specific product. Inventory managers at retailers can employ Google Insights to see whether there's an increase or a decrease in the demand for the goods they sell, and thus adjust their inventories accordingly. Clearly, Google Insights has the potential to become a valuable resource to help investors and business leaders better understand how the economy is performing and to discern clues on where it is headed.

HOW IS IT COMPUTED?

Launched in August 2008, Google Insights tracks the frequency of search terms going back to 2004. The search count is updated daily to keep it timely. Note that Google Insights does not reveal the absolute search count volume for a specific term. Nor does it release the data on a daily basis. Instead, the popularity of each search is reported in the form of an index, and that number is released to the public on a weekly basis.

The mechanics of computing this index is fairly straightforward. Google counts the weekly frequency of searches for a specific term and divides that number by the total number of those searches over a specified period. The resulting fraction is converted to an index, in which 100 represents the peak search frequency during that time frame. The rest of the scale is valued relative to that maximum search level. Let's say you've entered the term "washing machines" and you set the date parameters from 2008 to the present (see the accompanying chart). At some point during these years you will see the index touch 100, which marks the period when searches for washing machines hit their peak. Any index below 100 tells you the volume of searches for washing machines relative to that peak. Thus, an index of 50 would reflect half as many searches as the peak.

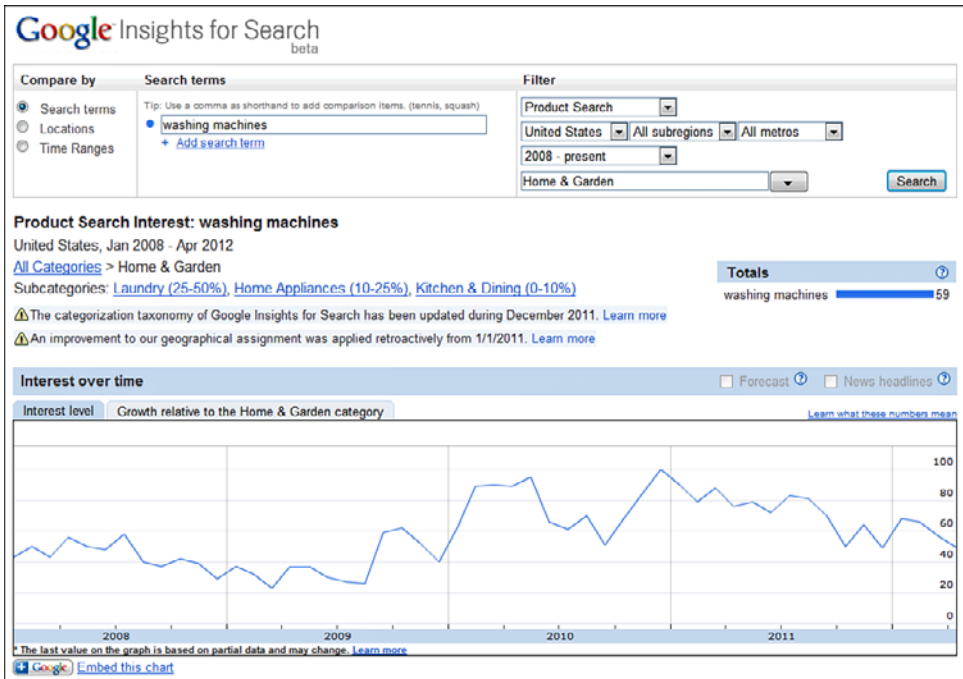
You might ask whether other search engines provide the same information. Not quite. While many search engines publish lists of the most popular search terms, what makes Google Insights unique is that its database can be customized so that it not only reveals fluctuations in the frequency of searches for a given term or phrase, but also allows researchers to set parameters on dates and geography.

To be sure, there are limitations to using and interpreting Google Insights results. First, its historical data goes back only to 2004, which means there is insufficient history to see how it performs across different business cycles. Second, Google Insights provides no demographic information of those conducting the search. Third, let's face it: Some product searches do not lead to sales. People might search simply out of curiosity. Finally, users may do a keyword search for reasons having nothing to do with future purchases. For example, an increase in the search for the term "washing machine" on one occasion included news stories of a washing machine that had a snake resting inside. (True story!)

MARKET IMPACT

There is no financial-market impact from Google Insights. It’s essentially a research tool. If used smartly, Google Insights can (1) help users better understand consumer behavior, (2) provide a heads up on key economic indicators such as retail sales, home buying, and employment, and (3) offer early clues on corporate revenues based on interest shown for specific products.

In summary, Google Insights appears to be a promising new tool with the potential to improve our understanding of the consumption side of the U.S. economy.



LAS VEGAS GAMING REVENUES

Market Sensitivity: None.

What Is It: A report on gaming revenues collected in Las Vegas, the largest and most mature gambling market in the United States.

Most Current News Release on the Internet: <http://gaming.nv.gov/mrrindex.htm>

Home Web Address: <http://gaming.nv.gov>

Release Time: Approximately 10:30 a.m.; published the second week of each month and reports on gaming revenues collected two months earlier.

Frequency: Monthly.

Sources: Nevada Gaming Commission and the Gaming Control Board.

Revisions: Revisions are made to previous months but they are only incorporated into the year-to-date totals.

WHY IS IT IMPORTANT?

What? Gambling in Las Vegas as a useful economic indicator? Yes!

Think about it. There is arguably no category of spending that is more discretionary than casino gambling. If you have money to burn, seek personal entertainment, and prefer a vacation destination in the U.S., chances are you will consider visiting places like Las Vegas, Atlantic City, or tribal resort casinos. What does it take for Americans to feel comfortable dropping hundreds or thousands of dollars shooting craps, playing blackjack, and working the slot machines? The intuitive answer is confidence in one's job and rising personal income, factors that typically reflect a healthy economy. If the economy is doing well, that can lure more people to take a chance at the casino tables, and the result will be higher gaming revenues.

Conversely, if the economy is deteriorating and starts to threaten job and income security, consumers become more cautious. They begin to scale back spending, especially on goods and services deemed unessential. The very notion that they have money to "burn" becomes anathema under those circumstances. The number of visitors to casinos dwindles and gaming revenues drop off.

This relationship between the economy's health and gaming revenues seems fairly logical. Interestingly, that was not always the case. For most of the post-World War II period, gambling was viewed as a recession-proof industry. After all, Nevada was for decades the sole destination for gambling activity. The state enjoyed little competition. Even during tough economic times, people came to Las Vegas to escape from recession hardships. Certainly addicts had few other places to go. But by the late 1970s, the

industry underwent fundamental changes that eventually made it much more sensitive to swings in the business cycle.

For one, Nevada lost its monopoly as a gambling Mecca. More and more cash-strapped states viewed legal gambling as a way to raise additional tax revenues and pare down their budget deficits.

New Jersey, Connecticut, Mississippi, Illinois, and Michigan granted licenses for such sites in their states. Gambling boats popped up and cruised outside U.S. territorial waters to offer the same service. All this new competition forced Las Vegas to raise its profile even more. They built megaresorts and offered more diverse entertainment to attract both gamblers and their families. Convention facilities were greatly expanded to lure businesses. In the process, revenues strictly from gambling accounted for a smaller and smaller share of overall casino income. Back in the 1980s, gambling accounted for most of the revenues; now that proportion has fallen to less than half.

One major outcome from these changes is that Las Vegas became more exposed to the vicissitudes of the business cycle. That was never more apparent than during the 2008–09 economic downturn. In the year before that recession, casinos on the Las Vegas Strip were raking in about \$600 million each month from just gaming activity. Those monthly revenues plummeted by 25% during the economic downturn. Indeed, more than two years after the recession in the U.S. officially ended, Las Vegas still failed to see revenues return to pre-recession levels (at least as of 2011). Two factors account for this underperformance. One reason is that the U.S. economy failed to grow fast enough to reduce unemployment by any meaningful amount. Another reason is that Las Vegas itself suffered greatly from the collapse of residential real estate values.

Nevertheless, it is worthwhile to track gaming revenues on the Las Vegas Strip to detect swings in consumer confidence levels and as a harbinger of future household spending.

HOW IS IT COMPUTED?

You might ask, Why focus on gaming statistics from Las Vegas if it is no longer the sole destination for gambling? Simple. The city remains the largest and most mature gambling market in the nation, and that allows us to study changes in gaming revenues over a longer period of business cycles.

In addition to Las Vegas, Nevada's Gaming Control collects gaming revenues from around the state. Gambling venues are required to submit those figures each month to the Board by the end of the following month. Gaming revenues here are defined as income derived strictly from gambling activity (or house winnings), and thus do not include receipts from lodging, restaurants, or shows.

The Board publishes the numbers with a two-month lag. To avoid short-term seasonal adjustment distortions, all numbers are compared with revenue levels of a year ago.

THE TABLES: CLUES ON WHAT’S AHEAD FOR THE ECONOMY

Gaming revenues on the Strip have a propensity to top out 3 to 13 months before the start of an economic recession. For example, casino income from gambling peaked more than a year before the onset of the 2008–09 downturn, suggesting that Americans sensed early on that economic and employment conditions were deteriorating. It is also interesting to note that gaming revenues typically recover about the same time a recession ends—though that was clearly not the case in 2009. Monthly gaming revenues topped out at \$645 million in November 2006 and tumbled to a low of \$383 million in June 2010, a full year after the recession ended.

• **Table** Nevada Gaming Revenues and Collections

Area	Current Period		% Change	Fiscal Year-to Date		% Change
	1/1/12 to 1/31/12	1/1/11 to 1/31/11		7/1/11 to 1/31/12	7/1/10 to 1/31/11	
Statewide	1,038,406,572	877,281,553	18.37%	6,345,790,624	6,119,740,249	3.69%
Clark County	925,487,094	761,222,824	21.58%	5,477,670,803	5,254,511,547	4.25%
LV Strip	623,512,323	482,732,006	29.16%	3,654,111,358	3,458,503,106	5.66%
Downtown	47,064,574	41,384,726	13.72%	289,705,629	280,575,544	3.25%
North Las Vegas	28,845,338	24,947,402	15.62%	154,520,082	153,693,875	0.54%
Laughlin	40,963,825	38,547,660	6.27%	257,213,130	266,528,079	-3.49%
Boulder Strip	84,313,327	77,552,950	8.72%	458,315,942	441,670,744	3.77%
Mesquite	10,433,497	9,895,602	5.44%	65,177,910	63,982,455	1.87%
Balance of County	90,354,209	86,162,479	4.86%	598,626,753	589,557,744	1.54%
Washoe County	53,728,973	57,258,306	-6.16%	433,157,877	442,463,470	-2.10%
Reno	37,988,402	41,574,574	-8.63%	310,473,237	320,031,243	-2.99%
Sparks	9,398,694	9,439,479	-0.43%	72,048,549	70,472,388	2.24%
North Lake Tahoe	1,926,884	2,010,512	-4.16%	16,582,688	18,214,691	-8.96%
Balance of County	4,414,993	4,233,741	4.28%	34,053,403	33,745,147	0.91%
South Lake Tahoe	17,235,153	16,883,329	2.08%	134,617,181	126,963,471	6.03%
Elko County	21,120,456	21,589,975	-2.17%	152,071,882	146,931,583	3.50%
Wendover	13,030,409	13,577,559	-4.03%	96,341,857	92,069,134	4.64%
Balance of County	8,090,048	8,012,416	0.97%	55,730,025	54,862,450	1.58%
Carson Valley Area	7,785,130	8,084,230	-3.70%	58,489,360	59,562,848	-1.80%
Other	13,049,765	12,242,889	6.59%	89,783,522	89,307,329	0.53%

* Carson Valley Area includes Carson City, Gardnerville, Minden and all other areas of Douglas County except South Lake Tahoe.

- (1) The table on Nevada Gaming Revenues looks at gambling income statewide and also breaks down the revenues by specific locale. The income listed under the “current period” column reflects total collections in the latest month, compares it with the same month a year ago, and provides a percentage change.
- (2) Also included in the table are the cumulative revenue totals for the fiscal year—and how those stack up against the comparable period from the previous year. The fiscal year in this instance runs from July 1 to June 30.

MARKET IMPACT

The monthly release on gaming revenues has no impact on the financial markets. The data is strictly a research tool to help assess the mood of consumers and forecast household spending patterns.

GROSS DOMESTIC PRODUCT (GDP)

Market Sensitivity: Medium to high.

What Is It: The foremost report on America's economic health, GDP measures how fast or slowly the economy is growing.

Most Current News Release on the Internet:

www.bea.gov/newsreleases/national/gdp/gdpnewsrelease.htm

Home Web Address: *www.bea.gov/*

Release Time: 8:30 a.m. (ET); advance estimates are released the final week of January, April, July, and October. Two rounds of revisions follow, each a month apart.

Frequency: Quarterly.

Source: Bureau of Economic Analysis, Commerce Department.

Revisions: Monthly revisions tend to be moderate, though they can on occasion be more substantial. Annual revisions, normally done at the end of July, reflect more complete information. Benchmark or historic revisions take place every five years or so with changes that can go back to 1929, when the GDP series began.

WHY IS IT IMPORTANT?

GDP. They are the best-known initials in economics and stand for gross domestic product. It is the mother of all economic indicators and the most important statistic to come out in any given quarter. The GDP is a must-read for many because it is the best overall barometer of the economy's ups and downs. Forecasters analyze it carefully for hints on where the economy is heading. CEOs use it to help compose business plans, make hiring decisions, and forecast sales growth. Money managers study the GDP to refine their investment strategies. White House and Federal Reserve officials view the GDP as a report card on how well or poorly their own policies are working. For these and other reasons, the quarterly GDP report is one of the most greatly anticipated.

However, trying to decipher the swell of data from the GDP may be intimidating at first. Simply put, the GDP is the total price tag in dollars of all goods and services made in the U.S. It's the sum value of all hammers, cars, new homes, baby cribs, video games, medical fees, books, toothpaste, hot dogs, haircuts, eyeglasses, yachts, kites, and computers—you get the idea—that were sold in the U.S. or exported during a specific period. Even goods that were not sold but ended up on stockroom shelves are included in the GDP because these products were still assembled. The GDP therefore reflects the final value of all output in the U.S. economy, regardless of whether it was sold or placed in inventory.

When you look at GDP performance over the past 60 years, it becomes clear that the U.S. economy has a natural predilection to grow. Business activity has expanded far more years than it has contracted. Though recessions have not disappeared, they have been shorter and shallower since World War II (with the exception of the 2008–09 downturn), and that is important to the country's economic and social welfare. The faster and longer the economy grows, the higher the level of employment. With more people working, total household income goes up. This encourages Americans to spend more on goods and services. As consumer spending accelerates, companies are inclined to speed up their own production and hire additional workers. That, in turn, further increases household income—and *voilà!*—you have a self-sustaining economic expansion. Moreover, the benefits of growth are not felt just inside the U.S. Stronger economic growth stimulates foreign businesses as well. Americans will import more cars, clothing, jewelry, wine, and home electronics from other nations, and that helps revitalize the international economy. Foreign workers also use some of their additional income to buy more goods from the U.S.

Can this self-generating cycle of growth continue indefinitely? In theory, yes. However, as a practical matter, this system is susceptible to breaking down once in a while as a result of shocks, like a spike in oil prices, or a war, or in the event of a serious imbalance, such as financial asset bubbles, excess inventories, or an outbreak of inflation. Fortunately, such events are rare. And even if they occur, the U.S. government has sufficient resources and policy options at its disposal to minimize damage to the economy.

Looking at the GDP report itself, it's important to note at the outset that the government computes the size of the economy in two ways: One is in nominal-dollar terms and the other is in real-dollar terms. Let's review what is meant by these two concepts. Current (or nominal-dollar) GDP tallies the value of all goods and services produced in the U.S. using present prices. On the other hand, real (or chained-dollar) GDP counts only the value of what was physically produced. To clarify the point, suppose a hat-making factory announces that it made \$1 million selling hats this year, 11% more than last year. The \$1 million represents nominal company sales (or current dollars). However, something is missing. From this figure alone, it's unclear how the factory achieved the extra income. Did it actually sell 11% more hats? Or did it sell the same number of hats as the year before but simply raise prices by 11%? If the factory made more money because it increased the price tag by 11%, then in real (or constant-dollar) terms, the true volume of hats sold this year was no greater than last year, at \$900,000. This is an important distinction. It's vital to know if the economy grew because the quantity of products sold was greater or whether it was largely the result of price hikes, or inflation. What you want to see are real increases in economic output, which means that a greater supply of goods and services is available for consumers. Higher real GDP improves the standard of living of Americans, whereas GDP growth due to inflation erodes living standards because people have to pay more for the same amount of products consumed as before. These two measures of GDP thus are of fundamental importance in economics.

To appreciate what the GDP is composed of and how it is calculated, it's best to look at the tables in the release. They are not as complicated as they first appear.

• **Table 3** Gross Domestic Product and Related Measures: Level and Change from Preceding Period

Table 3.—Gross Domestic Product and Related Measures: Level and Change from Preceding Period

	Billions of current dollars					Billions of chained (2000) dollars					Change from preceding period				
	2003	Seasonally adjusted at annual rates				2003	Seasonally adjusted at annual rates				2003		2003		
		2002	2003				2002	2003			2003	2003			
	IV	I	II	III	IV	IV	I	II	III	IV	2003	III	IV		
1 ▶ Gross domestic product	10,983.9	10,523.7	10,735.8	10,846.7	11,107.0	11,246.3	10,392.2	10,980.9	10,214.1	10,288.3	10,493.1	10,507.1	314.2	204.8	104.0
2 ▶ Personal consumption expenditures	7,523.7	7,501.2	7,600.7	7,673.6	7,836.3	7,896.4	7,362.2	7,859.9	7,204.1	7,304.0	7,426.6	7,474.2	128.6	122.6	47.6
Durable goods	941.8	907.3	868.2	868.2	975.1	967.8	1,027.6	963.8	965.0	1,005.1	1,069.1	1,071.4	70.4	64.0	2.3
Motor vehicles and parts	423.6	410.4	402.1	414.5	447.2	430.4	441.3	419.0	414.5	429.5	466.9	454.3	10.0	37.4	-12.6
Furniture and household equipment	334.5	325.3	321.8	329.9	339.9	346.4	400.7	373.5	374.7	391.7	412.4	424.0	36.0	20.7	11.6
Other	183.0	171.6	174.3	181.0	180.0	191.0	187.7	173.0	177.6	185.9	191.4	196.1	17.5	5.5	4.7
Nondurable goods	2,200.3	2,192.2	2,175.7	2,170.0	2,230.0	2,256.9	2,119.0	2,061.0	2,080.5	2,086.9	2,134.3	2,157.6	76.2	37.4	23.3
Food	1,064.2	1,016.4	1,037.4	1,049.7	1,074.9	1,084.7	964.6	963.9	979.6	985.4	1,002.8	1,010.7	36.4	17.4	7.9
Clothing and shoes	311.2	306.4	304.0	307.5	315.1	317.3	334.4	323.4	325.7	331.9	339.5	340.4	15.3	7.6	9.9
Gasoline, fuel oil, and other energy goods	208.7	193.0	222.4	196.9	209.2	206.4	189.8	201.0	203.1	192.9	194.2	199.9	-1.2	-1.8	5.2
Other	624.3	603.4	611.1	616.7	630.8	638.4	593.8	573.8	582.2	587.4	607.3	603.3	26.5	10.9	9.0
Services	4,602.1	4,474.7	4,526.8	4,576.6	4,631.2	4,673.8	4,223.8	4,175.4	4,190.7	4,208.4	4,237.2	4,259.0	82.0	28.8	21.8
Housing	1,199.6	1,167.7	1,181.5	1,191.4	1,204.9	1,216.4	1,085.4	1,071.7	1,078.0	1,082.8	1,087.7	1,092.3	23.5	5.9	3.6
Household operation	426.3	412.9	422.6	424.2	428.5	429.9	396.7	395.6	396.6	393.4	398.8	400.0	2.2	3.4	3.2
Electricity and gas	764.5	756.0	763.1	763.9	765.0	765.3	745.5	747.9	748.0	743.1	744.5	746.5	-3.3	1.4	2.0
Other household operation	291.8	256.9	259.5	260.3	262.7	264.6	251.2	247.5	248.5	250.5	252.4	254.6	2.0	1.9	1.9
Transportation	293.0	291.5	292.3	292.0	295.3	294.9	278.3	281.3	281.6	278.8	277.2	275.7	-6.5	-1.6	-1.5
Medical care	1,302.2	1,230.8	1,263.1	1,289.2	1,315.1	1,341.4	1,189.7	1,154.8	1,169.3	1,182.4	1,199.6	1,210.2	67.6	14.5	13.3
Recreation	319.3	309.7	312.6	317.2	321.3	326.4	291.3	287.5	287.5	290.1	291.9	295.5	6.5	1.0	3.6
Other	1,061.9	1,063.0	1,054.7	1,062.0	1,066.2	1,064.0	980.1	983.5	976.6	979.7	984.3	983.8	-2.1	4.6	-5.6
3 ▶ Gross private domestic investment	1,967.5	1,847.7	1,905.3	1,824.3	1,881.1	1,751.5	1,635.7	1,585.8	1,501.6	1,589.9	1,666.1	1,705.3	63.7	56.2	49.2
Fixed investment	1,670.8	1,594.6	1,690.2	1,630.1	1,689.6	1,747.6	1,633.6	1,573.6	1,577.7	1,601.4	1,685.9	1,705.9	67.7	58.6	32.9
Nonresidential	1,100.0	1,074.3	1,071.0	1,006.9	1,124.4	1,140.9	1,122.0	1,068.9	1,067.3	1,105.0	1,139.5	1,150.7	30.2	33.7	18.2
Structures	289.9	256.3	266.1	269.2	249.8	280.5	281.2	280.0	282.7	288.0	287.7	256.9	-11.8	-1.8	-1.6
Equipment and software	849.1	817.9	815.8	827.7	864.6	888.4	840.8	805.9	805.0	818.6	907.7	929.6	44.3	36.1	21.9
Information processing equipment and software	463.4	424.1	436.2	451.2	477.0	488.9	522.1	468.2	487.2	506.4	537.7	557.1	62.8	31.3	19.4
Computers and peripheral equipment	97.1	84.9	86.0	93.5	101.0	106.5	101.0	97.1	97.1	100.0	100.0	100.0	0.0	0.0	0.0
Other	181.0	169.8	173.4	177.6	185.1	187.8	182.3	169.7	174.4	178.6	185.0	191.0	14.8	6.4	6.0
Other	185.2	166.3	175.9	180.1	190.2	194.7	194.5	177.1	184.3	188.6	202.0	205.0	17.4	11.6	4.0
Industrial equipment	133.2	135.6	133.4	133.2	134.1	132.0	130.7	133.9	131.4	131.0	131.4	129.1	-5.4	-4.4	-2.3
Transportation equipment	120.2	126.0	119.0	115.3	117.0	127.9	115.5	127.2	117.4	115.1	113.7	115.6	-12.7	-1.4	1.9
Other equipment	132.4	129.4	126.3	128.1	136.7	139.6	128.2	126.1	122.6	123.9	131.1	136.1	3.9	7.2	4.0
Residential	562.0	250.3	534.4	543.2	575.1	590.6	506.1	401.0	406.4	491.7	516.7	529.0	35.0	25.0	13.1
Change in private inventories	-3.3	20.2	-9.9	-5.0	-10.5	4.0	-1.5	21.5	1.6	-4.5	6.1	-1.2	-4.6	15.2	-4.6
Farm	-3.1	-4.8	-2.1	-2.7	-4.3	-6.6	-1.8	-3.5	1.2	-2.0	-2.8	-2.7	1.7	-8.1	-1.1
Nonfarm	-2.2	25.0	-1.2	-3.0	-6.2	9.6	4.4	25.4	3.3	-2.4	-5.9	9.7	-8.9	-3.5	15.6
4 ▶ Net exports of goods and services	-491.5	-476.1	-487.6	-505.5	-490.6	-482.5	-505.5	-511.5	-490.0	-526.0	-505.2	-500.7	-39.9	20.8	4.5
Exports	1,081.7	1,021.0	1,020.2	1,048.5	1,102.6	1,033.0	1,017.5	1,012.4	1,009.6	1,033.7	1,079.9	1,079.1	84.1	46.2	46.2
Goods	724.7	698.3	707.6	707.7	722.1	761.5	719.7	703.2	708.5	703.5	718.2	750.5	12.5	14.7	32.3
Services	353.3	318.8	313.3	312.5	326.4	341.0	314.0	314.0	305.7	305.9	315.2	329.1	7.2	9.3	13.9
Imports	1,539.6	1,493.3	1,508.5	1,525.7	1,539.0	1,586.0	1,539.0	1,529.0	1,535.7	1,539.9	1,580.6	54.7	3.2	41.7	
Goods	1,279.1	1,240.3	1,254.2	1,272.4	1,275.6	1,314.4	1,304.1	1,268.1	1,266.2	1,307.4	1,302.4	1,340.4	55.7	-5.0	38.0
Services	260.4	252.5	254.3	253.3	263.5	270.7	236.2	241.2	236.5	229.8	237.2	241.2	-2.2	7.4	4.0
5 ▶ Government consumption expenditures and gross investment	2,055.7	1,903.9	2,017.4	2,054.2	2,072.1	2,070.0	1,899.5	1,870.0	1,869.0	1,902.0	1,911.1	1,915.0	62.6	0.3	3.9
Federal	1572.2	210.0	223.0	264.7	269.6	271.5	704.3	675.0	675.5	712.0	714.3	715.4	56.3	2.3	1.1
National defense	497.0	481.1	463.3	507.3	507.2	510.1	462.6	439.5	433.2	472.8	472.8	473.4	43.8	-1.6	2.2
Consumption expenditures	436.0	404.6	406.6	447.5	443.7	447.4	401.4	382.0	377.3	411.0	406.9	409.7	49.6	-4.9	-2.0
Gross investment	60.2	56.8	54.7	49.8	63.5	62.7	61.2	57.4	56.7	60.8	64.5	63.8	4.6	3.7	7.7
Nondefense	260.2	248.9	259.7	257.4	262.4	261.4	241.7	226.4	242.4	229.3	243.1	242.1	12.5	3.8	-1.0
Consumption expenditures	226.3	216.1	227.3	221.4	228.5	227.8	207.7	203.6	209.9	203.4	209.3	208.4	11.4	5.9	-8.9
Gross investment	33.9	32.7	32.4	36.0	33.8	33.6	34.0	32.7	32.4	36.0	33.8	33.7	1.1	-2.2	-1.1
State and local	1,269.5	1,273.9	1,294.5	1,289.6	1,302.5	1,307.4	1,195.7	1,195.3	1,193.8	1,191.4	1,197.4	1,202.2	6.6	6.0	2.8
Consumption expenditures	1,045.3	1,024.2	1,045.8	1,040.9	1,046.3	1,048.4	956.9	956.4	957.8	956.6	950.0	951.1	6.4	-6.1	6.4
Gross investment	253.1	249.7	248.7	248.7	256.2	259.0	238.9	239.0	236.0	234.7	241.5	243.2	3.3	6.8	1.7
Residual							-18.7	-2.5	-4.5	-11.5	-27.4				
Addenda:															
Final sales of domestic product	10,907.2	10,630.6	10,736.7	10,652.4	11,117.4	11,242.3	10,394.9	10,138.9	10,206.4	10,289.5	10,497.7	10,595.9	310.0	200.2	86.2
Gross domestic purchases	11,475.5	11,089.9	11,223.4	11,352.2	11,537.5	11,728.7	10,896.4	10,658.0	10,687.0	10,803.9	10,955.4	11,084.9	347.9	185.5	88.5
Final sales to domestic purchasers	11,470.7	11,078.7	11,224.3	11,367.9	11,600.0	11,724.8	10,897.1	10,646.1	10,693.5	10,811.1	11,000.1	11,053.7	357.7	189.0	83.6
Gross domestic product	10,903.9	10,623.7	10,735.0	10,846.7	11,107.0	11,246.3	10,392.2	10,160.0	10,210.4	10,288.3	10,493.1	10,587.1	314.2	204.0	104.0
Plus income receipts from the rest of the world		266.9	269.0	266.2	274.3			256.1	256.4	253.0	260.7			10.5	6.9
Less income payments to the rest of the world															
Equals: Gross national product		10,661.6	10,763.7	10,880.0	11,144.8			10,168.1	10,273.8	10,320.2	10,628.8			208.4	198.3
Net domestic product	9,676.2	9,323.3	9,430.1	9,543.3	9,797.9	9,933.4	9,087.6	8,958.4	8,903.4	8,984.4	9,181.7	9,281.7	289.1	198.3	100.0

Note that all numbers are expressed in billions of dollars and at annual rates. (The government uses annual rates to show how the economy would perform if that quarterly pace were maintained for a full year.) Looking at this table, we see two main columns on GDP growth: billions of current dollars and billions of chained dollars. Don't worry about the jargon. "Current dollars" represents nominal GDP, or the value of economic output including price increases. (Remember the hat factory.) "Chained dollars" describes output in real (constant-dollar) terms—that is, how much the economy really produced in volume or quantity. Though both columns contain useful information, the real-dollar amount of the GDP is more closely followed to get an accurate picture of the economy's health. So unless otherwise noted, all references deal with chained (or real) dollars.

- (1) *Gross Domestic Product*: The top line says it all. It's the final value of all goods and services produced in the U.S. The word "final" is intentional here; GDP does not directly include the costs of making a product during the intermediate stages. There's a logical reason for this. The value of intermediate goods is already included in the final product, so computing them separately would mean counting such costs more than once. For example, the final price of a new car already factors in all the costs of steel and rubber that went into making it. If you were to add the price of steel and rubber and wages at each stage of the assembly process, you would be counting the same production expenses several times. Thus, the government picks only the final value of goods and services to compute GDP.

Now let's look at the four major components that make up GDP:

- Personal consumption expenditures (what consumers spend)
- Gross private domestic investment (what businesses invest in plants, equipment, and construction)
- Net exports (the difference between what the U.S. sells to foreigners and what the U.S. buys from them)
- Government consumption expenditures and gross investment (how much federal, state, and local governments spend and invest)

Each of these four is further broken down into subcomponents to provide more detail and clarity on what the economy is up to.

- (2) *Personal Consumption Expenditures (PCE)*: This is essentially all spending by consumers on goods and services, and it accounts for 70% of total GDP. By virtue of its massive role in the economy, if households are not in a spending mood, it spells serious trouble for the economy, with a recession nearly unavoidable. For this reason, analysts closely monitor the dozen or so monthly economic indicators that report on consumer moods, income, and spending.

What are people spending money on? A broad answer can be found in one of the three subcategories that make up PCE: durable goods, nondurable goods, and services:

Durable Goods: These are big-ticket items (such as refrigerators, TVs, autos, and furniture) that by definition last three years or more. While only 15% of all consumer spending is on durable goods, they represent one of the most important measures of the economy's vitality because these types of products are more discretionary in nature. That means spending on durable goods is highly sensitive to changes in consumer income and attitudes. When income declines or consumers become concerned about the economy, they are likely to first postpone the purchase of a new car or television. Conversely, when income goes up or when consumers feel upbeat about future economic conditions, they are more comfortable buying big-ticket items. Furthermore, many durable goods are expensive and often purchased on credit, which makes their sales sensitive to interest-rate movements. Once rates start to move up, consumers quickly react by cutting back spending on durable goods because of higher financing costs.

Nondurable Goods: Think vegetables, sweaters, and shoes here—items that last less than three years. Nondurables make up about 25% of all personal spending. In contrast to the volatility often found in durable goods sales, orders for nondurables grow at a more stable rate during both good and bad economic times. The reason is that these products are often part of daily living, and spending for them cannot be postponed as easily as spending for durable goods. During uncertain economic times, households might postpone the purchase of a new car or large plasma-screen TV, but spending on food and fuel oil cannot be delayed. (That's why investors rush to buy shares of companies that produce nondurable goods when the economy is weakening and sell shares of those in the durable goods sector.)

Services: Not surprisingly, more than half of all consumer spending goes to pay for services such as medical and dental care, auto and home insurance, haircuts, mortgages, transportation, and legal costs. The service sector has grown dramatically, from 40% of all personal expenditures in 1960 to 65% now. This category, too, is fairly stable because outlays for housing and medical services continue largely unabated even when income declines.

- (3) *Gross Private Domestic Investment:* Business spending constitutes about 15% of GDP, but it can be extremely volatile. Much depends on the economic outlook. Business investment picks up if the economy is expected to show sustained growth, but such expenditures can drop sharply if signs emerge that economic activity is faltering.

Business expenditures fall into two broad headings: fixed investment and the change in inventory investment:

Fixed investment: The lion's share of all business spending is in fixed investment, which covers nonresidential expenditures (for example, office buildings, warehouses, computer equipment and software, machine tools, and transportation equipment) and residential spending (constructing single-family homes and apartment buildings). Residential outlays alone can account for nearly a third of all investment spending. It makes no difference whether these homes or apartments are occupied; all that matters is that they were built.

Both residential and nonresidential investment spending are highly sensitive to the business cycle. If the economy is growing and corporate earnings are increasing, this spurs spending on equipment and construction. However, the first whiff of a slowdown in economic activity can put the brakes on such investments. As demand for goods and services dries up, so will business spending. The resulting cutback in corporate expenditures can help drag an economy into recession.

Change in private inventories: Inventory changes and their relationship to GDP have been a source of much confusion, but they need not be. The relationship between inventories and economic growth is really quite a logical one. To begin with, we must understand that the GDP reflects the value of everything that is produced in the economy. To do this, the Bureau of Economic Analysis first totals all that consumers, businesses, and government have purchased. Of course, what was bought—and what was produced—are not always the same. Firms often produce a lot more goods than what is actually sold, and what's left over is classified as part of inventory. To get an accurate GDP reading of everything produced in the economy for a given period, you also have to include changes in inventories. Thus, in a simplified formula, GDP represents total demand plus the change in inventories. Here's an illustration of how the computation works. If a hat factory manufactures 1,000 hats but sells just 900, its inventory goes up by 100 hats. If you merely added up the hats that were bought, you would get an incorrect amount on the value of all the hats made by the factory. To come up with the correct figure, you would need to add the 100 hats now in inventory to the 900 sold to come up with the total of what was produced.

Now let's look at the situation in reverse. If in the next quarter the same hat factory manufactures only 700 hats but sells 800, it would be inaccurate to just consider total sales, because output that quarter was less than 800. In this case, the hat factory had to dig into inventory to come up with the extra 100 hats to sell. Thus, to obtain the correct amount of what the factory produced

that quarter, we'll look at our basic formula again: GDP represents total demand plus the change in inventories. Total demand for hats was 800, plus the change in inventories, which, in this case, dropped by 100. Thus, the result is real output of 700 hats.

As you can see, it's not the level of inventories that is used to compute the GDP, but the change in inventories from one period to the next.

Inventories can fluctuate wildly at turning points in the economy. In recent years, computers have made it easier to prevent inventories from getting too far out of line with sales. However, businesses still find it difficult to determine what the correct level of inventories should be when the economy nears an inflection point. If stockrooms become filled with unsold goods, companies will work off that surplus and trim production, perhaps even shutting plants and laying off workers—steps that could bring economic growth to a screeching halt. As time passes, however, with the aid of advertised sales, special discounts, and other shopping incentives, the inventory on stockroom shelves (and in car dealership lots) eventually thins out. When consumer demand returns, retailers and wholesalers will increase their orders for goods once again. Factories, in turn, respond by cautiously gearing up production to replenish now-depleted inventories. All these steps help place the economy back on the recovery track.

- (4) *Net exports of goods and services:* Foreign trade plays an increasingly important role in the economy. Exports account for about 13% of GDP, more than double the level of 1980. Imports have surged to 16% of GDP, up from 6.6%. As a result, nearly a third of all U.S. output is linked to international trade.

The GDP table lists net exports as a category that contributes to economic growth. What do we mean by “net exports,” and why is it included in the GDP? To begin with, American goods and services that are exported are added to GDP for the simple reason that they are produced here in the U.S. Exports stimulate U.S. economic growth because more has to be produced in this country to satisfy both domestic and foreign demand. At the same time, we have to account for the fact that Americans do spend money on imports. Purchases of foreign goods and services by U.S. consumers are subtracted from GDP growth because Americans are satisfying some of their demand by buying products that were not made in the U.S. but represent the output of another country. The term “net exports” is simply the difference between adding exports to the GDP accounts and subtracting imports. Since the 1970s, the U.S. has imported much more than it has exported, which is why over the past 30 years net exports has been a negative number and thus a drag on U.S. GDP growth.

- (5) *Government consumption expenditures and gross investment:* Government expenditures (federal, state, and local) represent about 18% of GDP, down from 21% in the mid-1980s. The federal component makes up a third of all government outlays, with state and local purchases accounting for the rest. The GDP table divides federal expenditures into defense spending (military hardware and salaries of military and civilian employees in the armed forces) and nondefense spending (such as highway construction, NASA, the Parks Service, and the salaries of nondefense federal employees).

State and local governments are two-thirds of all official spending and investment (for example, street construction, police, and firefighting equipment), but this number can fluctuate a bit. If the regional economies are doing well, with sales and tax revenues on the rise, outlays pick up as well. However, an economic slowdown can drain state and local treasuries as official outlays increase to pay for unemployment insurance programs, while government tax revenues shrink. At such times discretionary government spending is sharply cut back.

Adding together all four of the major components—consumer spending, business investments, government outlays, and net exports—allows the Bureau of Economic Analysis to compute total GDP. However, there are other variations of the GDP that can provide additional insight into the economy’s underlying health. Two such indicators extrapolated from the GDP are “final sales of domestic product” and “gross domestic purchases,” both of which are listed in the GDP table under “Addenda.”

- (6) *Final sales of domestic product:* To get a better feel for how vigorous economic activity is, look at how many goods and services were sold that period. GDP does the same, but it also includes changes in inventories, which does not reflect pure demand in the economy. Final sales of domestic product are calculated as GDP without adding in changes in inventories. This measure is thus considered an excellent barometer of actual demand for U.S. products. There’s one slight hitch, however. Final sales of domestic product include sales to foreigners as well as to U.S. consumers. To get a sense of demand just in the U.S., we have to check out the next category, gross domestic purchases.
- (7) *Gross domestic purchases:* This measure adds up total purchases by U.S. consumers and businesses, regardless of whether the product was made here or in another country. Recall that in calculating the GDP, imports are subtracted from spending and investment. Not so with gross domestic purchases. To get a snapshot of true demand inside the U.S., one has to exclude exports and include imports, which is what gross domestic purchases does.

Just below is another category labeled “Final Sales to domestic purchasers,” which arguably is the truest measure of actual demand in the U.S. because it

takes gross domestic purchases and then strips out changes in private inventories. This indicator sheds light on the well-being of Americans because we can see how much consumers and businesses are actually buying from domestic and foreign sellers, but without the noise of inventory investments. Weak or falling final sales to domestic purchasers strongly suggests American consumers are tapped out.

Nominal and Real GDP: Adjusting for Inflation

When studying economic growth, most analysts want to know how much the economy has physically expanded over time. This is not as simple to figure out as it sounds. GDP is initially calculated based on the current dollar (nominal) value of all goods and services made in the U.S. It is valuable for measuring the size of the U.S. economy, how large it is compared to the economies of other countries, and for learning the relative sizes of the industries that contribute to GDP. However, the problem with using current dollars is that it can be hard to discern whether an increase in GDP came about from greater output of goods and services or simply because of higher prices. People benefit by having more goods and services to purchase, not by paying higher prices for them.

So how can you determine how much of the rise in GDP was due to real expansion and how much was the result of inflation? The way to do this is to collect the current dollar value of all goods and services and then strip out the effects of price changes. The Bureau of Economic Analysis in 1996 put into effect a chain-type inflation measure that helps convert current GDP to real GDP. The methodology to accomplish this is complex and technical, but it is designed not only to remove price inflation, but also to adjust for changes in consumer shopping habits brought on by differences in product prices and in the quality of goods. (For instance, if the price of beef increases significantly, consumers might choose a less expensive cut of meat or even poultry. The chain-type calculation tries to account for these shifts.) What emerge are several different, yet quite important, inflation measures of the economy. The three major price indicators are the GDP price deflator, the gross domestic purchases deflator, and the influential PCE price index.

• **Table 4** Price Indexes for Gross Domestic Product and Related Measures: Percent Change from Preceding Period

- (8) *GDP Price Index and GDP Implicit Price Deflator*: These are the main inflation gauges for the economy as a whole. Economists and other players in the financial markets watch these indicators carefully to see if inflation is in check. The GDP price index and the GDP implicit price deflator measure changes in prices for the goods and services produced by the U.S. economy. However, the two inflation markers highlighted here have one significant disadvantage. They do not provide a full picture of the inflation pressures on U.S. consumers and

Table 4.—Price indexes for Gross Domestic Product and Related Measures: Percent Change From Preceding Period

	2001	2002	2003	Seasonally adjusted at annual rates															
				2000				2001				2002				2003			
				I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
8 ▶ Gross domestic product (GDP)	2.4	1.5	1.6	3.4	2.0	1.9	1.8	3.2	3.2	1.6	1.6	1.1	1.5	1.5	1.7	2.3	1.1	1.6	1.1
10 ▶ Personal consumption expenditures	2.0	1.4	1.8	3.5	2.0	1.9	1.8	3.2	2.5	.6	.4	7	2.9	2.0	1.7	2.8	.5	1.8	.6
Durable goods	-1.9	-2.9	-3.7	-1.8	-5	-2.5	-1.0	-1.3	-3.1	-2.8	-2.2	-3.5	-2.9	-3.0	-4.4	-3.9	-4.0	-3.8	-3.8
Nondurable goods	1.5	.5	2.1	5.2	3.7	3.4	1.4	1.3	3.7	-9	-4.3	-1	5.7	1.4	1.0	5.1	-2.1	3.8	.4
Services	3.2	2.7	2.8	3.9	1.7	2.1	2.6	5.1	3.2	1.8	3.3	2.0	2.8	3.4	3.1	3.2	2.7	2.0	1.6
Gross private domestic investment	1.1	0	.9	2.0	1.2	1.9	.8	3	1.3	2.3	0	-7	-7	-1.0	1.6	1.3	0	2.0	3.2
Fixed investment	1.1	.1	1.1	2.3	1.2	1.9	.9	1	1.6	2.4	0	-8	-7	-7	1.7	1.9	0	2.1	3.4
Nonresidential	-2	-3	-2	.6	3	1.4	0	-1.8	2	.6	-1.2	-1.3	-1.5	-1.5	4	-3	-1.2	1.6	1.9
Structures	5.5	1.4	2.0	4.8	3.6	4.5	5.0	6.5	6.9	6.3	1.2	-9	5	3	1.1	3.0	1.1	2.7	4.1
Equipment and software	-2.7	-1.7	-9	-8	-8	.4	-1.7	-4.7	-2.1	-1.6	-2.1	-1.4	-2.1	-2.1	2	-1.6	-1.8	1.2	1.3
Residential	4.6	2.4	3.8	7.1	3.9	3.2	3.4	5.3	5.1	7.0	2.9	.3	1.1	.9	4.5	6.4	2.2	3.1	6.2
Change in private inventories																			
Net exports of goods and services																			
Exports	-4	-4	2.1	2.7	2.1	.9	.4	1	-1.2	-2.1	-3.6	-1.2	2.9	3.3	.6	3.6	.8	1.6	2.7
Imports	-7	-7	2.0	1.3	1.6	.3	.4	-1	-1.6	-2.6	-3.8	-1.4	2.1	3.3	.6	3.5	1.7	-2	3.8
Services .....	.4	.3	2.2	6.2	3.5	2.5	.6	.6	3	-1.0	-3.0	-9	4.6	3.2	.6	3.8	-1.3	5.7	2
Imports	-2.5	-1.0	3.7	5.9	7	4.2	.7	-2.0	-6.0	-5.3	-9.0	-1.6	10.5	3.7	.9	11.7	-4.1	2.7	1.1
Goods	-3.0	-1.7	2.9	6.8	1.2	4.5	.8	-3.7	-6.6	-6.6	-11.1	-2.1	10.7	2.7	5	11.8	-6.8	2.6	.5
Services	2	2.5	7.4	1.3	-2.0	2.5	-.3	2.1	-3.9	1.4	-2.9	7	9.3	8.6	2.0	11.3	10.4	3.3	4.9
Government consumption expenditures and gross investment	2.6	2.6	2.9	6.6	1.7	4.5	2.7	2.7	2.2	2.0	1.4	3.6	3.3	2.7	1.8	7.3	1	1.7	.6
Federal	2.1	2.7	2.5	7.2	-1.1	5.0	1.6	2.0	1.6	2.4	1.7	5.9	2.3	1.2	-5	7.7	1.4	1.3	.3
National defense	2.7	2.5	2.6	8.2	-2	3.6	.9	3.6	1.6	2.4	1.8	6.2	2.3	1.8	-6	8.0	1.2	1.3	.4
Nondefense	1.9	3.2	2.3	5.4	-2.6	7.5	2.7	-7	1.8	2.3	3.6	7.3	2.1	2	-4	7.2	1.6	1.3	.1
State and local	2.9	2.5	3.1	6.3	3.2	4.2	3.2	3.0	2.5	1.8	1.3	2.4	3.8	2.7	3.0	7.1	-7	2.0	.6
Addenda:																			
Final sales of domestic product	2.4	1.5	1.7	3.4	2.0	1.9	1.8	3.1	3.2	1.6	1.6	1.1	1.4	1.5	1.8	2.4	1.1	1.6	1.1
Gross domestic purchases	2.0	1.4	1.9	3.8	1.8	2.3	1.8	2.6	2.3	1.9	1.5	1.0	2.4	1.6	1.7	3.4	.4	1.8	1.0
Final sales to domestic purchasers	2.0	1.4	1.9	3.8	1.8	2.3	1.8	2.6	2.3	1.0	1.5	.9	2.4	1.6	1.7	3.5	.4	1.8	1.0
Gross national product (GNP)	2.4	1.5	1.5	3.3	2.0	1.9	1.8	3.2	3.1	1.6	1.6	1.1	1.5	1.5	1.7	2.3	1.1	1.7	.....
Implicit price deflators:																			
GDP	2.4	1.5	1.6	3.6	1.7	2.1	1.6	3.1	3.2	1.6	1.9	7	1.9	1.0	1.8	2.3	1.1	1.6	1.0
Gross domestic purchases	2.0	1.4	1.9	4.1	1.6	2.5	1.6	2.6	2.3	1.0	0	6	2.9	1.2	1.8	3.4	.4	1.8	.9
GNP	2.4	1.5	1.5	3.6	1.7	2.1	1.6	3.1	3.2	1.6	1.9	7	2.0	1.0	1.8	2.3	1.1	1.6	.....

businesses. The reason? They include prices of exports but exclude prices of imports. A better measure of inflation in the economy, it is often argued, is the price index for gross domestic purchases, which is discussed in the next paragraph.

(9) *Deflator for Gross Domestic Purchases:* This inflation measure takes into account price changes from all purchases, including imports. If oil prices jump higher, that increase in cost is fully incorporated into the gross domestic purchase price index, unlike the GDP inflation indicators. Generally, the price indexes for gross domestic purchases and for the GDP move in tandem—except for periods when the cost of imports surges. That can happen when oil prices shoot up or if the dollar plummets in value, which automatically makes imports more expensive. In such instances, gross domestic purchases turns out to be a better gauge of inflation in the economy.

(10) *Deflator for Personal Consumption Expenditures (PCE):* Which of the major inflation measures should you rely on to help predict monetary policy or consumer spending behavior? The consumer price index (CPI) has traditionally been the main indicator of choice for the financial markets and labor unions. However, several studies have concluded that the most comprehensive and accurate measure of price changes at the consumer level is the PCE price index. Whereas the CPI merely compares price changes for a basket of goods and services whose items remain fixed for years, the PCE price index is

sensitive to ongoing changes in consumer spending patterns. Even the Federal Reserve has gone on record saying it will rely more on the PCE price index and less on the CPI when setting interest-rate policy. The government uses the PCE index to convert current dollar estimates of personal spending into real, inflation-adjusted dollars. Historically, the PCE tends to be about 0.5 percentage points below the CPI per year, which suggests that Americans actually have more purchasing power than what the consumer price index indicates.

HOW IS IT COMPUTED?

The GDP report has been a work in progress since the late 1930s, which makes it one of the longest-running economic indicators around. Calculating the GDP is a mammoth undertaking because we're talking about a \$15 trillion economy (as of 2012). The main responsibility for this task falls on the nonpartisan Bureau of Economic Analysis, which is well suited for the job given its history and experience.

The GDP series is really part of a marvelous national accounting system known as the National Income and Product Accounts (NIPA). That may be a mouthful to say, but the idea behind it is actually quite simple. In essence, the NIPA is composed of two complementary methods of estimating GDP. One side of the ledger is the product account, which tallies all goods and services sold. The other side is the income account, which looks at where all the monies generated from the production of GDP end up. After all, if consumers, businesses, and the government are spending \$15 trillion a year, someone must be getting this income. That's where the income side of the ledger comes in. It tries to record the disposition of the money that came from the production of those products and services. (How much went to wages and salaries? Proprietor income? Interest income? Profits?) Theoretically, the product and income measures should be equal. However, discrepancies between the two often crop up mainly because of how the statistics are collected. But the differences tend to be minor. By and large, the establishment of America's NIPA is an extraordinary accomplishment and the envy of the world because of its remarkable accuracy, comprehensiveness, and detailed accounting of America's massive economy.

So how does the bureau compute GDP? It collects and assimilates economic data from thousands of government and private sources. Among the information types sought are monthly retail sales, auto sales, and home purchases. To be sure, not all the economic data is available at the time of collection. As a result, agency staffers work up reasonable estimates for the first GDP report. Why not wait until all the numbers come in before releasing it? Because investment managers and policymakers want to get information on the economy's health as quickly as possible, even if some of its components have to be estimated. Few want to wait a full three months to get the final quarterly GDP report. Thus, the BEA runs the quarterly GDP numbers through its computers three times for the public. The first GDP report, known as the advance release, is published four weeks after

the quarter ends. It offers a rough preview of how the economy behaved in the quarter just ended. A month later, the preliminary GDP report is announced. It contains some revisions based on information not available at the time of the advance release. It's only at the very end of the subsequent quarter that we see a final GDP report with additional changes in the numbers to reflect more complete information.

However, it doesn't end there. On top of these revisions, the BEA takes another pass at the GDP statistics once a year, usually in July, when it further refines the numbers.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

Embedded in the GDP report are numerous hints on how the economy, inflation, and the job market will perform in the months ahead.

- **Table 1** Real Gross Domestic Product and Related Measures: Percent Change from Preceding Period

Table 1.—Real Gross Domestic Product and Related Measures: Percent Change From Preceding Period

	2001	2002	2003	Seasonally adjusted at annual rates															
				2000				2001				2002				2003			
				I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
11 ▶ Gross domestic product (GDP)	0.5	2.2	3.1	1.0	6.4	-0.5	2.1	-0.2	-0.6	-1.3	2.0	4.7	1.9	3.4	1.3	2.0	3.1	8.2	4.0
Personal consumption expenditures	2.6	3.4	3.1	6.6	2.6	3.9	3.4	5	2.3	1.9	6.2	4.1	2.6	2.0	2.7	2.6	3.3	6.9	2.6
Durable goods	4.1	6.5	7.4	24.4	-9.5	6.0	7	1.7	0.8	7	27.3	1.6	5	5.0	3	5	17.1	28.0	9
Nondurable goods	1.9	3.0	3.7	3	5.7	2.3	3.7	4	-1.1	2.9	4.7	6.1	4	2	4.6	5.7	1.2	7.3	4.4
Services	2.4	3.0	2.0	6.0	3.9	4.3	3.9	3	2.4	1.6	2.8	3.8	4.1	2.2	1.5	1.5	1.7	2.8	2.1
Gross private domestic investment	-8.4	-1.2	4.1	-6.9	20.1	-9.9	-2.3	-11.1	-16.4	-8.5	-17.7	11.1	4.6	11.4	-6	-3.5	4.7	14.8	12.4
Fixed investment	-3.2	-3.7	4.3	11.5	9.5	-6	7	-2.7	-9.2	-5.2	-10.8	-2.5	-6	6.6	2.1	1.1	6.1	15.8	8.1
Nonresidential	-4.5	-7.2	2.0	14.3	14.9	2.2	9	-4.5	-13.6	-0.4	-14.0	-7.0	-3.0	-1.1	-1	-6	7.0	12.0	6.9
Structures	-2.5	-18.4	-4.7	7.0	18.0	9.6	1.2	-5.9	-5.6	2.2	-35.3	-23.9	-14.5	-14.6	-5.6	4.0	3.9	-1.8	-3.9
Equipment and software	-5.2	-2.8	5.2	16.9	13.7	-2	8	-4.0	-16.4	-12.2	-4.1	-2	1.2	3.7	1.7	5	8.0	17.6	10.0
Residential .....	.4	4.9	7.6	4.1	-3.5	-0.0	4	2.6	3.7	3.1	-2.5	0.7	0.9	4.2	6.0	4.5	4.5	21.9	10.6
Change in private inventories																			
12 ▶ Net exports of goods and services	-5.2	-2.4	1.9	6.6	12.3	10.7	-2.7	-4.5	-13.4	-17.7	-8.8	4.4	8.7	4.3	-3.7	-2.6	-1.1	9.9	18.1
Exports	-6.1	-4.0	1.0	9.7	13.8	10.3	-5.4	-5.4	-10.1	-10.9	-7.6	-2.6	12.0	4.3	-8.1	1.9	-1.7	0.6	19.2
Imports	-3.1	1.4	2.3	1.4	8.5	-6.6	4.4	-2.0	-6	-14.7	-15.0	22.8	1.6	4.5	9.4	-10.1	2	12.7	18.9
Imports	-2.6	3.3	3.7	16.7	16.5	14.1	-1.6	-6.2	-8.6	-10.8	-3.8	8.4	17.1	4.1	8.2	-6.8	9.1	8	11.3
Goods	-3.2	3.7	4.5	16.9	17.7	14.1	-1.6	-6.0	-12.2	-9.2	-3.2	6.3	21.9	4.0	7.4	-6.6	13.7	-1.5	12.2
Services	-.4	1.4	-1	20.8	10.7	14.1	-1.9	-3.1	12.5	-18.2	-6.9	1.9	2.8	7	12.2	-7.5	-10.9	13.4	7.0
Government consumption expenditures and gross investment	2.8	3.8	3.4	-3.0	5.5	-2.1	1.3	5.8	5.8	-4.1	7.4	4.6	4.0	2.5	7.1	-4	7.4	1.8	8
Federal	3.7	7.9	8.7	-13.9	17.2	-9.2	-1.0	8.9	6.7	0	9.9	8.4	10.5	3.9	18.2	-2	23.5	1.2	7
National defense	3.9	8.9	10.5	-21.3	17.0	-7.4	1.7	7.7	2.6	2.4	14.2	8.2	9.5	4.5	22.1	-5.6	41.9	-1.3	1.8
Nondefense	3.5	6.2	5.4	7.0	17.6	-9.7	-5.7	11.2	14.4	-4.3	2.6	8.7	12.2	2.9	11.4	10.5	-5.0	6.5	-1.6
State and local	2.2	1.0	-.6	3.2	1	1.3	2.5	4.3	5.3	-6.1	6.1	2.7	7	1.7	1.5	-5	-0	2.1	9
13 ▶ Addenda																			
Final sales of domestic product	1.4	1.8	3.2	4.2	3.3	1.3	2.6	1.4	7	-7	3.2	2.6	1.3	1.8	1.7	2.7	3.3	8.3	3.4
Gross domestic purchases	7	2.8	3.3	2.5	7.2	4	2.1	-7	-4	-8	2.4	5.2	3.1	3.4	2.7	1.1	4.3	7.0	3.7
Final sales to domestic purchasers	1.6	2.4	3.3	5.6	4.2	2.1	2.6	9	9	-3	3.6	3.2	2.5	1.0	3.1	1.8	4.5	7.2	3.1
Gross national product (GNP)	5	2.1		8	6.6	-7	3.0	-1.3	-6	-1.9	4.6	2.6	1.3	3.8	2.0	1.5	3.3	8.3	
Disposable personal income	1.6	3.6	2.5	9.2	2.7	5.2	6	-3	-1.4	12.2	-4.4	10.6	4.1	-9	6	2.4	4.9	6.3	-5
14 ▶ Current-dollar measures:																			
GDP	2.9	3.0	4.0	4.7	8.3	1.6	3.8	2.9	2.6	-3	3.9	5.4	3.9	4.4	3.1	4.3	4.2	10.0	5.1
Final sales of domestic product	3.9	3.3	4.9	7.8	5.4	3.2	4.5	4.5	4.0	4.9	4.8	3.8	2.8	3.3	3.5	5.1	4.4	10.1	4.6
Gross domestic purchases	2.7	4.2	5.2	6.6	8.9	2.9	3.7	1.9	1.9	-2	3.3	5.8	6.1	4.6	4.5	4.5	4.7	8.9	4.6
Final sales to domestic purchasers	3.6	3.0	5.3	9.7	6.1	4.5	4.4	3.5	3.3	7	4.1	4.2	5.0	3.5	4.0	5.3	4.0	9.1	4.1
GNP	2.9	3.6		4.4	8.4	1.4	4.7	1.8	2.5	-3	6.6	3.3	3.3	4.9	3.9	3.9	4.4	10.1	
Disposable personal income	3.8	5.2	4.4	13.0	4.7	7.2	2.4	2.9	1.1	12.8	-4.1	11.4	7.2	1.1	2.3	5.3	5.4	8.1	1

(11) This table provides the latest quarterly growth rates for GDP and its chief components, along with about three years of previous quarterly data, to help you gain perspective on what the economy has been up to lately. When you're looking at the table, it's important to keep in mind that a real 3%–3.5% annual growth rate is considered the pace at which the economy has to grow for people to get a feeling of prosperity. For a \$15 trillion economy, this means the

U.S. must increase its output of goods and services by more than \$450 billion every year. If it expands less than 3% on average, the economy might not grow fast enough to absorb all the new workers entering the labor force, and the result usually is higher unemployment.

However, this leads to an obvious question. If 3% growth is the minimum required to lower unemployment, wouldn't 4%, 6%, or 10% growth be even better? How fast can the economy grow before it gets so overheated that it causes an eruption in inflation? There is no simple answer to this question. Much depends on the supply of labor and material resources at the time. Assuming that the economy is operating at a low level of unemployment, it is believed the economy's maximum rate of growth without breaking into an inflationary sweat is equal to the rise of non-farm productivity (see the section "Productivity and Costs") plus the growth in the labor force (from the Employment Situation report). A high level of productivity growth along with an ample supply of new workers coming into the labor force keeps the economy well oiled and out of danger of overheating. Because the labor force has been growing at an annual average rate of about 1% for years, it all comes down to improvements in labor productivity. During the 1970s and 1980s, U.S. productivity grew an average of 1.5% per year. If you add that to the 1% growth in the labor force, it means the economy's top long-term speed without generating inflation was about 2.5%. Since the mid-1990s, however, there has been a dramatic—and, some say, permanent—improvement in productivity growth as companies utilize computerized technology and software to operate more efficiently. As a result, productivity increases have averaged above 2.5% in recent years, lifting the red zone for economic growth to about 3.5%. (Calculation: Productivity increase of 2.5% plus 1% for the rise in the labor force equals 3.5%.) However, should the economy expand significantly above the 3.5% rate for several consecutive quarters, it could sop up excess labor and material resources, reignite inflation pressures, and force the Federal Reserve to jump in and raise interest rates.

- (12) *Net exports of goods and services*: U.S. trade with other countries now accounts for nearly \$1 out of every \$3 in economic activity. Indeed, so important have these international transactions become that a small change in the volume of exports or imports can markedly affect GDP growth. If U.S. exports to foreigners drop by 10% from one year to the next, it can reduce GDP growth by more than 1 percentage point over 12 months. Should imports rise by 10% over the same time frame, this can slash GDP growth by as much as 1.6 percentage points.

- (13) *Addendum: Final Sales of Domestic Product:* Economic forecasting is always risky because there are so many variables to ponder. Where experts seem to miss the mark most often is whenever the economy is about to turn. One early warning sign that the economy is close to switching tracks comes from real final sales, not GDP. The final sales figure is a purer measure of demand in the economy. It excludes inventories and looks at how much consumers, businesses, and the government are actually spending. If the rise in final sales slips below GDP growth for an extended period of time, it means companies have been producing much more than what people are interested in buying. As a result, inventories can swell to undesirable levels, and that will force companies to slow or halt production. Such a scenario can depress economic growth in the future or even cause a recession. Much depends on the degree to which real final sales have fallen and how much unwanted inventories have accumulated.

Conversely, if final sales are increasing at a faster clip than GDP growth, it portends strong economic growth ahead as companies accelerate production to meet the higher demand.

- (14) Up to now, all references to GDP numbers were in real (inflation-adjusted) dollars. However, don't neglect growth in nominal (current-dollar) terms. After all, that's how corporate sales, revenues, and profits are recorded. Historically, S&P 500 earnings growth tended to stay in line with nominal GDP. While profits may surge ahead from time to time, over the long run they cannot increase faster than economic growth.
- (15) Occasionally you hear references to both GDP and GNP (gross national product) and wonder what the difference is between the two. GDP covers all goods and services made in the U.S., regardless of whether it is an American company or a foreign company operating in the States. So long as it is produced within U.S. shores, the output is counted in the GDP. GNP, on the other hand, records goods and services produced only by U.S. residents, regardless of where these plants or offices are located in the world. Here's an example: GDP does not include production of autos made by General Motors if the plant is located in Europe because they were made outside the U.S., but GNP does include it. All production at a Japanese-owned Honda car plant in the U.S. is included in the GDP because these vehicles were manufactured here, but it is excluded from the GNP because of the plant's foreign ownership. GDP is a better measure of output in the U.S. and is more closely associated with U.S. employment activity.

• **Table 2** Contributions to Percent Change in Real Gross Domestic Product (Not Shown)

Simply scanning the GDP headline figures won't tell you much about what's going on in the economy. After all, even with zero economic growth, people are still spending \$15 trillion a year. In Table 2, you can see which specific sectors in the economy have contributed most to real growth and which have been a drag, and by how much. A quick study of this table can answer key questions. Was the latest pickup in economic activity due to a surge in government spending? How much has the business sector contributed to overall growth in the latest period? What role have consumers played in the economy's performance?

• **Appendix Table A** Real Gross Domestic Product and Related Aggregates and Price Indexes

Appendix Table A.—Real Gross Domestic Product and Related Aggregates and Price Indexes: Percent Change From Preceding Period

		Seasonally adjusted at annual rates																			
		2004	2005	2006	2003				2004				2005				2006				
					I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	
Gross domestic product (GDP) and related aggregates:																					
	GDP	3.9	3.2	3.4	1.2	3.5	7.5	2.7	3.9	4.0	3.1	2.6	3.4	3.3	4.2	1.8	5.6	2.6	2.0	3.5	
	Goods	4.9	4.6	6.4	3.9	1.6	16.2	2.5	3.7	3.0	5.0	4.6	4.9	3.5	6.7	3.1	12.8	3.6	3.8	7.9	
	Services	3.2	2.3	2.3	1	3.6	1.9	2.8	4.5	3.0	2.5	2.5	1.8	1.8	3.5	8	2.4	2.4	2.8	3.5	
	Structures	5.2	4.6	.6	-1.0	9.2	14.1	2.2	.5	13.6	.6	-2.7	8.0	11.1	.7	3.1	2.9	.3	-7.4	-8.6	
17 ▶	Motor vehicle output	3.5	5.9	-1.7	-11.8	10.9	8.9	-6.5	9.9	-7.1	16.6	1.9	12.0	-7	22.6	-19.1	3.8	-9.4	27.4	-31.7	
	GDP excluding motor vehicle output	3.9	3.1	3.6	1.7	3.2	7.4	3.0	3.6	4.5	2.7	2.6	3.1	3.4	3.6	2.6	5.6	3.0	1.2	4.8	
16 ▶	Final sales of computers ¹	8.2	24.5	17.1	16.9	-2.5	90.4	20.0	-16.0	-17.4	23.0	42.8	24.3	31.5	11.6	33.8	9.5	6.7	11.7	46.7	
	GDP excluding final sales of computers	3.9	3.1	3.3	1.1	3.5	7.0	2.5	4.0	4.2	3.0	2.4	3.3	3.1	4.1	1.6	5.6	2.5	1.9	3.2	
	Farm gross value added ²	7.4	1.0	4.6	-16.1	26.6	-34.7	-36.1	120.0	-17.4	19.4	23.7	-2.0	-24.6	11.3	8.1	14.1	3.9	-2.0	-4.4	
	Nonfarm business gross value added ³	4.3	3.8	3.9	1.2	4.3	11.0	1.6	3.6	5.2	3.2	2.4	4.2	4.4	4.9	1.8	6.7	2.7	1.9	4.2	
Price indexes:																					
	GDP	2.8	3.0	2.9	3.1	1.3	2.1	2.2	3.7	3.7	2.1	3.2	3.5	2.4	3.3	3.3	3.3	3.3	1.9	1.5	
	GDP excluding food and energy	2.7	3.0	2.9	2.7	1.1	1.7	2.1	3.4	3.4	2.6	3.1	3.4	2.4	2.8	3.3	3.1	3.0	2.2	2.3	
	GDP excluding final sales of computers	2.9	3.2	3.1	3.3	1.4	2.2	2.3	3.8	3.7	2.2	3.4	3.7	2.6	3.4	3.4	3.4	3.5	2.0	1.6	
	Gross domestic purchases	3.1	3.5	3.1	4.1	.6	2.2	1.9	4.3	4.1	2.6	3.6	3.2	3.3	4.4	3.5	2.7	4.0	2.2	.1	
	Gross domestic purchases excluding food and energy	2.7	2.8	2.7	2.6	1.3	1.8	2.0	3.5	3.3	2.5	2.9	3.4	2.3	2.5	3.0	3.0	2.9	2.2	2.3	
	Gross domestic purchases excluding final sales of computers to domestic purchasers	3.2	3.7	3.3	4.4	.7	2.4	2.0	4.4	4.2	2.8	3.8	3.4	3.5	4.6	3.7	2.9	4.2	2.3	.2	
18 ▶	Personal consumption expenditures (PCE)	2.6	2.9	2.8	3.1	.7	2.4	1.5	3.7	3.6	1.9	3.0	2.3	3.1	4.1	2.9	2.0	4.0	2.4	-8	
	PCE excluding food and energy	2.0	2.1	2.2	1.1	1.3	1.8	1.6	2.5	2.5	1.7	2.3	2.4	1.9	1.6	2.5	2.1	2.7	2.2	2.1	
	Market-based PCE ⁴	2.3	2.7	2.6	3.1	.3	2.2	.9	3.3	3.4	1.5	2.9	2.1	3.1	4.3	2.5	1.7	4.2	2.2	-1.6	
	Market-based PCE excluding food and energy ⁴	1.5	1.7	1.9	.7	1.0	1.4	.9	1.7	1.9	1.2	1.8	2.2	1.7	1.2	1.9	1.6	2.7	1.9	1.7	

(16) Some of the most intriguing numbers in the GDP report are buried in a table at the end of the release. One is final sales of computers, a key statistic because it reflects business spending on technology products. Such outlays rise when companies are optimistic about the economic outlook and sufficiently confident that they'll see a return on these investments. Sales of computers can also serve as a precursor to productivity growth in the future.

(17) The second figure is motor vehicle output. If dealership lots are filling up because of slow-selling cars and trucks, you'll see the effects in the output numbers in the table. Automakers will respond by slowing or halting production. On the other hand, if demand for autos rebounds and dealers are clamoring for more shipments, output will resume at higher levels. Because the auto

industry relies on thousands of suppliers (for rubber, glass, steel, electronics, and fabrics), a change in activity in auto production can affect the fortunes of many other ancillary businesses.

- (18) Aside from the main GDP growth figure, what is arguably the second most incendiary statistic in this important report is the change in inflation as measured by the Personal Consumption Expenditures (PCE) price index. Inflation at the consumer level is very closely monitored by the Federal Reserve and greatly influences their decision whether to raise, lower, or keep interest rates unchanged. What these policymakers study most carefully is the percentage change in the core PCE (that is, excluding food and energy). Some people might wonder—and legitimately so—why on earth the Fed pays so much attention to an inflation measure that completely ignores food and energy. After all, these are essential and routine expenses for households. The answer to this question may not satisfy consumers, but the Fed does have a reason for focusing on core-PCE.

We said earlier that while food and energy prices often move up or down sharply in the short run, they can do so for reasons that have nothing to do with economic fundamentals. For instance, a sudden cold spell or a severe drought can damage crops and temporarily inflate the price of certain foods. Sabotage or a hurricane can briefly interrupt the flow of oil and cause energy prices to spike for a short time. These are essentially one-time events that have little permanent impact on inflation. To be sure, consumers have to cough up more money during those periods. However, Fed officials are less concerned about such temporary blips in inflation. Their main goal is to prevent more serious imbalances in the economy that could lead to a *permanent* jump in inflation.

Here's an example: If the economy is racing ahead to the point where total demand for goods and services is growing faster than the nation's ability to supply such products, pressure builds on prices to climb. If left unchecked, this increase in prices can become permanently imbedded in inflation—and that can be very harmful for the economy! To prevent such an imbalance (between demand and supply) from materializing in the first place, the Fed raises interest rates to cool down economic activity a little. This is not an easy job. The big challenge for central bankers is to anticipate such significant imbalances and act on them *before* they become problematic and worsen inflation.

Remember, it takes as long as 9 to 18 months for a change in interest rates to do their therapeutic work on the economy. So rather than set interest rates based on the main PCE inflation measure, which is heavily influenced by short-run gyrations in food and energy prices, the Fed prefers to track core PCE because it better reflects the economy's true underlying rate of inflation. In this table we see the annual rate of inflation for the latest quarter. Generally

speaking, the Federal Reserve prefers to see core-PCE stay within a 1% to 2% range. If inflation is markedly above that level, the central bank could decide to lift the fed funds rates until prices show evidence of retreating to their target zone. Should the inflation rate slip below 1%, it can be symptomatic of an excessively weak economy, and then the Fed will just as quickly push down rates.

MARKET IMPACT

The GDP report lags behind many more-current monthly indicators, and its release can become a nonevent. However, you have to be careful here! Despite its dated appearance, the GDP report must not be ignored. For one, it could contain some genuine surprises. The growth rate can turn out to be hugely different from what the market expected. Second, it's essential reading for anyone who wants to identify sources of strength and weakness in the economy. Third, a close read of the GDP report can provide some hints on where the economy and corporate profits might be headed in the coming quarters. Fourth, the revisions might be large enough to completely alter your outlook on the economy and call for a new investment strategy. Finally, if the inflation statistics in this report remain stubbornly outside the Fed's comfort zone, you can expect a change in interest-rate policy fairly quickly. For these reasons you should never take the GDP release for granted.

Bonds

When the actual GDP data is released, the first question on everyone's mind is how it compares with expectations. If the economy is growing at or below the pace projected by economists, the bond market is likely to react positively, especially if real final sales are anemic and unwanted inventories are ballooning.

Conversely, if GDP growth numbers exceed expectations and the inflation indexes are showing signs of accelerating, it could be a nightmare for bondholders. A strong GDP report combined with rising inflation pressures will spread fears that the Federal Reserve will sooner or later intervene and raise short-term rates to cool down the economy. Unless investors are confident that the Fed can nip inflation in the bud, chances are that bond prices will plummet and cause yields to spike.

Stocks

The equity market's reaction to the GDP report will likely be less reflexive than the bond market's. Here the central question is how the latest release affects the outlook for corporate profits. A healthy economy generates more business earnings, while a sluggish business environment depresses sales and income. However, there's an important qualification here. If economic activity has been racing ahead of the 3.5% rate for several quarters, even shareholders start to get nervous about rising prices. Higher inflation will cause an

erosion of household purchasing power and probably will force interest rates higher. Thus, the equity market can be as uncomfortable with an economy growing too quickly as it is when it moves too slowly.

Dollar

To foreign investors, a strong American economy is viewed more favorably than a weak one. Robust economic activity in the U.S. spurs corporate profits and firms up interest rates. Thus, foreign investors see opportunities to make money in the stock market and from higher-yielding treasury bills and bonds. All this increases the demand for dollars. If the Federal Reserve moves quickly to preempt inflation by driving up short-term rates, odds are this would also lead to an appreciation of the dollar because of the perception that the U.S. central bank is ahead of the curve in containing price pressures.

However, if inflation accelerates and stays at a high level, it would lower U.S. competitiveness in the world and worsen the country's foreign trade deficit, a scenario that can make U.S. currency far less appealing.

DURABLE GOODS ORDERS

(ALSO KNOWN AS THE ADVANCE REPORT ON DURABLE GOODS MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS)

Market Sensitivity: High.

What Is It: A key indicator of future manufacturing activity.

Most Current News Release on the Internet:

www.census.gov/manufacturing/m3/adv/pdf/durgd.pdf

Home Web Address: *www.census.gov*

Release Time: 8:30 a.m. (ET); released three to four weeks after the end of the reporting month.

Frequency: Monthly.

Source: Census Bureau, Department of Commerce.

Revisions: Revisions can be major and cover the two preceding months.

WHY IS IT IMPORTANT?

Most economic indicators tell a story about what has already happened in the economy. Only a few provide solid clues about what might occur in the future. The Advance Report on Durable Goods orders is one such statistic, and that's why it gets center-stage attention from the financial markets and the business community the moment it is released. When we are looking at "orders" for factory goods, it is about production that will take place in the months ahead. A jump in orders is a positive sign because it suggests that factories and employees will remain busy as they work to satisfy this demand from customers. By the same token, a persistent decline in orders must be viewed as a troubling omen that assembly lines might soon fall silent, leaving workers with little to do. In such a situation, manufacturers face tough choices. Either they will have to shut down some plants and possibly lay off workers, or they will continue to maintain current production levels and risk filling up stockroom shelves with inventories no one wants.

Durable goods are by definition products that have a life expectancy of at least three years (such as autos, computers, machinery, aircraft, and communications equipment), and they represent a crucial part of business investment spending. Many sectors of the economy are tied to durable goods production, including employment growth, industrial output, productivity, and profits. There is another reason why orders for durable goods are so noteworthy: They serve as a sneak preview of the more comprehensive factory orders report, which includes both durable and nondurable goods, that is released just a week later. (See the next main section, "Factory Orders.")

HOW IS IT COMPUTED?

The Advance Durable Goods report is based on results obtained from 4,300 manufacturers representing 89 industry categories. Firms with at least \$500 million in annual shipments as well as a handful of smaller companies are asked for figures on new orders, shipments, unfilled orders, and inventories. For military equipment, the government relies on Defense Department data.

A new order is considered if it comes with a legally binding agreement to purchase a product for immediate or future delivery. Options on new orders are not counted. New orders are added up (with previous cancellations netted out), and the value of shipments is calculated after factoring out discounts but before freight charges and excise taxes. Inventories are priced according to their current cost basis.

All numbers are seasonally adjusted but not annualized, nor are the dollar amounts adjusted for inflation. To estimate “real” changes in durable goods orders, compare the growth rate over time with the performance of the producer price index.

THE TABLES: CLUES ON WHAT’S AHEAD FOR THE ECONOMY

What makes the durable goods report such a high-profile indicator for investors is that it can foreshadow significant changes in economic activity far sooner than most other statistics. However, it’s important to keep in mind that new durable goods orders are notoriously volatile month to month due in part to sudden large orders for defense goods and aircraft. So you must strip out some of these components to get a true reading of demand in the business sector.

Let’s begin with a description of the release on durable goods. It is divided into four main components: new orders, shipments, unfilled orders, and total inventories. Studied together, they can help business leaders and investors better anticipate the future pace of manufacturing output, hiring activity, and consumer demand; all are factors that determine economic growth in the coming months.

- **Table 1** Durable Goods Manufacturers’ Shipments and New Orders

- (1) *New Orders*: Orders of U.S.-made durable goods reflect the very latest demand from both American and foreign buyers. A surge in orders will keep factories busy in the future, making this statistic a good leading indicator. But beware: A single large military or aircraft order can inflate total new orders for durable goods and mislead analysts about the economy’s underlying strength. To avoid any confusion, this table also contains separate data that excludes the volatile elements of defense and transportation orders.

Table 1. Durable Goods Manufacturers' Shipments and New Orders
[Millions of Dollars]

Item	Seasonally Adjusted						Not Seasonally Adjusted ¹					
	Monthly			Percent Change			Monthly		Year to Date		Percent Change 04/03	
	Jan 2004 ²	Dec 2003 ³	Nov 2003	Dec - Jan ²	Nov - Dec ³	Oct - Nov	Jan 2004 ²	Dec 2003 ³	Jan 2003	2004		2003
DURABLE GOODS												
Total:												
Shipments.....	188,110	188,193	184,074	0.0	2.2	0.2	168,020	189,514	159,049	168,020	159,049	5.6
New Orders ⁴	180,984	184,226	181,346	-1.8	1.6	-2.4	169,335	189,869	159,786	169,335	159,786	6.0
Excluding transportation:												
Shipments.....	136,550	135,122	130,829	1.1	3.3	-0.3	121,500	138,690	111,676	121,500	111,676	8.8
New Orders ⁴	131,468	128,935	126,831	2.0	1.7	-0.4	121,401	131,894	110,701	121,401	110,701	9.7
Excluding defense:												
Shipments.....	178,764	178,838	175,275	0.0	2.0	0.3	160,268	178,701	152,004	160,268	152,004	5.4
New Orders ⁴	171,952	173,617	170,450	-1.0	1.9	-2.3	159,521	173,356	151,721	159,521	151,721	5.1
Manufacturing with unfilled orders:												
Shipments.....	128,892	126,803	124,212	1.6	2.1	0.5	114,593	129,679	107,234	114,593	107,234	6.9
New Orders ⁴	128,176	128,882	127,774	0.5	0.9	-3.1	121,853	136,404	113,107	121,853	113,107	7.7
Primary metals:												
Shipments.....	11,863	11,568	11,069	2.6	4.5	0.9	11,606	10,269	11,231	11,606	11,231	3.3
New Orders ⁴	11,915	11,622	11,811	2.5	-1.6	-1.1	12,335	10,715	11,665	12,335	11,665	5.7
Fabricated metal products:												
Shipments.....	21,308	21,047	20,423	1.2	3.1	-0.5	19,592	19,530	19,199	19,592	19,199	2.0
New Orders.....	22,363	21,843	21,089	2.4	3.6	-0.5	21,322	19,668	19,282	21,322	19,282	10.6
Machinery:												
Shipments.....	23,402	22,926	21,260	2.1	7.8	-1.1	20,410	22,734	18,230	20,410	18,230	12.0
New Orders.....	23,703	24,165	22,269	-1.9	8.5	2.6	21,945	23,349	19,094	21,945	19,094	14.9
Computers and electronic products:												
Shipments.....	38,325	37,487	36,348	2.2	3.1	-0.5	33,024	45,044	27,810	33,024	27,810	18.7
New Orders ⁴	31,708	29,604	29,471	7.1	0.5	-12.5	28,482	37,965	25,234	28,482	25,234	12.9
Computers and related products:												
Shipments.....	8,762	8,494	8,172	3.2	3.9	-3.3	7,717	11,090	6,262	7,717	6,262	23.2
New Orders.....	8,503	8,686	8,139	-2.1	6.7	-0.9	7,260	11,024	5,976	7,260	5,976	21.5
Communications equipment:												
Shipments.....	6,977	6,742	6,667	3.5	1.1	-1.5	5,648	8,907	4,744	5,648	4,744	19.1
New Orders.....	7,182	4,145	5,122	73.3	-19.1	-46.4	6,676	6,168	6,642	6,676	6,642	0.5
Semiconductors:												
Shipments.....	6,410	6,046	6,290	6.0	-3.9	0.3	5,945	6,370	5,136	5,945	5,136	15.8
New Orders ⁴	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electrical equipment, appliances, and components:												
Shipments.....	8,545	8,620	8,627	-0.9	-0.1	0.8	7,353	9,040	7,438	7,353	7,438	-1.1
New Orders.....	8,532	8,228	8,464	3.7	-2.8	-2.3	7,502	8,499	7,447	7,502	7,447	0.7
Transportation equipment:												
Shipments.....	51,560	53,071	53,245	-2.8	-0.3	1.6	46,520	50,824	47,373	46,520	47,373	-1.8
New Orders.....	49,516	55,291	54,515	-10.4	1.4	-0.2	47,934	57,975	49,085	47,934	49,085	-2.3
Motor vehicles and parts:												
Shipments.....	36,832	38,450	37,591	-4.2	2.3	-0.6	34,956	34,033	36,776	34,956	36,776	-4.9
New Orders.....	36,666	38,631	37,868	-5.1	2.0	-1.2	35,255	34,695	37,193	35,255	37,193	-5.2
Nondefense aircraft and parts:												
Shipments.....	5,362	5,323	5,861	0.7	-9.2	6.8	3,932	6,534	3,556	3,932	3,556	10.6
New Orders.....	4,398	6,098	4,930	-27.9	23.7	-12.4	3,783	8,602	4,704	3,783	4,704	-19.6
Defense aircraft and parts:												
Shipments.....	3,503	3,488	3,016	0.4	15.6	-10.8	2,903	4,159	2,566	2,903	2,566	13.1
New Orders.....	2,501	3,787	3,733	-34.0	1.4	-5.0	2,961	5,846	2,899	2,961	2,899	2.1
All other durable goods:												
Shipments.....	33,107	33,474	33,102	-1.1	1.1	-0.5	29,515	32,073	27,768	29,515	27,768	6.3
New Orders.....	33,247	33,473	33,727	-0.7	-0.8	-0.7	29,815	31,698	27,979	29,815	27,979	6.6
Capital goods:³												
Shipments.....	69,277	68,534	66,183	1.7	3.6	-0.5	59,721	77,190	52,632	59,721	52,632	13.5
New Orders.....	69,270	69,684	67,084	0.6	3.9	-5.5	64,007	82,539	56,704	64,007	56,704	12.9
Nondefense capital goods:												
Shipments.....	61,705	60,590	58,684	1.8	3.2	0.1	52,962	68,166	46,523	52,962	46,523	13.8
New Orders.....	61,093	60,204	57,862	1.5	4.0	-6.2	55,280	67,865	49,791	55,280	49,791	11.0
Excluding aircraft:												
Shipments.....	59,653	58,120	55,823	2.6	4.1	-0.7	51,673	64,753	45,298	51,673	45,298	14.1
New Orders.....	59,721	57,657	55,553	3.6	3.8	-5.8	53,856	63,082	47,721	53,856	47,721	12.9
Defense capital goods:												
Shipments.....	8,022	7,944	7,499	1.0	5.9	-5.3	6,759	9,024	6,109	6,759	6,109	10.6
New Orders.....	8,177	9,480	9,222	-13.7	2.8	-1.2	8,727	14,674	6,913	8,727	6,913	26.2

(2) *Orders excluding transportation:* As you can see from the title, this category records the number of new orders, but without the transportation component. Why subtract transportation from the total? Orders for civilian aircraft occur in periodic bursts and are hugely expensive. When a large order is received, it swells the total value of new orders for a brief period, greatly exaggerating the underlying pace of demand for durable goods, only to plummet the next month when it returns to a more normal level. To eliminate these erratic movements, it's better to study the behavior of durable goods orders without transportation.

- (3) *Orders excluding defense*: A similar situation exists with defense goods. The number of orders for military goods depends entirely on preparations for national defense and the execution of foreign policy. Given the active role of the U.S. in the world, there are occasional spurts of official spending on tanks, guns, aircraft, ammo, naval ships, missiles, submarines, and computers. Of course, the economy can benefit from higher defense spending, but what we're really after is knowledge of the underlying strength or weakness of the private business sector. Orders excluding defense turn out to be an excellent predictor of industrial output, especially if they were not influenced by a large order for civilian aircraft. A persistent climb in new orders for nondefense durable goods lasting, say, three to four months presages a broad improvement in manufacturing activity and an increase in factory jobs three to six months down the road.

New durable orders excluding both defense and aircraft: You have to do the math yourself here because there is no separate breakout for such a category, but it's well worth the effort. What you come up with is a less-well-known but very effective gauge of consumer confidence. Durable goods are mostly high-priced consumer products whose purchases are not pressing to most households. Falling into this group are boats, furniture, cars, wide-screen TVs, and appliances for kitchens and laundry rooms. A common characteristic of all of them is that consumers have some discretion as to when to buy these products. About 15% of discretionary spending goes to the purchase of durable goods. When consumers grow uneasy about the economy's path, this is the first place they cut spending. If new orders (aside from defense and aircraft) rebound, it shows that households are sufficiently comfortable with their finances and the employment outlook to resume spending again—all good signs for the industrial sector and the economy as a whole.

- (4) In addition to the broad headings just described, the Advance Report on Durable Goods contains more details on orders for different industry groupings:
- Primary metals*
 - Fabricated metals
 - Machinery
 - Computers, communications equipment, and electronic products
 - Electrical equipment and appliances
 - Transportation
 - All other durables

*When large manufacturers gear up to increase production, their first step is to make sure they have adequate supplies of industrial raw materials. Thus, a resurgence in orders for primary materials is a portent that industrial output is about to shift into higher gear.

- (5) *Capital goods orders*: Located at the bottom of this table are orders for capital goods. These are costly items not normally sold to households but to companies that use them to make other products. Purchases here include blast furnaces, machine tools, robotics, and similar equipment. Again, there's a separate listing for total capital goods orders, which includes those for defense, and for nondefense capital goods.
- (6) *Nondefense capital goods, excluding aircraft*: This category, also known among economists as “core capital goods orders,” might be the best leading indicator of business investment spending. Capital goods orders begin to slip 6 to 12 months prior to an economic downturn and generally rebound anywhere from 3 to 18 months after the economy hits a recession bottom.

Shipments

Shipments are, well, just that—shipments! They are products that have been ordered and are now being delivered. If you think of new orders as a leading indicator of manufacturing activity, shipments should be seen as a coincident indicator, which is a measure of what is going on in the economy right now. For that reason, the value of durable goods shipments is used to calculate GDP.

As a rule, shipments are far less volatile than orders. An aircraft maker like Boeing can receive a major order in one month for 40 passenger jets, which will cause the dollar value for new orders to spike that month. However, the actual assembly and delivery of all those aircraft takes much longer. For instance, only two planes might be ready for delivery each month, which means that shipments of the aircraft will be spread out over 20 months. Hence, the measurement of shipments tends to be far more stable than that of orders.

Unfilled Orders

- **Table 2** Durable Goods Manufacturers' Unfilled Orders and Total Inventories

- (7) *Unfilled orders*: This measure is a favorite among economists for several reasons. First of all, a large backlog of orders suggests that factories will stay busy in the future. That is, orders are coming in too fast for manufacturers to satisfy them on a timely basis. But a buildup in unfilled orders can also pose a problem for the economy. For example, it can strain manufacturing resources, create significant bottlenecks in the production process, cause delays in deliveries, and even lead to inflation pressures. To correct this, companies have to either increase plant capacity, hire more workers, or keep production lines operating overtime. Without such changes, producers may end up losing clients who are unhappy with the chronic delays in delivery. So you can see why many experts

Table 2. Durable Goods Manufacturers' Unfilled Orders and Total Inventories
 (Millions of Dollars)

Item	Seasonally Adjusted						Not Seasonally Adjusted ¹			
	Monthly			Percent Change			Monthly			Percent Change 2004/ 2003
	Jan 2004 ²	Dec 2003 ¹	Nov 2003	Dec - Jan ²	Nov - Dec ¹	Oct - Nov	Jan 2004 ²	Dec 2003 ¹	Jan 2003	
DURABLE GOODS										
Total:										
Unfilled Orders ⁴	505,232	505,948	503,869	-0.1	0.4	0.7	509,314	502,054	486,552	4.7
Total Inventories.....	263,022	262,827	261,414	0.1	0.5	-0.4	262,333	255,909	270,014	-2.8
Excluding transportation:										
Unfilled Orders ⁴	255,370	254,042	254,183	0.5	-0.1	0.9	256,617	250,771	240,424	6.7
Total Inventories.....	195,307	195,394	194,396	0.0	0.5	-0.2	195,195	190,780	202,420	-3.6
Excluding defense:										
Unfilled Orders ⁴	346,955	347,357	346,532	-0.1	0.2	0.4	349,543	344,345	340,987	2.5
Total Inventories.....	238,920	238,568	237,831	0.1	0.3	-0.5	238,553	232,274	248,811	-4.1
Manufacturing with unfilled orders:										
Unfilled Orders ⁴	505,232	505,948	503,869	-0.1	0.4	0.7	509,314	502,054	486,552	4.7
Total Inventories.....	205,363	205,543	204,731	-0.1	0.4	0.3	204,592	200,399	212,929	-3.9
Primary metals:										
Unfilled Orders.....	16,490	16,438	16,384	0.3	0.3	4.7	16,718	15,989	14,893	12.3
Total Inventories.....	17,464	17,300	17,276	0.9	0.1	0.7	17,607	17,420	19,246	-8.5
Fabricated metal products:										
Unfilled Orders.....	39,990	38,935	38,139	2.7	2.1	1.8	39,759	38,029	36,983	7.5
Total Inventories.....	30,864	30,979	30,995	-0.4	-0.1	-0.1	30,949	30,473	31,790	-2.6
Machinery:										
Unfilled Orders.....	44,203	43,902	42,663	0.7	2.9	2.4	44,399	42,864	43,284	2.6
Total Inventories.....	41,894	41,589	41,220	0.7	0.9	-0.6	41,967	40,527	42,979	-2.4
Computers and electronic products:										
Unfilled Orders ⁴	128,958	129,165	131,002	-0.2	-1.4	-0.4	130,148	128,745	121,377	7.2
Total Inventories.....	47,267	47,734	47,130	-1.0	1.3	-0.1	46,927	45,928	50,148	-6.4
Computers and related products:										
Unfilled Orders.....	8,584	8,843	8,651	-2.9	2.2	-0.4	8,348	8,805	7,838	6.5
Total Inventories.....	6,022	6,145	6,021	-2.0	2.1	-0.8	5,799	5,639	6,150	-5.7

watch unfilled orders very carefully. It serves as an early marker for new capital investments and job growth. Greater spending on plant and equipment stimulates more economic activity and improves the nation's industrial infrastructure. As factory employment rises, so does personal income, and this helps generate more household spending. The one big risk here is when the competition among corporations to acquire material resources and labor gets so intense that it drives up inflation pressures.

What happens if unfilled orders abruptly decline? This can occur for two reasons: Either companies are operating at optimal levels and thus can quickly satisfy all orders coming in, or orders themselves have markedly tapered off. The latter can hurt the economy by putting in jeopardy future production and jobs. By and large, unfilled orders tend to rise when the economy is growing robustly and drop when business activity turns anemic.

Inventories

Whenever factory output exceeds orders, it can cause inventories to balloon and lead to corporate financial headaches. A buildup of unwanted goods can be quite costly to a firm. After all, companies have to pay suppliers for the raw materials needed to manufacture

goods. But if there are suddenly fewer buyers for these completed goods, producers have little choice but to store them as unwanted inventories. As these inventories mount, manufacturing executives are often forced to slash output, which can lead to plant shutdowns and layoffs.

MARKET IMPACT

Bonds

Players in the bond market have a visceral dislike for surprises. Yet the Advance Report on Durable Goods is notable for regularly catching investors off guard because it is so volatile and unpredictable. Should orders come in at a pace much greater than expected, it could pummel bond prices and kick up yields. A surge in new orders, excluding defense and aircraft orders, indicates a strengthening manufacturing sector, faster GDP growth, and possibly higher inflation in the future. Conversely, a sudden drop in orders will weaken the manufacturing sector and possibly the rest of the economy, a scenario that's generally bullish for bonds.

Stocks

It's more problematic to predict how equity investors will react to the durable goods report. Generally, a jump in orders is viewed favorably because it can lead to higher corporate profits. However, if the economy is already operating at close to full capacity, a sharp increase in orders might unnerve stock market players who fear that the bond market will drive interest rates sharply higher. The rising cost of credit will cut into corporate earnings, and this could end up depressing share prices.

Dollar

The dollar frequently rallies on evidence of a strengthening U.S. economy, especially if it exceeds that of other industrialized countries. However, even currency traders might balk if the durable goods report adds to a growing body of evidence that the economy is overheating.

FACTORY ORDERS

(FORMALLY KNOWN AS MANUFACTURERS, SHIPMENTS,
INVENTORIES, AND ORDERS)

Market Sensitivity: Low to medium.

What Is It: A comprehensive measure of manufacturing orders and sales.

Most Current News Release on the Internet:

www.census.gov/manufacturing/m3/prel/pdf/s-i-o.pdf

Home Web Address: *www.census.gov*

Release Time: 10:00 a.m. (ET); published four to five weeks following the end of the month.

Frequency: Monthly.

Source: Census Bureau, Department of Commerce.

Revisions: Revisions occur over the next two months and can be substantial.

WHY IS IT IMPORTANT?

This economic indicator is a source of some confusion. After all, just a week or so before its release, the government puts out a similar report known as the Advance Report on Durable Goods Orders (see the preceding section). At first glance, it seems to cover the same ground as Factory Orders, but that's not quite the case. The Advance Report is a quick-and-dirty computation of orders for durable goods (hard products such as cars, aircraft, and refrigerators). This release on Factory Orders, however, adds another important piece of information. Not only does it show the durable goods data of a week ago, but, for the first time, there's also data on nondurable goods orders—defined as soft items such as food, clothing, and fuel—which the earlier Advance Report omits. Nondurable items make up 55% of all factory orders, with durable goods accounting for the rest. By including both durables and nondurables, the Factory Orders report completes the picture on U.S. manufacturing, and this enables economists, investors, and political leaders to get the latest pulse on U.S. factory activity.

Given the comprehensiveness of Factory Orders, you might think financial markets worldwide would anxiously await its release every month. The fact is that to most investors, the report on Factory Orders is as interesting as a soap opera rerun. Why? Because the most valued aspect of this report is the change in durable goods—not nondurables. Durable goods orders are considered an excellent leading indicator of economic activity. But the curtain already opened on that statistic days earlier with the release of the Advance Report on Durable Goods. By the time Factory Order is published, all the news

on durable goods has already been digested. Relatively little attention is paid to non-durables because it possesses little predictive value. Nondurable orders tend to rise at a fairly stable rate every month regardless of whether the economy is doing well or not. Consumers will always buy food, clothing, gas, and heating oil, because these products are essential for living.

Should we simply skip the Factory Orders report? No! It contains a mother lode of detailed information on manufacturing. If examined closely, these statistics can offer fresh insight into the soundness of the economy.

HOW IS IT COMPUTED?

The Census Bureau conducts a monthly survey that contacts 4,300 manufacturing departments covering 89 industry groups. Most of the companies queried have more than \$500 million in sales a year, with only a few smaller firms included in the survey. Inquiries are made to obtain the latest figures on orders, shipments, and inventories. Not all these companies come back with answers on time. Roughly 60% do, and they are counted in the preliminary release of Factory Orders. Subsequent revisions are based on more complete information.

A new order is considered if it comes with a legally binding agreement to purchase a product for immediate or future delivery. Options on new orders are not counted. New orders are also calculated net of cancellations. For military orders, the government relies on data from the Defense Department. Shipment values are computed net of discounts but before freight charges and excise taxes. Inventory values are calculated on a current cost basis.

All figures are presented in both seasonally and nonseasonally adjusted terms, but they are not corrected for inflation; that is, the numbers are in nominal (current) dollars. To compute the amount after accounting for inflation, use the Producer Price Index for intermediate materials to make the adjustment.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

Factory orders are not a high-profile economic indicator as far as money managers are concerned. A quick scan of the headline numbers is enough to satisfy most. However, by investing a little more time in looking beyond the headline figures, you might come away with a better feel for how the economy will perform in the coming quarters.

- **Table 2** Value of Manufacturers' New Orders for Industry Groups

This table represents the total dollar amount and percent change of new orders received by U.S. factories from both domestic and foreign customers. New orders is an excellent leading indicator because it impacts future production activity. In this report, orders are broken down into two types of goods. One is durable goods, which we already had an advance peek at the week before, and, in this release for the first

Table 2. Value of Manufacturers' New Orders for Industry Groups

[Millions of Dollars]

Industry	Seasonally Adjusted						Not Seasonally Adjusted ¹						
	Monthly			Percent Change			Monthly			Year to date			
	Dec. 2003 ²	Nov. 2003 ¹	Oct. 2003	Nov. - Dec.	Oct. - Nov.	Sep. - Oct.	Dec. 2003 ²	Nov. 2003 ¹	Oct. 2003	Dec. 2002	2003 ³	2002	Percent 2003/2002
1 ▶ All manufacturing industries ²	342,383	338,726	341,856	1.1	-0.9	2.4	344,296	330,467	336,783	313,957	3,047,601	3,800,930	3.9
Excluding transportation.....	286,843	284,211	287,232	0.9	-1.1	1.6	286,573	278,096	298,300	264,507	3,322,287	3,183,832	4.3
Excluding defense ²	331,847	327,830	330,563	1.2	-0.8	1.8	327,907	320,207	346,566	300,175	3,826,556	3,703,304	3.3
With unfilled orders ²	126,363	127,774	131,920	-1.1	-3.1	5.5	133,978	125,009	134,875	122,398	1,475,496	1,433,824	2.9
Durable goods industries ²	181,865	181,346	185,771	0.3	-2.4	3.9	187,373	176,103	193,408	168,525	2,098,886	2,040,581	2.9
Primary metals.....	11,578	11,811	11,948	-2.0	-1.1	9.8	10,753	11,018	12,200	9,706	132,866	134,089	-0.9
Iron and steel mills.....	5,321	5,553	5,734	-4.2	-3.2	18.6	5,024	5,135	5,619	4,487	60,943	61,884	-1.5
Aluminum and nonferrous metals.....	4,967	4,937	4,871	0.6	1.4	3.6	4,381	4,661	5,083	4,194	36,412	36,345	-0.2
Ferrous metal foundries.....	1,290	1,321	1,343	-2.3	-1.6	-0.5	1,148	1,222	1,498	1,025	15,511	15,660	-1.0
Fabricated metal products.....	21,043	21,089	21,191	-0.2	-0.5	2.1	19,286	20,465	22,338	18,292	246,177	249,408	-1.3
Machinery.....	23,053	22,269	21,705	3.5	2.6	1.4	22,303	20,893	21,779	19,538	253,139	244,559	3.5
Construction machinery.....	1,865	2,273	1,947	-17.9	16.7	4.1	1,862	2,063	1,964	1,754	21,691	20,074	8.1
Mining, oil field, and gas field machinery.....	710	840	751	-15.5	11.9	-2.2	798	809	690	661	8,727	7,561	15.4
Industrial machinery.....	3,004	2,612	2,798	15.0	-6.6	10.0	3,207	2,279	3,139	2,774	34,603	32,186	7.5
Photographic equipment.....	955	923	918	3.5	0.5	8.1	1,006	960	1,016	907	10,321	9,821	5.1
Ventilation, heating, air conditioning, and refrigeration equipment.....	3,011	2,495	2,599	20.7	-4.0	0.7	2,771	2,372	2,423	2,261	30,933	30,392	1.8
Metalworking machinery.....	1,444	1,519	1,593	-4.9	-4.6	-1.5	1,275	1,764	1,836	1,792	19,999	24,531	-18.5
Turbines, generators, and other power transmission equipment.....	3,620	3,138	2,632	15.4	19.2	9.7	3,611	3,062	2,552	1,990	30,467	27,202	12.0
Material handling equipment.....	1,474	1,470	1,395	0.3	5.4	-3.5	1,567	1,304	1,416	1,382	16,106	15,760	2.2
Computers and electronic products ²	29,136	29,471	33,685	-1.1	-12.5	2.5	37,278	29,924	33,673	33,999	357,068	325,378	9.7
Computers.....	5,271	5,361	5,490	-1.7	-2.3	3.2	5,812	5,204	6,171	5,778	59,486	50,949	16.8
Nondefense communications equipment.....	3,594	4,573	8,876	-21.4	-48.5	16.3	5,811	5,469	8,961	6,728	76,372	69,868	9.3
Defense communications equipment.....	593	549	676	8.0	-18.8	67.3	611	522	658	412	5,665	4,327	30.9
Semiconductors ²	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electronic components.....	4,648	4,640	4,488	0.2	3.4	5.3	5,146	4,795	4,628	4,558	48,642	52,709	-7.7
Nondefense search and navigation equipment.....	782	808	887	-3.2	-8.9	4.5	855	824	856	886	10,246	9,726	5.3
Defense search and navigation equipment.....	2,443	2,795	2,881	-12.6	-3.0	6.8	4,165	2,844	2,611	4,226	31,668	24,616	28.6
Electromedical, measuring, and control instruments.....	7,183	6,688	6,394	7.4	4.6	-15.3	8,415	6,110	6,110	6,560	75,978	66,053	15.0
Electrical equipment, appliances, and components.....	8,358	8,464	8,665	-1.3	-2.3	0.8	8,625	8,389	8,877	8,661	101,129	103,013	-1.8
Electric lighting equipment.....	1,020	1,004	930	1.6	8.0	-13.8	1,216	967	918	1,168	12,413	12,541	-1.0
Household appliances.....	1,986	2,070	2,088	-6.1	-0.9	4.2	2,107	2,119	2,074	2,105	23,736	22,600	5.0
Electrical equipment.....	2,362	2,248	2,651	0.6	-11.4	1.5	2,406	2,203	2,696	2,544	29,951	29,891	0.2
Transportation equipment.....	55,540	54,515	54,624	1.9	-0.2	6.4	57,723	52,371	58,485	49,450	625,314	617,098	1.3
Motor vehicle bodies, parts, and trailers.....	18,229	18,297	18,759	-0.4	-2.5	0.3	16,293	17,760	20,823	14,378	215,929	222,082	-2.8
Nondefense aircraft and parts.....	6,296	4,930	5,625	27.7	-12.4	20.6	8,604	5,111	4,635	8,275	60,884	65,295	-6.8
Defense aircraft and parts.....	4,070	3,733	3,934	7.7	-5.0	7.2	5,844	3,126	3,131	4,663	44,638	40,087	11.4
Ships and boats.....	2,221	3,371	1,494	34.1	125.6	-2.4	2,807	3,500	1,729	2,304	25,732	22,423	14.8
Furniture and related products.....	5,677	6,106	5,981	-7.0	2.1	0.6	5,082	6,158	6,289	5,261	69,752	68,959	1.1
3 ▶ Nondurable goods industries.....	160,518	157,380	156,085	2.0	0.8	0.6	156,923	154,364	163,377	145,432	1,848,715	1,760,349	5.0

time, nondurable goods. Recall that durable goods are considered “hard” products that have a life expectancy of at least three years. Nondurable goods are products that have less than three years of useful existence. Orders for this latter category tend to be more stable because they consist of commodities vital to our daily needs. Thus, any big movement in the total value of new orders is likely to come from changes in durable goods.

(1) *All manufacturing industries*: The best way to determine how busy major U.S. factories will be is to look at the number of new orders coming in, both in absolute dollar terms and as the percentage change from previous months. Whether it’s steel mills, autos, computers, communications, aircraft, or dozens of other industries, this is where you’ll get a sense of future production trends for each of the industries featured and for manufacturing as a whole. The table lists new orders for all key manufacturing industries in the latest month and the percentage change in each of the past three months. Why is this so important to track? New orders keep the production lines going. If orders drop off, factories

risk being idle, and companies owning these plants can quickly lose money. If demand for factory goods is strong, assembly lines will remain in full operation, and the manufacturer can generate sales income.

Looking solely at total new orders, however, conveys only the most general impression. Certain manufacturing industries are more important than others to the economy. Moreover, total orders can be distorted by the occasional surge in spending on civilian aircraft and defense. Both are typically expensive and cause the value of new orders to balloon, greatly exaggerating for a single month the underlying pace of demand for manufactured goods. To eliminate these erratic movements, it's more prudent to look at manufacturing orders after excluding transportation and defense orders. Fortunately, the Census Bureau adjusts for some of these categories in the same table. Finally, to smooth out the wild monthly swings in the data, one should examine orders on at least a three-month moving-average basis.

- (2) *Durable goods industries:* Equity investors here will find more details on orders for an assortment of key manufacturing industries, including computers, semiconductors, industrial machinery, electronic components, and motor vehicles. It's worth repeating here that regardless of whether you're using the Advance Durable Goods Orders of a few days ago or this revised Factory Orders release, if new orders pick up (minus aircraft and defense), it's a sign that factories will be humming for at least the next three to six months, or longer.

The most substantial shortcoming in the data for new orders is that it does not differentiate between domestic and foreign orders. Thus, it's difficult to discern how much of the new demand originates from inside and outside the U.S.

- (3) *Nondurable goods industries:* Unlike durable goods, orders for nondurable goods show little fluctuation during the course of the business cycle because many products in this group are considered household necessities. Indeed, nondurable goods account for 65% of all retail sales, with food products, pharmaceuticals, and textiles making up the largest chunk. The one nondurable that can be subject to wide price swings is petroleum, a commodity whose cost is often influenced by geopolitical factors.

Though the total dollar amount of orders for nondurable goods is noted at the bottom of Table 2, you'll notice that there's no product breakdown of nondurables here. For that, you have to go to Table 1 (not shown) of this release, which lists the value of products shipped.

• **Table 3** Value of Manufacturers' Unfilled Orders for Industry Groups

Table 3. Value of Manufacturers' Unfilled Orders for Industry Groups
[Millions of Dollars]

Industry	Seasonally Adjusted						Not Seasonally Adjusted				Percent Change Dec. 03/02
	Monthly			Percent Change			Monthly				
	Dec. 2003 ^a	Nov. 2003 ^a	Oct. 2003	Nov. - Dec.	Oct. - Nov.	Sep. - Oct.	Dec. 2003 ^a	Nov. 2003 ^a	Oct. 2003	Dec. 2002	
All manufacturing industries ¹	505,768	503,869	500,307	0.4	0.7	1.7	501,979	495,329	491,677	480,679	4.4
Excluding transportation	253,822	254,183	251,891	-0.1	0.9	2.5	250,906	251,197	247,897	236,263	6.2
Excluding defense	347,046	346,532	345,067	0.1	0.4	1.8	344,075	343,320	340,826	336,134	2.4
Durable goods industries ¹	505,768	503,869	500,307	0.4	0.7	1.7	501,979	495,329	491,677	480,679	4.4
Primary metals	16,612	16,384	15,642	1.4	4.7	6.7	16,158	15,543	14,895	14,459	11.8
Iron and steel mills	9,768	9,524	8,899	2.6	7.0	11.2	9,437	8,979	8,378	7,800	21.0
Aluminum and nonferrous metals	4,513	4,495	4,396	0.4	2.3	0.7	4,409	4,248	4,217	4,481	-1.6
Ferrous metal foundries	2,331	2,365	2,347	-1.4	0.8	2.4	2,312	2,316	2,300	2,178	6.2
Fabricated metal products	38,409	38,139	37,473	0.7	1.8	1.8	37,861	37,891	37,170	36,900	2.6
Machinery	43,530	42,663	41,654	2.0	2.4	0.5	42,524	42,249	41,182	42,420	0.2
Construction machinery	2,596	2,641	2,289	-1.7	15.4	0.0	2,568	2,509	2,111	2,009	27.8
Mining, oil field, and gas field machinery	1,099	1,117	1,004	-1.6	11.3	4.4	1,099	1,117	1,004	898	22.4
Industrial machinery	7,600	7,575	7,593	0.3	-0.2	-0.8	7,253	7,530	7,546	7,472	-2.9
Photographic equipment	843	811	784	3.9	3.4	1.2	809	819	789	554	46.0
Ventilation, heating, air-conditioning, and refrigeration equipment	4,400	4,538	4,593	-3.0	-1.2	1.1	4,196	4,408	4,433	3,996	5.0
Metalworking machinery	3,935	3,921	3,819	0.4	2.7	2.6	3,874	4,002	3,821	3,643	6.3
Turbines, generators, and other power transmission equipment	9,331	8,415	8,072	10.9	4.2	-0.6	9,305	8,411	8,050	10,730	-13.3
Material handling equipment	4,796	4,764	4,704	0.7	1.3	-0.2	4,800	4,683	4,666	4,889	-1.8
Computers and electronic products ¹	129,686	131,002	131,589	-1.0	-0.4	2.7	129,220	129,454	129,155	118,817	8.8
Computers	8,883	8,651	8,684	2.7	-0.4	-2.7	8,805	8,871	8,564	8,124	8.4
Nondefense communications equipment	46,995	49,558	51,203	-5.2	-3.2	5.3	46,525	49,206	50,151	41,805	11.3
Defense communications equipment	3,456	3,302	3,202	4.7	3.1	6.8	3,456	3,302	3,202	2,942	17.5
Semiconductors ¹	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electronic components	14,140	13,934	13,602	1.5	2.4	2.2	13,964	13,684	13,525	15,484	-9.8
Nondefense search and navigation equipment	4,657	4,815	4,783	-3.3	0.7	0.9	4,581	4,745	4,685	4,489	2.0
Defense search and navigation equipment	35,651	35,632	35,405	0.1	0.6	1.0	36,028	34,675	34,445	33,634	7.1
Electromedical, measuring, and control instruments	15,904	15,110	14,710	5.3	2.7	1.4	15,861	14,971	14,583	12,339	28.5
Electrical equipment, appliances, and components	13,732	13,997	14,160	-1.9	-1.2	0.7	13,509	13,938	14,094	13,792	-2.1
Electric lighting equipment	1,366	1,408	1,463	-3.0	-3.8	-7.6	1,333	1,356	1,447	1,455	-8.4
Household appliances	766	927	964	-17.4	4.8	7.6	767	961	882	899	-14.7
Electrical equipment	8,407	8,525	8,634	-1.4	-1.3	1.2	8,274	8,535	8,673	8,071	2.5
Transportation equipment	251,946	249,686	248,416	0.9	0.5	0.9	251,073	244,132	243,780	244,416	2.7
Motor vehicle bodies, parts, and trailers	13,378	13,304	13,027	0.6	2.1	4.0	13,432	12,958	12,407	12,133	10.7
Nondefense aircraft and parts	104,838	103,900	104,831	0.9	-0.9	0.1	105,071	103,003	104,222	111,494	-5.8
Defense aircraft and parts	62,405	61,840	61,123	0.9	1.2	0.9	60,753	59,085	59,216	55,964	8.6
Ships and boats	20,221	20,282	19,233	-0.3	5.5	-3.5	20,461	19,832	18,727	20,648	-0.9
Furniture and related products	5,454	5,603	5,518	-2.7	1.5	1.0	5,235	5,727	5,546	5,254	-0.4

(4) Unfilled orders is one of the most trusted leading indicators of future manufacturing activity and is a good barometer of the economy's overall health. The category represents orders to manufacturers that have yet to be filled and shipped. When the economy is growing modestly, the order backlog is minimal, because factories have enough production capacity to meet demand. However, those dynamics change if new orders begin to surge and stay at high levels. Since production capacity can't be expanded overnight, at some point manufacturers will no longer be able to keep up with the high level of orders coming in. If orders can't be processed fast enough, deliveries get delayed. One positive outcome from such bottlenecks for the economy is that companies might invest to expand capacity and raise output. At the very least, a growing backlog of orders means high factory employment, more overtime, and busy assembly lines. The danger from unfilled orders is that they can cause a buildup of inflation pressures as

both manufacturing capacity and commodities become scarce. Indeed, Federal Reserve officials closely monitor unfilled orders to detect any emerging imbalance between the demand and supply for materials and products.

Aside from warning of inflation, changes in the order backlog can send other signals. A persistent fall in unfilled orders, for instance, can warn of a slowdown in consumer and business spending that could result in a decline in factory output and even recession. Before jumping to any conclusions, however, remember to track changes in unfilled orders, excluding transportation and defense, since these two components can greatly warp the data.

- **Table 4** Value of Manufacturers' Inventories for Industry Groups (Not Shown)

Inventory levels is another yardstick that can be used to foretell what the economy will do. Factory inventories represent more than a third of all business inventories, with wholesale and retail filling up the rest. As an economic concept, inventories can move up or down, depending on the relative pace of demand and supply.

Traditionally, inventories grow when the economy is expanding, because at such times, businesses are happy to keep stockrooms filled. The problem begins after demand unexpectedly drops and factories fail to adjust in time and slow their output. This can quickly lead to an imbalance in which supplies are growing faster than demand. The result is that unwanted inventories begin to pile up as factories get stuck holding goods that no one wants to buy at the moment.

- **Table 7** Ratios of Manufacturers' Inventories to Shipments and Unfilled Orders to Shipments (Not Shown)

Two interesting columns are presented here. One deals with the inventory-sales (or shipments) ratio (*I/S* ratio). It provides some perspective on where inventories stand relative to current sales. The second ratio, unfilled orders to shipments, tells just how bad the logjam is between orders coming in and shipments going out. The higher the ratio, the longer the delay in deliveries. Again, about a dozen industries are tracked in this table.

MARKET IMPACT

The Factory Orders report is considered old news to financial markets, so any reaction is modest, unless it contains a major revision from the Advance Report on Durable Goods, which is rare.

Bonds

Bond prices might inch higher if Factory Orders conforms with other evidence that the economy is weakening. A decline in new orders and order backlog would lower the threat

of inflation and enhance the chance of an easing in monetary policy by the Federal Reserve—all bullish events for fixed-income securities. On the other hand, a spike in new orders and a jump in the backlog raise the prospect of inflation, which can upset bond investors and lead to a sell-off that results in higher interest rates. As for inventories and the I/S ratio, traders generally pay little attention to them unless the economy is close to an inflection point.

Stocks

Equity investors prefer to see Factory Orders validate other signs of economic strength because this translates into higher corporate earnings. Thus, rising orders for both durable and nondurable goods and a pickup in unfilled orders are viewed as beneficial for stocks. However, its actual impact on share prices might be negligible because similar indicators have already come out by then.

Dollar

The dollar appears completely unaffected by the Factory Orders release.

BUSINESS INVENTORIES

(FORMALLY KNOWN AS MANUFACTURING AND TRADE INVENTORIES AND SALES)

Market Sensitivity: Low to medium.

What Is It: Tracks total U.S. business sales and inventories.

Most Current News Release on the Internet:

www.census.gov/mtis/www/mtis.html

Home Web Address: *www.census.gov*

Release Time: 10:00 a.m. (ET); released six weeks after the month ends.

Frequency: Monthly.

Source: Census Bureau, Department of Commerce.

Revisions: Tend to be small. Annual benchmark changes come out in the spring or summer and can cover several years.

WHY IS IT IMPORTANT?

“Business inventories.” The term alone is enough for many readers to shut this book for good. Despite its sleep-inducing title, this release by the Census Bureau offers a lot of useful information on what the economy is up to, as well as some valuable clues regarding its future path. At the heart of this report are three sets of data: total business sales, total inventories, and the inventory-sales (I/S) ratio. Let’s look at them individually.

Total business sales: We don’t need to spend much time on this part of the report, because a lot of the sales data on manufacturers, wholesalers, and retailers has already been released weeks before in separate economic reports. (Figures on retail sales came out four weeks earlier. Those by manufacturers were published two weeks ago, and the wholesalers’ numbers the previous week.) The main virtue of this release is that all these sales numbers are now combined into one table, along with total inventories and the inventory-sales ratio, giving analysts an opportunity to connect the dots more easily and get a fuller picture of the economy.

Business inventories: Total business inventories represents the amount of goods that manufacturers, wholesalers, and retailers keep in their stockrooms. Though some of the data on inventories has been out before, new in this release are the figures on retail inventories. This is a late but very telling piece of data, because the economy often first runs into trouble at the retail level.

Understanding inventories is crucial because they can directly affect the pace of future economic growth. A company whose stockroom or back lot is filled with unsold goods can quickly find itself in a financial squeeze, especially if the economy starts to weaken. Keep in mind that inventories are often financed with short-term loans that have to be repaid even when income from sales is down. At the same time, holding a certain

level of inventories is vital for businesses. A company has to have something to sell, or it can't make money. The central question for corporate managers is just how much inventory they should carry in light of present orders and expected future demand for goods and supplies. Generally speaking, stockpiles with manufacturers account for 40% of total business inventories, with retailers and wholesalers each holding about 30%.

Historically, inventory problems have been one of the main causes of economic downturns, and they usually play out in the following scenario: Retailers with bloated inventories and sleepy sales will cut back or cancel their orders to wholesalers. As a result, wholesalers, fearful that their own stockrooms will start to swell with unwanted products, start to postpone orders to factories. That leaves factories with no choice but to slow or shut down their own production, a step that can lead to plant closings and large-scale layoffs. With more people out of work, household income drops and consumers spend less. This makes it even tougher for retailers to sell off their excess inventories, which, in turn, sets off yet another round in this entire cycle. On a wide-enough scale, such a sequence of events can easily bring on a recession.

Interestingly, changes in inventory can also rescue an economy from recession. For example, companies generally succeed in drawing down their stock of excess goods by promoting special sales, discounts, and other incentives to lure consumers back. Once firms get close to depleting their old inventories, a process that can take many months, they will at some point have to replenish their stockrooms. New orders from retailers thus become the powerful tonic that helps the economy get back on its feet. Retailers submit fresh orders to wholesalers, and the latter purchase more from factories. Plants are reopened and workers are rehired.

To some extent, the wild inventory swings just described are becoming less common as more companies rely on technology and software to help them maintain a better balance between stockroom supplies and sales. This "just in time" system of inventory management is supposed to keep the economy out of trouble. But the practice isn't perfect, and corporate buyers still make mistakes.

Inventory-sales (I/S) ratio: Companies always want to keep enough inventory on hand so they can sell to customers. But how much is enough? The most popular gauge for assessing whether inventory levels are too high or too low is the I/S ratio. The I/S ratio measures how many months it takes to sell off inventories based on the latest monthly sales rate. A very general rule of thumb is to stock up for no more than one-and-a-half months' worth of sales (also expressed as an I/S ratio of 1.5 months). Some industries desire less, others more. Automakers, for instance, routinely prefer to have close to two months' worth of vehicles on their lots (I/S ratio = 2.0). If the I/S ratio for motor vehicle inventory at dealerships exceeds two months' supply, it's a yellow flag that they're carrying more than is prudently needed. Indeed, it might serve as fresh evidence that car purchases are waning. Too high a ratio, and companies will halt further stock building, a step that can derail production activity. Too low an I/S ratio means that sales to consumers have been growing faster than the rise in inventories. Without further action by the

retailers, it would be only a matter of time before they would be left with nothing to sell. To avoid this predicament, companies rush through orders for more goods, which paves the way for faster economic growth.

HOW IS IT COMPUTED?

As mentioned, much of the data for this report has already come out. Only the retail inventory data is new here. These numbers are provided with and without seasonal adjustments. However, they are not annualized or adjusted for inflation.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

- **Cover Page** Total Business Inventories/Sales Ratios

- (1) For the past 30 years, businesses have shown a desire to hold an average of about 1.40 months' worth of goods on shelves and in stockrooms. To see where the I/S ratio presently stands, go to the graph that tracks the I/S ratio over the past ten years. Generally, if the I/S ratio falls much below the 1.45-month trend, companies typically increase their orders to bring inventories back to preferred levels, provided that the economy is not in the midst of a downturn. If the economy is sinking, firms might decide to wait until demand improves before submitting new orders.

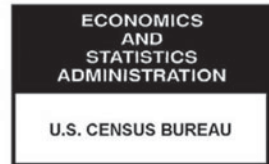
- **Table 1** Estimated Monthly Sales and Inventories for Manufacturers, Retailers, and Merchant Wholesalers

- (2) This neatly organized table breaks down sales and inventory levels in dollar terms and lists the I/S ratio for manufacturers, retailers, and wholesalers. From here we can observe the domino effect of how changes in one sector can affect the other two sectors over time. For example, if consumer spending slows markedly, retail sales will suffer. A buildup in unwanted retail inventories increases the I/S ratio. Wholesalers end up receiving fewer orders. As their inventory swells, wholesalers, in turn, order less from manufacturers.

This process eventually corrects itself. Retailers will use a variety of sales promotion programs to work down all that surplus inventory. This process can take from three to nine months and even longer. Once that's done, however, and the economy is rebounding, investments in new inventory resume across the pipeline—from retailers to factories.

By looking at this table, one can thus make some judgments about the future path of the economy. If you see business inventories consistently rise *less* than the pace of sales, it indicates that demand is strong and that wholesalers and retailers are likely to order more goods from factories to keep their stockrooms and back lots adequately supplied to satisfy the customer orders. Conversely, if

inventories are growing *faster* than sales, companies will be under increasing pressure to cut back on orders for fear of getting stuck with unwanted stock. Holding excess inventories can be quite costly, since such goods are often financed with credit—plus there is the additional risk that over time these goods may be outmoded by the time the economy turns up again.



FOR WIRE TRANSMISSION 10:00 A.M. ET, Thursday, February 12, 2004

CB-04-18

MANUFACTURING AND TRADE INVENTORIES AND SALES

INTENTION TO REVISE: Revisions to the Wholesale and Retail adjusted and unadjusted monthly estimates for sales and inventories are scheduled for release March 3 and March 30, respectively. Manufacturing estimates will be revised at a later date. Revisions to the Wholesale data will be reflected in the January 2004 Manufacturing and Trade Inventories and Sales (MTIS) press release scheduled for March 12, 2004. Revisions to the Retail data will be reflected in the February 2004 MTIS scheduled for April 13, 2004.

Sales. The Census Bureau of the Department of Commerce announced today that the combined value of distributive trade sales and manufacturers' shipments for December, adjusted for seasonal and trading-day differences but not for price changes, were estimated at \$889.8 billion, up 0.9 percent ($\pm 0.2\%$) from November and up 7.0 percent ($\pm 0.4\%$) from December 2002.

Inventories. Manufacturers' and trade inventories adjusted for seasonal variations but not for price changes, were estimated at an end-of-month level of \$1,190.7 billion, up 0.3 percent ($\pm 0.2\%$) from November and up 1.9 percent ($\pm 0.5\%$) from December 2002.

Inventories/Sales Ratio. The total business inventories/sales ratio based on seasonally adjusted data at the end of December was 1.34. The December 2002 ratio was 1.41.

1 ►

Total Business Inventories/Sales Ratios: 1994 to 2003

(Data adjusted for seasonal, holiday and trading-day differences but not for price changes)

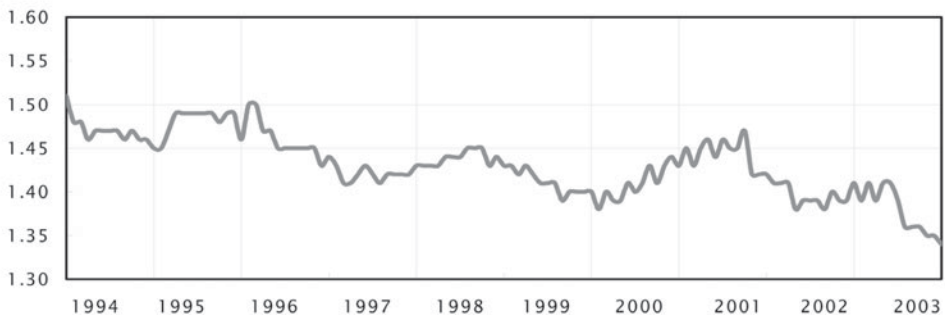


Table 1. Estimated Monthly Sales and Inventories for Manufacturers, Retailers, and Merchant Wholesalers
(In millions of dollars)

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	Sales			Inventories ¹			Inventories/Sales Ratios		
	Dec. 2003	Nov. 2003	Dec. 2002	Dec. 2003	Nov. 2003	Dec. 2002	Dec. 2003	Nov. 2003	Dec. 2002
	(p)	(r)	(s)	(p)	(r)	(s)			
Adjusted									
Total business.....	889,797	881,635	831,472	1,190,686	1,187,687	1,168,999	1.34	1.35	1.41
Manufacturers ³	346,533	341,454	323,362	438,106	438,126	444,188	1.26	1.28	1.37
Retailers.....	292,400	291,921	275,763	458,123	456,845	436,103	1.57	1.56	1.58
Merchant wholesalers.....	250,864	248,260	232,347	294,457	292,716	288,708	1.17	1.18	1.24
Not Adjusted									
Total business.....	945,296	855,100	868,285	1,178,306	1,220,733	1,155,640	1.25	1.43	1.33
Manufacturers ³	344,042	333,414	316,560	427,737	439,491	433,756	1.24	1.32	1.37
Retailers.....	343,377	286,269	319,815	453,333	485,870	431,121	1.32	1.70	1.35
Merchant wholesalers.....	257,877	235,417	231,910	297,236	295,372	290,763	1.15	1.25	1.25

2 ▶

(3) Although the I/S ratio is considered a lagging indicator, which means it tends to follow, not lead, the economy’s overall pace, its performance can still have implications for the future. As I pointed out previously, a low I/S ratio can set the stage for faster economic growth in the coming months as companies seek to replenish their stockrooms. In contrast, a persistent rise in the I/S ratio (when inventories are rising faster than sales) can eventually lead to a slowdown in economic activity, along with lower inflation and interest rates.

• **Table 2** Percent Changes for Sales and Inventories—Manufacturers, Retailers, and Merchant Wholesalers

Table 2. Percent Changes for Sales and Inventories -- Manufacturers, Retailers, and Merchant Wholesalers

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	Adjusted						Not Adjusted					
	Sales			Inventories			Sales			Inventories		
	Dec. 03/ Nov. 03	Nov. 03/ Oct. 03	Dec. 03/ Dec. 02	Dec. 03/ Nov. 03	Nov. 03/ Oct. 03	Dec. 03/ Dec. 02	Dec. 03/ Nov. 03	Nov. 03/ Oct. 03	Dec. 03/ Dec. 02	Dec. 03/ Nov. 03	Nov. 03/ Oct. 03	Dec. 03/ Dec. 02
Total business.....	0.9	0.7	7.0	0.3	0.4	1.9	10.5	-5.9	8.9	-3.5	0.9	2.0
Manufacturers.....	1.5	0.5	7.2	0.0	-0.1	-1.4	3.2	-6.3	8.7	-2.7	-0.5	-1.4
Retailers.....	0.2	1.0	6.0	0.3	0.8	5.0	19.9	-0.8	7.4	-6.7	2.7	5.2
Merchant wholesalers..	1.0	0.6	8.0	0.6	0.5	2.0	9.5	-10.9	11.2	0.6	0.4	2.2

- (4) Keep an eye on the change in inventories in this table, because it's a key element in how GDP is calculated. GDP, which represents total output, is computed by adding up all sales in the economy plus the change in inventories. What do we mean by "change in inventories"? Suppose a U.S. company produces 100 television sets during the quarter but sells only 80. The unsold 20 sets get stored as inventory. If we now calculate the GDP for that quarter based on sales alone, we come up with just the dollar value of 80 television sets, even though the true output for that period was 100 TV sets. Thus, to get the correct GDP, we have to add a special allowance for the change in inventories, which in this case increased by 20 during the quarter. Total sales (80) plus the change in inventories (+20) brings you up to 100, the correct number for total output. What if in the next quarter the firm sells 60 TVs but produces only 50? The same basic formula applies here too. To satisfy customer demand, the company digs into inventory to come up with the other 10. Thus, the level of inventory has fallen by 10. Again, to measure GDP output in that quarter, you count total sales (60) and the change in inventory levels (-10) to give you a total output of 50 for that quarter. The point is that changes in inventories play a major role in how economic growth is calculated.

By monitoring three-month changes in inventory levels in this table, one can get a heads up on whether it will add to or subtract from GDP. There's one catch. This table measures percent changes in inventories based on nominal dollars—that is, before adjusting for the effects of inflation. GDP, however, values inventories in real (inflation-adjusted) dollars. To make a rough adjustment from nominal to real dollars, take the percent change in producer price inflation for finished goods (see the later section "Producer Price Index [PPI]") and subtract it from the percent change in total inventories. For example, if total inventories jumped 0.3% in nominal dollars in the month and the PPI rose 0.1%, the real change in inventory was up roughly 0.2%. Because the quarterly GDP report covers three months, you will have to assess real inventory changes for the last three months for which data is available.

- **Table 3** Estimated Monthly Retail Sales, Inventories, and Inventories/Sales Ratios, by Kind of Business

- (5) This table shows how various retailers stand in terms of sales, inventories, and the I/S ratio. Of the three, the I/S is the most meaningful in serving as a leading economic indicator of future orders and production activity. Specific emphasis is placed on motor vehicles, home furnishings, building materials, clothing, food and beverages, and general-merchandise stores.

A word of caution: Auto and truck inventories, which account for one-third of total retail inventories, can be quite volatile in this series. To reduce any distortions, look at the total retail I/S ratio, excluding the motor vehicle and parts components.

Table 3. Estimated Monthly Retail Sales, Inventories, and Inventories/Sales Ratios, by Kind of Business
(In millions of dollars)

NAICS Code	Kind of Business	Sales			Inventories ¹			Percent Change			Inventories/Sales Ratios			
		Dec. 2003	Nov. 2003	Dec. 2002	Dec. 2003	Nov. 2003	Dec. 2002	In Inventories			Ratios			
		(p)	(r)	(s)	(p)	(r)	(s)	Dec. 03/Nov. 03	Nov. 03/Oct. 03	Dec. 03/Dec. 02	Dec. 03	Nov. 03	Dec. 02	
	Adjusted ²													
	Retail trade, total.....	292,400	291,921	275,763	458,123	456,845	436,103	0.3	0.8	5.0	1.57	1.56	1.58	
	Total (excl. motor veh. & parts).....	215,478	215,116	202,269	299,494	298,332	289,524	0.4	0.6	3.4	1.39	1.39	1.43	
441	Motor vehicle & parts dealers.....	76,922	76,805	73,494	158,629	158,513	146,579	0.1	1.1	8.2	2.06	2.06	1.99	
442.3	Furniture, home furn., elect. & appl. stores.....	16,887	16,869	15,509	28,583	28,401	26,373	0.6	0.9	8.4	1.69	1.68	1.70	
444	Building materials, garden equip & supplies.....	28,413	28,244	24,875	47,285	46,746	43,109	1.2	0.9	9.7	1.66	1.66	1.73	
445	Food & beverage stores.....	42,792	42,962	41,327	34,565	34,645	34,294	-0.2	0.1	0.8	0.81	0.81	0.83	
448	Clothing & clothing access. stores.....	15,245	15,269	14,525	36,794	36,741	36,061	0.1	0.9	2.0	2.41	2.41	2.48	
452	General merchandise stores.....	40,569	40,434	38,437	67,786	67,073	66,456	1.1	0.0	2.0	1.67	1.66	1.73	
4521	Dept. str. (excl. leased depts.).....	18,017	18,018	18,336	35,821	36,089	37,767	-0.7	-1.3	-5.2	1.99	2.00	2.06	
	Not Adjusted													
	Retail trade, total.....	343,377	286,269	319,815	453,333	485,870	431,121	-6.7	2.7	5.2	1.32	1.70	1.35	
	Total (excl. motor veh. & parts).....	270,789	219,306	252,873	290,986	326,051	281,124	-10.8	1.7	3.5	1.07	1.49	1.11	
441	Motor vehicle & parts dealers.....	72,588	66,963	66,942	162,347	159,819	149,997	1.6	4.8	8.2	2.24	2.39	2.24	
442.3	Furniture, home furn., elect. & appl. stores.....	23,959	18,424	21,625	28,383	32,462	26,162	-12.6	4.4	8.5	1.18	1.76	1.21	
444	Building materials, garden equip & supplies.....	25,542	25,671	21,814	45,914	45,577	41,816	0.7	-0.6	9.8	1.80	1.78	1.92	
445	Food & beverage stores.....	46,655	42,914	44,693	35,356	36,248	35,074	-2.5	1.8	0.8	0.76	0.84	0.78	
448	Clothing & clothing access. stores.....	26,835	16,540	25,296	33,998	40,893	33,356	-16.9	0.6	1.9	1.27	2.47	1.32	
452	General merchandise stores.....	61,470	45,473	58,883	63,537	79,567	62,207	-20.1	2.2	2.1	1.03	1.75	1.06	
4521	Dept. str. (excl. leased depts.).....	31,243	21,082	31,854	33,170	43,595	35,010	-23.9	1.5	-5.3	1.06	2.07	1.10	

MARKET IMPACT

Financial markets and the press react mildly to this report because so much of the data has already been put out in separate releases. It's also hard to get excited about economic events that took place nearly two months ago. Still, on a slow business news day, the retail inventory series might draw some attention, particularly if the economy is reaching an inflection point.

Bonds

Faster-than-expected growth in retail inventory can upset traders in fixed-income securities because it adds to GDP growth and can put upward pressure on interest rates. A fall in inventory investment subtracts from economic output, which is positive for bonds.

Stocks

Rarely does the stock market get excited by this release. Though a slowdown in sales and production displeases equity investors because of its implications for earnings, chances are that most investors have already seen and reacted to similar evidence weeks earlier.

Dollar

The main question for foreign exchange traders is how the news on retail inventories will influence interest rates in the U.S. For them, a jump in the I/S ratio (with inventories rising at a faster pace than sales) is symptomatic of an economy in the process of slowing down. That eventually portends lower interest rates, which translates into a smaller pay-back for international investors. Currency traders generally look at the dollar more favorably if both sales and inventories are rising at the retail, wholesale, and manufacturing level.

INDUSTRIAL PRODUCTION AND CAPACITY UTILIZATION

Market Sensitivity: Medium.

What Is It: Records U.S. industry's output and spare capacity.

News Release on the Internet: www.federalreserve.gov/releases/g17/current

Home Web Address: www.federalreserve.gov

Most Current Release Time: 9:15 a.m. (ET); released around the 15th of the month and reports on the previous month.

Frequency: Monthly.

Source: Federal Reserve Board.

Revisions: Modest changes are made for the previous three months, followed by an annual revision in the fall that can go back several years.

WHY IS IT IMPORTANT?

Any economic indicator released by the Federal Reserve is automatically noticed by investors around the world. After all, this is the agency that conducts U.S. monetary policy and controls short-term interest rates. Two of the Fed's most closely watched reports are Industrial Production and Capacity Utilization, both published simultaneously around the middle of every month. Industrial production covers nearly everything that is physically produced or mined in the U.S. and includes the making of cars, umbrellas, paper clips, electricity, and medical equipment. It makes no difference whether these goods are for American buyers, foreign consumers, or inventory. All that matters is how much industry is actually churning out in this country. One reason experts are so keen on following industrial production is that it reacts fairly quickly to the ups and downs of the business cycle. It also has a good track record of forecasting changes in manufacturing employment, average hourly earnings, and personal income.

The capacity utilization rate is a deceptively simple and incredibly important concept. Fed economists look at how much industries in the U.S. are presently producing and then compare that output with what they could potentially produce if the industrial sector were running at maximum capability. This series is significant in three respects. First, a nation's economic power is judged by its ability to produce goods when they're needed. It reflects the strength and flexibility of the industrial sector. Second, it is useful to know how underutilized manufacturers, utilities, and the mining sectors are in case more output is needed in the future. Third, the capacity utilization rate has some predictive value. It's a good leading indicator of business investment spending and can warn of building inflation pressures.

Industrial Production

The industrial production (IP) series is like a window into the industrial part of the economy. It differs from most other economic indicators in one important respect. It measures changes in the volume of goods produced. That is, IP doesn't take the price of these products into account, so there's no need to worry about the distorting effects of inflation. That makes it a purer measure of output, so it corresponds more closely to the performance of real (inflation-adjusted) GDP. One can ask why IP figures are so influential to economic forecasters when the manufacturing sector makes up less than 20% of the economy, while the service industry gets far less attention yet contributes much more to the economic pie. The answer is that the service sector grows at a fairly stable pace regardless of whether the economy is weak or strong. People will always spend on medical and dental care, transportation, and haircuts. In contrast, manufacturing activity is highly sensitive to changes in interest rates and demand, so it closely parallels shifts in the overall economy. As a result, there is a close relationship between changes in industrial output and GDP growth.

Capacity Utilization

Capacity utilization measures the amount of slack in the economy. If a bike-making firm has the capacity to manufacture 500 bicycles a month but is currently producing only 350, it's operating at a capacity utilization rate of just 70%. Now let's assume that the rest of the bike industry is operating at the same low level. Under such circumstances, getting spare parts would be no problem. There's likely to be lots of extra bike tires and brakes available from suppliers. Nor would there be a reason to hire additional workers or invest in new bike-making machinery, because there are not enough buyers out there to purchase what can already easily be produced.

But all this changes when demand surges and the industry starts churning out bikes at close to 100% of its capacity. If that feverish pace continues for an extended period, bike makers will begin to experience shortages in parts. Prices for bike components can also rise. As the cost of assembling bicycles accelerates, shoppers will see their price tags go up as well. The lesson here is that as American industry gets closer to operating at full capacity, shortages in resources emerge, and this can generate inflation. High-capacity utilization rates can also lead to new investments in factory equipment and plant expansion so that companies can increase output in the future. As you might imagine, the capacity utilization rate for manufacturing typically climbs when the economy is vibrant and falls when demand softens.

How Is It COMPUTED?

Industrial Production

Every month, the Federal Reserve calculates an index of industrial production after collecting data on more than 300 industry components representing manufacturing, mining, and the electric utilities and gas industries. Each component is given a weight based on how important it is to the economy. (These weights are adjusted every year.) Most of this information is derived from government data as well as private trade associations.

The Fed first puts out a preliminary release on industrial production two weeks after the reporting month, and it is based on only 70% of the data needed. Why such a low figure? Because the investment community and policymakers want to get a read on industrial activity as quickly as possible given this sector's role in the economy and its sensitivity to turning points in the business cycle. Since it takes time to collect output figures from so many industries, some 30% of the information arrives too late for the first report. Fed economists thus fill in the gaps with estimates that are based on other economic reports. These reports include hours worked in factories (from the employment data) and the amount of electric power consumed by businesses (from power-supply companies). Interestingly, both hours worked and electric power consumption seem to move in line with total industrial output, so these estimates tend to be quite accurate. Indeed, the preliminary IP index and the final revised index three months later vary by an average of just 0.3 percentage points.

Finally, data on IP is presented in two formats. One is by "major market group," which essentially reflects the demand for consumer goods, business equipment, intermediate goods, and materials. The second format is "industry group," and it measures output by industry in broad, supply-side terms.

One cautionary note: Although industrial production figures are seasonally adjusted, final numbers can occasionally be distorted because of bizarre weather, natural disasters, or a major labor strike. Thus, to discern the true underlying growth rate of industrial production in the economy, it is best to look at a three-month moving average. (Industrial production does not include output from agriculture, construction, transportation, communications, trade, finance, or service industries.)

Capacity Utilization

If you think industrial production is tough to compute, calculating capacity utilization rates is very near a crapshoot. To determine what proportion of capacity is being used, you have to know how much industry is capable of producing when it operates at full speed. However, that is impossible to determine with any precision. For one, how do you define full capacity? Industries rarely work at 100% capacity, though theoretically they can function seven days a week, 24 hours a day. Indeed, some industries do have such

nonstop operations. These companies include chemical and steel manufacturers, as well as petroleum refining companies. During times of war, many other U.S. industries mobilize their workforce and plants to work past 90% capacity. However, these are extreme situations. The Fed gets around this by defining capacity based on what is considered the “normal” operating time for each industry. A second difficulty in calculating capacity is that a growing number of production facilities are not even located in the U.S. Though capacity utilization in this report is based only on U.S. operations, the fact is that manufacturing capacity is increasingly being moved offshore, where costs are cheaper. Because American companies can also rely on these foreign production facilities to help meet U.S. demand, it becomes harder to define what true full capacity is. Third, manufacturers regularly invest in new plants and equipment, but it’s not immediately clear whether this is done to expand production capabilities or replace aging and less-efficient equipment. Finally, mergers and acquisitions also impact capacity, because they often lead to a permanent shutdown or sale of redundant production facilities. So trying to figure out the nation’s capacity utilization rate at any given moment is like taking a snapshot of a moving target. Yet despite these difficulties, the Federal Reserve makes a valiant effort to calculate capacity utilization rates for 89 detailed industries (71 in manufacturing, 16 in mining, and 2 in utilities) and then comes up with an industry total.

THE TABLES: CLUES ON WHAT’S AHEAD FOR THE ECONOMY

Manufacturing is the most cyclically sensitive part of the economy, a factor that makes industrial production a classic indicator of current business conditions. When economic activity is increasing, factory production rises with it. As the business cycle approaches its peak, factory output also tops out. And when the economy slips into recession, output drops as well. Does industrial production have any use as a predictive indicator? The answer is yes. The IP report can reveal quite a lot about the future direction of economic growth, corporate sales, inflation, and more.

- **Cover Page** Industrial Production and Capacity Utilization: Summary
 - (1) The “total index” on the front-page table summarizes the change in industrial activity during the latest four-month period. Historically, there has been a strong relationship between industrial production and quarterly GDP. By monitoring percentage changes in industrial output over the past three months, one can make a fairly good estimate of the current trend in GDP growth.
 - (2) Another key set of numbers refers to the total amount of consumer goods (such as cars and trucks) produced versus that of business goods. Strong sales and a thinning of inventories encourages more production of consumer products, whereas the output of business equipment reflects mainly capital investment spending by companies.

FEDERAL RESERVE statistical release



G.17 (419)

For release at 9:15 a.m. (EST)
February 17, 2004

INDUSTRIAL PRODUCTION AND CAPACITY UTILIZATION

Industrial production rose 0.8 percent in January; output in December was revised downward and is now estimated to have been unchanged from the November reading. At 113.8 percent of its 1997 average, overall industrial output in January was 2.4 percent above its January 2003 level. Manufacturing output rose 0.3 percent, and mining output increased 0.1 percent; with unusually cold weather in January, the output of utilities rose 5.2 percent. The rate of capacity utilization for total industry increased from 75.6 percent in December to 76.2 percent in January.

(over)

INDUSTRIAL PRODUCTION AND CAPACITY UTILIZATION: SUMMARY

4
▼

Seasonally adjusted

		1997=100				Percent change				Jan. '03 to Jan. '04
		2003 Oct. ^f	Nov. ^f	Dec. ^f	2004 Jan. ^P	2003 Oct. ^f	Nov. ^f	Dec. ^f	2004 Jan. ^P	
Industrial production										
1 ▶	Total index	111.8	112.9	112.9	113.8	.3	1.0	.0	.8	2.4
	<i>Previous estimates</i>	111.9	113.1	113.2		.4	1.0	.1		
Major market groups										
2 ▶	Final Products	107.7	108.8	108.5	109.1	-1	1.1	-.3	.6	1.4
	Consumer goods	106.0	107.0	106.6	107.4	-1	1.0	-.4	.8	.8
	Business equipment	110.8	112.8	112.8	113.4	-.3	1.8	.0	.5	3.3
	Nonindustrial supplies	109.6	110.6	110.5	111.5	.8	1.0	-.2	.9	2.1
	Construction	103.1	104.1	104.2	104.5	.9	1.0	.0	.4	1.8
	Materials	116.9	118.0	118.5	119.5	.5	1.0	.4	.9	3.5
Major industry groups										
3 ▶	Manufacturing (see note below)	112.9	114.1	114.2	114.6	.2	1.0	.1	.3	2.3
	<i>Previous estimates</i>	113.0	114.2	114.5		.2	1.0	.3		
	Mining	93.7	94.0	94.2	94.3	.2	.3	.2	-.1	.9
	Utilities	111.0	112.8	111.3	117.1	1.0	1.6	-1.3	5.2	4.4
Capacity utilization		Percent of capacity								Capacity growth
		Average 1972-2003	1982 low	1988-89 high	2003 Jan.	2003 Oct. ^f	Nov. ^f	Dec. ^f	2004 Jan. ^P	Jan. '03 to Jan. '04
5 ▶	Total industry	81.1	70.9	85.2	75.2	75.0	75.7	75.6	76.2	1.1
	<i>Previous estimates</i>					75.1	75.8	75.8		
	Manufacturing (see note below)	80.0	68.7	85.6	73.6	73.6	74.3	74.4	74.6	.9
	<i>Previous estimates</i>					73.7	74.4	74.5		
	Mining	86.9	78.6	85.6	84.8	85.4	85.7	85.9	86.0	-.4
	Utilities	86.9	77.6	92.8	85.9	82.4	83.4	82.1	86.1	4.1
Stage-of-process groups										
	Crude	86.3	77.2	88.5	82.9	83.8	84.0	84.3	84.6	-1.0
	Primary and semifinished	82.2	68.1	86.4	77.2	77.0	77.8	77.8	78.7	1.8
	Finished	78.2	71.3	83.2	71.4	71.1	71.8	71.6	71.7	.7

- (3) Here you have the three main components of the industrial production index. The largest by far is manufacturing, which in 2012 accounted for about 75% of industrial output, with mining and utilities roughly splitting the difference. Interested in developing forecasts of corporate revenues for U.S. manufacturers? One strategy used by some analysts involves taking the three-month percentage

change in manufacturing output and multiplying it by the three-month percentage change in consumer price inflation. The result becomes a good proxy for nominal dollar GDP performance, which, in turn, is a reliable harbinger of factory sales growth.

- (4) The percent change in production for all these groups over the past year is listed here.
- (5) Moving on to capacity utilization, this table shows how much spare capacity is left at factories, mines, and utilities. In general, the utilization rate rises or falls with the business cycle, much like industrial production. If orders for products fade, factory output declines, and less capacity is utilized. If the utilization rate lingers below 80%, it tends to discourage new business investments and may even trigger a round of job dismissals.

On the other hand, strong demand for goods stimulates production. Manufacturers utilize more of their factories and plants, causing any slack in capacity to shrink or even disappear. As capacity utilization edges closer to operating at maximum levels, pressure on prices starts to build. Is there a red zone in the capacity utilization rate that usually detonates inflation? Generally speaking, the industrial sector can function safely (that is, without an eruption of higher prices) with a capacity utilization rate as high as 81%. After the utilization rate enters the 82%–85% range, however, production bottlenecks appear, and this can put fresh pressure on prices, especially at the producer price level. Look at the summary table to see the current capacity utilization rate for total industry and its three main components: manufacturing, mining, and utilities.

- **Table 1** Industrial Production: Market and Industry Group Summary

A wealth of information on industrial output is found in Tables 1 and 2. Table 1 lists percent change in production of key products for each of the past four months, as well as the last four quarters annualized, and over the past three years.

Here are some of the most important categories:

- (6) *Business equipment*: A category that tells of plans by companies to invest in new plants and equipment.
- (7) *Defense and space equipment*: A broad measure of production for military and aerospace hardware.
- (8) *Motor vehicles and parts*: An indication of whether automakers see enough demand to fill dealers' lots.

Table 1
INDUSTRIAL PRODUCTION: MARKET AND INDUSTRY GROUP SUMMARY
 Percent change, seasonally adjusted

Item	2003 proportion ¹	Fourth quarter to fourth quarter			Annual rate				Monthly rate			Jan. '03 to Jan. '04		
		2001	2002	2003	2003 Q1	Q2	Q3	Q4 ²	2003 Oct. ³	Nov. ⁴	Dec. ⁵		2004 Jan. ⁶	
Total IP	100.00	-5.2	1.3	1.4	.9	-4.0	3.8	5.4	.3	1.0	.0	.8	2.4	
MARKET GROUPS														
Final products and nonindustrial supplies	58.62	-4.9	.5	1.1	1.9	-4.5	2.9	4.1	.1	1.0	-.3	.7	1.6	
Consumer goods	31.18	-2.2	1.0	.2	1.4	-5.1	2.2	2.6	-.1	1.0	-.4	.8	.8	
Durable	8.15	-2.9	6.0	3.1	1.6	-6.5	11.2	7.0	-.8	1.2	-.1	.6	2.3	
Automotive products	4.13	-1.1	9.9	5.0	3.2	-8.8	20.5	7.0	-.4	1.0	.2	.8	3.8	
Home electronics	.36	-10.3	4.4	24.5	39.2	-8.7	18.6	59.7	7.1	3.3	-1.2	-4.2	3.9	
Appliances, furniture, carpeting	1.42	-2.0	1.8	1.2	.2	1.7	2.8	.0	.0	1.4	-.1	1.0	2.0	
Miscellaneous goods	2.24	-8.1	2.4	-2.3	-5.4	-7.2	-.5	4.1	.5	1.2	.2	.9	-.6	
Nondurable	23.03	-1.9	-.8	-.8	1.2	-4.5	-.8	1.0	.2	.9	-.6	.8	.3	
Non-energy	18.27	-1.0	-2.8	-.3	1.1	-1.4	-2.3	1.6	.3	.8	-.6	.0	-.5	
Foods and tobacco	9.97	-.6	-3.9	-1.9	-.7	-1.7	-.2	-3.2	-.3	.4	-.8	-.2	-2.5	
Clothing	.86	-15.1	-2.4	-13.4	-18.7	-18.5	-18.2	3.9	1.7	.6	-.2	-1.0	-11.2	
Chemical products	4.67	3.0	-1.8	3.3	1.7	-.9	1.0	9.8	1.0	1.6	-.7	.5	4.0	
Paper products	2.24	-3.2	-.9	5.6	15.6	4.2	-2.8	6.1	1.4	.7	-.4	.0	3.5	
Energy	4.75	-5.8	8.7	-2.8	2.2	-16.0	5.5	-1.2	-.4	1.4	-.5	4.1	3.4	
Business equipment	9.57	-12.8	-1.4	2.7	3.3	-4.8	5.3	7.3	-.3	1.8	.0	.5	3.3	
Transit	1.57	-5.9	-15.2	-3.1	-11.8	-12.6	3.9	9.9	-1.5	1.5	1.1	.6	.3	
Information processing	3.05	-12.8	5.5	8.3	17.8	-1.3	8.8	8.8	1.8	-.1	-.7	.5	5.2	
Industrial and other	4.96	-15.0	-1.0	1.0	-.2	-4.5	3.5	5.6	-1.3	3.1	-.1	.5	3.0	
Defense and space equipment	1.99	12.4	3.6	4.7	9.9	1.8	6.1	1.2	.0	-.4	-.3	-.8	1.4	
Construction supplies	4.23	-6.5	.4	1.1	-2.9	-4.5	4.7	7.6	.9	1.0	.0	.4	1.8	
Business supplies	11.30	-5.6	1.4	1.4	3.1	-4.1	1.6	5.2	.7	1.0	-.2	1.1	2.2	
MATERIALS														
Non-energy	41.38	-5.7	2.5	2.0	-.6	-3.4	5.0	7.2	.5	1.0	.4	.9	3.5	
Durable	29.85	-6.6	3.0	2.6	-1.0	-3.3	5.5	9.5	.5	1.1	.7	.5	3.9	
Consumer parts	18.64	-7.2	4.2	4.4	-.8	-.3	9.4	12.8	.8	1.2	.8	.8	6.0	
Equipment parts	3.92	-7.2	6.7	2.5	.9	-9.8	8.1	12.4	-.7	.9	1.8	.8	3.3	
Other	6.51	-7.4	5.9	11.8	3.0	6.8	20.4	17.9	1.2	1.5	1.0	1.6	14.4	
Other	8.21	-6.8	1.5	-.5	-4.7	-7.3	1.7	9.0	1.3	1.1	.2	.2	.8	
Nondurable	11.20	-5.6	.9	-.5	-1.3	-3.8	-.7	4.1	-.2	1.0	.4	.0	.5	
Textile	.68	-11.6	-1.0	-10.3	-13.7	-16.5	-17.3	8.4	1.1	1.5	-.6	.3	-7.2	
Paper	2.61	-6.1	1.5	4.4	-.6	-3.9	-3.0	2.9	-1.0	.8	.4	.1	-1.8	
Chemical	4.23	-5.1	1.7	2.7	2.2	-5.2	4.2	10.2	-.3	1.8	.8	1	3.6	
Energy	11.53	-2.9	1.0	.5	.5	-3.6	3.9	1.6	.5	.5	-.3	2.0	2.5	
INDUSTRY GROUPS														
Manufacturing	82.29	-5.6	1.0	1.8	1.0	-3.2	3.7	6.0	.2	1.0	.1	.3	2.3	
Manufacturing (NAICS)	76.93	-5.5	1.2	1.7	-.1	-3.6	4.3	6.1	-.1	1.0	.2	.3	2.3	
Durable manufacturing	41.70	-7.3	3.0	3.7	1.4	-3.9	8.4	9.6	.1	1.2	.5	.6	4.4	
Wood products	321	1.45	-2.2	-1.8	3.2	-2.7	-2.8	7.2	11.7	2.5	1.1	-.3	.8	4.3
Nonmetallic mineral products	327	2.26	-5.6	2.1	1.2	-2.2	-3.0	3.9	6.4	1.1	.9	.6	2.1	
Primary metal	331	2.16	-10.6	3.5	-.8	-1.8	-16.0	-.6	18.0	2.1	2.3	.8	-1.4	-2.4
Fabricated metal products	332	5.64	-8.4	-.1	-1.6	-5.1	-8.6	1.7	6.2	.2	.9	.7	.9	
Machinery	333	5.12	-17.1	-.9	2.8	-.3	-.1	2.9	9.0	-1.1	3.8	1	.6	5.8
Computer and electronic products	334	7.91	-7.5	10.8	15.7	12.2	7.5	25.0	19.1	2.1	.8	2	1.0	14.9
Electrical equip., appliances, and components	335	2.18	-12.7	-2.3	.8	-3.7	-3.1	1.3	9.3	.6	1.3	.4	.4	3.1
Motor vehicles and parts	3361-3	6.67	-2.8	9.9	3.9	.6	-11.2	19.3	9.2	-2.2	.5	.8	.9	3.2
Aerospace and other miscellaneous transportation equipment	3364-9	3.46	4.9	-9.7	.7	-2.9	-1.6	2.5	5.0	-.1	.9	.6	.5	2.2
Furniture and related products	337	1.65	-7.4	-.4	-2.3	-.4	-8.1	-.4	-.1	-.5	.7	.3	.3	-2.5
Miscellaneous	339	3.20	-2.8	3.5	-1.4	5.8	-6.4	-4.7	-.3	-.4	.4	1.3	.3	-1.6
Nondurable manufacturing	35.23	-3.3	-.9	-.8	-.1	-1.5	-3.2	-.3	2.1	.1	.8	-.2	.0	-.2
Food, beverage, and tobacco products	311,2	11.59	-.4	-3.5	-1.6	-.6	-1.2	-1.3	-3.2	-.4	.3	-.6	-.2	-2.1
Textile and product mills	313,4	1.17	-10.3	-1.3	-7.0	-11.6	-10.8	-9.7	5.4	1.7	2.3	1.9	1.2	-3.0
Apparel and leather	315,6	.94	-15.5	-2.0	-12.6	-17.9	-18.0	-16.7	4.3	1.6	.6	.1	-1.0	-10.4
Paper	322	2.97	-6.0	2.9	-2.8	-7.5	-.4	-2.9	-.1	.1	.7	.6	-.1	.1
Printing and support	323	2.35	-6.7	-1.7	5.1	-4.2	-10.4	-2.4	-3.0	-.5	-.3	-.1	-.1	-5.3
Petroleum and coal products	324	2.46	-2.5	1.2	2.4	2.3	-2.6	3.4	6.7	.2	.8	.8	-1.2	1.7
Chemical	325	10.02	-1.3	-.1	2.9	2.3	-1.7	3.4	8.0	.3	1.4	.0	.5	3.8
Plastics and rubber products	326	3.72	-5.7	2.2	-.1	-1.0	-4.4	1.6	3.7	.4	.9	-.3	-.1	.5
Other manufacturing (non-NAICS)	1133,5111	5.36	-6.3	-2.2	4.3	16.4	3.1	-5.3	4.3	1.0	.8	-.8	-.2	2.2
Mining	21	7.62	-1.0	-2.3	.7	.0	-.7	1.0	2.7	.2	.3	.2	.1	.9
Utilities	2211,2	10.08	-5.2	6.6	-1.1	.5	-13.3	6.8	2.6	1.0	1.6	-1.3	5.2	4.4
Electric	2211	8.32	-3.7	5.5	.0	.8	-10.9	9.2	2.2	1.3	1.7	-1.8	4.8	4.7
Natural gas	2212	1.77	-12.8	13.4	-6.6	-.5	-24.1	-3.5	4.7	-.2	1.0	1.0	7.0	2.8

• **Table 2** Industrial Production: Special Aggregates and Selected Detail

(9) One important way to determine whether companies are taking steps to operate more efficiently is to see if they are investing in high-technology products. This table has a category labeled “selected high-technology” that measures the

Table 2
INDUSTRIAL PRODUCTION: SPECIAL AGGREGATES AND SELECTED DETAIL
 Percent change, seasonally adjusted

Item	2003 proportion	Fourth quarter to fourth quarter			Annual rate				Monthly rate				Jan. '03 to Jan. '04	
		2001	2002	2003	2003 Q1	Q2	Q3	Q4 ^f	2003 Oct. ^f	Nov. ^f	Dec. ^f	2004 Jan. ^p		
Total industry	100.00	-5.2	1.3	1.4	.9	-4.0	3.8	5.4	.3	1.0	.0	.8	2.4	
Energy	18.95	-3.6	2.9	-2	1.1	-7.6	4.1	2.1	.5	.9	-5	2.7	2.8	
Consumer products	4.75	-5.8	8.7	-2.8	2.2	-16.0	5.5	-1.2	-.4	1.4	-5	4.1	3.4	
Commercial products	2.41	-1.6	3.5	.8	1.8	-12.1	3.4	11.8	2.4	2.0	-1.4	4.1	3.6	
Oil and gas well drilling	.25	-10.9	-14.8	4.0	-1.2	18.1	-2	.5	.5	-.4	.0	-5.2	.4	
Converted fuel	3.69	-7.9	3.7	.2	3.3	-17.2	15.7	1.9	1.4	1.1	-9	4.4	2.8	
Primary materials	7.84	-2	-.4	.8	-.9	3.7	-1.0	1.4	.1	.3	.0	.9	2.4	
Non-energy	81.05	-5.6	1.0	1.8	.8	-3.2	3.7	6.2	.2	1.0	.1	.3	2.3	
Selected high-technology industries		4.93	-8.4	15.3	21.6	13.8	14.4	33.3	26.0	2.4	1.3	1.3	2.6	24.6
Computers and office equipment	3341	1.17	-5.7	24.0	14.0	15.9	-4.3	20.2	26.7	2.1	1.9	1.8	2.0	14.2
Communication equipment	3342	1.31	-22.8	-5.5	5.8	27.4	2.8	-6.7	2.4	2.2	-9	-1.8	1.9	4.2
Semiconductors and related electronic components	334412-9	2.45	.8	24.9	35.0	5.8	33.2	69.5	39.2	2.6	2.1	2.5	3.2	42.7
Excluding selected high-technology industries		76.11	-5.2	-.1	.6	-.1	-4.3	1.9	4.9	.0	1.0	.0	.2	.9
Motor vehicles and parts	3361-3	6.67	-2.8	9.9	3.9	.6	-11.2	19.3	9.2	-2.2	.5	.8	.9	3.2
Motor vehicles	3361	2.94	1.5	11.6	3.7	1.3	-14.4	28.4	3.7	-4.7	-.5	.4	1.0	1.4
Motor vehicle parts	3363	3.32	-5.3	7.8	3.1	.6	-8.9	12.2	10.0	-.9	.3	1.5	1.0	3.7
Excluding motor vehicles and parts		69.44	-5.5	-1.0	.2	-.1	-3.6	.4	4.5	.3	1.1	.0	.1	.6
Consumer goods	26.22	-1.5	-.3	.7	1.1	-3.0	1.5	3.1	.0	.9	-.4	.2	.2	
Business equipment	7.29	-11.5	-4.6	.8	-.3	-5.3	4.3	4.9	-.8	2.1	.0	.1	1.9	
Construction supplies	4.19	-6.4	.5	1.0	-3.2	-4.6	4.9	7.6	.8	.9	.0	.3	1.7	
Business supplies	10.95	-5.5	.7	.5	2.9	-5.1	.1	4.4	.6	1.0	-.3	1.0	1.2	
Materials	24.81	-7.2	.3	-.2	-2.0	-5.1	.1	6.6	.4	1.1	.4	.1	.8	
Measures excluding selected high-technology industries														
Total industry	95.07	-4.9	.4	.4	.1	-5.0	2.4	4.4	.1	1.0	-.1	.7	1.2	
Manufacturing ¹	77.36	-5.2	-.1	.6	.1	-4.3	1.9	4.8	.0	1.0	.1	.2	.9	
Durable	36.96	-6.9	1.0	1.3	-.5	-6.4	5.1	7.4	-.1	1.2	.4	.3	1.7	
Measures excluding motor vehicles and parts														
Total industry	93.33	-5.4	.8	1.3	.9	-3.5	2.8	5.1	.4	1.0	-.1	.8	2.3	
Manufacturing ¹	75.62	-5.8	.3	1.6	1.0	-2.4	2.4	5.7	.4	1.1	.1	.3	2.2	
Durable	35.22	-7.9	1.8	3.6	1.4	-2.5	6.3	9.7	.6	1.3	.4	.5	4.5	
Measures excluding selected high-technology industries and motor vehicles and parts														
Total industry	88.40	-5.1	-.2	.1	.1	-4.5	1.2	4.0	.3	1.0	-.1	.7	1.1	
Manufacturing ¹	70.69	-5.5	-.9	.3	.1	-3.6	.4	4.3	.2	1.0	.0	.1	.6	
Stage-of-process components of non-energy materials, measures of the input to														
Finished processors	13.73	-7.4	5.0	4.8	-.6	-1.4	10.1	11.8	.2	1.2	1.0	1.0	6.9	
Semifinished and primary processors	16.12	-5.8	1.2	.6	-1.4	-5.0	1.7	7.6	.6	1.1	.3	.0	1.4	

output of computers, sophisticated office equipment, semiconductors, and related electronic components. Higher output in these items reflects a willingness by firms to make the necessary investments to lift productivity levels.

- (10) Because of the enormous influence of motor vehicle output on the manufacturing industry, large fluctuations in this one group can greatly distort swings in industrial production overall. To find out how much manufacturers outside the auto industry are producing, look at the output measure excluding motor vehicles and parts.

Table 3
MOTOR VEHICLE ASSEMBLIES
Millions of units, seasonally adjusted annual rate

Item	2003 average	2003 Q1	Q2	Q3	Q4	2003 Oct.	Nov.	Dec.	2004 Jan.
Total	12.09	12.30	11.76	12.29	12.20	12.24	12.12	12.24	12.29
Autos	4.51	4.68	4.43	4.56	4.41	4.54	4.41	4.29	4.31
Trucks	7.58	7.63	7.32	7.73	7.79	7.70	7.72	7.95	7.99
Light	7.32	7.39	7.08	7.46	7.49	7.40	7.41	7.64	7.67
Medium and heavy	.26	.23	.24	.26	.30	.29	.30	.31	.32
MEMO									
Autos and light trucks	11.83	12.07	11.52	12.03	11.90	11.94	11.82	11.93	11.97

• **Table 3** Motor Vehicle Assemblies

(11) No single industry is more closely identified with manufacturing than automakers. They are responsible for seven million jobs and represent about 4% of GDP. The U.S. automotive industry produces a higher level of output than any other single industry. It is among the largest purchasers of aluminum, iron, plastics, rubber, textiles, vinyl, steel, and computer chips. It’s also an industry that is highly sensitive to interest rates. High rates will dull sales and lead to lower auto production and even layoffs, whereas a drop in financing costs can spur purchases of motor vehicles, increase assembly line output, and fuel more economic growth. Given its unique position in American business, the Federal Reserve has dedicated a separate table on the output of cars and trucks produced every month.

• **Table 7** Capacity Utilization

(12) This is one of the most interesting tables in the entire release. When it comes to capacity utilization rates, not all industries share the same threshold for inflation. Operating at 85% capacity might pose a serious strain for the motor vehicle industry, but it’s unlikely to overtax the primary metals producers. Table 7 shows the current and historical capacity utilization rates for many key industries. The data here can help presage inflationary pressures for specific sectors. Here’s one example: The computer industry operated at a peak of 86.6% of capacity during the halcyon years of 1994–95. However, in 2003, the industry was operating at an average capacity of just 71%. With so much excess production capacity sitting idle, prices for computers and peripheral equipment were able to stay down.

This table can also give you a heads up on which industries are likely to increase future capital investments. Producers who have been operating at high-capacity utilization rates are likely to increase outlays for new facilities to relieve current production pressures and improve productivity.

Percent of capacity, seasonally adjusted

Item	2003 proportion	1972-2003 ave.	1988-89 high	1990-91 low	1994-95 high	2003				2004			
						Q1	Q2	Q3	Q4 ^f	Oct. ^f	Nov. ^f	Dec. ^f	Jan. ^p
Total industry	100.00	81.1	85.2	78.6	84.8	75.1	74.1	74.6	75.4	75.0	75.7	75.6	76.2
Manufacturing	84.35	80.0	85.6	77.2	84.3	73.5	72.7	73.2	74.1	73.6	74.3	74.4	74.6
Manufacturing (NAICS)	79.53	79.8	85.5	77.0	84.4	72.9	72.0	72.6	73.6	73.1	73.8	73.9	74.0
Durable manufacturing	44.99	78.3	84.5	73.4	83.7	70.3	69.1	70.1	71.4	70.8	71.5	71.8	72.1
Wood products	321	1.45	80.2	88.8	73.0	87.9	73.1	72.7	74.0	76.1	75.7	76.5	76.2
Nonmetallic mineral products	327	2.20	79.4	85.7	72.1	84.0	77.5	76.9	77.7	78.8	78.3	78.9	79.4
Primary metal	331	2.18	80.8	95.3	75.2	94.9	76.8	73.4	73.3	76.3	74.9	76.7	77.3
Fabricated metal products	332	6.26	76.9	80.3	71.1	83.8	68.8	67.2	67.3	68.2	67.7	68.3	68.7
Machinery	333	5.73	79.5	84.6	72.8	87.6	66.8	67.0	67.6	69.3	67.5	70.1	70.3
Computer and electronic products	334	9.67	79.1	81.1	76.3	85.3	63.2	62.9	65.2	66.8	66.9	67.0	66.7
Electrical equip., appliances, and components	335	2.23	83.0	87.4	75.0	92.5	73.5	73.1	73.5	75.4	74.6	75.6	75.9
Motor vehicles and parts	3361-3	6.27	77.7	89.7	56.5	87.8	80.9	77.9	80.7	81.8	81.5	81.7	82.2
Aircraft and other miscellaneous transportation equipment	3364-9	4.06	72.9	88.9	81.9	67.7	63.8	63.6	64.0	64.8	64.3	64.9	65.3
Furniture and related products	337	1.77	78.9	84.0	67.9	83.7	71.1	69.6	69.6	69.6	69.2	69.7	69.9
Miscellaneous	339	3.15	76.9	81.7	77.7	81.2	77.8	76.5	75.6	75.7	75.1	75.4	76.4
Nondurable manufacturing	34.55	82.0	87.0	81.8	85.5	76.5	76.1	76.1	76.7	76.3	76.9	76.8	76.9
Food, beverage, and tobacco products	311.2	11.18	82.1	85.5	81.3	84.5	77.4	77.3	77.2	76.8	76.7	77.0	76.6
Textile and product mills	313.4	1.23	83.3	91.4	77.2	91.0	73.2	71.7	70.4	72.0	71.2	73.0	71.8
Apparel and leather	315.6	1.13	79.6	84.2	77.3	89.2	65.2	63.4	61.9	64.0	63.3	64.1	64.6
Paper	322	2.69	88.3	93.7	85.2	92.4	83.6	83.8	83.4	83.6	82.9	83.6	84.2
Printing and support	323	2.46	84.3	91.6	82.7	86.0	73.7	71.9	71.8	71.5	71.6	71.5	71.5
Petroleum and coal products	324	2.07	86.4	88.9	82.5	90.2	88.4	87.6	87.9	89.0	88.4	89.0	89.6
Chemical	325	10.27	78.4	85.6	80.8	81.3	73.1	72.6	73.0	74.2	73.5	74.5	74.8
Plastics and rubber products	326	3.51	83.7	91.3	77.2	92.4	79.6	79.1	79.9	81.1	80.6	81.4	81.3
Other manufacturing (non-NAICS)	1133,5111	4.81	83.6	90.7	79.1	82.8	82.3	83.2	82.4	83.5	83.2	84.0	83.4
Mining	21	6.71	86.9	85.6	83.4	88.3	84.7	84.7	85.0	85.6	85.4	85.7	85.9
Utilities	2211,2	8.95	86.9	92.8	84.1	93.8	86.3	82.4	82.9	82.6	82.4	83.4	82.1
Selected high-technology industries	6.35	78.8	79.9	74.5	88.3	61.7	62.0	65.0	67.1	66.8	67.2	67.4	68.6
Computers and office equipment	3341	1.37	78.1	79.3	67.2	86.6	71.4	68.6	70.4	73.3	72.4	73.3	74.1
Communications equipment	3342	2.09	77.7	81.7	73.2	87.5	50.6	50.9	50.2	50.7	51.3	50.9	50.1
Semiconductors and related electronic components	334412-9	2.89	80.7	80.5	78.1	91.5	64.9	66.8	73.0	75.9	75.3	75.8	76.5
Measures excluding selected high-technology industries													
Total industry	93.65	81.3	85.6	78.8	84.7	76.3	75.3	75.7	76.4	76.0	76.7	76.6	77.1
Manufacturing ¹	78.00	80.1	86.1	77.3	84.1	74.7	73.9	74.3	75.1	74.6	75.4	75.4	75.6
STAGE-OF-PROCESS GROUPS													
Crude	9.67	86.3	88.5	84.7	88.9	83.3	83.3	83.7	84.0	83.8	84.0	84.3	84.6
Primary and semifinished	48.65	82.2	86.4	77.5	87.9	77.2	75.8	76.4	77.5	77.0	77.8	78.7	78.7
Finished	41.68	78.2	83.2	77.2	80.3	71.2	70.4	70.9	71.5	71.1	71.8	71.6	71.7

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→

MARKET IMPACT

Bonds

Traders in the fixed-income market usually can anticipate changes in industrial production before the official release is out. What tips them off are earlier reports, such as factory hours worked (from the employment data), the purchasing managers report (based on the ISM survey), producer prices, and retail sales. Of course, surprises do happen from time to time. Should industrial production and capacity utilization jump by a greater-than-expected amount, this can prompt a sell-off in the bond market. This is particularly the case if the utilization rate climbs above 80%, a zone that can begin to drain resources, create bottlenecks, and accelerate inflation.

On the flip side, slower production along with falling utilization rates could raise bond prices and lower interest rates because the threat of inflation has subsided.

Stocks

Industrial production is not one of those high-profile indicators known to roil the equity market. Strong production is generally considered to be supportive of stock prices because it signifies more economic growth and better corporate profits. The only concern for stock investors is if higher production leads to excessively tight capacity and higher prices. Should the latter scenario emerge, stocks might react negatively to a jump in industrial output.

Dollar

Normally, the dollar reacts modestly to industrial production. Foreigners try to assess how production and capacity utilization will affect future inflation and interest rates in the U.S. Because a jump in industrial output suggests faster economic growth, it can increase foreign demand for dollar-based investments—or, at the very least, prevent U.S. currency from falling.

INSTITUTE FOR SUPPLY MANAGEMENT (ISM) MANUFACTURING SURVEY

Market Sensitivity: Very high.

What Is It: First monthly report on the economy with a focus on manufacturing.

Most Current News Release on the Internet: www.ism.ws/ISMReport/index.cfm

Home Web Address: www.ism.ws

Release Time: 10:00 a.m. (ET); released the first business day after the reporting month.

Frequency: Monthly.

Source: Institute for Supply Management.

Revisions: No monthly revisions are done, but every January the seasonal adjustment factors are reassessed and this can lead to changes in all the data.

WHY IS IT IMPORTANT?

You might choose to ignore this economic indicator because of its less-than-riveting name. So here's a warning: Don't! It is the first piece of news on the economy out of the gate every month and the most influential statistic released by the private sector. The organization behind this market-moving series is the Institute for Supply Management (ISM), a Tempe, Arizona-based group that represents corporate purchasing managers around the country. Indeed, prior to January 2002, it was known by the more transparent name of National Association of Purchasing Managers. The ISM puts out two major surveys each month. The first is based on comments from purchasing managers in the manufacturing sector. The second deals with their counterparts in the non-manufacturing, or service, industry. It is the manufacturing survey that grabs most of the attention in the financial markets and the press.

This raises an immediate question. How is it that an obscure bunch of purchasing managers in manufacturing can hold such sway over the investment community? The answer can be found by understanding what corporate purchasing agents do. Manufacturing companies need lots of supplies to make products. Those in charge of procuring this material for their companies are purchasing managers. A sample of items they might order includes wiring, packing boxes, ink, and computers. If there is a pickup in demand for manufactured products, purchasing managers quickly respond by increasing orders for production material and other supplies. If manufacturing sales slow, these corporate buyers will cut back on industrial orders. Thus, by virtue of their position, purchasing managers are in the forefront of monitoring activity in manufacturing. That's important because the goods-producing industry is highly sensitive to the ebb and flow of business in the broader economy. Best of all about the ISM's Purchasing Managers Index is its timing. Survey results come out on the first business day of every month. As such,

they provide the earliest clues about how the economy has fared during the previous four weeks. Indeed, the numbers are so current that Federal Reserve officials are briefed on the data before the public sees it. The ISM's non-manufacturing report (see the next major section) comes out two business days later, but it has not yet achieved the exalted status of the manufacturing release.

HOW IS IT COMPUTED?

The ISM's manufacturing survey has an interesting history. Its origin can be traced to Herbert Hoover. Faced with a collapsing U.S. economy during the Great Depression, President Hoover was frustrated by the lack of current data on the health of American manufacturers. He approached the ISM, then known as the National Association of Purchasing Agents, and urged them to develop a survey that would provide up-to-date information on the health of this important part of the economy. The group complied, and the survey began in 1931. It has been around ever since, except for a brief four-year interruption during World War II.

Nowadays, the ISM mails out questionnaires every month to about 400 member companies around the country, representing 20 different industries. Corporate purchasing managers are asked to assess whether activity is rising, falling, or unchanged in the following fields:

- New orders: Purchasing agents ask their salespeople about new orders received.
- Production: Manufacturing output.
- Employment: Hiring in the company.
- Supplier deliveries (or vendor performance): Speed of delivery from suppliers.
- Inventories: The rate of liquidating manufacturers' inventories.
- Customers' inventories: Agents guess the inventory levels of their customers.
- Commodity prices: Prices paid by manufacturers for supplies.
- Backlog of orders: Orders not yet filled.
- New export orders: Rate of new orders from other countries.
- Imports: Material that agents purchased from other countries.

(Seasonal adjustment factors are applied only on new orders, production, employment, supplier deliveries, inventories, export orders, and imports.)

The Purchasing Managers Index (PMI) itself is a compilation based on the responses to the first five queries in the preceding list. They are weighted equitably to compute the index: new orders (20%), manufacturing production (20%), employment (20%), supplier deliveries (20%), and inventories (20%). The bottom five entries provide additional coverage on how manufacturing is performing. The PMI is calculated as a so-called diffusion index, which by definition measures the degree to which a change in something is dispersed or "diffused" in a particular group. It does not show actual levels of production.

As the responses from members come in, the ISM takes the percentage of those who reported activity being higher in each component and adds that to half the percentage of those who reported seeing no changes. The result is then adjusted for seasonal factors. If the result is an index number above 50, it means the manufacturing sector is growing. Below 50 means it's contracting. An index of 50 represents no change in activity.

Here are two examples: Let's say 100% of those surveyed reported no change in manufacturing production. To come up with the index, take half the percentage of those who said orders were unchanged (which gives you 50%) and add it to the percentage of agents who saw higher activity (no one did, so it's 0%). If the outcome comes to a seasonally adjusted index of 50, it means that purchasing managers have seen no discernible change in manufacturing output from one month to the next.

In the second example, we'll assume that 30% of the agents reported higher activity, and 50% noticed no change in business. The diffusion index in this case comes to 55% (30 plus half of 50 plus assume a seasonally adjusted factor of 1.0), which is a sign that manufacturing output is expanding.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

You can glean lots of information about the present health of specific industries from the ISM survey. For example, inside the ISM report, 20 different business sectors—from food to furniture manufacturers—are probed so that you can see where the greatest sources of strength and weakness are in the economy. Which sectors are growing, hiring, or feeling the inflation pinch? What makes this so valuable to equity investors is the timeliness of the results and the fact that this information came directly from industry executives. With very few exceptions over its long history, the ISM index has been an excellent leading indicator of GDP growth.

The screenshot shows the ISM website interface. At the top left is the ISM logo with the tagline 'Advancing the purchasing and supply management profession through education and development.' The date 'April 30, 2004' is in the top right. A search bar is located in the top right corner. Below the search bar are links for 'JOIN ISM', 'PURCHASE', 'REGISTER NOW', and 'CONTACT US'. A navigation menu on the left lists various categories such as 'ABOUT ISM', 'MEMBERS ONLY', 'ISM MEMBERSHIP', 'SOCIAL RESPONSIBILITY', 'CERTIFICATION (C.P.M. & A.P.P.)', 'PRODUCTS & STUDY MATERIALS', 'SEMINARS & ONLINE LEARNING', 'CONFERENCES & PROGRAMS', 'INSIDE SUPPLY MANAGEMENT & OTHER PUBLICATIONS', 'ISM REPORT ON BUSINESS', 'ONLINE GUIDES, TOOLS & LINKS', 'GOLD RESEARCH', 'CAREER CENTER', 'ADVERTISE/EXHIBIT WITH ISM', and 'SEARCH'. The main content area features a dropdown menu for 'In This Section' and a heading 'ISM Reports On Business®'. Below this heading is a list of report links: 'Manufacturing Data', 'Non-Manufacturing Data', 'Manufacturing and Non-Manufacturing Graphical Data', 'Regional Data', 'ISM/Forrester Research Report on Technology in Supply Management', 'Find out how to respond to ISM's Report On Business*', 'ISM's Report On Business® Frequently Asked Questions', and 'JPMorgan Global PMI Reports on Manufacturing and Services'. The main content area also displays 'Report On Business® MANUFACTURING' with a sub-heading and two links: 'Latest Manufacturing ROB' and 'Seasonal Adjustments'.

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- ISM Manufacturing Survey at a Glance

The latest outcome of the Purchasing Managers Index and its components is the first table in the report, and it's well worth studying. The overall PMI has been effective at gauging turning points in the business cycle and thus is closely linked to movement in the GDP. For instance, a PMI reading of 50 is believed to be consistent with real GDP growth of about 2.5%. Every full point in the index above 50 can add another 0.3 percentage points or so of growth over the year.

MARCH 2004 ISM BUSINESS SURVEY AT A GLANCE

	Series Index	Direction Mar vs Feb	Rate of Change Mar vs Feb
PMI	62.5	Growing	Faster
New Orders	65.7	Growing	Slower
Production	65.5	Growing	Faster
Employment	57.0	Growing	Faster
Supplier Deliveries	67.9	Slowing	Faster
Inventories	48.3	Contracting	Faster
Customers' Inventories	39.5	Too Low	Slower
Prices	86.0	Increasing	Faster
Backlog of Orders	63.5	Growing	Faster
New Export Orders	62.0	Growing	Faster
Imports	56.8	Growing	Slower

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More broadly, here is how you can interpret the results:

- Above 50: Both manufacturing and the economy are expanding.
- Below 50 but above 41.1: Manufacturing activity is contracting, yet the overall economy may still be growing.
- Below 41.1 on a sustained basis: Both manufacturing and the economy are likely to be in recession. The prospect increases that Fed officials will lower rates to spur faster economic growth.

What if the PMI surges beyond the 60 range? That depends on how long it stays there and whether supplies and capacity utilization are getting tight. Three to six months above 60 in an economy already showing vigorous growth, and low unemployment, could prompt the Federal Reserve to raise interest rates.

One of the most useful leading economic indicators of future production is new orders. A jump in orders is normally followed by higher production in the months ahead. Should new orders show a persistent decline, it's an omen that activity in

manufacturing, and possibly the overall economy, may soon start to sputter, if not stall.

New Orders

ISM's New Orders Index grew in March with a reading of 65.7 percent. The index is 0.7 percentage point lower than the 66.4 percent registered in February and is the 11th consecutive month the index has exceeded 50 percent. A New Orders Index above 51 percent, over time, is generally consistent with an increase in the Census Bureau's series on manufacturing orders (in constant 1987 dollars). Nineteen industries report increases for the month of March: Tobacco; Leather; Industrial & Commercial Equipment & Computers; Wood & Wood Products; Transportation & Equipment; Textiles; Paper; Primary Metals; Chemicals; Printing & Publishing; Glass, Stone & Aggregate; Miscellaneous*; Apparel; Fabricated Metals; Electronic Components & Equipment; Rubber & Plastic Products; Instruments & Photographic Equipment; Food; and Furniture.

New Orders	%Better	%Same	%Worse	Net	Index
March 2004	50	41	9	+41	65.7
February 2004	49	41	10	+39	66.4
January 2004	48	40	12	+36	71.1
December 2003	45	42	13	+32	73.1

The employment index series should be tracked to see whether factories are laying off or actively hiring new workers. The ISM can thus foreshadow changes in employment conditions before the official jobs report is released.

Employment

ISM's Employment Index grew for the fifth consecutive month, following a 37-month trend of contraction. The index registered 57 percent in March compared to 56.3 percent in February, an increase of 0.7 percentage point. The last time the Employment Index registered higher than March's index was in December 1967, registering 59.1 percent. An Employment Index above 48 percent, over time, is generally consistent with an increase in the Bureau of Labor Statistics (BLS) data on manufacturing employment. The 11 industries reporting growth in employment during March are: Miscellaneous*; Transportation & Equipment; Industrial & Commercial Equipment & Computers; Apparel; Furniture; Electronic Components & Equipment; Textiles; Chemicals; Instruments & Photographic Equipment; Wood & Wood Products; and Rubber & Plastic Products.

Employment	%Higher	%Same	%Lower	Net	Index
March 2004	26	65	9	+17	57.0
February 2004	23	66	11	+12	56.3
January 2004	16	73	11	+5	52.9
December 2003	21	64	15	+6	53.5

The supplier deliveries index (also known as vendor performance) deserves close monitoring. It tracks the change in delivery times that purchasing agents experience from their suppliers. An index figure racing into the high 50s and above means purchasing agents are waiting longer to receive material they ordered. This normally occurs when demand is so strong that suppliers are having trouble shipping goods in time. In such a climate, suppliers can regain pricing power, which, of course, also raises fresh concerns about future inflation. This index has proven to be such an effective predictor of economic activity that it is included in the Conference Board's Index of Leading Economic Indicators.

Supplier Deliveries

ISM's Supplier Deliveries Index indicates that delivery performance is slower when comparing March to February. March's reading of 67.9 percent is an increase of 5.8 percentage points over February's reading of 62.1 percent. A reading above 50 percent indicates slower deliveries. The 17 industries reporting slower supplier deliveries in March are: Primary Metals; Miscellaneous*; Electronic Components & Equipment; Fabricated Metals; Transportation & Equipment; Instruments & Photographic Equipment; Textiles; Apparel; Paper; Industrial & Commercial Equipment & Computers; Furniture; Printing & Publishing; Wood & Wood Products; Glass, Stone & Aggregate; Food; Chemicals; and Rubber & Plastic Products.

Supplier Deliveries	%Slower	%Same	%Faster	Net	Index
March 2004	38	59	3	+35	67.9
February 2004	28	70	2	+26	62.1
January 2004	24	72	4	+20	60.4
December 2003	17	81	2	+15	58.6

Customer inventories (table not shown) is also an interesting category in the ISM survey. Purchasing managers go on record characterizing the inventory levels of their customers. But this index works perversely. A higher number means more customers are unhappy about the buildup in their inventories and are thus less likely to place new orders, which augurs slower factory output in the near future. If they perceive those inventories to be low and the index falls below 50, it should be viewed as a positive development. Dwindling customer inventories can lead to greater production by manufacturers because their clients will eventually need to replenish their own stock of goods to stay in line with sales.

The price index reflects the change in prices paid by manufacturers for material. It can tell you if inflation is accelerating or decelerating early in the production process. This price index has a correlation over time with changes in monetary policy by the Federal Reserve. If the price index stays above 65, chances increase that the Fed will step in and lift rates.

Prices^{aa}

ISM's Prices Index indicates manufacturers continued to pay higher prices in March. This is the 25th consecutive month the index has registered higher prices. March's index is at 86 percent, 4.5 percentage points higher than February's reading of 81.5 percent. The last time the index registered as high as March's index was in January 1995 when it was also 86 percent. In March, 73 percent of supply executives reported paying higher prices and 1 percent reported paying lower prices, while 26 percent reported that prices were unchanged from the preceding month.

A Prices Index below 46.9 percent, over time, is generally consistent with a decrease in the Bureau of Labor Statistics (BLS) Index of Manufacturers' Prices. The 19 industries reporting paying higher prices in March are: Tobacco; Leather; Textiles; Primary Metals; Miscellaneous*; Industrial & Commercial Equipment & Computers; Food; Fabricated Metals; Wood & Wood Products; Transportation & Equipment; Furniture; Glass, Stone & Aggregate; Paper; Electronic Components & Equipment; Chemicals; Rubber & Plastic Products; Apparel; Printing & Publishing; and Instruments & Photographic Equipment.

Prices	%Higher	%Same	%Lower	Net	Index
March 2004	73	26	1	+72	86.0
February 2004	65	33	2	+63	81.5
January 2004	54	43	3	+51	75.5
December 2003	37	58	5	+32	66.0

New exports orders (table not shown) is an index with a double-edged sword. Although a jump in orders from other countries can boost domestic manufacturing,

encourage hiring, and fuel GDP growth, it can also heat up the pressure of inflation as buyers in the U.S. have to compete with foreigners for American products and resources. This poses little problem if the domestic economy is weak. But if the U.S. and international economies are simultaneously showing robust growth, product prices will march higher.

MARKET IMPACT

Bonds

For players in the bond market, the PMI is one of a handful of indicators that can truly shake things up. Though manufacturing plays a far smaller role in the economy than it did 50 years ago, the timing of the data and its sensitivity to economic turning points make the ISM report one of the “big” ones to watch. Indeed, long-term bond yields have a 70% correlation with the ISM manufacturing index. Adding to its reputation as a major market mover is the PMI’s history of frustrating even the best forecasters. Economists are not very good at predicting what the PMI will be because so little other information is available on the month just concluded.

Just how the market will react to the ISM depends largely on where the economy stands in the business cycle. Normally, investors view a PMI consistently above 50 as bearish for fixed incomes, especially if the economy is well into its expansionary phase because that can aggravate inflation pressures and invite higher interest rates. An index of 45 to 50 is unlikely to cause much of a stir in the bond market. A reading below 45, however, could energize the bond market, because it denotes serious weakness in manufacturing and perhaps for the broader economy.

Stocks

The equity market will react positively to a rising PMI, particularly after a period of tepid economic growth. Of course, if the index jumps at a time when business activity is already in high gear, stock prices could drop as worries mount that the economy may be in danger of overheating. This raises the probability that the Federal Reserve will boost interest rates to cool business activity.

Dollar

If the economy is fundamentally healthy and inflation is in check, the dollar will likely bounce higher, with a PMI above 50. Conversely, should the ISM report portray a manufacturing sector teetering on recession, foreigners might sell some of their dollar-linked investments, depressing the greenback’s value against other key currencies.

INSTITUTE FOR SUPPLY MANAGEMENT (ISM) NON-MANUFACTURING BUSINESS SURVEY

Market Sensitivity: Medium.

What Is It: The first read on the economy's service sector.

Most Current News Release on the Internet: www.ism.ws/ISMReport/index.cfm

Home Web Address: www.ism.ws

Release Time: 10:00 a.m. (ET); released on the third business day following the month being reported.

Frequency: Monthly.

Source: Institute for Supply Management.

Revisions: No monthly revisions. There are yearly reassessments of seasonal adjustment factors. They are normally done in January and can lead to revisions for the previous four years.

WHY IS IT IMPORTANT?

This survey once reminded me of Rodney Dangerfield's old lament: "I get no respect, no respect at all." Published for the first time in June 1998, the ISM's Non-Manufacturing Survey looks at conditions in the service sector. For years, it lacked the kind of recognition and gravitas its manufacturing counterpart had in the financial markets, but that has clearly changed. This non-manufacturing report is now viewed as one of the most important economic indicators put out every month. The reason? The service sector makes up more than 85% of the entire U.S. economy. Its predominant role thus commands attention, and the ISM does an excellent job of identifying changes in employment trends, new orders, and prices in the non-manufacturing industries. Equally important is that the trade group then publishes the results for all to see on a near-real-time basis. The data comes out on the third business day of each month and covers the month just concluded.

Why did the financial markets initially pay less attention to this report than its manufacturing cousin? For one, the non-manufacturing release is relatively new, and there has not been enough historical experience to draw a relationship with GDP performance. Several more years of tracking ISM's non-manufacturing index as a harbinger of economic activity will be needed to establish any reliable correlation. Another reason it has been slow to excite investment managers and forecasters is that the service sector is not as cyclical as manufacturing. During tough economic times, Americans quickly slash spending on pricey manufactured goods (such as cars, furniture, and home entertainment systems), but they will not significantly pare back outlays on services, because there is always a demand for medical care, transportation, and communications. That makes the ISM's non-manufacturing index less than an ideal forecasting tool to identify turning

points in the economy. Nevertheless, the non-manufacturing index is a compelling indicator simply because it encompasses so much of the economy and provides a very current assessment of business conditions.

There are some similarities and differences between this survey and its better-known manufacturing cousin. Both look at the same components, such as backlog of orders, new orders, employment, new export orders, imports, prices, inventory sentiment, supplier deliveries, and inventories. However, since we're dealing essentially with services, these categories are defined somewhat differently. For example, the pricing component in the manufacturing survey looks at the costs of raw materials and basic supplies. In contrast, costs in the service sector are more likely to be based on purchasing finished products and other services. Furthermore, exports in the non-manufacturing sector are not about shipping goods to other countries; they are about selling financial, consulting, entertainment, and accounting services to foreign companies and individuals. Last, there is no overall composite index like the ISM manufacturing report. Instead, the non-manufacturing survey uses a "business activity index" that measures the rate and direction of change in the service sector.

HOW IS IT COMPUTED?

The methodology for the non-manufacturing business activity index is much the same as that used in the manufacturing survey. Questionnaires are sent to more than 370 purchasing managers in over 17 industries, including legal services, entertainment, real estate, communications, insurance, transportation, banking, and lodging. The proportion of companies queried in each industry depends on how much that sector contributes to GDP.

Respondents are asked if they are experiencing higher activity, lower activity, or no change for each of the ten components listed here:

1. Business activity: Measures changes in the level of business activity in services.
2. New orders: Reflects shifts in the number of new orders from customers.
3. Employment: Looks at the rate of increase or decrease in employment.
4. Supplier deliveries: Tells whether deliveries from suppliers are faster or slower.
5. Inventories: Monitors the increase or decrease in inventory levels.
6. Customer inventories: Rates the level of inventories their clients have.
7. Prices: Reports whether member organizations are paying more or less for products and services.
8. Backlog of orders: Measures the amount of backlog of orders, whether growing or declining.
9. New export orders: Reports changes in the level of orders, requests for services, and other activities to be provided outside the U.S.
10. Imports: Measures the rate of change in materials and services imported.

The index is computed by giving equal 25% weight to the top four components (business activity, new orders, employment, and supplier deliveries). Seasonal adjustments are made for only four of the ten: business activity, new orders, employment, and prices.

For the main Business Activity index, a reading of 50 shows that the same percentage of purchasing managers reported higher activity as lower activity. Index values over 50 indicate growth, whereas below 50 means contraction. Since its inception in 1998, the ISM non-manufacturing Business Activity index has rarely dropped below 50.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

There is not enough history to determine whether this survey has any qualities as a leading indicator. Because the service sector is less prone to volatile cyclical swings, its predictive value might turn out to be limited. However, at least two components in the report can send up flares of trouble ahead: prices and employment.

- **Report on Non-Manufacturing: Prices (Not Shown)**

The pricing component in this survey can tip us off if the inflation threat is becoming more serious. After all, services account for about 60% of the consumer price index, and it has been the main culprit behind rising prices in the past. However, be aware that the price component in this report includes the cost of both services and materials purchased by non-manufacturers, so it should not be viewed strictly as a pure inflation gauge for services. Generally speaking, when this price index exceeds 60 beyond three months, it should flag investors that price increases might be accelerating for the broad economy too.

- **Report on Non-Manufacturing: Employment (Not Shown)**

This table can provide an early clue on what the monthly payroll numbers might show when the official employment report comes out for that month. Jobs in the non-manufacturing sector account for about 80% of all employment in the economy, so this table can serve as a leading indicator of labor market conditions. What's often overlooked by the press is that this table also points out which specific service industries are showing the most and least job growth.

MARKET IMPACT

So far there has been no discernible reaction in the bond, stock, and currency markets to the ISM's non-manufacturing survey. But over time, you can expect investors to take this indicator more seriously given the growing importance of services in the economy.

CHICAGO PURCHASING MANAGERS INDEX (BUSINESS BAROMETER)

Market Sensitivity: Medium.

What Is It: Measures business activity in the Midwest region.

Most Current News Release on the Internet: www.ism-chicago.org

Home Web Address: www.ism-chicago.org

Release Time: 9:45 a.m. (ET); released on the final business day of the month being covered. (Subscribers get this report several minutes before the public release.)

Frequency: Monthly.

Source: National Association of Purchasing Management, Chicago affiliate.

Revisions: The only revision comes from changes in seasonal adjustment factors, and it is made every January.

WHY IS IT IMPORTANT?

Timing can be everything when it comes to getting the public to notice an economic indicator. Take the Chicago Purchasing Managers report. This group is an affiliate of the Institute for Supply Management, which releases the market-sensitive Purchasing Managers Index the first business day after the reporting month ends. So what does the local Chicago chapter do to grab some of the limelight? It publishes the survey a business day before the ISM number is released. The strategy has worked well.

Money managers around the country and in the business press carefully look over the Chicago results for some tips on what the red-hot ISM manufacturing index will do a day later. On a month-to-month basis, the Chicago Business Barometer index moves in the same direction as the national PMI numbers about 60% of the time. More important, of the ten local ISM chapters that publish monthly regional reports, the Chicago survey is considered by many as the most influential. It concentrates on a region considered to be the industrial heartland of the nation. After all, this area covers the auto industry, which plays a major role in the output of the U.S. economy.

HOW IS IT COMPUTED?

The Chicago chapter of the ISM queries about 200 purchasing managers spread out across a region that includes Illinois, Indiana, and Michigan and questions them on business activity in their area. Only about half of the respondents actually return their questionnaires. Answers received are compiled, and a diffusion index is produced based on a weighted average of the five subcomponent indexes: new orders (35% weight), production (25%), order backlogs (15%), employment (10%), and supplier deliveries (15%).

Aside from the overall Business Barometer index, separate measures are provided on prices paid for goods and changes in inventories.

The diffusion index, which is seasonally adjusted, functions like the manufacturing ISM survey; a reading above 50 in the Business Barometer index indicates expansion, while one below 50 suggests some contraction in business activity in this region.

By the way, the responses received by the Chicago affiliate for this survey are not the same data sent to the national ISM group. Different samples are used for each survey.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

- **Table** Business Barometer

- (1) Some traders in the financial markets look to the latest Chicago Business Barometer index for an early heads up on what the more influential ISM index might do the next day. The two move in the same direction on a month-to-month basis a little better than 60% of the time. However, in terms of the size of their changes (as opposed to just relative directions), the two have demonstrated a correlation over the past two decades of about 90%. That's quite high, of course. But for investors who want to make a quick trade in the market, the more relevant concern is the direction these indexes move and not so much the level of change.

- **Tables** New Orders and Orders Backlogs

- (2) Given the predominant influence of auto and auto parts manufacturers in this region, you can get a sense of motor vehicle demand and production by examining the new orders and order backlogs indexes in the Chicago report.

- **Tables** Supplier Deliveries and Prices Paid

To get a check on inflationary pressures in the industrial economy, follow the trend in these two categories: prices paid and supplier deliveries. If the price index has been rising for more than three months and purchasing managers are noticing supplier deliveries taking longer, it's a warning that inflation might soon spread to other sectors of the economy.

FOR RELEASE:
27 February 2004
9am CT

The CHICAGO Report

National Association of Purchasing Management—Chicago

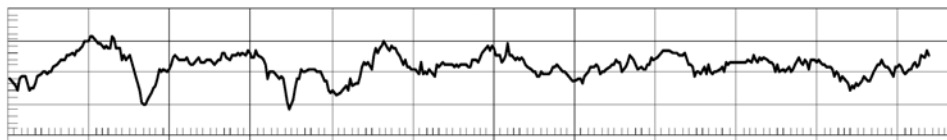
2004
February

BUSINESS BAROMETER™ Growth Slows

The Chicago Purchasing Managers report the growth of Business Barometer slowed to 63.6, marking the tenth month of growth.

- PRODUCTION, NEW ORDERS, and ORDER BACKLOGS slow from last month's strong rise;
- EMPLOYMENT grew for only the third time since March 2000;
- PRICES PAID remains strong;
- BUYING POLICY: Lead Times for CAPITAL EQUIPMENT are the shortest since June 1992.

The Business Barometer™ is a trademark of the National Association of Purchasing Management – Chicago



1970

Business Barometer	3 month average	2003				2004	
		Sep	Oct	Nov	Dec	Jan	Feb
Index		54.3	53.5	59.0	55.7	61.8	66.3
Index	Seasonally adjusted	53.0	55.8	62.9	61.2	65.9	63.6

Next Release:
31 March 2004

Production	3 month average	2003				2004	
		Sep	Oct	Nov	Dec	Jan	Feb
Higher		37	36	42	37	52	58
Same		49	44	45	47	37	33
Lower		14	20	13	16	11	9
Index		61.5	58.0	64.5	60.5	70.5	74.5
Index	Seasonally adjusted	57.1	63.9	68.3	68.9	76.5	73.0

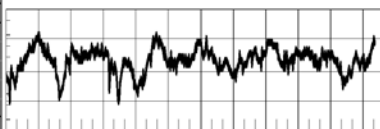
Slips from last month's twenty-year high

New Orders	3 month average	2003				2004	
		Sep	Oct	Nov	Dec	Jan	Feb
More		37	33	46	35	44	56
Same		37	44	36	46	45	33
Fewer		26	23	18	19	11	11
Index		55.5	55.0	64.0	58.0	66.5	72.5
Index	Seasonally adjusted	54.8	61.6	68.5	66.1	69.7	67.5

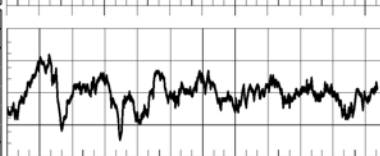
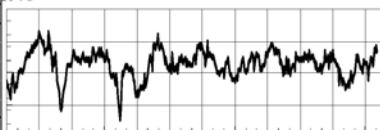
Three-month moving average eases

Order Backlogs	3 month average	2003				2004	
		Sep	Oct	Nov	Dec	Jan	Feb
Larger		27	23	18	14	30	31
Same		49	52	64	65	47	50
Smaller		24	25	18	21	23	19
Index		51.5	49.0	50.0	46.5	53.5	56.0
Index	Seasonally adjusted	51.1	49.2	53.6	52.2	57.3	54.4

Continues to grow at a slower rate

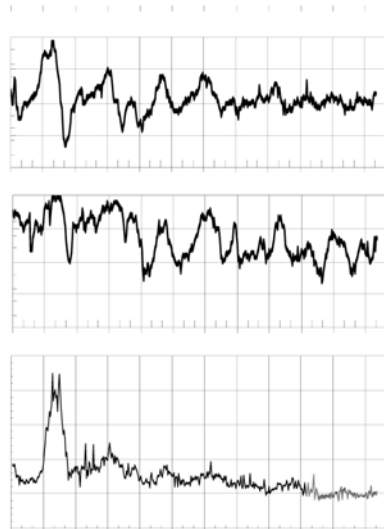


1970



Source: Kingsbury International, Ltd. (www.kingbiz.com); NAPM-Chicago.

Supplier Deliveries		2003				2004	
3 month average ↑		Sep	Oct	Nov	Dec	Jan	Feb
Faster		8	10	7	4	7	4
Same		89	80	77	82	79	78
Slower		3	10	16	14	14	18
Index		47.5	50.0	54.5	55.0	53.5	57.0
Index	Seasonally Adjusted	45.9	49.8	54.4	57.2	56.2	57.3
Returns to December level							
Prices Paid		2003				2004	
3 month average ↓		Sep	Oct	Nov	Dec	Jan	Feb
Higher		12	23	23	16	45	45
Same		80	72	72	79	44	51
Lower		8	5	5	5	11	4
Index		52.0	59.0	59.0	55.5	67.0	70.5
Index	Seasonally Adjusted	53.0	59.8	68.1	57.3	67.8	66.9
Rate of Increase slows							
Buying Policy:		2003				2004	
Production Materials ↑		Sep	Oct	Nov	Dec	Jan	Feb
less than 11 days		40	47	49	45	40	45
11-15 days		14	7	9	11	16	9
16-30 days		23	15	20	18	21	15
31-60 days		17	24	15	19	17	23
more than 60 days		6	7	7	7	6	8
Average Days		22.7	25.7	23.3	24.8	24.0	26.6
Days	Seasonally Adjusted	23.2	24.2	25.3	25.2	23.8	26.3
Longest lead times since last July							



Source: Kingsbury International, Ltd. (www.kingbiz.com); NAPM-Chicago.

MARKET IMPACT

The Business Barometer report is one of those unfortunate releases whose time in the spotlight is short-lived because it’s quickly overshadowed by the national ISM story, which comes out the next business day. If the two reports diverge, market participants lean more on the ISM for the latest assessment of industrial activity in the country.

Bonds

Bond traders can be highly sensitive to this report because it is a brief forerunner to the ISM manufacturing survey. An unexpected surge in the Business Barometer will likely cause bond prices to fall in anticipation that the national survey might show similar results. Another reason for its importance is that the Federal Reserve monitors this report to study conditions in the manufacturing sector and check for signs of production imbalances.

Stocks

Aside from the insight one might gain into auto industry activity from this report, equity investors are not inclined to adjust their portfolios in response to it. Obviously, if both the Chicago and the ISM reports register hefty increases, the stock market might be more confident that corporate profits are on the rise. However, if the economy is already well into its expansion phase, stocks could respond perversely and retreat as expectations rise that the Fed will lift interest rates to slow the economy.

Dollar

Foreign investors usually do not take major currency positions on the basis of just the Chicago index.

INDEX OF LEADING ECONOMIC INDICATORS (LEI)

Market Sensitivity: Low to medium.

What Is It: An index designed to predict the economy's direction.

Most Current News Release on the Internet: www.conference-board.org/data/

Home Web Address: www.conference-board.org

Release Time: 10:00 a.m. (ET). The report is published three weeks after the end of the reporting month.

Frequency: Monthly.

Source: The Conference Board.

Revisions: Usually minor, but can be more significant at times.

WHY IS IT IMPORTANT?

Suppose you want to know what's ahead for the economy but you don't want to waste time going through reams of economic statistics. Is there a simpler way to find out how the economy might perform in the months ahead? One alternative is to rely on the Index of Leading Economic Indicators (LEI), which is published every month by the Conference Board, a private business research group in New York City. This index is a composite of a select group of economic statistics that are known to swing up or down well in advance of the rest of the economy. Thus, by tracking the LEI index, you'll hopefully know how the economy will perform in the coming months. Though its record is not perfect, the LEI index has been successful enough to make the measure worth watching.

Why do we need such a forecasting index in the first place? As any company executive can tell you, business cycles are not neat, well-organized affairs. If they were, it would be a lot easier to predict corporate sales, employment, and profits. Life, however, is never that simple. Dozens of economic indicators are released on a regular basis, and together they draw a remarkably unclear picture of what is happening in the economy. To make some sense of this gallimaufry of data, the Conference Board releases an index composed of ten indicators that tend to precede changes in the economy. This Index of Leading Economic Indicators has done a fairly respectable job of signaling peaks and troughs of an economy some three to nine months down the road. To further improve its predictive value, the Conference Board refined the methodology starting with the January 2012 release.

The LEI index is made up of ten components—seven nonfinancial and three financial. They are described next, along with their relative weight in the index.

Nonfinancial Indicators

1. *Average hourly workweek in manufacturing (27.8%)*: This is taken from the employment report. A sustained rise or fall in the number of hours worked is often a telling sign of whether companies will soon hire or fire workers.
2. *Average weekly initial claims for unemployment (3.3%)*: Data is obtained from the jobless claims report. This series is one of the most sensitive to changing business conditions. Initial claims for unemployment benefits climb when the economic climate deteriorates; the number of claims falls when the economy gets stronger.
3. *Manufacturers' new orders for consumer goods and materials (8.1%)*: These numbers come from the factory orders report. The inflation-adjusted series is a measure of how comfortable manufacturers are with current inventory levels and projections of future consumer demand.
4. *ISM's New Orders Index (16.5%)*: This is lifted from the Institute for Supply Management's manufacturing survey. The thinking here is quite logical: An increase in orders from customers will lead to greater production in the coming months, while a drop in new orders will likely pressure producers to scale back output.
5. *Building permits for new private homes (2.7%)*: Data is taken from the housing starts release. Because most builders have to file for a permit before breaking ground to build private homes, tracking changes in the number of permits is a good indicator of future construction activity.
6. *Manufacturers' new orders for nondefense capital goods (3.6%)*: This originates from the factory orders report. Companies are less likely to spend on new capital equipment and goods if they suspect that a business slowdown is looming.
7. *Average of consumer expectations (15.5%)*: This statistic is based on a compilation on the results from the Conference Board's own Consumer Confidence survey and those of the Reuters/University of Michigan Consumer Sentiment report. Both are given equal weight. If the two surveys show that consumer expectations of the economy are improving, the probability increases that households will shortly ramp up spending, especially on big-ticket items.

Financial Indicators

1. *Stock prices based on the S&P 500 stock index (3.8%)*: The stock market has historically been a good leading indicator of economic turning points. After all, stocks today are priced to reflect expected earnings. A rise or fall in the S&P stock index is a barometer of what investors believe the economy will do in the future.

2. *Leading Credit Index (7.9%)*: This is a proprietary index formulated by the Conference Board that represents an aggregate computation of different financial measures. It includes interest-rate swaps, corporate-treasury spreads, credit-default swaps, and the Federal Reserve's senior loan officer survey. Together, these financial indicators have the capacity to better predict turning points in the business cycle.
3. *Interest-rate spread between the ten-year Treasury bond and the federal funds rate (10.7%)*: The difference between long-term rates and the federal funds rate (overnight borrowing rates by banks) has the best track record of the ten components for forecasting economic activity. This is why it has been given a relatively high weight in the index. If the spread in rates increases so that long-term rates become materially higher than short-term rates, it's a sign the economy is on a growth path. However, if the spread narrows to the point where either there is no difference between the two maturities or they are inversely related (with short-term rates higher than long-term rates), it's indicative of an economy headed for trouble. This can happen when the Federal Reserve has driven short-term rates so high that the bond market is convinced that economic activity will greatly weaken and bring down inflation with it.

Besides the forward-looking LEI index, the Conference Board publishes two other measures. One is the Coincident Indicators index, which moves in line with what is currently happening in the economy. So when business activity picks up, the coincident index rises simultaneously. If economic activity is declining, so will this index. The other gauge is a Lagging Indicators index. It operates much like a rearview mirror in a car; it simply confirms that a certain part of the business cycle has passed. For instance, the lagging index would continue declining for a time even as an economy emerges from recession. "What's the point of having coincident and lagging indexes?" you might ask. "Who cares about the past or even the present? It's the future that counts!" These questions are understandable, but it's useful to know what all three indexes are doing to get a broader picture of the business cycle while it's in motion. The coincident index moves in tandem with the economy and captures its peaks and troughs in real time. The lagging indicator reassures analysts where the economy has been.

Index of Coincident Indicators

The index of coincident indicators consists of four components:

1. *Employees in nonagricultural payrolls (26%)*: Data is taken from the monthly jobs report. This is the net increase or decrease in non-farm payrolls and includes full-time and part-time workers, regardless of whether they are temporary or permanent hires. This payroll series is arguably the most influential economic indicator in the financial markets.

2. *Personal income less transfer payments (13.5%)*: This is obtained from the personal income and spending report. This is real (inflation-adjusted) personal income levels minus transfer payments. Keeping tabs on changes in income is crucial in determining the financial resources available for total spending.
3. *Industrial production (7.3%)*: The industrial production series comes from the Federal Reserve. It monitors the physical output of all stages of production. A turn in economic activity quickly shows up in the manufacturing, mining, and utilities industries.
4. *Manufacturing and trade sales (53.2%)*: The data originates from the Business Inventories report. This index, which is adjusted for inflation, reflects total spending at the manufacturing, wholesale, and retail levels.

Index of Lagging Indicators

The lagging indicators index is based on a composite of seven measures:

1. *Average duration of unemployment (3.6%)*: This metric is taken from the jobs report. The focus of attention here is the average number of weeks individuals are out of work. Employment activity—specifically, the duration of joblessness—is by nature a lagging indicator. Companies delay plans in hiring or firing workers because they are uncertain where the economy is headed. Eventually, as more economic evidence pours in, company officials get a clearer picture of business conditions, which leads to changes in employment policies.
2. *Inventories and sales ratio, manufacturing and trade (12.1%)*: The ratio comes from the Business Inventories report and adjusted for inflation. The inflation-adjusted inventory sales ratio is a reactive indicator. In other words, after months of weak manufacturing and retail sales, inventory levels as a proportion of sales surge. Eventually the ratio falls when sales accelerate faster than the buildup of inventories. Historically, the inventory sales ratio reaches its cyclical peak in the middle of a recession and then falls at the start of a recovery as sales pick up more rapidly than inventories.
3. *Change in labor cost per unit of output (5.9%)*: Data comes from the Productivity and Costs report. This is the six-month percentage change (annualized) of unit labor costs in the manufacturing sector. Labor costs edge up when productivity fails to keep up with compensation growth. Generally, unit labor costs hit a high during the recession as output per hour drops faster than compensation.
4. *Average prime rate charged by banks (28.1%)*: The prime rate is what banks charge for loans to their best corporate customers. Changes in the average prime rate generally trail changes in the rest of the economy.

5. *Commercial and industrial loans outstanding (9.7%)*: Figures are obtained from the Federal Reserve and are then adjusted for inflation. Business debt is also considered a lagging indicator because it typically peaks after a recession has started, a time when profits are slowing and debt service remains high. Such bank loans bottom out about a year after the recession ends.
6. *Changes in the CPI for services (19.6%)*: This comes from the CPI report. Here the Conference Board takes into account the six-month annualized rate of inflation in the service sector. For reasons not yet fully understood, service inflation actually peaks several months after the onset of recession and declines once the recovery has started.
7. *Ratio of consumer installment credit outstanding to personal income (21%)*: Figures are taken from the personal income report and the Federal Reserve's consumer installment credit series. This series looks at the relationship between consumer debt and personal income. Whenever there is a prolonged drop in household income, the burden of servicing consumer debt becomes much greater. That's because a larger portion of income goes to repaying IOUs. As a result, Americans proceed to cut back on shopping and turn more cautious about using credit. When income growth resumes and the economy is more stable, consumer spending and borrowing return to normal levels.

Of the three key business-cycle indexes described—leading, coincident, and lagging—the leading-indicators gauge gets most of the attention in the press, even though its forecasting performance has been short of stellar. Although it has successfully predicted recessions in the past, the index has also declined on numerous occasions without a corresponding downturn in the economy. Thus, the LEI index can give off false signals about an oncoming recession too. It has a much better track record of indicating when the economy is ready to emerge from recession.

HOW IS IT COMPUTED?

The Commerce Department originated and first published the leading, coincident, and lagging economic indicator indexes in the 1960s. However, the government grew uncomfortable being part of the forecasting game and sold the entire series to the Conference Board in 1995. The nonprofit business group wasted little time fine-tuning the series to more accurately reflect what's going on in the economy. It jettisoned a few indicators and added new ones so that the overall indexes would send out fewer false signals.

To make the leading indicator index more timely, the Conference Board decided to advance its release date. However, this poses a slight problem. Some of the components that make up this index have yet to be released. In other words, the Conference Board won't have all the data it needs to come up with a complete LEI index. To get around this problem, the business group provides estimates on those missing components. Every month, two of the ten components underlying the leading-economic-indicators index have

to be estimated: (1) manufacturers' new orders for consumer goods and materials, and (2) manufacturers' new orders for nondefense capital goods. A similar problem exists with the coincident index. The Conference Board has to do its own preliminary calculation for two of the four components: personal income less transfer payments, and manufacturing and trade sales. In the lagging-indicator series, no fewer than five of the seven have to be estimated: the inventory sales ratio, the ratio of consumer installment debt to personal income, the change in the unit labor costs, the consumer price index for services, and the personal consumption deflator to compute real commercial and industrial loans outstanding. Because of these estimates, the leading, coincident, and lagging indexes can be substantially revised if the underlying figures turn out to be radically different from what was estimated.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

Just how good is the LEI index at forecasting economic turning points? It is too early to answer that question, since the Conference Board reformulated this measure in 2012. Simply put, the new LEI will have to prove itself. However, we believe that this refinement will improve our ability to anticipate major shifts in economic activity.

- **Summary Table of Composite Economic Indexes**

- (1) This table has two parts. You will see how all three major indexes changed in each of the past three months—as well as over the previous half year. Let's focus on the LEI index. The old rule of thumb was that three consecutive declines in the index was a warning that an economic downturn might begin within three to nine months, and that three unbroken months of increases in the leading index portended the end of recession and the beginning of a recovery within that same time frame.

The Conference Board, however, no longer subscribes to that three-month rule. The reason is that since 1953, the LEI index has actually fallen anywhere from 2 months to 20 months before the onset of recession. Not a very consistent record. So after considerable research, the business group came forward with another criterion considered to be more precise: a downward move in the LEI index of more than 2% over six months coupled with declines in a majority of the ten components. The new rule is considered to be a more effective way of forecasting a recession. However, it has one rather important shortcoming. If you have to wait six months, it becomes less of a leading indicator, because by the end of that period, the economy may already be in recession. As a result, private economists outside the Conference Board have devised their own formulas when using the LEI. In one case, the leading index must decline at least four of the seven months, and the coincident index has to drop three consecutive months before there's a credible threat that recession is around the corner. There are

probably other ways to utilize these indexes for the purpose of predicting turning points in the economy, which proves how subjective the science of forecasting can be.

- (2) The coincident indicator index reflects what is currently happening in the economy. When you measure the change in this index over a 12-month period, it turns out to be a good proxy for GDP growth. The yearly change in the coincident index moves in tandem with the rest of the economy about two-thirds of the time.

Summary Table of Composite Economic Indexes

	2011	2012		6-month
	Dec	Jan	Feb	Aug to Feb
1▶ Leading index	94.6 r	94.8 r	95.5 p	
Percent Change	.5	.2 r	.7 p	1.9
Diffusion	60.0	60.0	80.0	70.0
2▶ Coincident Index	103.6 r	103.8 r	104.0 p	
Percent Change	.6 r	.2	.2 p	1.8
Diffusion	100.0	100.0	87.5	100.0
Lagging Index	113.3 r	113.9 r	114.1 p	
Percent Change	.2 r	.5 r	.2 p	1.9
Diffusion	50.0	85.7	50.0	64.3

n.a. Not available p Preliminary r Revised
 Indexes equal 100 in 2004

Source: The Conference Board

Source: The Conference Board, used with permission.

MARKET IMPACT

If the new LEI series is successful in signaling upcoming turning points in the economy, it will certainly be watched more closely by the investment community. But up until 2012, reaction to the LEI was muted because it rarely surprised. For one, much of the data that made up the index had already been published days or weeks earlier. Second, money managers felt that the forecasting track record of this series was short of divine. As a result, the release sparked little excitement in the markets. That could all change with the new methodology.

Bonds

Professionals in the fixed-income markets spend little time musing over the leading indicators series because it's considered old news, and they pay virtually no attention to the coincident and lagging gauges. Perhaps these measures will generate more talk when the economy is believed to be close to a turning point, with yields possibly inching up or down a basis point or two. Otherwise, the market has largely discounted the LEI since the data underlying it has already been published.

Stocks

The LEI has a slightly greater impact on equity prices. During a recession, stock market investors search for any corroborative signs that point to a recovery and higher profits. If the LEI index posts several consecutive gains, investors feel more confident that an economic rebound is in the offing and thus raise their equity holdings. In contrast, any report that reinforces the notion that the economy is close to peaking could depress share prices, since it casts a cloud over future earnings.

Dollar

Assuming that the dollar is not being influenced by other factors, it will likely follow the same path as the stock market. Consecutive monthly rises in the LEI encourage foreign investors to buy dollar-based securities. Stronger U.S. economic growth brings with it higher interest rates and greater profits, all positive influences on the dollar. A series of falling LEI indexes would make the greenback less attractive to hold.

HOUSING STARTS AND BUILDING PERMITS

(ALSO KNOWN AS NEW RESIDENTIAL CONSTRUCTION)

Market Sensitivity: Medium.

What Is It: Records the number of new homes being built and permits for future construction.

Most Current News Release on the Internet: www.census.gov/construction/nrc/

Home Web Address: www.census.gov

Release Time: 8:30 a.m. (ET); normally released two or three weeks following the month being covered.

Frequency: Monthly.

Source: Census Bureau, Department of Commerce.

Revisions: Modest revisions occur for the preceding two months on housing starts and for just one month on permits. Seasonal adjustment changes are made every April, and they cover two years' worth of data.

WHY IS IT IMPORTANT?

Looking for a single infallible indicator that can foresee the future direction of the economy? Forget it; you won't find any. However, one comes surprisingly close: housing! Excluding one brief instance, there has never been a recession in the U.S. at a time when the housing sector stood strong. The exception was in 2001, and that downturn proved to be brief and shallow. More interesting is that only once (2009) did the U.S. manage to emerge from recession *even* though housing remained stagnant. But the economy paid a heavy price for housing's absence, since what followed was the most lifeless recovery in 70 years! The fact that the general economy cannot function with any vitality without the participation of residential real estate is why many experts view home building as one of the most reliable leading indicators of economic activity. Real estate is among the first sectors to shut down when the economy nears recession, and typically the first to bloom when the economy starts to turn up.

What keeps housing so far ahead of the rest of the economy? Mainly its sensitivity to interest rates. An overheated economy drives interest rates higher. As mortgage rates climb, this depresses demand for homes and discourages future construction. Builders are also less likely to seek construction loans when rates are high. Conversely, when mortgage rates tumble and home prices decline—events that typically happen during periods of economic weakness—interest in home buying is rekindled now that it is more affordable. Builders, in turn, rush back to banks before the cost of borrowing rises again.

Another critical aspect of the home-building industry is how powerful an influence it has on the rest of the economy through what are known as “multiplier effects.” By multiplier effects, we mean that changes in the pace of housing construction can have major ramifications for many other industries. Just look at who benefits when housing is strong. A jump in residential construction drives up demand for steel, wood, electricity, glass, plastic, wiring, piping, and concrete. The need for skilled construction workers such as bricklayers, carpenters, and electricians soars as well. By one estimate, for every 1,000 single-family homes under construction, some 2,500 full-time jobs and nearly \$100 million in wages are generated. Moreover, while the home-construction business accounts for approximately 5% of GDP, its overall impact on the economy is really much greater than that. A vibrant home-selling market also accelerates purchases of furniture, carpet, home electronics, and appliances, activity which together can account for nearly 20% of GDP. Housing is thus a major swing industry in the economy because it can affect so many diverse businesses.

This release presents two key gauges on the home-building industry: housing starts and permits.

Housing Starts

Housing starts record how much new groundbreaking occurred for residential real estate in the preceding month. The data on home construction is divided into three types of structures:

1. *The building of single-family houses:* It is by far the largest component of the three, accounting for 75% of total home building.
2. *Residences with two to four apartments or units:* These are usually townhouses or small condos, and they make up no more than 5% of the market.
3. *Structures with five or more units:* This category consists mostly of apartment buildings and represents about 20% of all residential housing starts. Each apartment in a high-rise building is considered a single start. Thus, the government counts the construction of a 50-unit apartment building as 50 starts.

Housing Permits

Builders planning to construct new homes usually have to file for a permit in advance. Some 95% of all localities in the U.S. require construction firms to obtain such authorization before the first shovel touches ground. By tracking the issuance of permits, one can get a sense of how much and where future construction activity will take place. Because housing permits are such an excellent marker of future home building, they are one of the ten components that make up the Conference Board’s Index of Leading Economic Indicators.

HOW IS IT COMPUTED?

The housing starts series goes back to 1959. The Census Bureau conducts telephone interviews and sends out mailers to builders in 19,000 localities across the country during the first two weeks of each month to inquire about the number of construction starts and permits filed in their regions.

A housing start occurs when excavation begins to set a new foundation for a residence. Adding a room, basement, or new roof to an existing home is not considered a housing start, although if a home is being totally rebuilt on an existing foundation, it is counted. The housing figures do not include construction of mobile homes, dormitories, rooming houses, and long-term hotels.

Permits are more straightforward. Each one represents the written authorization a builder receives from local municipalities to begin construction.

Though figures in the tables are adjusted for seasonal factors, home construction can still be extremely volatile during the winter season, so it's important not to rely too much on one or even two months' worth of data. Adverse weather conditions can bring housing activity to a standstill one month, only to have it rebound vigorously the next two months to make up for earlier downtime. It's better to monitor housing activity over a three- to four-month period to detect an underlying trend.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

- **Table 3** New Privately Owned Housing Units Started

For more than half a century, housing starts have been a very effective forecasting tool of future economic activity. A sharp drop-off in home construction is a telltale sign that the broad economy is on the verge of slowing, while a rebound in housing starts and home buying sets the stage for a pickup in overall business activity. Interest rates and real personal income growth are the most important forces influencing home buying and starts. Another factor that plays a large role is tax legislation. Changes in tax laws can have a dramatic impact on home building. Many apartment buildings wouldn't stand a chance of getting constructed were it not for hefty tax breaks builders receive. Moreover, the government partially subsidizes home buying by allowing owners to deduct their home mortgage interest payments on their income tax returns. Should laws ever be modified in an unfavorable way for homeowners and builders, it could put a chill on future housing activity.

- (1) *Total Housing Units Started*: Check the pace of total housing starts. A healthy housing market is typically one in which starts are running at a 1.5-million- to 2-million-unit annual range. A level that lingers at less than 1 million units spells trouble for the economy; above 2 million for an extended period, and you're likely to bump up against other problems, such as shortages of supplies and skilled workers.

3

[Thousands of units. Detail may not add to total because of rounding]

Period	United States				Northeast		Midwest		South		West	
	Total	2 In structures with --			Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
		1 unit	2 to 4 units	5 units or more								
Seasonally adjusted annual rate												
2003: January	1,828	1,509	(S)	278	145	115	349	327	820	646	514	421
February	1,640	1,312	(S)	298	142	98	279	247	759	602	460	365
March	1,742	1,393	(S)	313	155	112	351	281	814	680	422	320
April	1,627	1,357	(S)	239	150	130	319	283	724	589	434	355
May	1,745	1,389	(S)	329	151	116	357	293	791	620	446	360
June	1,844	1,499	(S)	317	162	106	353	290	822	683	507	420
July	1,890	1,533	(S)	321	186	121	392	321	866	728	446	363
August	1,831	1,490	(S)	309	152	110	401	325	848	711	430	344
September	1,931	1,547	(S)	339	186	112	428	345	861	705	456	385
October	1,977	1,640	(S)	308	154	112	389	330	908	748	526	450
November ^f	2,054	1,673	(S)	344	187	121	426	322	892	746	549	484
December ^f	2,067	1,670	(S)	369	172	135	404	318	968	782	523	435
2004: January ^g	1,903	1,537	(S)	339	148	110	319	275	918	716	518	436
Average RSE (%) ¹	3	3	(X)	9	10	10	8	7	4	4	6	7
Percent Change:												
January 2004 from December 2003	-7.9%	-8.0%	(S)	-8.1%	-14.0%	-18.5%	-21.0%	-13.5%	-5.2%	-8.4%	-1.0%	0.2%
90% Confidence Interval ²	± 6.0	± 6.6	(X)	± 17.1	± 12.8	± 7.8	± 14.0	± 16.0	± 9.6	± 11.2	± 11.5	± 11.8
January 2004 from January 2003	4.1%	1.9%	(S)	21.9%	2.1%	-4.3%	-8.6%	-15.9%	12.0%	10.8%	0.8%	3.6%
90% Confidence Interval ²	± 6.5	± 6.3	(X)	± 32.3	± 26.4	± 24.4	± 18.4	± 14.6	± 10.3	± 10.0	± 9.6	± 10.9

(2) *Single-Family Housing Starts:* Other important measures are worth noting. The performance of “single-family home starts” is a far more reliable leading indicator of the economy than “multifamily starts,” which is classified as five or more units. Single-family home building is based on consumer confidence and demand, whereas construction of multiunit apartment dwellings can be subject to the whims of speculative real estate investors and changes in the tax code.

(3) *Housing Starts Regionally:* This release also breaks down the number of housing starts by geographic regions (Northeast, Midwest, South, and West), which allows you to identify areas of the country that are experiencing healthy real estate (as well as economic) growth and those where activity is lagging.

• **Table 1** New Privately Owned Housing Units Authorized in Permit-Issuing Places

Keep a close eye on building permits because they lead housing starts by roughly one to three months. Although the issuance of a housing permit does not automatically result in new construction, the two series do go hand in hand over time.

[Thousands of units. Detail may not add to total because of rounding]

Period	United States				Northeast		Midwest		South		West	
	In structures with --				Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
	Total	1 unit	2 to 4 units	5 units or more								
Seasonally adjusted annual rate												
2003: January	1,777	1,406	87	284	157	119	354	277	796	620	470	390
February	1,786	1,319	78	389	170	100	308	250	777	595	531	374
March	1,688	1,311	71	306	150	106	324	257	777	607	437	341
April	1,724	1,332	82	310	152	110	341	258	784	622	447	342
May	1,803	1,349	84	370	166	111	343	262	819	627	475	349
June	1,823	1,427	77	319	158	115	379	282	843	667	443	363
July	1,800	1,434	77	289	161	118	364	287	810	665	465	364
August	1,901	1,484	84	333	189	119	377	290	866	700	469	375
September	1,875	1,487	88	300	164	121	384	298	841	681	486	387
October	1,981	1,539	81	361	187	124	382	305	885	707	527	403
November	1,863	1,473	88	302	180	125	378	285	812	673	493	390
December ^f	1,953	1,530	77	346	199	123	356	278	911	722	487	407
2004: January^g	1,899	1,487	96	316	179	119	356	291	857	674	507	403
Average RSE (%) ¹	(Z)	1	3	1	2	2	1	1	1	1	1	1
Percent Change:												
<i>January 2004 from December 2003</i>	-2.8%	-2.8%	24.7%	-8.7%	-10.1%	-3.3%	0.0%	4.7%	-5.9%	-6.6%	4.1%	-1.0%
<i>90% Confidence Interval³</i>	± 0.8	± 0.9	± 1.7	± 1.7	± 1.7	± 2.1	± 3.9	± 4.4	± 1.3	± 1.5	± 1.0	± 1.1
<i>January 2004 from January 2003</i>	6.9%	5.8%	10.3%	11.3%	14.0%	0.0%	0.6%	5.1%	7.7%	8.7%	7.9%	3.3%
<i>90% Confidence Interval³</i>	± 1.1	± 1.0	± 3.7	± 1.3	± 2.7	± 3.3	± 3.9	± 4.4	± 1.5	± 1.7	± 1.9	± 2.1

In fact, you can actually track the entire construction cycle for homes by looking at Tables 1 through 5 in this release:

- Table 1 records the number of permits issued for home construction by type of home and region of the country. It's a good indicator of how confident builders are about future demand.
- Table 2 counts the number of units where construction permits have been granted but where groundbreaking has not yet started (not shown). A significant rise in these numbers suggests that builders are having trouble keeping up with the demand for new homes.
- Table 3 lists the number of units where construction began in the previous month.
- Table 4 tracks the number of new housing units undergoing construction as of the end of the previous month (not shown).
- Table 5 notes the number of homes where construction was completed in the previous month (not shown).

Overall, it takes about six months on average for a single-family house to be built, from groundbreaking to completion. The cycle for a multifamily dwelling is ten months to a year.

MARKET IMPACT

Bonds

Good news in housing is often perceived as bad news for players in the fixed-income markets. A healthy pickup in housing starts depicts an economy that is robust and where inflation pressures are likely to accelerate. That can knock down bond prices and cause yields to rise, leading to losses on bond portfolios. Traders prefer weak or falling housing starts because they portend a slackening economy with less inflation—factors that lift bond prices.

Stocks

Prolonged weakness in housing starts can alarm stock investors since it's often a precursor to a broader downturn in the economy. On the other hand, if housing activity is vibrant and inflation remains contained, shareholders will view it as a positive sign. A rebound in housing can have a beneficial impact on other businesses as well. This is bullish for corporate profits and thus for stock prices. The danger comes when housing starts surge at a time when the rest of the economy is already operating at full speed. Investors might withdraw from stocks as worries mount that the Federal Reserve will raise short-term interest rates to curb economic activity.

Dollar

Foreign investors are attracted to the U.S. if they can earn a higher rate of return here relative to what they can receive in other countries. Thus, a strong housing report is considered bullish for the dollar because it usually supports a scenario of higher corporate profits and a firming of U.S. interest rates.

The dollar's value can slip with weak housing data because it signals slower economic growth in the future and thus falling interest rates. Under such circumstances, foreigners might choose to seek out more lucrative investment opportunities outside the U.S.

EXISTING HOME SALES

Market Sensitivity: Medium.

What Is It: Measures monthly sales of previously owned single-family homes.

Most Current News Releases on the Internet:

Existing Home Sales: www.realtor.org/topics/existing-home-sales/data

Pending Home Sales: www.realtor.org/topics/pending-home-sales

Housing Affordability Index: www.realtor.org/topics/housing-affordability-index

Home Web Address: www.realtor.org

Release Time: 10:00 a.m. (ET); published four to five weeks after the month being reported ends.

Frequency: Monthly.

Source: National Association of Realtors.

Revisions: Monthly revisions tend to be small. Annual revisions due to seasonal adjustment factors take place in February and can cover the preceding three years.

WHY IS IT IMPORTANT?

The big gorilla of the residential real estate market is existing home sales. About eight out of every ten homes purchased are used homes, with the rest being sales of newly constructed housing. Yet, despite its large size, the actual impact of existing home sales on the economy is relatively modest because no new ground is broken. No physical investment in construction is made. Buyers and sellers simply transfer ownership of a deed.

If that's the case, why don't the financial markets ignore this indicator? The reason is that sales of existing homes can indirectly stimulate economic activity. Sellers generally use the capital gain from the sale of one house to buy a larger home to meet the needs of an expanded family. Invariably, this means additional spending on furnishings and appliances. In other cases, buyers sell their home because it's too large and subsequently purchase a smaller house, leaving more of the capital gain available for spending on discretionary items. A rise in existing home sales also brings in greater commissions to real estate agents and generates higher income for both moving companies and mortgage bankers. Equally important is that an increase in home sales is an unmistakable sign that buyers are confident about their jobs and future income growth. All of these factors make monitoring figures on existing home sales worthwhile.

The downside of this series is that it's not very timely. Existing home sales are counted at the time of actual closing, which is when the deed finally gets transferred from one owner to another. The problem is that it can take one to three months or longer

between the moment the initial contract is signed and the time buyers and sellers finally meet to close the deal. By the time existing home sales are recorded and tallied for the monthly release, market conditions in housing could already have changed. So analysts have to be careful when extrapolating data from this economic indicator. In an effort to provide more current information on housing, the National Association of Realtors (NAR), the organization that publishes existing home sales figures, recently introduced a new measure called Pending Home Sales. This series looks at the number of contracts that have been signed but not yet closed. The advantage is that we don't have to wait until the very end of the home-buying process to see how the housing industry is doing.

HOW IS IT COMPUTED?

The NAR is a private trade group of 960,000 agents and brokers from the residential and commercial real estate market. For the monthly report, it culls information from 400 out of the 900 multiple listing boards and local Realtor boards nationwide. The trade group is thus able to capture 30%–40% of all existing home sale transactions in its monthly survey, with prices ranging from less than \$30,000 to more than \$600,000. The raw figures are then divided into the four census regions: Northeast, South, Midwest, and West. The NAR also includes in its monthly release the median and average sale price for homes at the national level, as well as for each of the four geographic regions.

Keep in mind that seasonal factors can influence selling prices; the price tag for homes is generally highest in the late spring and summer, when favorable weather conditions and the end of the school year bring increased traffic to real estate offices. In fact, demand for homes usually peaks in the summer and then declines gradually for the balance of the year.

Home-sales figures are seasonally adjusted and presented in the form of annual rates.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

Each month, existing home sales data is summarized on a single page that contains two fact-filled tables: Existing Home Sales and Sales Price of Existing Homes.

- Existing Home Sales

- (1) Monitoring the volume of sales nationwide is a good way to assess housing demand in the country. There's a strong correlation between purchases of existing homes and consumer spending, especially on durable goods such as furniture and home electronics. Furthermore, a sustained drop—or rebound—in existing home sales often portends a turning point in the economy. Finally, a big turnover in home sales produces large capital gains, which can stimulate more home buying and related shopping.

		Existing Home Sales											
		2										3	
		1										4	
Year		U.S.	Northeast	Midwest	South	West	U.S.	Northeast	Midwest	South	West	Inventory	Mos. Supply
2004 r		6,778,000	1,113,000	1,550,000	2,540,000	1,575,000	*	*	*	*	*	2,244,000	4.3
2005 r		7,076,000	1,169,000	1,588,000	2,702,000	1,617,000	*	*	*	*	*	2,846,000	4.5
2006 r		6,478,000	1,086,000	1,483,000	2,563,000	1,346,000	*	*	*	*	*	3,450,000	6.5
		Seasonally Adjusted Annual Rate					Not Seasonally Adjusted						
2006	Jan	6,750,000	1,010,000	1,540,000	2,740,000	1,460,000	373,000	58,000	77,000	154,000	85,000	2,883,000	5.1
	Feb	6,940,000	1,170,000	1,610,000	2,700,000	1,460,000	401,000	70,000	92,000	160,000	80,000	2,985,000	5.2
	Mar	6,900,000	1,180,000	1,610,000	2,670,000	1,440,000	554,000	87,000	131,000	217,000	119,000	3,198,000	5.6
	Apr	6,710,000	1,140,000	1,560,000	2,610,000	1,410,000	560,000	91,000	130,000	215,000	124,000	3,415,000	6.1
	May	6,680,000	1,140,000	1,510,000	2,610,000	1,410,000	642,000	102,000	153,000	249,000	138,000	3,589,000	6.4
	Jun	6,490,000	1,090,000	1,490,000	2,550,000	1,360,000	699,000	120,000	163,000	267,000	149,000	3,738,000	6.9
	Jul	6,320,000	1,050,000	1,430,000	2,530,000	1,320,000	605,000	111,000	141,000	235,000	118,000	3,861,000	7.3
	Aug	6,310,000	1,060,000	1,430,000	2,520,000	1,290,000	653,000	113,000	149,000	261,000	131,000	3,844,000	7.3
	Sept	6,230,000	1,040,000	1,420,000	2,520,000	1,260,000	529,000	89,000	124,000	214,000	102,000	3,783,000	7.3
	Oct	6,270,000	1,030,000	1,420,000	2,520,000	1,300,000	518,000	87,000	114,000	210,000	107,000	3,860,000	7.4
	Nov	6,250,000	1,080,000	1,420,000	2,470,000	1,280,000	472,000	79,000	103,000	189,000	101,000	3,810,000	7.3
	Dec	6,270,000	1,070,000	1,460,000	2,490,000	1,250,000	469,000	79,000	106,000	192,000	92,000	3,450,000	6.6
2007	Jan p	6,460,000	1,070,000	1,530,000	2,540,000	1,320,000	363,000	61,000	78,000	147,000	77,000	3,549,000	6.6
	vs. last month:	3.0%	0.0%	4.8%	2.0%	5.6%	-22.6%	-22.8%	-26.4%	-23.4%	-16.3%	2.9%	0.0%
	vs. last year:	-4.3%	5.9%	-0.6%	-7.3%	-9.6%	-2.7%	5.2%	1.3%	-4.5%	-9.4%	23.1%	29.4%
	year-to-date:						0.363	0.061	0.078	0.147	0.077		

Source: National Association of Realtors, used with permission.

What are the two biggest forces in the economy that influence existing home sales? Employment and interest rates. A weakening job market will slow home purchases. Every percentage-point increase in mortgage rates can reduce existing home sales by 250,000 units.

- (2) A geographic breakdown of sales can be found for each of the four major regions, as well as their percentage changes from the previous month and year.
- (3) One harbinger of future housing trends is the total number of available homes on the market for sale that month. It is listed here along with the latest percentage change from the previous month and year.
- (4) Close by is the inventory sales ratio for houses. This ratio tells you how many months it takes to sell the existing inventory of used homes on the market based on the latest monthly sales rate. Generally, a 4.5- to 6-month supply of homes is considered a balanced market between buyers and sellers. If the ratio falls below 4.5 months, it's a sign that supplies may be getting tighter; that can place upward pressure on home prices. A ratio above 6 denotes a soft housing market, which can lead to lower prices.

- Sales Price of Existing Homes

Shifts in housing prices reflect the changing supply and demand for homes. By and large, prices of existing homes have historically marched higher from year to year, though the rate of increase depends a great deal on the economic climate and the

mix of houses sold (whether they are luxury homes versus more modestly priced residences). However, much has changed since the devastating 2008–09 recession. The worst financial crisis since the Great Depression shattered the once-ingrained expectation that home values would rise in value every year in perpetuity. This new reality fundamentally altered the perception that real estate can serve as a secure investment vehicle.

Sales Price of Existing Homes

Year		U.S.	Northeast	Midwest	South	West	U.S.	Northeast	Midwest	South	West
		Median					Average (Mean)				
2004		\$195,400	\$243,800	\$154,600	\$170,400	\$286,400	\$244,400	\$273,600	\$189,400	\$215,600	\$324,300
2005		219,600	271,300	170,600	181,700	335,300	266,600	297,000	203,800	231,700	363,800
2006	r	221,900	271,900	167,800	183,700	342,700	268,200	299,700	205,300	230,000	371,300
		Not Seasonally Adjusted					Not Seasonally Adjusted				
2006	Jan r	217,400	263,900	168,500	177,600	336,700	265,900	294,000	209,600	225,200	366,800
	Feb	217,800	280,100	160,200	182,200	333,000	263,600	301,500	191,800	229,600	363,500
	Mar	217,600	270,400	160,700	180,000	340,300	264,500	295,200	197,700	227,600	368,500
	Apr	222,600	285,200	163,500	181,600	345,300	269,100	307,100	200,200	229,300	372,800
	May	228,500	281,300	171,700	191,300	343,700	273,700	305,000	210,600	239,100	372,100
	Jun	229,300	289,100	174,400	189,400	341,300	275,800	313,300	214,800	237,400	372,200
	Jul	230,200	274,600	177,000	192,500	346,200	275,400	301,800	216,000	238,300	374,000
	Aug	224,000	272,600	171,800	184,800	345,300	270,000	302,700	210,700	230,800	372,800
	Sept	220,900	260,400	168,300	184,500	338,800	266,400	290,300	206,000	229,800	367,900
	Oct	218,900	255,400	166,600	183,700	341,800	264,600	287,900	203,200	228,100	370,000
	Nov	217,300	266,900	163,900	178,600	349,400	265,100	295,400	201,700	223,500	375,700
	Dec r	221,600	284,000	166,200	180,900	348,300	268,000	308,900	201,200	225,200	375,800
2007	Jan p	210,600	260,700	162,600	174,600	321,300	257,400	291,600	196,100	222,100	351,900
	vs. last year:	-3.1%	-1.2%	-3.5%	-1.7%	-4.6%	-3.2%	-0.8%	-6.4%	-1.4%	-4.1%

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Source: National Association of Realtors, used with permission.

(5) The NAR report lists both the median sale price (the midpoint price where half the homes sold for more and the other half sold for less) and the average sale price for both the regional and national level. This is where one can assess how residential real estate values have held up against inflation over months and years. If real estate prices increase significantly faster than inflation, Americans will be inclined to view housing as an attractive investment. Of course, if home prices appreciate significantly in real (inflation-adjusted) terms, this can also be detrimental to future home buyers, especially first-time purchasers because many might not be able to afford one. This entire subject of affordability is explored in a separate release by the NAR known as the Housing Affordability Index.

- Pending Home Sales Index (PHSI)

A common complaint about Existing Home Sales is that it counts only “closings,” and such events are based on decisions made by home buyers many months earlier.

Though most closings occur within two months after a contract is signed, nearly 20% can take up to four months or even longer. To make its figures more current, the NAR in March 2005 introduced the Pending Home Sales Index, which tracks contracts that have been signed and are awaiting closing.

Pending Home Sales Index (PHSI)

Year		United States					United States				
		Northwest	Midwest	South	West	Northwest	Midwest	South	West	West	
2004		120.9	109.7	118.6	126.8	122.9	*	*	*	*	*
2005		124.4	108.6	116.6	134.9	128.7	*	*	*	*	*
2006 p		111.8	98.5	101.5	126.8	109.6	*	*	*	*	*
		Seasonally Adjusted Annual Rate					Not Seasonally Adjusted				
2005	Dec	117.6	94.4	107.8	135.5	118.0	76.8	57.6	65.9	91.6	80.0
2006	Jan	118.6	101.0	114.3	129.4	120.0	99.4	81.2	90.4	110.1	106.4
	Feb	117.6	107.3	114.6	129.5	110.2	107.2	96.4	103.4	116.8	104.5
	Mar	116.1	112.9	106.3	127.6	111.1	134.5	132.8	123.6	146.2	129.3
	Apr	111.9	106.7	100.3	129.7	100.2	128.6	125.8	117.6	151.7	106.2
	May	113.5	106.1	101.4	127.5	110.1	135.3	129.6	123.2	153.1	124.7
	Jun	113.5	99.8	102.5	130.6	109.1	135.7	122.8	125.5	156.4	124.1
	Jul	105.6	92.1	93.8	121.9	103.2	116.6	97.3	103.7	137.6	112.3
	Aug	110.3	95.5	94.4	126.6	112.9	120.1	101.7	105.8	134.7	126.5
	Sept	109.1	89.9	96.4	125.0	112.5	100.8	84.4	91.2	113.6	103.7
	Oct	107.5	88.0	97.0	122.9	109.5	103.0	88.4	92.4	115.0	106.7
	Nov r	107.2	83.2	100.0	124.4	106.6	89.6	68.3	80.1	101.8	97.1
	Dec p	112.4	89.9	103.2	129.8	112.2	71.0	53.4	60.8	84.9	73.6
	vs. last month:	4.9%	8.1%	3.2%	4.3%	5.3%	-20.8%	-21.8%	-24.1%	-16.6%	-24.2%
	vs. last year:	-4.4%	-4.8%	-4.3%	-4.2%	-4.9%	-7.6%	-7.3%	-7.7%	-7.3%	-8.0%

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Source: National Association of Realtors, used with permission.

- (6) The PHSI series is calculated as an index in which 100 represents the average level of contract signings during 2001. As it turns out, that year was the first of five consecutive years of record existing home sales. By definition, these contracts include purchases of homes, condos, and co-ops. The PHSI has the potential to be a good leading indicator of housing activity, but it will take time to determine its true predictive value. Keep in mind that not all contracts to purchase a home make it to closing. Last-minute disputes could occur between buyers and sellers. Or if the economy turns sour, home buyers may suddenly get nervous and seek ways to cancel their contracts. Though the majority of contracts do go through to closing, economists will want to monitor the Pending Home Sales a few years to see how well it can foreshadow changes in the housing market. The table itself lists the PHSI for the past 12 months for all of the U.S. and for the four major geographic regions. What we have seen so far is that the annual percentage change in the index (such as August 2006 compared with August 2005) is a better indicator of future home sales than month-to-month comparisons. Time will tell what other forecasting attributes this series has.

- Housing Affordability Index (HAI)

Just how expensive is it for Americans to buy a home? The NAR assembles a table every month that measures the affordability of purchasing a home given the existing economic climate. This series, called the Housing Affordability Index, can also be found on the NAR Web site (www.realtor.org/topics/housing-affordability-index). Though this measure has virtually no impact on the stock and bond markets, it is included here because home purchases are the single biggest investment that households make in their lifetime. A favorable combination of economic conditions, such as rising personal income and low mortgage rates, makes home buying more affordable and thus sets the stage for more real estate sales in the future.

NATIONAL ASSOCIATION OF REALTORS® Housing Affordability Index 7 ▼

Year		Median Priced Existing Single- Family Home	Mortgage Rate*	Monthly P & I Payment	Payment as a % of Income	Median Family Income	Qualifying Income**	Affordability Indexes		
								Composite	Fixed	ARM
2001		147,800	7.03	789	18.4	51,407	37,872	135.7	135.7	145.5
2002		158,100	6.55	804	18.5	52,103	38,592	135.0	132.7	148.3
2003 r		170,000	5.74	793	17.8	53,463	38,064	140.5	127.6	142.6
2003	Jan	160,000	5.96	764	17.4	52,811	36,672	144.0	142.0	156.1
2003	Feb	161,300	5.93	768	17.4	52,929	36,864	143.6	141.6	156.2
	Mar	162,100	5.80	761	17.2	53,048	36,528	145.2	143.3	158.3
	Apr	163,700	5.72	762	17.2	53,166	36,576	145.4	143.3	158.0
	May	166,400	5.62	766	17.3	53,285	36,768	144.9	143.2	155.7
	Jun	175,000	5.40	786	17.7	53,404	37,728	141.6	139.9	154.1
	July	181,600	5.39	815	18.3	53,522	39,120	136.8	135.3	148.5
	Aug	177,200	5.66	819	18.3	53,641	39,312	136.4	133.5	149.0
	Sept	171,800	5.94	819	18.3	53,759	39,312	136.7	133.8	149.3
	Oct	171,800	5.83	809	18.0	53,878	38,832	138.7	135.2	150.7
	Nov	169,900	5.85	802	17.8	53,996	38,496	140.3	136.5	151.0
	Dec r	174,800	5.82	822	18.2	54,115	39,456	137.2	133.3	148.9
2004	Jan p	168,700	5.70	783	17.3	54,395	37,584	144.7	140.8	156.5
								This Month	Month Ago	Year Ago
	Northeast	212,300	5.76	992	19.7	60,313	47,616	126.7	134.6	140.5
	Midwest	134,300	5.70	624	13.1	57,017	29,952	190.4	176.4	183.1
	South	155,500	5.75	726	17.6	49,499	34,848	142.0	135.3	139.6
	West	234,500	5.59	1,076	23.4	55,094	51,648	106.7	97.9	108.2

Source: National Association of Realtors, used with permission.

- (7) The Housing Affordability Index tells whether a typical family can qualify for a mortgage loan on a typical home. A typical home is defined here as the national median price of an existing single-family home as calculated by NAR. The outcome can be found in the columns on the right side of the page. An index value of 100 means that a median-income family has exactly enough income to qualify for a mortgage on a median-priced home. An index above 100 signifies that a family earning the median income has more than enough to qualify for a mortgage loan on a median-priced home, assuming a 20% down payment. For example, a composite index of 130 means a family earning the median family income has 130% of the income necessary to qualify for a conventional loan covering 80% of a median-priced existing single-family home.

The NAR assumes a maximum qualifying ratio of 25%, where monthly principal and interest payments cannot exceed 25% of the median family's monthly income.

MARKET IMPACT

Bonds

Reaction to existing home sales is muted unless the economy is edging closer to overdrive and facing an eruption of inflation pressures. Any unexpected jump in existing home sales could easily scare away bond investors, a scenario that will lower bond prices and raise yields.

A sudden plunge in sales might foreshadow a slowdown in economic activity in the months ahead, which would support higher bond prices and lower rates. Thus, to a large extent, the response to this release really depends on the economic backdrop.

Stocks

From the standpoint of corporate profits, investors prefer to see existing home sales stay at a high level. Housing is a major industry upon which many other businesses rely. A strong report will buoy stock values, whereas a weak report might undermine them. However, if strength in housing fires up inflation, the Federal Reserve will eventually intervene with higher rates, and such a prospect can upset the equity market.

Dollar

Foreign investors monitor existing home sales because it is one of the dominant indicators of consumer spending and can potentially influence interest rates. Generally, the dollar will remain firm or appreciate as long as existing home sales do not stumble into an extended downswing. A sluggish housing market would lower rates and raise uncertainties about future stock prices, both of which can weaken demand for U.S. currency.

NEW HOME SALES

Market Sensitivity: Medium.

What Is It: Tracks the sales of new single-family homes.

Most Current News Release on the Internet: www.census.gov/newhomesales

Home Web Address: www.census.gov

Release Time: 10:00 a.m. (ET); released about four weeks after the reporting month ends.

Frequency: Monthly.

Source: Census Bureau, Department of Commerce.

Revisions: There are frequent revisions with the data, and they can cover the preceding three months.

WHY IS IT IMPORTANT?

An abundance of economic indicators deal with housing. With every month comes news of housing starts and permits, sales of existing homes, construction spending, and now the topic of this section, new home sales. Each offers a different perspective on this all-important industry. Housing starts, or new home construction, is essentially a production figure. That is, it's less a predictor of consumer spending and more a reflection of business confidence—specifically, builder expectations of future home-buying trends. Existing home sales, on the other hand, provides better insight into consumers' financial health and shopping mood. The downside of existing home sales is that its effects on the economy are rather limited. Nothing new has to be constructed since the house is already in place. Also, existing home sales has only limited value as a predictive indicator because it is counted only when the transaction formally closes and the title is exchanged, a process that can take several months after the initial contract.

This section looks at new home sales, which is considered a more timely measure of conditions in the housing market and a better indicator of future economic activity. For instance, the sale of a newly constructed house is recorded not at closing (as is the case with existing homes), but when the initial contract is signed. True, you don't know if all those signed contracts to purchase a home make it all the way to final closing, but those that don't are rare and are statistically insignificant. The more interesting issue is how could the sale of new homes, which makes up a tiny 15% of the residential real estate market, have such a profound effect on the economy? The answer is that new homes generate lots of investment, jobs, spending, and production. Builders seek construction loans; purchase property; order lumber, glass, wiring, concrete, and plumbing; and hire a variety of skilled workers to help put up a home. New homes also tend to be more expensive than existing homes because builders often include many modern amenities. In addition, when

buyers move in, it triggers yet another round of spending on new furniture and other accessories for the next 12 to 18 months.

There is one other reason top money managers closely examine this indicator on new home sales. If consumer spending is about to change direction, you'll see it turn here first. Purchasing a home is the single-biggest expense a household will undertake, and unless prospective buyers are content with their income, job security, and the economic outlook, many will be reluctant to buy. Should home buying begin to wane, it sets off alarms in many sectors of the economy. Banks will cut back on construction loans for fear builders might have a hard time repaying them. Without the necessary capital, new residential investment falls, and that will suppress demand for building supplies, appliances, and construction workers. Suddenly the danger of a serious economic slowdown begins to loom.

Ironically, it is in the midst of recession that the housing sector comes back to life and helps lift the rest of the economy out of its stupor. Mortgage rates fall during an economic downturn, and at some point they drop to a level where they make housing more attractive again. As interest in home buying revives, builders find a warmer reception from bank loan officers, who, after a long dry spell of making few loans, are eager to lend again. Moreover, in a recession, there is ample supply of labor and materials. As a consequence, construction quickly picks up speed to satisfy the growing demand for new homes. Given the multiplier effects of a rebound in housing, it's only a matter of weeks before other industries benefit as well.

HOW IS IT COMPUTED?

To come up with figures on new home sales, the Census Bureau relies on data from its housing permits series. Why look at permits? Because builders often file for construction permits only after they've collected a deposit or received a signed contract from a home buyer.

New home sales figures generally undergo revisions, sometimes substantial ones, if parts of the country have been exposed to unusual weather patterns. As a result, it's necessary to look at the data for at least three to four months before one can decipher a trend in new home sales.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

- **Table 1** New Houses Sold and For Sale

New home sales get center stage when the economy is believed to be near a turning point. In such instances, experts are looking for evidence that prospective home buyers are ready to jump into the housing market and lock in the lowest possible mortgage rate, a point that often occurs at the bottom of the business cycle. A pickup in new home sales is often followed a month or two later by an increase in sales of existing homes. As the pace of home buying quickens, demand for supplies and services will stimulate activity in other home-related businesses.

That pattern is reversed if the economy has been growing at full speed for a prolonged period. Eventually, mortgage rates will climb to painful levels and begin to push many home seekers out of the market. After new and existing home sales turn down, the broad economy begins to sputter as well.

Table 1. New Houses Sold and For Sale

[Thousands of houses. Detail may not add to total because of rounding]

Period	Sold during period ¹					For sale at end of period					Months supply	Median sales price (\$)	Average sales price (\$)
	United States	North-east	Mid-west	South	West	United States	North-east	Mid-west	South	West			
Seasonally adjusted													
2003: January	1,009	89	176	466	278	343					4.1		
February	935	50	181	442	262	343					4.5		
March	1,008	83	166	503	256	341					4.1		
April	1,004	70	174	468	292	341					4.1		
May	1,081	73	162	525	321	344					3.9		
June	1,200	85	194	552	369	343					3.5		
July	1,145	75	223	542	305	341					3.6		
August	1,190	74	255	548	313	345					3.5		
September	1,129	91	193	520	325	350					3.8		
October ²	1,149	92	199	540	318	361					3.9		
November ²	1,111	88	164	534	325	363					3.9		
December ²	1,125	100	179	515	331	367					4.0		
2004: January³	1,106	95	189	504	318	370					4.1		
Average RSE (%)	6	18	16	9	9	4					6		
Percent Change:													
<i>January 2004 from December 2003</i>	-1.7%	-5.0%	5.6%	-2.1%	-3.9%	0.8%					2.5%		
<i>90% Confidence Interval⁴</i>	±13.6	±24.2	±28.3	±18.2	±34.3	±1.0					±11.3		
<i>January 2004 from January 2003</i>	9.6%	6.7%	7.4%	8.2%	14.4%	7.9%					0.0%		
<i>90% Confidence Interval⁴</i>	±12.8	±49.0	±34.9	±15.8	±28.0	±4.6					±12.1		
Not seasonally adjusted													
2002 :	973	65	185	450	273	344	36	77	161	70	(X)	187,600	228,700
2003 ¹ :	1,089	81	189	512	307	374	28	97	171	78	(X)	194,100	245,200
RSE (%)	2	8	7	3	3	3	12	8	5	7	(X)	3	2
2003: January	76	6	12	37	22	347	36	77	163	71	4.6	181,700	230,200
February	82	4	15	39	23	339	34	73	162	70	4.2	187,000	233,400
March	98	9	17	47	25	330	30	74	157	69	3.4	185,100	231,100
April	91	7	17	40	27	339	29	76	162	72	3.7	189,500	237,200
May	101	6	15	50	29	341	30	79	161	71	3.4	195,500	243,700
June	107	8	18	48	33	342	29	84	162	67	3.2	187,900	239,700
July	99	6	20	47	26	342	29	84	159	69	3.5	190,200	248,400
August	105	6	23	48	28	342	28	84	163	68	3.3	190,500	241,000
September	90	8	15	42	25	350	27	88	165	69	3.9	192,000	254,500
October ²	88	7	16	40	25	368	29	92	171	76	4.2	194,100	242,800
November ²	78	6	12	38	22	366	29	94	169	74	4.7	204,700	268,200
December ²	76	7	11	36	21	374	28	97	171	78	5.0	195,800	254,500
2004: January³	84	6	12	40	25	373	27	96	174	76	4.4	197,000	258,600
Average RSE (%)	6	18	16	9	9	4	12	9	5	6	6	5	4

(1) *New Houses Sold*: This is the headline number where you'll find the monthly tally of new homes sold at an annualized rate for the entire U.S. and the four geographic regions: Northeast, Midwest, South, and West. Any discernible

change in trend sales here can act as an early-warning indicator that the economy is losing steam or gearing up for recovery.

- (2) *New Houses for Sale at End of Period:* This table provides the latest in the supply of new homes being offered for sale. It stands to reason that the inventory of new homes ready for sale would shrink in a buoyant housing market and increase when buying turns sluggish. Of course, a great deal depends on how quickly builders are grinding out new homes during these periods. Clearly, if the inventory of unsold homes expands too much, builders will scale down future construction until the market improves again.
- (3) *Months' Supply:* The all-important inventory-sales ratio of new homes tells you how many months it will take to sell the current supply of new homes based on the most recent sales pace. The I/S ratio is a good predictor of future home construction. When homes sales are brisk, the months' supply ratio usually stabilizes or falls. Generally, if it drops to four months' worth of supply or less, builders are sufficiently encouraged to keep investing in new construction. Conversely, if sales are declining or there are just not enough buyers to absorb all the new homes being built, the stock of new homes can climb past six months' worth of supply. This usually foreshadows a drop in new home construction.
- (4) *Median and Average Sales Prices:* Check here to see the latest median and average price of new homes. Normally, the value of new homes appreciates faster than that of existing homes because they have more modern features. If prices move steadily higher over several months, it's evidence of a vibrant housing sector. It's also interesting to compare the rise in home prices with inflation. If new home prices increase significantly faster than inflation, Americans will be inclined to view housing as an attractive medium and long-term investment.

- **Table 2** New Houses Sold, by Sales Price

New home prices can range from under \$100,000 to more than \$10 million. This table shows which price segment of the housing market sold the best during the past several months. Homes in the \$150,000 to \$250,000 category are normally the fastest-selling residences.

[Thousands of houses. Components may not add to total because of rounding. Percents computed from unrounded figures]

Period	Number of houses ¹							
	Total	Under \$100,000	\$100,000 to \$124,999	\$125,000 to \$149,999	\$150,000 to \$199,999	\$200,000 to \$249,999	\$250,000 to \$299,999	\$300,000 and over
2002 :	973	62	94	138	237	139	107	196
2003 ² :	1,089	55	98	149	264	147	112	263
RSE (%)	2	16	9	6	6	5	5	6
2003: January	76	3	9	12	19	10	8	16
February	82	5	7	13	18	12	8	18
March	98	4	11	15	25	12	11	21
April	91	6	7	14	23	11	10	20
May	101	4	10	13	25	16	10	23
June	107	5	11	16	27	14	9	26
July	99	6	9	13	25	13	10	23
August	105	6	9	14	27	13	11	25
September	90	5	7	12	23	14	8	21
October ³	88	7	7	12	20	10	12	20
November ⁴	78	3	6	10	18	10	7	23
December ⁵	76	5	7	8	20	10	7	19
2004: January ⁶	84	5	8	9	20	8	8	25
Average RSE (%) ⁷	6	29	20	17	13	16	16	12

• **Table 3** New Houses Sold and For Sale by Stage of Construction and Median Number of Months on Sales Market

(5) *Sold during period, but not started*: One of our favorite indicators on the outlook for the home-building industry is a little-known column that highlights lots sold. Why track this series? Buyers of new homes typically get the best deal on units that have already been built, often on speculation. But what if we see a significant pickup in the sale of *single-family housing lots*? If the volume of lots purchased rebounds, it is a precursor of more construction. This column essentially counts the number of lots that were sold in the latest month for which construction has yet to begin. Changes in these numbers can serve as a fairly good leading indicator of the housing-market trends.

Table 3. New Houses Sold and For Sale by Stage of Construction and Median Number of Months on Sales Market
 [Thousands of houses. Detail may not add to total because of rounding.]

Period	Sold during period				For sale at end of period				Median months for sale ¹
	Total	Not started	Under construction	Completed	Total	Not started	Under construction	Completed	
2010:	323	67	104	151	188	27	81	80	7.9
2011: (r)	306	74	91	140	152	25	67	60	6.8
RSE (%)	4	8	5	5	5	9	6	5	8
2011: February	22	7	5	10	181	26	78	77	8.1
March	28	6	9	13	179	26	79	74	8.7
April	30	7	8	15	172	25	79	68	8.9
May	28	7	9	12	168	24	78	66	9.2
June	28	6	9	13	167	24	81	61	10.0
July	27	7	9	11	165	23	80	62	9.4
August	25	5	8	11	164	24	78	62	8.7
September	24	5	8	11	163	25	77	61	7.6
October	25	5	7	12	159	24	77	59	7.2
November (r)	23	6	6	11	156	24	73	59	7.2
December (r)	24	6	6	12	152	25	67	60	6.8
2012: January (r)	22	6	6	10	150	25	68	57	7.3
February (p)	25	7	8	10	150	29	67	54	7.6
Average RSE (%) ²	9	10	12	10	5	9	6	6	10

(p) Preliminary. (r) Revised. RSE Relative standard error. (X) Not applicable. (Z) Less than 500 units or less than 0.5 percent.

¹Median number of months for sale since completion.

²Average RSE for the latest 6-month period.

▲
5

MARKET IMPACT

Bonds

New home sales tend to have the greatest impact on the fixed-income market near the peaks and troughs of a business cycle. During periods of strong economic growth, a larger-than-expected jump in new home sales can intensify alarms of inflation and thus weaken bond prices. On the other hand, if the economy were just starting to emerge from recession, the response by traders to a rebound in new home sales will likely be more muted, because it poses far less of an inflationary threat at this stage.

A precipitous monthly drop in home sales could signal a weakening in the economy and lower inflation. In such circumstances, bond prices can edge higher, with interest rates slipping lower.

Stocks

The volatile nature of this series and its small proportion of the residential real estate market keep it from generating much excitement among equity investors. Yet, because it is widely known as a leading indicator, the new-home-sales series becomes more influential whenever analysts suspect the economy is near a turning point.

Dollar

Traders in the currency markets have not shown much sensitivity to new home sales. There just isn't much of a correlation between the performance of new home sales and a change in the dollar's value.

HOUSING MARKET INDEX: NATIONAL ASSOCIATION OF HOME BUILDERS (NAHB)

Market Sensitivity: Medium.

What Is It: Assesses the current market for new single-family home sales along with builder expectations of future trends.

Most Current News Release on the Internet: www.nahb.org/hmi

Home Web Address: www.nahb.org

Release Time: 10:00 a.m. (ET); published midmonth and covers activity for the first half of the same month.

Frequency: Monthly.

Source: National Association of Home Builders; Wells Fargo.

Revisions: Tend to be minor.

WHY IS IT IMPORTANT?

It is a truism in economics that as the housing industry goes, so goes the rest of the economy. That's why you'll find so many economic indicators dedicated to tracking the residential real estate market. Among the many reports, however, is one indicator that often slips under the radar, despite its talent for being among the best predictors of future housing activity. The Housing Market Index (HMI), published every month by the National Association of Home Builders and Wells Fargo, possesses all the characteristics of a big-time market mover. It is based on responses directly from home builders, who have the best pulse on current and future home-building trends. Furthermore, the HMI is released in the same month it reports on, long before any of the other major monthly housing reports are out. Finally, this housing index has a proven track record of being a decent leading indicator of future home sales. Given these attributes, you would think money managers would spring into action after the report is released. However, that is not the case. For one thing, the size of the statistical sample used by the association is fairly small; the survey is based on responses from 400 builders out of a total membership of 72,000. In addition, the data is not broken down regionally, making it hard to identify areas of the country that are experiencing strong or weak demand for new single-family homes.

HOW IS IT COMPUTED?

For more than 20 years, the National Association of Home Builders has conducted a monthly survey asking roughly 900 members (about half of whom answer on time) the following questions:

- What are the current conditions for new single-family home sales? (Good, fair, or poor?)
- What are your expectations of new single-family home sales for the next six months? (Good, fair, or poor?)
- Rate the traffic of prospective home buyers you are seeing at new home sites. (High to very high, average, or low to very low?)

The survey results are based on answers received in the first ten days of every month. Scores are calculated using a diffusion index for each question and are adjusted for seasonal factors. The index has a scale that ranges from 0 to 100, in which 0 means that virtually everyone agreed that conditions were poor, and 100 indicates that everyone believed that conditions were good. An index of 50 means that the number of “good” responses received from builders is about the same as the number of “poor” responses. Thus, any index number above 50 suggests that more builders viewed conditions as “good” rather than “poor.”

The centerpiece of the report is the overall Housing Market Index, which is computed as a weighted average of the results from the three main questions just listed. Answers to the first query on current conditions represent 59% of the HMI index, expected sales for the next six months accounts for 14%, and the traffic of home seekers is 27%.

THE TABLES: CLUES ON WHAT’S AHEAD FOR THE ECONOMY

The NAHB has two separate locations on its Web site for information on the Housing Market Index. One is the press release with the latest monthly analysis, and the other contains all the current and historical data points on the Housing Market Index. You can see both by visiting www.nahb.org/hmi.

- **Press Release on the Housing Market Index**

Survey results and a brief analysis of the latest HMI can be found here. The index is considered a good leading indicator for the other housing reports that are released weeks later. By looking at both the HMI and the Census Bureau’s housing-starts figures, one can more accurately forecast the future demand and supplies for new homes and even the outlook for national economic activity given the ripple effect that home buying has on the economy.

- **Table 3 NAHB/Wells Fargo National HMI Components—History**

The three components that make up the HMI are shown here to provide additional perspective on the new housing market.

The screenshot shows the NAHB website with a navigation menu and a news article. The article title is "Builders See New-Homes Market Holding Strong And Steady In March". The text discusses the Housing Market Index (HMI) for March 2004, noting that demand for newly built single-family homes is holding steady. It includes quotes from Bobby Rayburn, NAHB president, and David Seiders, NAHB Chief Economist. The article also mentions that the HMI remained unchanged from February's 64 reading.

Source: National Association of Home Builders, used with permission.

Housing Market Index (Seasonally Adjusted)																		
2002			2003						2004									
Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
63	64	65	64	62	52	52	57	62	65	71	68	72	70	70	69	64	64	69

Housing Market Index Components (Seasonally Adjusted)																			
2002			2003						2004										
Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	
Single-Family Sales: Present																			
69	71	72	69	69	59	57	62	67	69	77	73	78	78	77	76	71	70	76	◀ 1
Single-Family Sales: Next 6 Months																			
68	70	69	68	66	56	62	69	70	74	78	78	82	81	77	76	73	70	76	◀ 2
Traffic of Prospective Buyers																			
47	48	48	51	43	35	35	40	47	51	55	51	52	47	52	51	46	49	48	◀ 3

Source: National Association of Home Builders, used with permission.

- (1) The series in this row represents sales of single-family homes. It is actually better than the composite Housing Market Index at predicting housing starts in the short term, such as over the next two months. However, if you want to see what single-family home construction might be like beyond that period, the HMI has a higher correlation than any of the three questions individually.
- (2) Builders are not likely to commit to new construction unless they expect demand to be healthy in the months ahead. This table reflects how builders assess the new home sales market over the next six months based on current assumptions of interest rates and economic growth.
- (3) The third row gauges the number of buyers walking onto new home sites. A pickup in visitors to real estate showrooms can lift builder confidence because these walk-ins represent potential future sales.

MARKET IMPACT

Bonds

Economic indicators on home construction have an impact on bonds. However, the NAHB's Housing Market Index, despite its early appearance, appears to be overshadowed by other, better-known government releases on building activity. These include housing starts and new home sales, both of which are based on larger surveys. As a result, the HMI does not provoke much of a reaction in the bond market.

Stocks

Money managers might review the report, but they generally do not trade based on the information.

Dollar

Foreign exchange traders do not follow the NAHB release.

WEEKLY MORTGAGE APPLICATIONS SURVEY AND THE NATIONAL DELINQUENCY SURVEY

Market Sensitivity: Medium.

What Is It: Tracks the number of Americans applying for a mortgage to buy a home or refinance an existing mortgage.

Most Current News Release on the Internet:

www.mortgagebankers.org/NewsandMedia

Home Web Address: *www.mortgagebankers.org*

Release Time: 7:00 a.m. (ET); comes out every Wednesday and covers the week ending the previous Friday. A separate report, the National Delinquency Survey, is published two-and-a-half months after each quarter.

Frequency: Weekly.

Source: Mortgage Bankers Association (MBA).

Revisions: Few revisions are made.

WHY IS IT IMPORTANT?

The key to any forecast on the economy is the consumer. If you can correctly assess how much people will spend in the months ahead, odds are you'll do fairly well at predicting economic growth. Get consumer behavior right, and everything else usually falls into place. If you miss this critical source of demand in the economy, your projections will almost certainly be off the mark. As a result, professional forecasters look for any piece of economic data they can find that helps them foresee changes in consumer spending. One of the best pieces of information turns out to be the Weekly Mortgage Applications Survey by the Mortgage Bankers Association. A pickup in mortgage applications is very bullish for the economy in two respects. First, it serves as evidence that home-buying interest has accelerated, which should be viewed as a positive for the residential real estate market and for the economy as a whole. Second, in a climate of falling mortgage rates, homeowners often jump at the chance to fill out a new application to refinance their existing mortgages. By switching from a high-cost mortgage to one that allows for lower monthly payments, consumers end up with a savings windfall—money that can be used to pay off other debt (such as car loans and credit card bills) or fire up a new round of consumer spending.

Reading the Weekly Mortgage Applications Survey is easy. It contains various indexes, each measuring a different part of the residential mortgage market. However, the two that grab the most attention are the purchase index and the refinance index. Because most home buyers have to apply for a mortgage before they can buy a home, changes in

the purchase index can tell analysts where the housing market is headed. Rarely has the economy found itself in trouble when home buying is strong. As for the refinance index, an increase in these applications often leads to greater household spending, which in turn fuels more economic growth.

Here's a list of the main indexes in the Weekly Mortgage Applications Survey and a description of what they cover:

1. *The Market Composite Index*: This is the best indicator of total mortgage application activity. It tracks all mortgage applications during the latest week, regardless of whether they were to purchase or refinance a home. The index covers conventional and government-backed mortgage applications, as well as major types of mortgage maturities: 30-year fixed, 15-year fixed, and adjustable-rate mortgages.
2. *Purchase Index*: Refers to all mortgage applications filed for the sole purpose of buying a private home, using either a conventional or a government loan.
3. *Refinance Index*: Covers all mortgage applications used to refinance an existing mortgage. It also includes conventional and government refinances.

In addition to these indexes, the survey computes the latest average contract interest rate for 30-year fixed mortgages, 15-year fixed mortgages, and 1-year adjustable-rate mortgages (ARMs).

HOW IS IT COMPUTED?

Each week, the MBA polls about 25 mortgage bankers, commercial banks, and thrifts on the latest mortgage activity. The survey manages to cover about 75% of the U.S. retail residential mortgage volume.

The answers are adjusted for seasonal and holiday effects, but they are also available in a seasonally unadjusted form.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

The Weekly Mortgage Applications Survey, which made its first appearance in 1990, can be viewed on MBA's Web site at no cost. It contains a useful summary of all the key indexes, plus a brief analysis. Access to tables, however, is through subscription only. We'll stick to information that can be found in the publicly available press release for both the Weekly Mortgage Applications Survey and the National Delinquency Survey.

- **News Release** Weekly Mortgage Applications Survey

The purchase index has proven to be a reliable indicator of future housing activity, especially with existing home sales, which dominate the residential real estate market. In fact, over the past 15 years there has been a 60% correlation between the annual change in the index of purchase applications and the change in sales of new and existing single-family homes in the months ahead. A sustained increase in the

purchase index thus suggests the presence of a vibrant home-buying market. Moreover, the purchase index also serves as a leading indicator of consumer spending, since buyers want to outfit their new homes with furniture and appliances. The refinance index is the best-known measure of mortgage refinancing activity. Anyone trying to forecast consumer spending has to consider the volume of mortgage refinancing applications.

News Room

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Purchase Applications Increase While Refinance Applications Fall In Latest Survey

Source: Mortgage Bankers Association
Date: April 7, 2004
Contact: Matt Royle (202) 557-2727 mroyle@mortgagebankers.org Laura Armstrong (202) 557-2730 larmstrong@mortgagebankers.org
[Subscribers only: [Click here to access this week's mortgage application survey data.](#)]

WASHINGTON, D.C. (April 7, 2004)—The Mortgage Bankers Association (MBA) today released its Weekly Mortgage Applications Survey for the week ending April 2. The Market Composite Index of mortgage loan applications—a measure of mortgage loan applications for purchases and refinancing—decreased by 7.2 percent to 1012.9 on a seasonally adjusted basis from 1091.3 one week earlier. On an unadjusted basis, the Market Index decreased by 6.8 percent compared with last week and was down 17.6 percent compared with the same week one year earlier.

The MBA's seasonally adjusted Purchase Index increased by 7.6 percent to 477.5 from 443.8 the previous week. The seasonally adjusted Refinance Index decreased by 15.0 percent to 3126.7 from 4857.4 one week earlier. Other seasonally adjusted index activity included the Conventional Index, which decreased 7.7 percent to 1488.3 from 1612.4 the previous week. The Government Index decreased 1.0 percent to 219.6 from 223.9 the previous week.

The refinance share of mortgage activity decreased to 57.1 percent of total applications from 62.8 percent the previous week. The adjustable-rate mortgage (ARM) share of activity increased to 28.8 percent of total applications from 27.5 percent the previous week.

The average contract interest rate for **30-year fixed-rate mortgages increased to 5.79 percent from one week earlier**, with points decreasing to 1.27 from 1.29 the previous week (including the origination fee) for 80 percent loan-to-value (LTV) ratio loans.

The average contract interest rate for **15-year fixed-rate mortgages increased to 5.03 percent from one week earlier**, with points increasing to 1.40 from 1.31 the previous week (including the origination fee) for 80 percent LTV loans.

The average contract interest rate for **one-year ARMs increased to 3.49 percent from one week earlier**, with points increasing to 1.04 from 0.98 from the previous week (including the origination fee) for 80 percent LTV loans.

****SPECIAL NOTES****

The survey covers approximately 50 percent of all U.S. retail residential mortgage originations, and has been conducted weekly since 1990. Respondents include mortgage bankers, commercial banks and thrifts. Base period and value for all indexes is March 16, 1990=100.

The Mortgage Bankers Association (MBA) is the national association representing the real estate finance industry, an industry that employs more than 400,000 people in virtually every community in the country. Headquartered in Washington, D.C., the association works to ensure the continued strength of the nation's residential and commercial real estate markets; to expand homeownership prospects through increased affordability; and to extend access to affordable housing to all Americans. MBA promotes fair and ethical lending practices and fosters excellence and technical knowledge among real estate finance professionals through a wide range of educational programs and technical publications. Its membership of approximately 2,700 companies includes all elements of real estate finance: mortgage companies, mortgage brokers, commercial banks, thrifts, life insurance companies and others in the mortgage lending field. For additional information, visit MBA's Web site: www.mortgagebankers.org.

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Source: Mortgage Bankers Association, used with permission.

- **News Release** National Delinquency Survey (NDS) (Not Shown)

In addition to the Mortgage Applications Survey, the MBA publishes a quarterly report on mortgage delinquencies and home foreclosures known as the National Delinquency Survey. It's based on a sample of more than 44 million mortgage loans serviced by mortgage companies, commercial banks, thrifts, credit unions, and other lenders. Economists read it to see whether economic conditions have deteriorated to the point where households have difficulty meeting their mortgage obligations.

Investors study the data to gauge the condition of the U.S. mortgage market and to check on the credit quality portfolio of banks and other mortgage lenders.

The results of the National Delinquency Survey can be found on the same MBA Web site. (To find it, go to www.mortgagebankers.org/NewsandMedia, and click the arrow at the bottom of the MBA News section to see the latest quarterly report.) By definition, the NDS looks at the percentage of all mortgages that are delinquent and to what extent: Normally, after 90 days, the lender can initiate foreclosure proceedings, and the MBA includes a percentage of those as well.

Over the years, a few trends have emerged from the National Delinquency Survey. First, during moments of great financial stress, Americans place a priority on keeping their mortgage payments on time. They will usually delay payments on credit cards and other types of debts in order to have sufficient funds to keep their home. Should household finances worsen further, 30-day delinquencies on home payments will pick up, and this will shortly be accompanied by a jump in 60-day and 90-day delinquencies as well. The last to rise are foreclosure rates. Sadly, during the devastating 2008–09 recession, the value of many houses plummeted to an amount *below* the mortgage still due. That prompted a large number of financially strapped households to simply walk away from their homes and their mortgage obligations, forcing lenders to take over these properties.

Banks and other mortgage lenders are typically reluctant to take the home repossession route, because the process can be costly and time-consuming. However, when the number of foreclosures increases, it sets in motion a process that's hard to turn around, even if the economy improves. Foreclosure rates lag behind improvements in delinquency rates because it takes so long for repossessions to work their way through the legal system.

MARKET IMPACT

Bonds

Over the past few years, the Weekly Mortgage Applications Survey has taken on greater significance among bond traders and economists for its connection to future consumer spending. The report itself tends to have only a modest impact on the financial markets. However, there are occasions when investors holding bonds might fret that a sharp increase in home buying portends greater consumer outlays and brisk economic growth—events that can lead to higher inflation. Such survey results therefore might trigger a mild sell-off, particularly if the refinancing index unexpectedly surges. As for the quarterly National Delinquency Survey, bond traders show little interest in this report.

Stocks

Equity investors regularly monitor the Weekly Mortgage Applications Survey as well as the National Delinquency Survey, but for different reasons. The former can shed light on how housing and consumer spending will perform in the months ahead; the latter is

studied to check on the quality of loan portfolios held by banks and mortgage lenders. Earnings at financial institutions can suffer if delinquencies and loan losses begin to mount.

Dollar

There's no direct reaction in foreign exchange markets to either report.

CONSTRUCTION SPENDING

Market Sensitivity: Low.

What Is It: Tallies up all spending on public and private construction.

Most Current News Release on the Internet:

www.census.gov/constructionspending

Home Web Address: *www.census.gov*

Release Time: 10:00 a.m. (ET); published at the start of each month but covers construction activity that occurred two months earlier.

Frequency: Monthly.

Source: Census Bureau, Department of Commerce.

Revisions: Can be major. The two previous months are revised with each new release. In addition, annual benchmark changes occur every May that can go back two years or more.

WHY IS IT IMPORTANT?

Up to now, economic indicators that gauge construction activity have focused on residential real estate trends. The construction spending report, however, looks at both residential and nonresidential building. It is the most comprehensive barometer of building activity in the U.S. and is well worth watching because of its large contribution to GDP. The total construction industry alone accounts for nearly 9% of all economic activity. That doesn't even include all the other businesses whose fortunes are tied to the building sector, such as the home furnishings and appliance industries. Clearly, construction activity is a major force in the economy. The government uses the data from this release to help compute business investment spending for the quarterly GDP report.

Construction spending is divided into three distinct categories:

- *Private construction for residences (5% of GDP):* Includes single-family homes and apartment buildings.
- *Private nonresidential structures (2.4%):* Pertains to factories, office buildings, hotels, motels, religious and educational buildings, hospitals, and other types of institutions.
- *Public construction (2%):* Covers public housing projects, public schools, sewer systems, and similar infrastructure development.

While many economists follow this indicator, money managers generally do not. For one, it is terribly late in coming; the data is one of the last pieces of information to be released for a given month. More than a dozen other real estate-linked indicators for the same month have been released long before, so many investors find little added value in these figures. Aside from its late arrival, the report is notorious for undergoing sizable revisions. As a result, analysts are forced to rely mostly on three- and six-month moving averages to detect a trend in the construction business.

HOW IS IT COMPUTED?

The government obtains the value of residential construction directly from its own surveys on housing starts and new home sales. For nonresidential structures, it relies on outside sources, such as McGraw-Hill Construction, for the estimated dollar value of the work done by commercial real estate builders.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

- **Table 1** Value of Construction Put in Place in the U.S.

(1) *Total Private Construction*: Private construction activity can be a telling indicator of business confidence. This table records the monthly spending (at an annual rate) on private residential and nonresidential construction for each of the past six months and also compares the latest level to that of the previous year. What separates this report from all the other previous releases on real estate activity is that we get to know for the first time how much builders are actually spending and on what type of construction (homes, hotels, schools, nursing homes, hospitals). Of great interest to analysts is the spending on home building because of the industry's reputation as being a leading indicator of economic turning points, and the fact that it accounts for nearly 70% of all private construction. Another observation worth noting is that residential construction tends to lead nonresidential construction by about a year. Thus, if home-building activity peaks and then begins to weaken, commercial construction generally follows that pattern and slows within 12 months.

MARKET IMPACT

Economists and industry specialists pay more attention to this report than day-to-day traders, who do not find construction spending data particularly riveting nor timely. Even once released, this series has a history of massive revisions.

Table 1. Value of Construction Put in Place in the United States, Seasonally Adjusted Annual Rate
(Millions of dollars. Details may not add to totals due to rounding.)

Type of Construction	Jan 2004 ¹	Dec 2003 ¹	Nov 2003 ¹	Oct 2003	Sep 2003	Jan 2003	Percent change Jan 2004 from -	
							Dec 2003	Jan 2003
Total Construction	931,178	934,411	928,657	925,485	913,824	883,232	-0.3	5.4
Residential	507,146	507,068	502,732	493,377	481,735	455,960	0.0	11.2
Lodging	9,511	9,696	10,339	11,036	10,723	10,134	-1.9	-6.1
Office	39,223	40,773	41,785	42,083	40,355	40,881	-3.8	-4.1
Commercial	60,117	61,643	59,961	61,456	62,636	60,666	-2.5	-0.9
Health care	28,362	29,251	29,358	29,525	29,518	28,613	-3.0	-0.9
Educational	69,492	71,220	68,940	70,736	71,278	71,450	-2.4	-2.7
Religious	7,737	7,987	8,061	8,528	8,569	8,435	-3.1	-8.3
Public safety	8,268	8,413	8,392	9,023	8,665	8,214	-1.7	0.7
Amusement and recreation	18,361	19,215	19,010	19,614	18,751	18,922	-4.4	-3.0
Transportation	22,860	22,827	23,454	24,473	24,152	24,331	0.1	-6.0
Communication	15,994	14,727	16,245	15,218	14,961	15,309	8.6	4.5
Power	37,918	37,422	35,109	35,880	37,332	36,864	1.3	2.9
Highway and street	66,003	64,770	65,271	64,377	64,900	63,538	1.9	3.9
Sewage and waste disposal	13,270	13,166	12,679	13,162	12,943	12,033	0.8	10.3
Water supply	9,108	9,032	9,454	9,187	9,492	9,731	0.8	-6.4
Conservation and development	3,880	3,425	3,705	3,849	3,695	4,039	13.3	-3.9
Manufacturing	13,928	13,778	14,162	13,961	14,119	14,112	1.1	-1.3
1 ▶ Total Private Construction ¹	715,778	719,336	712,644	705,215	692,462	667,636	-0.5	7.2
Residential	501,444	501,352	496,988	487,541	475,716	450,039	0.0	11.4
Lodging	8,618	8,986	9,323	9,836	9,414	9,233	-4.1	-6.7
Office	29,286	30,885	31,692	31,587	29,812	30,839	-5.2	-5.0
Commercial	55,704	57,206	55,502	56,322	57,041	56,767	-2.6	-1.9
Health care	22,435	23,233	23,524	23,656	23,374	23,127	-3.4	-3.0
Educational	12,965	13,419	12,496	12,940	13,544	12,839	-3.4	1.0
Religious	7,736	7,983	8,056	8,526	8,565	8,431	-3.1	-8.2
Amusement and recreation	7,501	8,035	7,776	7,981	7,278	6,216	-6.6	20.7
Transportation	6,225	6,229	6,122	6,319	6,493	7,219	-0.1	-13.8
Communication	15,821	14,630	16,069	15,145	14,854	15,277	8.1	3.6
Power	32,827	32,238	29,526	30,082	30,918	32,615	1.8	0.7
Manufacturing	13,778	13,700	14,080	13,906	13,960	14,014	0.6	-1.7
Total Public Construction ²	215,399	215,076	216,014	220,270	221,362	215,595	0.2	-0.1
Residential	5,702	5,716	5,744	5,837	6,019	5,922	-0.2	-3.7
Office	9,937	9,888	10,093	10,496	10,543	10,043	0.5	-1.1
Commercial	4,414	4,437	4,460	5,134	5,595	3,899	-0.5	13.2
Health care	5,927	6,018	5,834	5,869	6,145	5,486	-1.5	8.0
Educational	56,526	57,801	56,444	57,796	57,734	58,611	-2.2	-3.6
Public safety	8,049	8,155	8,130	8,715	8,350	8,116	-1.3	-0.8
Amusement and recreation	10,860	11,181	11,234	11,633	11,472	12,706	-2.9	-14.5
Transportation	16,635	16,598	17,333	18,155	17,659	17,113	0.2	-2.8
Power	5,090	5,184	5,583	5,798	6,414	4,249	-1.8	19.8
Highway and street	65,748	64,622	65,157	64,195	64,643	63,451	1.7	3.6
Sewage and waste disposal	12,737	12,765	12,204	12,780	12,491	11,829	-0.2	7.7
Water supply	8,858	8,708	9,130	8,738	9,080	9,123	1.7	-2.9
Conservation and development	3,699	3,114	3,388	3,792	3,639	4,014	18.8	-7.8

REGIONAL FEDERAL RESERVE BANK REPORTS

Every month, investors, economists, CEOs, and Washington policymakers are besieged by a multitude of surveys that claim to measure business activity in every nook and cranny of the country. The best-known ones come from the Institute for Supply Management and the government's own industrial production index. However, a slew of reports are also published by regional Federal Reserve Banks around the country, and some of them have begun to influence trading in the stock and bond markets. We'll focus on five of the most widely read.

The first to be released each month also happens to be among the newest of the Fed surveys. The Federal Reserve Bank of New York first published the Empire State Manufacturing Survey in 2002, and for a few months it went virtually unnoticed. The report began to catch the eye of investors when they realized its quick turnaround—the Empire survey comes out in the middle of the month being covered—and how well it serves as a reliable leading indicator of manufacturing activity of other Fed bank surveys.

The next to be published is the Philadelphia Fed survey, which is also released the same month it reports on. It has a reputation of predicting what the market-sensitive ISM Purchasing Managers manufacturing index will do when it comes out a few days later.

Two other noteworthy surveys come in the middle of the following month: One is from the Federal Reserve Bank of Kansas City, and the other is from the Fed Bank of Richmond.

Last on the list is the Federal Reserve Bank of Chicago, whose report is unique in comparison to the others in at least two respects. First, it's not a regional report; it instead looks at business conditions nationwide. Second, no survey is mailed. This Chicago index consists of a compilation of major economic indicators with a unique formula designed to predict inflation problems and forewarn of recessions.

The following sections discuss the five Fed bank reports in the order they are released:

- Federal Reserve Bank of New York
- Federal Reserve Bank of Philadelphia
- Federal Reserve Bank of Kansas City
- Federal Reserve Bank of Richmond
- Federal Reserve Bank of Chicago

FEDERAL RESERVE BANK OF NEW YORK: EMPIRE STATE MANUFACTURING SURVEY

Market Sensitivity: Medium.

What Is It: Tracks manufacturing activity in New York State.

Most Current News Release on the Internet:

www.newyorkfed.org/survey/empire/empiresurvey_overview.html

Home Web Address: *www.ny.frb.org*

Release Time: 8:30 a.m. (ET); released around the 15th of the month being reported.

Frequency: Monthly.

Source: Federal Reserve Bank of New York.

Revisions: Revisions are slight on a month-to-month basis. Every January the data undergoes benchmark revisions to reflect new seasonal adjustment factors.

WHY IS IT IMPORTANT?

If you've never heard of the Empire State Manufacturing Survey (ESMS), you're not alone. Most people haven't. Large institutional money managers have, however, and they recognize it as an up-and-coming economic indicator that could become one of the most influential reports released by the government.

The ESMS was developed by the Federal Reserve Bank of New York for internal use in July 2001, when the economy was in recession. Less than a year later, the bank went public with a monthly survey and cleverly set the timing for its release to precede other Fed surveys as a way to elbow into the financial market spotlight.

The ESMS is designed to find out the present condition of New York's manufacturing industries, as well as what company executives believe they will do in the next six months. Despite its short history, the ESMS has already demonstrated an intriguing correlation with the Philadelphia Index, which in turn has a knack for being a leading indicator of the market-shaking ISM manufacturing survey. Even the Federal Reserve Board, which sets the policy on interest rates, checks on the ESMS for any early indications of weakness or strength in manufacturing, as well as any incipient signs of inflation. It is something of a surprise that the ESMS is being given such careful consideration when, in fact, New York State doesn't really have a significant amount of manufacturing.

HOW IS IT COMPUTED?

On the first business day of every month, the New York Fed polls the same group of about 200 manufacturing CEOs or presidents. Respondents are asked to give their views on an assortment of issues and to return the completed forms by the 10th, though the forms still might be considered if they arrive as late as the 15th. Normally, about 100 are received on time at the New York Fed.

They are asked to describe how manufacturing conditions have changed in the month and what changes they expect to see in the next half year. Only three answers are possible: an increase in activity, a decrease in activity, or no change at all.

The survey questions are as follows:

- What is your evaluation of the level of general business activity?
- What about new orders? Shipments? Unfilled orders? Delivery times?
- Inventories? Prices paid? Prices received? Number of employees, including contract workers?
- Average employee workweek? Technology spending?
- Capital expenditures?

The responses to each question are tallied to form a diffusion index in which the percentage of those who saw a decrease in activity is subtracted from the percentage who saw an increase in activity. Thus, any number above zero means that more manufacturers believe business conditions are improving rather than worsening.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

- **Cover Page** Empire State Manufacturing Survey

(1) *General Business Conditions*: This is the report's summary findings for the month. It conveys the overall impression of manufacturing executives on whether activity is increasing or slipping. Note that the General Business Conditions index is not a weighted average of all the results from this survey, but is based on a distinct question on general business activity.

What can we discern from the General Business Condition index? Aside from its short history as an economic measure, a positive index number is a sign that factory activity is strengthening. Just how widespread that feeling is among manufacturers can be seen in the report's detailed tables.

March 2012

A publication of the Federal Reserve Bank of New York

Empire State Manufacturing Survey

The March *Empire State Manufacturing Survey* indicates that manufacturing activity in New York State expanded at a moderate pace. The general business conditions index was little changed at 20.2, its fourth consecutive positive reading. The new orders and shipments indexes were both positive but slightly lower, indicating continued growth in orders and shipments, though at a somewhat slower pace than in the last month. The prices paid index rose a steep 25 points to 50.6, its highest level since summer 2011, and the prices received index was positive but two points lower than in February. Employment indexes

rose and indicated continued growth in both employment levels and the average workweek. Indexes for the six-month outlook, though generally somewhat lower than they were last month, conveyed a high degree of optimism, and the capital spending index rose to its highest level in more than a year.

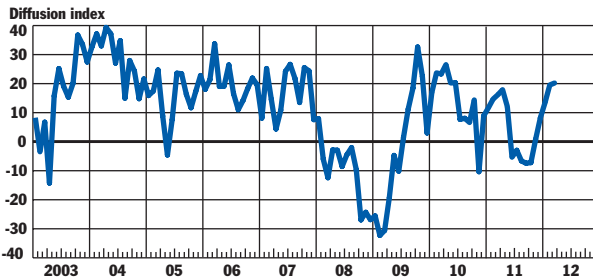
On a series of supplementary survey questions, respondents were asked about recent and expected changes in their firms' borrowing needs and credit availability. Parallel questions were asked in October 2011, March 2011, and earlier surveys. While a majority of respondents in the latest survey reported no change in borrowing

needs, a larger proportion than in earlier surveys indicated a rising need to borrow. Looking ahead, 30 percent of manufacturers indicated that they expect borrowing needs to be higher a year from now, whereas just 13 percent anticipated lower borrowing needs. Respondents were evenly split about both past and expected changes in credit availability. Firms also reported little change in borrowing costs, on balance, over the past three months.

Moderate Pace of Growth Continues

The general business conditions index was little changed in March and, at 20.2, indicated a continued moderate pace of growth in business activity for New York State manufacturers. One-third of respondents reported that conditions had improved, while just 13 percent reported worsening conditions. The new orders index inched down three points to 6.8, indicating a modest growth in orders. The shipments index fell five points to 18.2, revealing a continued increase in shipments, though at a slower pace than in February. The unfilled orders index rose six points to -1.2; though negative, this is the highest value for the index since June 2011. The delivery time index

1 ► General Business Conditions
Seasonally adjusted



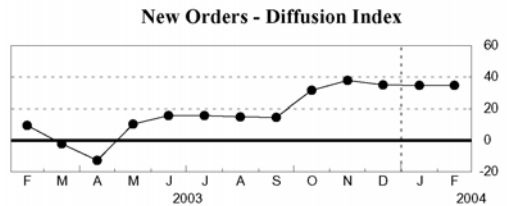
- Empire State Manufacturing Survey (Results for the Month and for Expectations Six Months Ahead)

Detailed Tables: The numbers in each table represent the actual percentage of respondents who feel activity is higher compared with the percentage who say it is lower. The final index is merely the difference between the two. Obviously, the larger the index, the greater the consensus. One problem with this report is the volatility of these numbers. They can fluctuate wildly from month to month, which is why the graph can be helpful. It provides a snapshot of sentiments in the past 12 months. To detect an underlying trend in the data, it is advisable to calculate three-month and six-month moving averages.

(2) *New Orders:* Future production and employment in manufacturing depend on the steady flow of new orders. When orders slump, production can shift into lower gear and possibly jeopardize jobs. A sustained increase in orders is a promising sign that factories will continue to run smoothly and keep workers busy. This subcomponent can also be a harbinger of business confidence. If factories are fully operational and production orders are streaming in, firms become more comfortable about hiring new workers and increasing capital spending.

New Orders

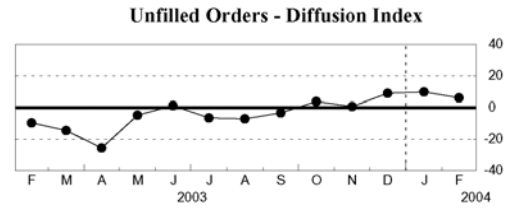
	<u>Higher</u>	<u>Same</u>	<u>Lower</u>	<u>Index</u>
Jan	49.03	36.75	14.21	34.82
Feb	48.91	37.12	13.97	34.94 ◀ 2



(3) *Unfilled Orders:* This indicator provides some perspective on how overburdened manufacturers are. If demand is so strong that factories are unable to match it by increasing production output, the number of unfilled orders will rise and deliveries will be delayed. Such strains can also lead to higher prices as shortages of raw materials emerge. One positive aspect of a chronic jump in unfilled orders is that it can promote new business spending by manufacturers who want to expand production capacity to satisfy customers with quicker deliveries.

Unfilled Orders

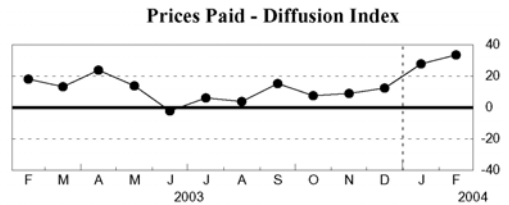
	<u>Higher</u>	<u>Same</u>	<u>Lower</u>	<u>Index</u>
Jan	26.03	57.93	16.04	9.99
Feb	24.39	57.70	17.91	6.48 ◀ 3



- (4) *Prices Paid:* If the seeds of inflation are starting to sprout, you'll find the first evidence here, at the manufacturing level. Factories often pass on higher production costs to wholesalers; wholesalers then transfer their additional expense to retailers, and they, in turn, try to pass it on to consumers. That's how households often end up paying more for goods. The Federal Reserve carefully monitors inflation pressures at this early stage of the production process so that it can nip inflation in the bud.

Prices Paid

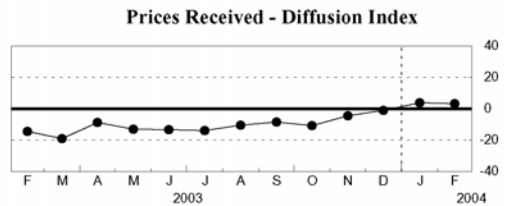
	<u>Higher</u>	<u>Same</u>	<u>Lower</u>	<u>Index</u>
Jan	32.69	62.50	4.81	27.88
Feb	38.79	56.03	5.17	33.62 ◀ 4



- (5) *Prices Received:* Corporate earnings depend not only on how well companies are able to cut operating costs, but also on their ability to set prices to achieve a decent profit margin. Global competition and a weak domestic economy can diminish a company's pricing power. On the other hand, an improving economy might return pricing flexibility to manufacturers and enhance profitability.

Prices Received

	<u>Higher</u>	<u>Same</u>	<u>Lower</u>	<u>Index</u>
Jan	15.38	73.08	11.54	3.85
Feb	14.66	74.14	11.21	3.45 ◀ 5



- (6) *Number of Employees:* This is the earliest indicator available on labor-market conditions for the month. It can act as a preview of changes in manufacturing

jobs that could be seen in the official employment report, which is released two weeks later.

No. of Employees

	<u>Higher</u>	<u>Same</u>	<u>Lower</u>	<u>Index</u>
Jan	35.09	54.34	10.58	24.51
Feb	27.74	61.05	11.21	16.54 ◀ 6



MARKET IMPACT

Bonds

Keeping ahead of inflation and the interest-rate curve is the main focus of bond traders. Thus, any fresh intelligence on the current and future state of the economy is looked upon with great interest. The Empire State Manufacturing Survey is seen in that light—as a timely report with current news on factory activity. The key question, however, is whether traders will vigorously act on it. Here the record has been spotty. One can safely assume that this survey will be more influential when the economy is believed to be near a turning point. If the ESMS shows modest growth in manufacturing with negligible inflation, this should raise bond prices and lower interest rates. But a surge in the indexes accompanied by a persistent rise in prices paid and prices received will upset investors. The price on fixed incomes might drop as worries mount that other Fed surveys will show the same.

Stocks

The equity market is also sensitive to this report because of its positive correlation with the Philadelphia and Chicago Fed bank surveys and the ISM data. Weakness in the Empire State indexes suggests that the earnings of manufacturers are under pressure, which can dull stock prices. A healthy jump in the indexes at a time of economic softness will lift stock prices.

Dollar

There is no discernible reaction by foreign investors to this index.

FEDERAL RESERVE BANK OF PHILADELPHIA: BUSINESS OUTLOOK SURVEY

Market Sensitivity: Low to medium.

What Is It: A survey of manufacturing activity in eastern Pennsylvania, southern New Jersey, and the state of Delaware.

Most Current News Release on the Internet:

www.phil.frb.org/econ/bos/index.html

Home Web Address: *www.phil.frb.org*

Release Time: 10:00 a.m. (ET); data is released on the third Thursday of the month being covered.

Frequency: Monthly.

Source: Federal Reserve Bank of Philadelphia.

Revisions: No monthly revisions take place, but the Philadelphia Fed does make annual benchmark changes at the start of the year.

WHY IS IT IMPORTANT?

The Philadelphia Fed regional report began in 1968 and is the longest-running survey of manufacturers by a Federal Reserve Bank. Known formally as the Business Outlook Survey (BOS), its familiarity has made it one of the most closely followed surveys by money managers and the press. The report is recognized for its timeliness because the results are published in the same month it covers. This Fed district also encompasses one of the more populated regions in the U.S. (eastern Pennsylvania, southern New Jersey, and the state of Delaware), which gives it added significance. Finally, the BOS can provide a sneak preview of what the high-profile ISM manufacturing survey might show when it comes out less than two weeks later.

HOW IS IT COMPUTED?

At the beginning of every month, the Philadelphia Fed mails questionnaires to the top executives at 250 large firms. They are asked to assess present conditions and record their expectations for the next six months. These questions can be answered in one of three ways: activity is up, down, or unchanged.

- What is your evaluation of the level of general business activity?
- What about new orders? Shipments? Unfilled orders? Delivery times?
- Inventories? Prices paid? Prices received? Number of employees?
- Average employee workweek? Capital expenditures?

Responses are received by the 10th of the month, though some of the data includes the period that bridges the current month and the previous one. All told, about half of the 250 questionnaires sent are returned on time.

Scores are tabulated for each of the questions, and seasonal adjustment factors are applied. The Philadelphia Fed then comes up with a diffusion index, which is the percentage of the positive scores minus the percentage that are negative. A zero is the break-even point, where half of the respondents report an increase and the other half a decrease. Readings above zero indicate that an expansion is under way, while an index below zero points to contraction.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

- Business Outlook Survey

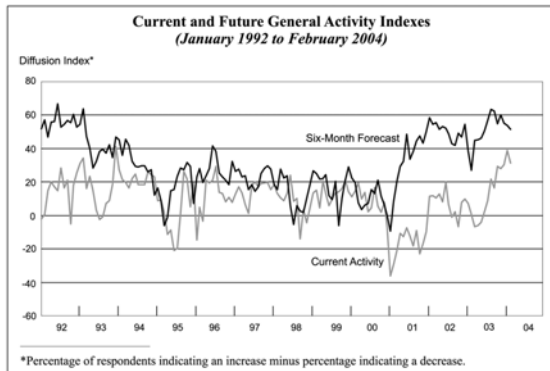


February 2004

▶ Activity in the region's manufacturing sector continues to expand, according to firms surveyed for this month's *Business Outlook Survey*. Although indicators for general activity, new orders, and shipments fell from their January readings, they remain at relatively high levels. For the fifth consecutive month more firms reported increases in employment than reported declines, and a larger percentage of firms reported higher average work hours this month. Firms reported an increase in input prices again this month and some upward pressure on prices of their own manufactured goods. Expectations for overall growth over the next six months remain very positive, and about one-third of the firms expect employment to increase.

Growth Continues but Some Indicators Fall Back

The diffusion index of current general activity, the survey's broadest measure of manufacturing conditions, decreased from 38.8 in January to 31.4 and has now been positive for nine consecutive months (see chart). Although some current indicators fell this month, they continue to reflect solid growth in the region's manufacturing sector. The new orders index fell nearly 9 points, and the shipments index fell almost 14 points. Still, both indicators remain at relatively high levels. Firms reported an increase in unfilled orders and essentially steady inventories this month. The delivery times index, at 72, is at its highest reading since January 1999.



Price Indexes Drift Higher

Firms reported higher costs again this month. Over 46 percent reported higher input prices, and only 3 percent reported lower prices. The prices paid diffusion index increased for the seventh consecutive month. Twenty-four percent of firms reported that prices for their own manufactured goods were higher this month, while 5 percent reported lower prices. The current prices received index is now at its highest reading since January 1995.

Firms' expectations regarding future price increases continue to drift higher. The future prices paid index has now

decreased from 53.9 in January to 51.4 this month, but it remains at a relatively high level (see chart). The future new orders index actually increased 6 points and the future shipments index was mostly unchanged. Firms expect unfilled orders to increase over the next six months, and delivery times to be longer. More firms (39 percent) expect inventories to increase over the next six months than to decrease (25 percent). The future inventory index has trended higher over the last six months and is now at its highest reading since 1984. In response to the special questions this month (see Special Questions), 37 percent

(1) *Summary of Results:* The BOS is considered one of the better indicators of change in the industrial sector. Though it portrays conditions only in its district, changes in the indexes can foreshadow shifts in the broader economy as well, especially with respect to prices and employment. Moreover, if you want a heads up on what might appear in the “Beige Book,” the much-studied publication from the Federal Reserve Board in Washington (see the section “The Federal Reserve Board’s Beige Book”), read the Philadelphia Fed’s Business Outlook Survey; portions of it make their way into the broader national report.

- Details of the Business Outlook Survey

(2) *General Business Activity Index:* Grabbing all the headlines in this release is the General Business Activity index, which has maintained a fairly close correlation with the manufacturing ISM series. They move in tandem about 70% of the time. Still, one has to be cautious here. The index can be quite volatile on a month-to-month basis because it is limited in geographic scope and reflects the answers to a single question. Thus, any conclusions about a trend should be based on a three-month moving average.

BUSINESS OUTLOOK SURVEY
Summary of Returns
February 2004

	Previous Diffusion Index	February vs. January			Diffusion Index	Previous Diffusion Index	Six Months from Now vs. February			Diffusion Index
		Increase	No Change	Decrease			Increase	No Change	Decrease	
2 ▶ What is your evaluation of the level of general business activity?	38.8	42.3	46.9	10.8	31.4	53.9	60.7	26.5	9.3	51.4
Company Business Indicators										
New Orders	36.5	40.7	46.5	12.8	27.8	49.8	63.8	25.7	8.5	55.3
Shipments	33.1	35.2	46.9	15.9	19.3	49.7	58.7	28.0	10.2	48.6
Unfilled Orders	10.7	20.4	62.3	16.0	4.4	17.2	33.6	51.7	7.9	25.7
Delivery Times	-2.0	19.2	68.7	12.1	7.2	11.5	21.5	67.9	7.9	13.6
Inventories	-3.9	24.9	50.3	24.1	0.8	8.7	39.1	30.9	25.2	14.0
Prices Paid	35.3	46.2	49.9	2.5	43.7	44.3	57.2	37.7	3.5	53.8
Prices Received	9.4	23.6	70.2	4.7	18.9	29.8	42.2	48.5	4.9	37.3
Number of Employees	17.5	20.9	68.9	8.4	12.5	15.1	32.7	51.3	13.2	19.5
Average Employee Workweek	12.9	26.7	63.8	3.1	23.6	16.7	22.0	65.0	6.6	15.4
Capital Expenditures	—	—	—	—	—	26.0	30.1	36.5	6.0	24.1

Notes:
 (1) Items may not add up to 100 percent because of omission of respondents.
 (2) All data seasonally adjusted.
 (3) Diffusion indexes represent the percentage indicating an increase minus the percentage indicating a decrease.
 (4) Survey results reflect data received through February 13, 2004.

- (3) *Six-Month Outlook*: Also of interest in this report are the respondents' answers to the six-month outlook. Of the 11 business indicator questions asked, two warrant particular attention. What's the half-year projection for capital expenditures? And second, will the number of manufacturing employees grow or shrink in that time frame? Clearly these two factors are related. Manufacturers will increase business expenditures only if they are confident that private demand has been resuscitated. Similarly, factories and plants are unlikely to hire permanent workers if there's still uncertainty about the economy's future direction.

MARKET IMPACT

Bonds

The Business Outlook Survey by the Philadelphia Fed isn't a huge market mover. Yet traders of fixed-income securities do track it because this report can tip off analysts about the results of the more influential national ISM survey when it is released days later.

Stocks

Investors keep an eye on the Business Outlook Survey, but they usually do not initiate major trades based on its information alone.

Dollar

Foreign exchange traders largely disregard this release.

FEDERAL RESERVE BANK OF KANSAS CITY: MANUFACTURING SURVEY OF THE 10TH DISTRICT

Market Sensitivity: Low.

What Is It: Measures manufacturing activity in a region that includes Colorado, Kansas, Nebraska, Oklahoma, Wyoming, western Missouri, and northern New Mexico.

Most Current News Release on the Internet:

www.kc.frb.org/mfgsurv/mfgmain.htm

Home Web Address: *www.kc.frb.org*

Release Time: 11:00 a.m. (ET); the report is released near the end of the month being examined.

Frequency: Monthly.

Source: Federal Reserve Bank of Kansas City.

Revisions: No revisions.

WHY IS IT IMPORTANT?

It's safe to say that this survey is not routinely in the national business spotlight. The Kansas City Fed Manufacturing Survey is relatively new, having been launched in 1995, and it lacks a solid track record on how well it correlates with other major economic indicators and with the economy as a whole. Still, this survey has some noteworthy virtues. There's a relatively short lag from the time the survey is conducted to its release date. This quick turnaround enables the Kansas City Fed manufacturing report to come out before other key indicators, such as industrial production, business inventories, producer prices, and durable goods. Thus, by merely being ahead of the pack, the Kansas City Fed survey is looked at with interest.

HOW IS IT COMPUTED?

The Kansas City Fed queries about 300 manufacturers who represent the district's geographic and industrial distribution. Respondents are asked about changes in business conditions for three time frames: over the past month, versus a year ago, and the expected change in six months. Questions are posed on the following issues:

- Change in volume of production
- Volume of shipments
- New orders
- Order backlog
- Number of employees

- Average employee workweek
- Prices received for finished products
- Prices paid for raw materials
- Capital expenditures
- New orders for exports
- Supplier deliveries
- Inventory for raw materials and for finished goods

Responses are compiled, corrected for seasonal adjustment factors, and presented in the form of a diffusion index. That is, the percentage of those who reported a decrease for a specific category is subtracted from the percentage of those who claimed an increase. Thus, the index can range from -100 (all those queried see activity declining) to $+100$ (everyone sees activity as increasing). If half see activity rising and the other half see it falling, the index is zero. So any figure above zero indicates that manufacturing activity is expanding, and any figure below zero suggests it is contracting.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

- **Table 1** Summary of Tenth District Manufacturing Conditions

Though the results of this survey pertain to economic activity inside one Federal Reserve district, they still can provide fresh clues on how the rest of the country is performing. Here are some key indicators to track in the report:

- (1) *Production and shipments*: Trends here reflect current manufacturing conditions as well as expectations for the near-term future.
- (2) *New orders and the backlog of orders*: The numbers tell you how busy factories will be in the future.
- (3) *Prices paid and received*: Changes presage inflationary or deflationary pressures.
- (4) *Capital expenditures index*: Looks at business spending plans in the region, but can also be seen as a harbinger of such investments in other parts of the country.

MARKET IMPACT

Bonds

Players in the fixed-income markets follow the regional Federal Reserve Bank surveys because they portray economic conditions in various parts of the country. Any surprise on the upside can make investors edgy because they can portend changes in the more influential manufacturing reports, including the ISM series and industrial production.

Table 1

Summary of Tenth District Manufacturing Conditions, January 2004

		January vs. December (percent, not seasonally adjusted)				January vs. Year Ago (percent)				Expected in Six Months (percent, not seasonally adjusted)			
		Increase	No Change	Decrease	Index*	Increase	No Change	Decrease	Index*	Increase	No Change	Decrease	Index*
Plant Level Indicators													
1 ▶	Production	40	36	23	17	52	18	28	24	51	29	18	33
	Volume of shipments	40	29	28	12	53	18	26	27	56	25	17	39
2 ▶	Volume of new orders	47	24	26	21	55	16	25	30	54	26	16	38
	Backlog of orders	31	40	24	7	42	31	20	22	41	38	16	25
	Number of employees	21	64	12	9	30	34	32	-2	29	51	17	12
	Average employee workweek	27	53	18	9	38	43	18	20	27	53	18	9
3 ▶	Prices received for finished product	17	74	8	9	30	47	22	8	26	61	11	15
	Prices paid for raw materials	42	52	3	39	56	32	8	48	49	42	7	42
4 ▶	Capital expenditures					22	55	16	6	28	54	12	16
	New orders for exports	14	71	5	9	14	69	6	8	21	65	4	17
	Supplier delivery time	11	79	7	4	17	69	11	6	9	81	6	3
Inventories:													
	Materials	28	50	19	9	28	36	33	-5	22	46	31	-9
	Finished goods	18	56	24	-6	23	44	30	-7	18	50	30	-12

Stocks

Equity investors take notice but generally don't trade on the survey results.

Dollar

There is no noticeable response in the currency market to the Kansas City Fed survey.

FEDERAL RESERVE BANK OF RICHMOND: MANUFACTURING ACTIVITY IN THE FIFTH DISTRICT

Market Sensitivity: Low.

What Is It: Measures manufacturing performance in a region encompassing the District of Columbia, Maryland, North Carolina, South Carolina, Virginia, and most of West Virginia.

Most Current News Release on the Internet:

www.richmondfed.org/research/regional_economy/surveys_of_business_conditions/

Home Web Address: *www.rich.frb.org*

Release Time: 10:00 a.m. (ET); the report is released on the fourth Tuesday of every month and reports on activity during that month.

Frequency: Monthly.

Source: Federal Reserve Bank of Richmond.

Revisions: No monthly revisions. The survey is subject to annual revisions in the fall that stem from changes in seasonal adjustment factors.

WHY IS IT IMPORTANT?

Since the Federal Reserve Bank of Richmond's manufacturing survey comes out near the end of the month, it can offer fresh insights into what the more influential ISM national manufacturing report will say when it is released just days later. The Richmond survey has a decent historical correlation of 70% with the ISM. Analysts also closely follow the inflation measures to see whether price pressures are rising or diminishing in the Fifth District, which covers rural areas as well as politically sensitive urban communities.

HOW IS IT COMPUTED?

This release is known for having a quick turnaround from when the survey is taken to the time the results are published. Every month, the Richmond Fed surveys about 220 plant managers, purchasing managers, and financial controllers whose firms make up a cross section of the industrial activity in the mid-Atlantic Fed district. Typically, 50% of those queried mail back their responses in time. About a week later, the Richmond Fed releases the results.

It presents the information a little differently than other regional Fed banks. For most of the questions, the Richmond Fed uses a diffusion index, in which the percentage of respondents reporting decreases in activity is subtracted from the percentage of those reporting increases in activity. Thus, on every topic queried, a diffusion index is given for

each of the past three months, along with a three-month moving average index. The moving average smooths out the month-to-month volatility and enables one to more easily spot an underlying trend. The headline manufacturing index is a composite of three major categories, with each assigned a different weight: shipments (33%), new orders (40%), and employment (27%). When it comes to recording swings in prices, the Richmond Fed follows a different procedure. No diffusion index is employed here. The Fed records actual percent changes in prices paid and prices received in the region—specifically, the average annual rate at which prices have moved during the month.

The questions asked are similar to those of other Fed banks. They want to know about changes in activity that occurred in the latest month and what is expected to happen over the next six months.

Specific topics covered in these questionnaires include the following:

Based on a diffusion index:

- Shipments
- Volume of orders
- Backlog of orders
- Capacity utilization
- Vendor lead time
- Number of employees
- Average workweek
- Wages
- Inventory levels (latest month only) for finished goods and raw materials
- Capital expenditures (expectations over the next six months only)

Based on percent change in prices (annualized):

- Prices paid
- Prices received

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

- **Business Activity Indexes**

This survey provides a more detailed assessment of current and future price pressures than the other regional Fed bank reports. The Richmond Fed focuses on some of the most sensitive inflation detectors, such as changes in manufacturing wages and capacity utilization. By looking at the survey results, investors might get a heads up on what the nationwide CPI, PPI, and capacity utilization measures will report when they're published a few weeks later.

Regional Surveys of Business Activity

March 27, 2012

Fifth District Survey of Manufacturing Activity

Business Activity Indexes¹

General Business Assessment	Current Conditions			Expectations ²		
	Mar-12	Feb-12	Jan-12	Mar-12	Feb-12	Jan-12
Fifth District Manufacturing Index ³	7	20	12	--	--	--
Company Conditions						
Shipments	2	25	17	26	30	36
Volume of New Orders	11	21	14	32	31	32
Backlog of Orders	4	4	-4	11	12	14
Capacity Utilization	6	12	8	24	28	28
Vendor Lead-time	11	14	3	10	10	11
Number of Employees	6	13	4	10	32	20
Average Workweek	2	10	4	9	10	7
Wages	11	7	10	24	26	19
Capital Expenditures	--	--	--	22	19	15
Inventory Levels						
Finished Goods Inventories	4	12	9	--	--	--
Raw Materials Inventories	14	11	18	--	--	--
Price Trends⁴						
Prices Paid	2.50	2.25	2.53	2.80	1.58	3.15
Prices Received	1.50	0.97	0.57	1.60	1.55	1.62

Technical Notes:

- ¹ Each index equals the percentage of responding firms reporting increase minus the percentage reporting decrease. Data are seasonally adjusted. Results are based on responses from 132 of 346 firms surveyed.
- ² Expectations refer to the time period six months out from the survey period.
- ³ The manufacturing index is a gauge of broad activity in the District's manufacturing sector. It is a composite index representing a weighted average of the shipments (33 percent), new orders (40 percent) and employment (27 percent) indexes. All firms surveyed are located within the Fifth Federal Reserve District, which includes the District of Columbia, Maryland, North Carolina, South Carolina, Virginia, and most of West Virginia.
- ⁴ Price changes are expressed a percent change, annualized.

MARKET IMPACT**Bonds**

A small but growing cadre of traders track the Richmond Fed survey for its ability to sniff out price pressures in the economy.

Stocks

Investors pay little attention to this survey.

Dollar

Currency traders do not follow this report.

FEDERAL RESERVE BANK OF CHICAGO: NATIONAL ACTIVITY INDEX (CFNAI)

Market Sensitivity: Low.

What Is It: A nationwide measure of economic activity and inflation pressures.

Most Current News Release on the Internet:

www.chicagofed.org/webpages/publications/cfnai/index.cfm

Home Web Address: *www.chicagofed.org*

Release Time: 10:00 a.m. (ET); usually released four weeks after the reporting month.

Frequency: Monthly.

Source: Federal Reserve Bank of Chicago.

Revisions: Substantial revisions can occur in the monthly data.

WHY IS IT IMPORTANT?

Economists are always coming up with new calculations they hope will improve their ability to predict how the economy will perform. They might tweak an equation here and there, change some assumptions, and occasionally add or toss certain indicators—all with the intent of coming up with a more refined method of forecasting U.S. business activity. Most of the time, these formulations go unnoticed in the financial markets because they're new and untested. Every once in a while, though, an indicator comes along that stands out because of its potential to foresee economic problems. In March 2001, the Federal Reserve Bank of Chicago launched a monthly index designed to better assess the health of the national (not regional) economy, warn of upcoming inflationary pressures, and predict the beginning and end of recessions. Called the Chicago Fed National Activity Index (CFNAI), it has emerged as one of the most promising measures to come out in recent years.

HOW IS IT COMPUTED?

Here's how it works. The index reflects the performance of 85 monthly national economic indicators drawn from four broad categories:

1. Production and income
2. The job market and hours worked
3. Personal consumption and housing
4. Sales, inventories, and orders

By using a weighted average involving all 85 measures, a single index figure is computed so that a value of 0 indicates that the economy is growing at its full potential. In other words, business is humming along at the fastest pace possible without aggravating

inflation pressures. A value above 0 indicates that the economy is expanding at a rate above its safe speed, with total demand outstripping supplies to such an extent that it can lead to an outbreak of inflation. An index with a negative number points to an economy growing below potential, a development that may be benign for inflation but can also cause unemployment to rise. A three-month moving average of the index is also supplied to smooth out the volatility caused by short-term factors.

Due to the schedule of the release and the large number of components needed for the index, about one-third of the data sought is not available in time to contribute to the monthly report. Therefore, estimates are used for the missing indicators. Once those missing numbers become available, the index is recalculated and the revisions appear in the following month.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

The main purpose of setting up the CFNAI is to advise investors and policymakers on whether the economy is (a) growing at a healthy pace with inflation nicely in check, or (b) racing ahead at a speed that threatens a buildup of inflationary pressures, or perhaps (c) functioning way below par and in danger of slipping into recession.

- **Chicago Fed National Activity Index**

The two main indexes in this report are identified as CFNAI (the report's acronym) for the latest monthly index, and CFNAI-MA3, which represents the index's three-month moving average. Trying to interpret the latest monthly reading is a useless exercise because it tends to fluctuate a great deal. It is also subject to substantial revisions the next month. The three-month moving average index is far more valuable because it is less volatile and based on more complete information.

- (1) Track the CFNAI-MA3 index to see the outlook for inflation and economic growth. A moving average that falls below -0.7 indicates that the chance of a recession has risen substantially. How does the Chicago Fed know that? Looking back over the period of 1967–2010, the CFNAI has had a success rate of better than 80% in warning of a pending downturn. When the index drops to -1.5 , the economy is probably in the midst of a recession.

A three-month moving average above 0.2 is a signal that the recession is likely over. If the index rises above 0.7 more than two years into the economic expansion, it is a warning that inflation is in danger of accelerating. A number above 1.0 when the economy is already well into the expansion means there's a clear threat that business activity might be overheating and that a sustained period of rising inflation could follow.

MARKET IMPACT

Few participants in the financial markets follow this indicator. That could change in the future as investors begin to take note of its usefulness as a forecasting tool.

News Release

Embargoed for release:
10:00 am Eastern Time
9:00 am Central Time
January 29, 2004

Contact:
James Pieper
Coordinator, Media Relations
312-322-2387

Federal Reserve Bank of Chicago
230 South LaSalle Street
Chicago, IL 60604

The monthly CFNAI index, a weighted average of 85 indicators of national economic activity, is constructed to have an average value of zero and a standard deviation of one. A zero value for the index indicates that the national economy is expanding at its historical trend rate of growth; negative values are associated with below-trend growth, while positive values indicate above-trend growth. Month-to-month movements in the CFNAI can be volatile, so a three-month moving average version, the CFNAI-MA3, provides a more consistent picture of national economic growth. The 85 economic indicators that comprise the CFNAI are drawn from four broad categories of data: 1) production and income; 2) employment, unemployment, and hours; 3) personal consumption and housing; and 4) sales, orders, and inventories.

The next CFNAI will be released:
February 25, 2004
10:00 am Eastern Time
9:00 am Central Time

**FEDERAL RESERVE BANK
 OF CHICAGO**

Chicago Fed National Activity Index

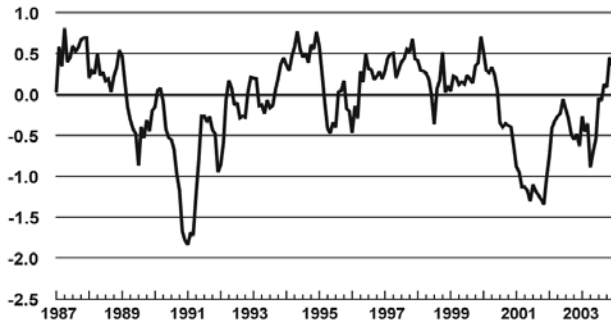
CFNAI indicates above-trend economic growth again in December

The Chicago Fed National Activity Index was +0.13 in December, the fourth consecutive positive monthly reading. November's CFNAI was revised up from +0.55 to +0.68, the highest value since October 1999. Three of the four broad categories of indicators that comprise the index (see sidebar) made positive contributions in December; only the employment-related category made a negative contribution. The three-month moving average, CFNAI-MA3, fell moderately in December, to +0.35, from an upward-revised November reading of +0.46. CFNAI-MA3 readings above zero are associated with above-trend economic growth; accordingly, the CFNAI-MA3 value of +0.35 suggests that growth in national economic activity was above its historical trend in December. With regard to inflation, CFNAI-MA3 values above zero signal increased inflationary pressures over the coming year.

Most of the December decrease in the CFNAI can be attributed to a smaller contribution from output-related measures that month (+0.05) relative to November (+0.54). Industrial production (IP) growth slowed from 1.0 percent in November to 0.1 percent in December; manufacturing IP showed a similar-sized deceleration. The slowing in IP growth was largely offset by strong results from the Institute for Supply Management's survey of manufacturers: That survey's Purchasing Managers' Index rose from 61.3 in November to 63.4 in December, the highest reading in 20 years.

The employment-related category, which has not made a positive contribution to the monthly index since January 2003, contributed -0.13 to the CFNAI in December. Nonfarm payroll employment was up by just 1,000 in December, a much smaller gain than November's

Chicago Fed National Activity Index, Three-Month Moving Average (CFNAI-MA3)



CFNAI and CFNAI-MA3 for the latest six months and year-ago month

	Dec '03	Nov '03	Oct '03	Sep '03	Aug '03	Jul '03	Dec '02
CFNAI							
Current	+0.13	+0.68	+0.25	+0.44	-0.43	+0.35	-0.63
Previous	N/A	+0.55	+0.19	+0.25	-0.42	+0.39	-0.55
CFNAI-MA3							
Current	+0.35	+0.46	+0.09	+0.12	-0.08	-0.04	-0.92
Previous	N/A	+0.33	+0.01	+0.08	-0.07	-0.06	-0.69

Current and Previous values reflect index values as of the January 29, 2004, release and December 18, 2003, release, respectively. N/A indicates not applicable.

THE FEDERAL RESERVE BOARD'S BEIGE BOOK

Market Sensitivity: Medium.

What Is It: A summary of economic conditions around the country compiled for the Federal Reserve Board.

Most Current News Release on the Internet:

www.federalreserve.gov/monetarypolicy/beigebook/default.htm

Home Web Address: *www.federalreserve.gov*

Release Time: 2:00 p.m. (ET); released two Wednesdays before each Federal Open Market Committee (FOMC) meeting.

Frequency: Eight times a year.

Source: Federal Reserve Board.

Revisions: None.

WHY IS IT IMPORTANT?

Among the most important determinants of future U.S. economic growth are interest rates. Their effects are pervasive. Changes in interest rates can impact consumer spending, business expenditures, corporate profits, government budgets, stock and bond prices, and the value of the dollar. Movements in interest rates often precede recession and economic recoveries. Controlling this mighty tool in the short run is the Federal Reserve Board, or, more precisely, a group within the Fed known as the Federal Open Market Committee (FOMC).

The FOMC consists of 19 members (the 7 Federal Reserve Board Governors and the 12 regional Federal Reserve Bank presidents). Though all 19 members can deliberate on monetary policy, only 12 are allowed to vote. They are the 7 Fed Governors, the president of the Federal Reserve Bank of New York (who has permanent voting status), and 4 regional Fed bank presidents who rotate among the remaining 11 for voting privileges.

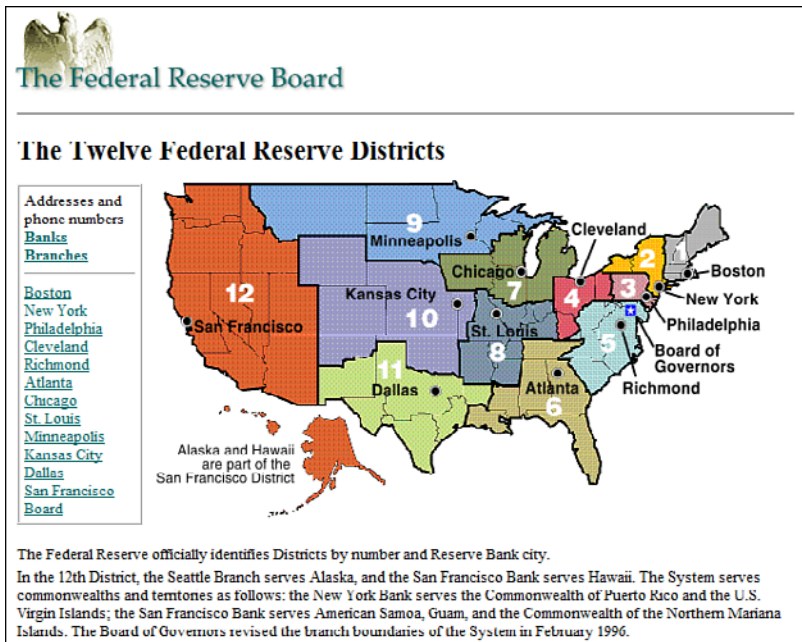
The FOMC meets eight times a year (and also confers by telephone when necessary) to assess the economy's health and to decide what the appropriate level of short-term interest rates should be. On days when FOMC officials gather behind closed doors to debate monetary policy, anxiety levels in the financial markets tend to be at their highest. So much is riding on the outcome of these deliberations that traders and money managers wait nervously on the sidelines, doing very little until the Fed issues a statement briefly explaining its decision to raise the cost of credit, lower it, or keep it unchanged.

Can we determine beforehand how the FOMC might rule? No. Precious few clues guide outside observers. Indeed, a whole cottage industry of specialists, known as "Fed watchers," has emerged over the years. Their job is to pick up every possible nuance from speeches, side comments, and writings by FOMC members that might tip off how they

will vote at the next interest-rate policy meeting. So far the track record of “Fed watchers” has been less than stellar, which is of little surprise. As famed economist John Kenneth Galbraith once said, “There are two types of interest-rate forecasters: those who don’t know, and those who don’t know they don’t know.”

Nonetheless, the Fed does release to the public at least one relevant document in advance of each FOMC meeting, and it serves as an economic backdrop for these closed-door sessions. Two weeks prior to an FOMC gathering, the Fed puts out the Beige Book, so called because of its tan cover. Two factors make the Beige Book special. First, it provides up-to-date information on economic conditions around the country. Second, and more important, this book is given to each member of the FOMC to help set the stage for the debate on interest-rate policy.

The Beige Book, known formally as the *Summary of Commentary on Current Economic Conditions by Federal Reserve District*, is not a collection of statistical data. Far from it. The report is mostly a compilation of anecdotal information from each of the 12 Federal Reserve Districts. It is based on interviews with local businesspeople and academics who are asked to describe the economic climate in their region. These observations are then summarized by one of the Federal Reserve District banks in preparation for the next FOMC meeting.



The Beige Book is not the only report read by FOMC officials. Two other key “books” are produced, but these are released to the public with a five-year lag. There’s the Green Book, which is prepared by top economists at the Federal Reserve Board and contains their view of current and future domestic and international economic conditions. Finally, there is the Blue Book, the most sensitive of the three documents, written by key Fed staff members. It offers a set of interest-rate policy alternatives and their likely consequences.

All three documents are distributed to FOMC members before each meeting. The Beige Book arrives two weeks before the monetary policy debate commences. Up until June of 2010, the Fed would make the Green and Blue Books available to members on separate days just before the FOMC confers. But that distribution process has since changed. The Fed now merges the Green and Blue Books into one report and refers to it as the Teal Book, though its official title is *Report to the FOMC on Economic Conditions and Monetary Policy*. What has not changed is that the Teal Book will remain confidential for five years, after which it is made available to the public.



The Federal Reserve Board

The
Beige
Book

March 3, 2004

Summary

Summary

Districts
[Boston](#)
[New York](#)
[Philadelphia](#)
[Cleveland](#)
[Richmond](#)
[Atlanta](#)
[Chicago](#)
[St. Louis](#)
[Minneapolis](#)
[Kansas City](#)
[Dallas](#)
[San Francisco](#)

[Full report](#)

Prepared at the Federal Reserve Bank of Philadelphia based on information collected before February 23, 2004. This document summarizes comments received from businesses and other contacts outside the Federal Reserve and is not a representation of the views of Federal Reserve officials.

Economic activity continued to expand in January and February, according to information received by Federal Reserve District Banks. Growth was variously described as moderate in Boston, Philadelphia, Cleveland, Atlanta, Chicago, St. Louis, and Kansas City, firm in Minneapolis, sound in San Francisco, and showing signs of accelerating in New York, Richmond, and Dallas.

Consumer spending rose in most Districts. There were gains in sales of general merchandise in January and February in all Districts except St. Louis, which reported a slight decline. In contrast to the general improvement in merchandise sales, motor vehicle sales slowed in most Districts. Tourism activity increased compared to last winter. Service sector activity has been expanding. Manufacturing output continued to rise in all Districts except Cleveland, where it has been steady. Real estate market conditions showed little change: commercial markets generally remain soft and demand for housing continues to be strong. Agricultural conditions were mixed: demand for beef appears to be recovering from the effects of mad cow disease but exports of poultry products have been curtailed by the outbreak of avian influenza. Oil and gas production remain at high levels and iron ore processing has increased. Bank lending has been growing moderately.

HOW IS IT COMPUTED?

About three weeks prior to each FOMC conference, staff from all 12 regional Federal Reserve banks interview local business executives, private economists, bankers, academics, and others to get their assessment of the economic and business climate in their region. A standard set of questions is asked. How is consumer spending holding up? Is the labor market getting tighter? Are wage pressures rising? Has demand for financial services diminished? Is housing or commercial construction slowing or accelerating? Have manufacturers detected a change in order volume? One of the Federal Reserve banks, chosen on a rotating basis, summarizes all the anecdotal information and organizes the findings by district level to create the Beige Book.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

Since there are no tables in the Beige Book, the question becomes whether one can divine from the anecdotes and summary how the Fed might rule on interest rates. The short answer is no. The Beige Book is not a good leading indicator of interest rates, or anything else for that matter. Still, it's the only game in town that permits outsiders to know what Fed governors will be reading as they prepare to discuss whether to change the benchmark Federal funds rate.

MARKET IMPACT

Though the Beige Book has no predictive value of its own, stock and bond traders are still anxious to see what it says, if only because Federal Reserve officials get this material before their all-important gathering. Moreover, the information in the Beige Book is quite timely, because it comes out sooner than most of the statistical data for the period.

Bonds

Widespread anecdotal signs of a softening in the economy are considered bullish for fixed incomes because this might move the Fed closer to lowering interest rates. On the other hand, reports of strong business activity and tight labor markets will likely depress bond prices and raise interest rates because investors expect the central bank to intervene and cool the economy.

Stocks

If the Beige Book portrays a soft economy with few inflation pressures, equity investors might look to the Fed to keep interest-rate levels low. Normally this is a positive for stocks because it reduces corporate borrowing costs and improves future profits. In contrast, if economic growth is too rapid at a time when labor and material resources are becoming scarce, this heightens concerns that the Fed will soon hike rates, and this often causes stocks to retreat.

Dollar

The dollar might rise in value if the Beige Book agrees with other evidence that economic activity is robust. It portends firmer interest rates in the U.S., which makes the dollar more attractive to hold. In contrast, foreign investors are leery of reports depicting a fragile economy, since the Fed might be inclined to lower interest rates, and that might undermine the dollar's value, especially if U.S. rates end up below those of other major industrialized countries.

THE FEDERAL OPEN MARKET COMMITTEE STATEMENT

Market Sensitivity: Very high.

What Is It: A press release by the Federal Open Market Committee (FOMC) that announces its decision on where the crucial federal funds rate has been set.

Most Current News Release on the Internet:

www.federalreserve.gov/monetarypolicy/fomccalendars.htm

Home Web Address: *www.federalreserve.gov*

Release Time: The FOMC releases a statement after each of its eight meetings a year. However the Fed in 2012 chose to alter both the duration of those meetings and the timing of its press release. Instead of scheduling five of the eight meetings to last two days, with the rest just one day, Fed officials decided that from mid-2012 and at least through all of 2013, all eight meetings will last two days to allow a more wide-ranging discussion. The FOMC will then issue a statement at 12:30 p.m. Should it decide to return to single-day sessions after 2013, the press releases will likely be issued at 2:15 p.m.

Frequency: Though the FOMC formally gathers eight times a year, its members can confer and take actions between scheduled meetings in extraordinary circumstances.

Source: Federal Reserve Board.

Revisions: No revisions.

WHY IS IT IMPORTANT?

Here's a report that fills barely a single page, contains virtually no numbers, and comes out just eight times a year. It is by far the briefest of all the economic releases. So why all the fuss over this statement? Simple. The brevity of this report belies the enormous impact it has around the world. On mornings when the FOMC convenes to discuss whether to raise, lower, or keep unchanged the federal funds rate, trading everywhere comes to a near standstill. This genuflect by the financial markets toward the Fed is understandable. Investors are extremely reluctant to commit large amounts of money until after the FOMC announces the results of its deliberations on interest rates. Once that statement is released, stocks, bonds, and currencies react instantly. But it is not just the investment community that feels the full frontal impact of the Fed's action on rates. Business leaders also eagerly await the news because they have to evaluate the implications that a sudden change in the cost of credit will have on their corporate balance sheets, profitability, future sales, hiring plans, and capital spending projects. Consumers are deeply affected as well, since shifts in monetary policy influence other short-term rates, such as those for bank deposits, personal loans, credit cards, home equity loans, and adjustable-rate mortgages.

At the epicenter of all this activity is a decision by the Federal Reserve on where to target a rather obscure monetary tool known as the “federal funds rate,” or by its shortened version, the fed funds rate. This is the interest rate that banks charge one another for overnight loans. Why do these institutions make such short-term loans? The reason is that the Federal Reserve requires banks to keep a certain amount of cash (or reserves) either in their vaults or as deposits with their local Federal Reserve branch. (Without such a requirement, banks would happily lend out every dollar they could, and history has shown that this can pose risks to the banking system and to the economy.) However, from time to time banks find themselves short of meeting their reserve requirements. Perhaps they lent too much to customers or had an unexpected surge in withdrawals. Whatever the circumstance, these banks quickly need to acquire additional funds to meet the required reserves. At the same time, other banks may be holding more reserves than they need to. These excess funds can be lent overnight to banks that lack sufficient reserves. The rate charged on such overnight loans is dictated by the Federal Reserve’s fed funds rate. History has shown that by controlling the cost of credit for these overnight loans, the Federal Reserve can, over time, influence the level of economic activity in the U.S.

How so? A higher federal funds rate makes banks more reluctant to be in a position to borrow overnight funds. Thus, they will either lend out less money or continue to make loans but charge their business and consumer clients a higher rate to offset the more costly fed funds rate. In both instances, loans become more expensive. The private sector responds by borrowing less, and that sets the stage for a slowdown in the economy.

If the FOMC decides to lower the fed funds rate, the process works in reverse. Banks tend to lend more, and borrowers are willing to take advantage of cheaper credit. This can stimulate more consumer spending and give the economy an extra jolt. Thus, a change in the fed funds rate will reverberate through the entire economy, since many transactions are financed by credit.

The biggest challenge for the Fed is to peg the fed funds rate at just the right level so that it permits maximum growth in jobs and economic output *without* firing up inflation. This is not an easy task. After all, the \$15 trillion U.S. economy is buffeted every day from millions of decisions made by consumers, corporate leaders, and lawmakers. As a result, the economy is in a constant state of motion. Also, since we are living in an increasingly globalized environment, the actions of foreign investors and geopolitical shocks overseas can have a profound impact on business conditions in the U.S. Finally, it’s important to bear in mind that the economy doesn’t turn on a dime when there is a change in monetary policy. There’s usually a 9- to 18-month lag from the moment there is a shift in the fed funds rate to when the real economy acts in response. That’s why Federal Reserve economists devote so much time to forecasting how the economy will perform in the next year or so.

It all boils down to this: If the economy is expanding too quickly and inflation is in danger of accelerating, a key antidote is to lift the fed funds rate because the higher cost of borrowing will cool overall spending and defuse price pressures. On the other hand, if

the economy is visibly weakening, with joblessness rising and inflation all but absent, the FOMC will likely choose to lower the fed funds rate to help revive growth. The point here is that controlling the direction of short-term rates (via the fed funds rate) is one of the most powerful weapons the Federal Reserve has in its arsenal to keep the economy out of serious trouble.

On those very rare occasions when the economy remains unresponsive even with short-term interest rates at zero, the Fed can dig deeper into its monetary bag of tools and seek to bring down longer-term rates as well. However, this is a more complex and risky strategy for the Federal Reserve. Remember, the goal is to jump-start an economy that is stubbornly dormant. One unconventional way to achieve that is to drop the cost of longer-term funds, which can be especially helpful to companies and households that want their financing expenses to be as low as possible. Lower long-term rates will encourage firms to borrow new funds, make more productive investments, and hire more workers. This strategy will also reduce mortgage rates, which can make home buying more affordable for Americans.

How does the Federal Reserve bring down those long-term rates? It simply creates new money for its own account and then goes on a shopping spree, buying Treasury bonds, mortgage-backed securities, and other types of longer-maturity debt from financial institutions around the country. Those lenders in turn receive more funds, which they can make available to borrowers at a cheaper rate. This action is popularly referred to as quantitative easing.

The tricky part for the Fed is knowing when and how quickly to sell those securities back to the financial firms. Such an action would sop up all those extra funds and help normalize interest rates. But, again, the timing here can be problematic. If the economy starts to grow and the Fed unloads these securities too quickly, then longer-term rates will leap higher and stop the recovery in its tracks. On the other hand, if the Fed acts too slowly, interest rates will remain low even after the economy has recovered—and that is a recipe for higher inflation. So as you can see, quantitative easing is a delicate monetary operation for the U.S. central bank and is used only in dire economic circumstances, such as to prevent another Depression.

HOW IS IT COMPUTED?

The powerful FOMC is made up of 12 voting members, 8 of whom have permanent voting status. They consist of the 7 Fed Governors and the president of the New York Federal Reserve Bank. The other 4 seats are taken from the remaining 11 regional Federal Reserve Bank presidents, who rotate every January for a one-year stint as voting members. (The rotating 11 Fed bank presidents come from Boston, Philadelphia, Richmond, Cleveland, Chicago, Atlanta, St. Louis, Dallas, Minneapolis, Kansas City, and San Francisco.) It's important to note that *all* Federal Reserve Bank presidents fully participate in the closed-door deliberations on monetary policy. But when it comes to voting, only 4 of the 11 are permitted to do so with the 8 permanent members.

How is a typical FOMC meeting conducted?

On the days of a scheduled session, all Fed governors and bank presidents, along with a few key staffers, gather in a large conference room just outside the Fed chairman's office. Deliberations for the two-day meeting usually begin on Tuesday at 1 p.m. of the first day. It resumes on Wednesday around 9 a.m. and concludes around 11:30 that morning.

- The first item on the agenda is a presentation by a key manager at the New York Fed, who describes what has transpired in the domestic financial and foreign exchange markets since the last FOMC meeting.
- The next speaker is the Federal Reserve Board's Director of Research and Statistics, who discusses in detail the Fed's latest forecast for the U.S. economy.
- After that begins the first of two "go around the table" sessions. In the first go-around, members of the FOMC present their opinions on the regional and national outlook. Bank presidents start off this round, because they have more timely information on the health of the economy and key industries operating in their local area.
- Next comes the most important phase of the meeting. The Federal Reserve's Director of Monetary Affairs takes over and introduces a variety of possible policy actions and the likely impact each might have on the economy. The options are no change in interest rates at this time, an increase in rates (and by how much), or a decline in rates. This official explains the advantages and disadvantages of each step.
- Now it is the Fed Chairman's turn to speak. He presents his view of the economic outlook and then makes a specific recommendation on which option he favors and why.
- After the Chairman concludes, the next and final go-around takes place. Each member of the FOMC makes a case for what he or she believes is the best target for the fed funds rate at this time. Here the members voice their agreement or disagreement with the Fed Chairman's view.
- At the end of this crucial phase, the Fed chief takes the floor again and summarizes his analysis of and recommendation for setting interest rates.
- Now it's time for the critical vote. The Fed Chairman votes first, followed by the Vice Chairman, and then the rest of the FOMC members are called in alphabetical order for their vote.
- The last stage of the meeting is the wording of the all-important FOMC statement. Crafting this press release is not an easy task. Federal Reserve officials want to announce to the world what was decided and why, along with some sense of the risks they see ahead for the economy. Given how closely the public scrutinizes the

statement and its effect on global money markets, Fed officials know that they have to choose their words carefully.

What happens next is relatively new. The FOMC decided that upon conclusion of the two-day sessions, the chairman of the Federal Reserve will, for the balance of 2012 and in 2013, hold a press conference on the third month of each quarter (March, June, September, and December). On those four occasions, the central bank will put out two major reports. The first, the formal FOMC statement, is made public at 12:30 p.m. on the second day. Another report, called the “Economic Projections of Federal Reserve Board Members and Federal Reserve Bank Presidents,” will be released at 2 p.m. As its name implies, it includes the economic forecasts and interest-rate projections from all members of the FOMC. Finally, at 2:15 p.m., the Fed chairman meets with the press to further elaborate on the FOMC’s decisions. The person most credited with this new openness is Ben Bernanke, who became chairman of the Federal Reserve in 2006. He hoped that by giving the public more information about the FOMC’s assessment of the economy and its current plans, the central bank will be able to conduct monetary policy more effectively. It remains to be seen whether future Fed chiefs will carry on with this new transparency.

On all other two-day meetings, when no press conference is scheduled, the FOMC will make public its one-page statement at 2:15 p.m.

THE TABLES: CLUES ON WHAT’S AHEAD FOR THE ECONOMY

Once released, the FOMC statement and the economic projections are studied carefully by the public, since everyone has an interest in knowing how the Fed views current economic conditions and for clues on what monetary policy might be in the future. The scrutiny it receives is nearly Talmudic. Every word or phrase is analyzed for its nuance. The latest statement is examined for differences from the previous report. What new wording has been added, what has been omitted? Does the Fed see inflation as a bigger risk than recession? What are the most serious threats facing the economy? The answers to these questions might provide hints on whether the central bank is biased toward lowering or raising rates when it convenes the next FOMC meeting.

The layout of the Fed’s press release has undergone numerous changes since it was first introduced in 1994. Each Fed chairman has his own preferences as to how much, or how little, should be included in the FOMC statement. Fortunately, both the FOMC’s press release and the economic projections can be found on the Fed’s Web site the instant it is made public. Everyone on the planet has access to the latest report at the same time. A calendar of when the FOMC meets and where all their reports can be viewed will be found at this location: www.federalreserve.gov/monetarypolicy/fomccalendars.htm.

A sample of the FOMC statement and the economic projections are included here.

Press Release

FEDERAL RESERVE press release



Release Date: March 13, 2012

For immediate release

Information received since the Federal Open Market Committee met in January suggests that the economy has been expanding moderately. Labor market conditions have improved further; the unemployment rate has declined notably in recent months but remains elevated. Household spending and business fixed investment have continued to advance. The housing sector remains depressed. Inflation has been subdued in recent months, although prices of crude oil and gasoline have increased lately. Longer-term inflation expectations have remained stable.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects moderate economic growth over coming quarters and consequently anticipates that the unemployment rate will decline gradually toward levels that the Committee judges to be consistent with its dual mandate. Strains in global financial markets have eased, though they continue to pose significant downside risks to the economic outlook. The recent increase in oil and gasoline prices will push up inflation temporarily, but the Committee anticipates that subsequently inflation will run at or below the rate that it judges most consistent with its dual mandate.

To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee expects to maintain a highly accommodative stance for monetary policy. In particular, the Committee decided today to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that economic conditions—including low rates of resource utilization and a subdued outlook for inflation over the medium run—are likely to warrant exceptionally low levels for the federal funds rate at least through late 2014.

The Committee also decided to continue its program to extend the average maturity of its holdings of securities as announced in September. The Committee is maintaining its existing policies of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. The Committee will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as appropriate to promote a stronger economic recovery in a context of price stability.

Voting for the FOMC monetary policy action were: Ben S. Bernanke, Chairman; William C. Dudley, Vice Chairman; Elizabeth A. Duke; Dennis P. Lockhart; Sandra Pianalto; Sarah Bloom Raskin; Daniel K. Tarullo; John C. Williams; and Janet L. Yellen. Voting against the action was Jeffrey M. Lacker, who does not anticipate that economic conditions are likely to warrant exceptionally low levels of the federal funds rate through late 2014.

Economic Projections of Federal Reserve Board Members and Federal Reserve Bank Presidents, January 2012

Advance release of table 1 of the Summary of Economic Projections to be released with the FOMC minutes

Percent

Variable	Central tendency ¹				Range ²			
	2012	2013	2014	Longer run	2012	2013	2014	Longer run
Change in real GDP	2.2 to 2.7	2.8 to 3.2	3.3 to 4.0	2.3 to 2.6	2.1 to 3.0	2.4 to 3.8	2.8 to 4.3	2.2 to 3.0
November projection	2.5 to 2.9	3.0 to 3.5	3.0 to 3.9	2.4 to 2.7	2.3 to 3.5	2.7 to 4.0	2.7 to 4.5	2.2 to 3.0
Unemployment rate	8.2 to 8.5	7.4 to 8.1	6.7 to 7.6	5.2 to 6.0	7.8 to 8.6	7.0 to 8.2	6.3 to 7.7	5.0 to 6.0
November projection	8.5 to 8.7	7.8 to 8.2	6.8 to 7.7	5.2 to 6.0	8.1 to 8.9	7.5 to 8.4	6.5 to 8.0	5.0 to 6.0
PCE inflation	1.4 to 1.8	1.4 to 2.0	1.6 to 2.0	2.0	1.3 to 2.5	1.4 to 2.3	1.5 to 2.1	2.0
November projection	1.4 to 2.0	1.5 to 2.0	1.5 to 2.0	1.7 to 2.0	1.4 to 2.8	1.4 to 2.5	1.5 to 2.4	1.5 to 2.0
Core PCE inflation ³	1.5 to 1.8	1.5 to 2.0	1.6 to 2.0		1.3 to 2.0	1.4 to 2.0	1.4 to 2.0	
November projection	1.5 to 2.0	1.4 to 1.9	1.5 to 2.0		1.3 to 2.1	1.4 to 2.1	1.4 to 2.2	

NOTE: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The November projections were made in conjunction with the meeting of the Federal Open Market Committee on November 1–2, 2011.

1. The central tendency excludes the three highest and three lowest projections for each variable in each year.
2. The range for a variable in a given year includes all participants' projections, from lowest to highest, for that variable in that year.
3. Longer-run projections for core PCE inflation are not collected.

MARKET IMPACT

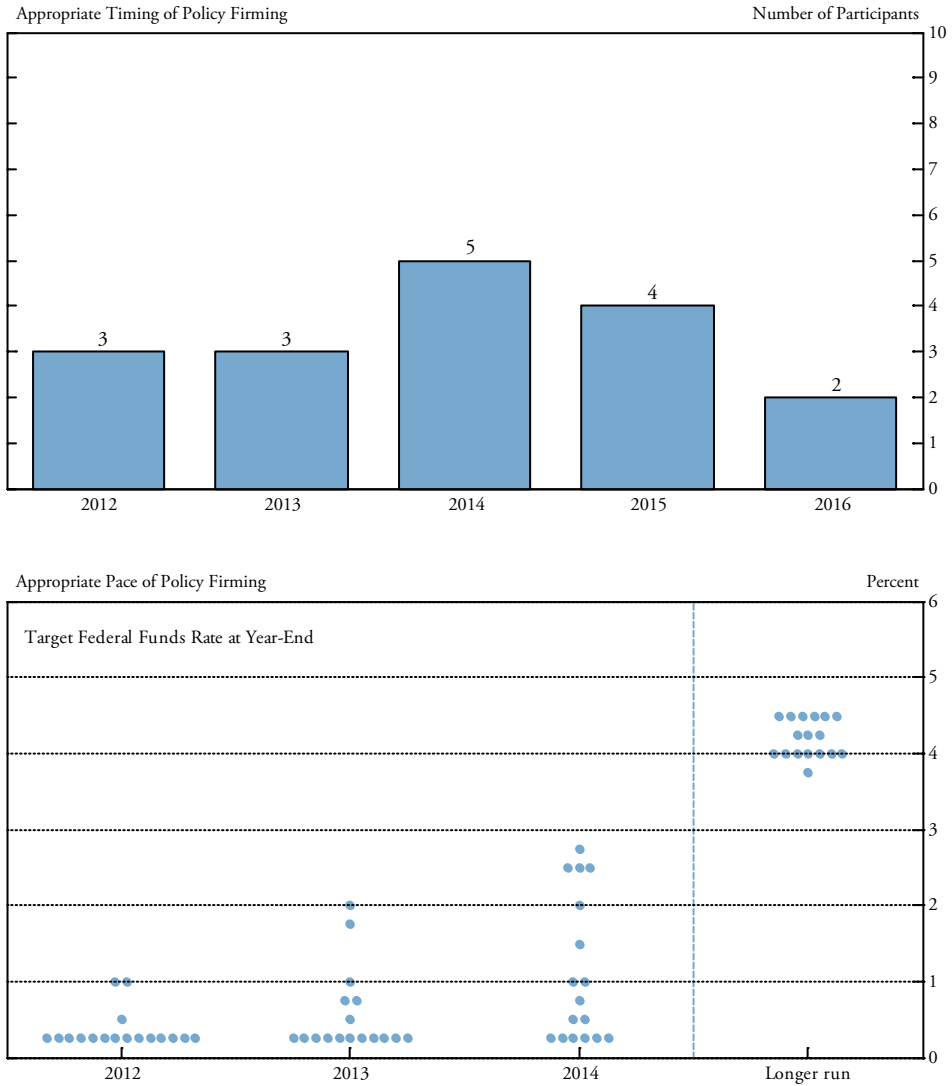
Bonds

The reaction in the bond market to a change in monetary policy has been the subject of much research. That's because the two historically have had a complicated relationship. Sometimes a rise in the fed funds rate confirms that inflation is on the rise. In such instances, traders might flee the long bond (usually maturities of 10 to 30 years) and purchase shorter-term securities. The latter are less risky and can also offer more attractive returns now that the Fed is tightening monetary policy. As the sale of bonds accelerates, their yields rise. Although fixed-income investors normally seek out higher yields, those returns might not provide sufficient protection from current and future inflation.

It may take some time and several hikes in the fed funds rate before the economy slows and inflation pressures diminish. Once investors grow more confident that monetary policy is working and inflation appears more benign, they may quickly switch to buying bonds again in order to lock in the highest possible yield.

It is important to add a few caveats to the bond/fed funds rate relationship. First, other factors can influence how the bond market responds to monetary policy. For example, much depends on whether investors believe the Federal Reserve has the competence and commitment to achieve price stability. Is the Fed behind or ahead of the curve in combating inflation? If it is slow to react, the fed funds rate may ultimately have to go

Figure 2. Overview of FOMC participants' assessments of appropriate monetary policy



NOTE: In the upper panel, the height of each bar denotes the number of FOMC participants who judge that, under appropriate monetary policy and in the absence of further shocks to the economy, the first increase in the target federal funds rate from its current range of 0 to ¼ percent will occur in the specified calendar year. In the lower panel, each shaded circle indicates the value (rounded to the nearest ¼ percent) of an individual participant's judgment of the appropriate level of the target federal funds rate at the end of the specified calendar year or over the longer run.

much higher, possibly even causing a recession, before finally subduing inflation. The second point is that foreign demand for U.S. bonds can also sway yields and add liquidity to (or drain liquidity from) the economy. This can complicate the Fed's job of achieving price stability.

In the final analysis, it is the perceived direction of inflation and the expected "total" real rate of return on bonds (interest income, adjusted for inflation, plus price appreciation) that most affect trading in the fixed-income market. As a result, the language used in the FOMC to describe economic conditions might actually be more important to bond traders than the Fed's latest decision on rates.

Stocks

The relationship between stock prices and the fed funds rate is more direct. Whenever the Fed raises rates, or hints that it will, the news is not received kindly in the equity markets. Sure, higher rates might help dampen inflation pressures, but such action also hurts companies in two major ways. When credit becomes more expensive, it can slow economic activity, and that can reduce future sales and profits. Rate hikes also increase the cost of doing business, and that too can cut into profit margins.

Stock investors typically celebrate a drop in rates because such action can stimulate business and consumer spending and improve the outlook for corporate earnings. For these reasons, traders carefully monitor the FOMC meetings and parse every word in the press release and in their economic and interest-rate projections.

Dollar

The U.S. currency will rally if the Federal Reserve shows an inclination to raise interest rates, since such a move promises higher returns on fixed-income securities. How much the dollar will actually rise in value depends on the degree to which the foreign exchange market has already taken these hikes into consideration. If international investors have already priced in the next rise in the fed funds rate, the dollar's appreciation will be minimal, if at all. Expectations of a rate cut in the U.S. could prompt investors to sell dollars, especially if central bankers in other countries are taking steps to tighten monetary policy.

Should the FOMC decide to leave rates unchanged, the outlook for the dollar will be determined by the explanation found in the Fed's press release on why it chose not to act. For example, if the latest pause comes after a series of rate increases, chances are the U.S. economy is starting to slow, and the dollar will consequently weaken since additional rate hikes are now less likely in the near future. However, if the decision to keep rates steady comes after a bout of monetary easing, it suggests that economic conditions are improving and that the risk of inflation will become greater in the future. Such circumstances should be perceived as either bullish or neutral for the dollar.

INTERNATIONAL TRADE IN GOODS AND SERVICES

Market Sensitivity: Medium.

What Is It: A monthly report on U.S. exports and imports of goods and services.

Most Current News Release on the Internet:

www.bea.gov/newsreleases/international/trade/tradnewsrelease.htm

Home Web Address: *www.bea.gov*

Release Time: 8:30 a.m. (ET); data is released the second week of the month and refers to trade that occurred two months earlier.

Frequency: Monthly.

Source: Census Bureau and Bureau of Economic Analysis, Department of Commerce.

Revisions: Each release comes with revisions that go back several months to reflect more complete information. Changes are usually small in magnitude, though they can be sizable at times. The annual benchmark revisions normally come out in June and can span several years.

WHY IS IT IMPORTANT?

Up until the early 1970s, the U.S. was viewed as having a closed economy. International trade was dismissed as a useful but not particularly vital part of overall domestic business activity. Back then, exports made up just 5.5% of total U.S. output, and imports accounted for 5.3%. These percentages were small enough that foreign economic events had only minimal impact on the American economy. That is certainly no longer the case. With the collapse of the Bretton Woods Agreement in 1971—a treaty that came into being at the end of World War II to secure a stable foreign exchange system—currency values in the world financial markets were no longer anchored. They could float freely—and boy did they ever, sometimes moving wildly up or down. At the same time, world trade grew faster than ever. Cheaper foreign goods, often of better quality, increasingly found their way into the U.S. market and started to pose serious competition for U.S. producers. American companies responded by operating more efficiently, lowering prices, and seeking new markets overseas. Trade has since evolved to become one of the most important forces shaping the U.S. economy—so much so, that flows in foreign trade can determine whether the overall economy is growing or not. Today, the business of buying and selling products in foreign markets accounts for one out of every three dollars being transacted in the U.S. economy.

International trade plays such a critical role that Washington issues two major releases on this topic. The first report is the International Trade in Goods and Services report, which is a collection of monthly data on U.S. exports and imports. It's partly from these numbers that the "net export" figure is derived for use in the GDP account. The

other report is known as the International Transactions account (see the next section, “Current Account Balance [U.S. International Transactions]”). It is released quarterly and covers not only trade in goods and services, but also foreign investment entering the U.S. and the amount of investment capital flowing out of the U.S. to other countries. Though both of these reports are valuable economic indicators, investors pay more attention to the monthly trade data since it’s more current. The international transaction account comes out every three months; by then, much of the news is considered quite old for trading purposes.

What makes the monthly international trade report a must-read? First, exports reflect U.S. competitiveness in world markets, create American jobs, and improve corporate profits. In addition, exports also contribute directly to domestic economic growth. To satisfy both American and foreign demand, U.S. firms have to produce more. Greater production translates into faster GDP growth. Finally, by looking at imports, one can tell how strong demand is in the U.S. Consumers and businesses tend to import much more when the economy is expanding. The downside of a rise in imports is that it subtracts from GDP growth since these products are made by foreign, not U.S.-based, companies.

One potential risk to America’s growing dependence on global trade is that the U.S. economy is no longer immune to financial and economic disruptions abroad. Relatively distant events, such as Russia’s default on its foreign loans in 1998, China’s efforts to cool its speculative real estate market in early 2007, and the more recent European sovereign debt crises, have had a detrimental impact on U.S. stocks, bonds, and even the economy. Some of these effects might be short-lived, but others can last much longer.

What key forces shape the country’s trade balance? Broadly speaking, America’s trade performance is determined by two primary factors: the relative differences in growth rates between the U.S. and other countries, and the changing value of the dollar against other major currencies. Let’s look at them separately. Obviously, where the economy stands in the business cycle can influence how much we buy from other nations. By the same token, how much foreigners buy from the U.S. depends on how well those economies are doing. If the U.S. is growing at a faster rate than most other countries, imports to the U.S. will increase by a greater amount than exports, thus ensuring a deficit in the trade account. What further deepens the deficit, however, is that Americans have also shown a greater propensity to import than shoppers in other countries. So, even if both the U.S. and other major industrial countries were growing at the same rate, the trade deficit would still worsen because Americans are inherently inclined to spend proportionally more on imports. This hunger for foreign goods has locked the U.S. into annual trade deficits every year since 1976.

The second major factor shaping the trade balance is exchange rates. Changes in currency values can alter the price of imports and exports and thus affect their demand. A strong dollar worsens the trade balance because it lowers the price of imports, thus making them more desirable to Americans. At the same time, it raises the cost of U.S.-made goods sold in international markets. This encourages foreign buyers to look elsewhere for

less expensive products. It's been estimated that a 1% rise in the dollar's value against its main trading partners can worsen the trade deficit by \$10–\$15 billion over two years. On the flip side, a falling U.S. currency makes imports more expensive, and Americans might think twice about purchasing foreign goods. The upside of a weaker dollar is that it lowers the price of American exports in foreign markets, which can increase overseas demand for U.S. goods and services. Thus, changes in exchange rates over time have a profound effect on international commerce.

It should be noted that differences in inflation rates among countries could also influence trade patterns. A high U.S. inflation rate can price American-made goods out of foreign markets. In such a situation, demand for U.S. products will drop both here and abroad. In contrast, if inflation in other countries climbs at a faster rate than in the U.S., imports might become more expensive relative to what consumers will pay for American-made products. In that case, shoppers—both here and abroad—will be tempted to buy more from the U.S., where prices are rising more slowly, if at all. So low inflation has a beneficial impact on this country's trade flows.

Could the U.S. return to a positive trade balance or, at the very least, sharply slash its deficits in the future? Sure, but it won't be easy. One solution is for America's major trading partners to grow much faster than the U.S. for several years so that they can accelerate their purchases of American products. However, such a plan is difficult to achieve because of the structural difference between the economies of the U.S. and, say, Europe or Japan. For example, the U.S. economy has a larger capital market, lower tax rates, and fewer regulatory obstacles than most other industrial countries. All these factors help promote faster growth here than overseas.

Another approach to cutting the trade deficit, at least theoretically, is to induce a prolonged recession in the U.S. because that will surely reduce imports. But this approach is a nonstarter as a policy option, since a recession will only generate other problems, including larger budget deficits, higher unemployment, a loss in income, and slower productivity growth.

A third way to correct the trade imbalance is to significantly devalue or cheapen the dollar and make imports too expensive for many Americans. Yet this solution also carries grave risks, such as rising inflation and interest rates. In the final analysis, the only reasonable way to end the chronic trade deficits is a twofold approach. First, Americans must learn to save more and consume less. Second, policymakers in Europe and Japan need to lower trade barriers, accelerate regulatory reforms, and reduce tax rates so that their citizens can have more money to spend on U.S. goods and services. So far, these regions have been agonizingly slow at making such changes.

HOW IS IT COMPUTED?

Each month, the Commerce Department tallies figures on U.S. exports (such as corn, telecommunications equipment, musical instruments, and computers) and imports (cars, steel, rugs, caviar, wine, and copper). Normally, they reflect transactions that actually

took place in the reported month, though a small number of trades are included from previous months. Exports are reported based on what is called “free alongside ship” (FAS) value. This means that the price of the commodity includes freight transport, insurance, and other charges connected with shipping the goods to the U.S. port of exportation. Imports, however, are valued on a “customs value” (CIF), which is essentially the price of the product without the cost of insurance, freight, or import duties.

Trade in services is handled differently. Here the Commerce Department depends entirely on monthly surveys taken by businesses and associations in the service sector to see how much revenue these firms raised by selling services abroad, and, on the other side of the ledger, how much American firms paid for services provided by foreigners.

Trade figures in the report are presented in both nominal (current) dollars and real (adjusted for inflation) dollars. The conversion from nominal to real is based on the monthly import and export price indexes (see the section “Import and Export Prices”). Although the nominal figures get all the immediate press attention, it’s more important to follow the inflation-adjusted numbers because they reflect the actual volume of goods traded, which is what ultimately impacts real GDP.

Trade statistics are given in both seasonally and nonseasonally adjusted terms. Normally they are not annualized, but anyone can do so by simply multiplying the monthly trade figure by 12.

THE TABLES: CLUES ON WHAT’S AHEAD FOR THE ECONOMY

This nearly-50-page release has dozens of informative tables. Some of the most useful are highlighted in the following pages. It should be pointed out that international trade has few qualities as a leading indicator. The reason is that trade patterns change slowly due to the long lag between the time contracts are signed and when goods actually get shipped. Does that diminish the value of this release to investors and forecasters? Absolutely not. The Commerce Department provides amazingly detailed information in this report on America’s foreign trade position, including its transactions with virtually every country in the world.

• **Exhibit 1** U.S. International Trade in Goods and Services

- (1) The first table summarizes the U.S. trade balance for the latest period, along with about three years of monthly data so that readers can spot any departure from recent trends in exports and imports, as well as the total trade balance. A one-month aberration is not significant, but a continuous divergence spanning at least three months can indicate that a more significant change is under way in the U.S. or international economy.
- (2) Look to see whether the departure in trade patterns stems from changes on the export or import side. An abrupt drop in the export growth rate can occur because of deteriorating economic conditions in other countries, an overly

Exhibit 1. U.S. International Trade in Goods and Services

In millions of dollars. Details may not equal totals due to seasonal adjustment and rounding. (R) - Revised.

Period	Balance			Exports			Imports		
	Total	Goods (1)	Services	Total	Goods (1)	Services	Total	Goods (1)	Services
2002									
Jan.-Dec.	-418,038	-482,872	64,834	974,107	681,874	292,233	1,392,145	1,164,746	227,399
Jan.-	-28,299	-33,495	5,196	78,580	55,228	23,352	106,879	88,723	18,156
January	-28,299	-33,495	5,196	78,580	55,228	23,352	106,879	88,723	18,156
February	-31,049	-35,876	4,827	78,579	54,988	23,591	109,628	90,864	18,764
March	-30,704	-36,661	5,957	79,286	55,083	24,203	109,990	91,744	18,246
April	-34,225	-39,773	5,548	80,674	56,871	23,803	114,899	96,644	18,255
May	-35,097	-40,830	5,733	81,050	56,848	24,202	116,147	97,678	18,469
June	-35,563	-40,683	5,120	81,974	57,702	24,272	117,537	98,385	19,152
July	-34,069	-39,304	5,235	82,954	58,638	24,316	117,023	97,942	19,081
August	-36,249	-42,070	5,821	82,566	57,870	24,696	118,815	99,940	18,875
September	-36,663	-41,938	5,275	82,294	57,807	24,487	118,957	99,745	19,212
October	-35,154	-40,647	5,493	82,159	57,301	24,858	117,314	97,949	19,365
November	-38,629	-44,147	5,518	82,917	57,765	25,152	121,545	101,911	19,634
December	-42,332	-47,447	5,115	81,075	55,774	25,301	123,406	103,220	20,186
2003									
Jan.-Dec. (R)	-489,911	-549,156	59,245	1,018,720	713,788	304,932	1,508,632	1,262,945	245,687
Jan.- (R)	-40,007	-44,833	4,826	82,058	57,156	24,902	122,065	101,989	20,076
January (R)	-40,007	-44,833	4,826	82,058	57,156	24,902	122,065	101,989	20,076
February (R)	-38,589	-43,628	5,039	82,691	57,920	24,771	121,280	101,548	19,732
March (R)	-42,952	-47,482	4,530	82,639	58,309	24,330	125,591	105,791	19,800
April (R)	-41,971	-46,334	4,363	81,103	57,243	23,860	123,074	103,577	19,497
May (R)	-41,772	-46,628	4,856	82,261	57,774	24,487	124,033	104,402	19,631
June (R)	-40,357	-45,050	4,693	84,132	59,269	24,863	124,489	104,319	20,170
July (R)	-40,613	-45,006	4,393	85,627	60,367	25,260	126,240	105,373	20,867
August (R)	-39,781	-44,695	4,914	83,385	57,691	25,694	123,166	102,386	20,780
September (R)	-41,254	-46,548	5,294	85,836	59,719	26,117	127,090	106,267	20,823
October (R)	-41,705	-47,088	5,383	88,250	61,655	26,595	129,955	108,743	21,212
November (R)	-38,220	-43,944	5,724	90,633	63,722	26,911	128,853	107,666	21,187
December (R)	-42,692	-47,921	5,229	90,103	62,962	27,141	132,795	110,883	21,912
2004									
Jan.-	-43,057	-48,392	5,335	89,045	61,907	27,138	132,102	110,299	21,803
January	-43,057	-48,392	5,335	89,045	61,907	27,138	132,102	110,299	21,803
February									
March				▲ 2			▲ 2		
April									
May									
June									
July									
August									
September									
October									
November									
December									

muscular dollar, or sharply rising U.S. inflation. A marked decline in imports can take place if domestic demand has plunged due to a weakened U.S. economy, or perhaps as a consequence of a serious erosion of the dollar's value in currency markets, which would make foreign goods much more expensive.

- (3) Like many economic indicators, trade can be subject to periodic distortions. A sharp swing up or down in petroleum prices in a single month can exaggerate the overall trade picture. Large auto shipments from overseas might on occasion cause statistical shocks too. To smooth out such month-to-month volatility, the government presents trade data in three-month moving averages. In such a calculation, the latest monthly figures are added to the two prior months, and the sum is divided by 3.

To gain some additional perspective on trade, separate tables are broken out for two of the most volatile commodities: energy and motor vehicle imports. Exhibit 17 is devoted to imports of petroleum and petroleum products, and Exhibit 18 focuses on motor vehicle imports and exports. Both are discussed in more detail in the following sections.

• **Exhibit 17** Imports of Energy-Related Petroleum Products, Including Crude Oil

Exhibit 17. Imports of Energy-Related Petroleum Products, Including Crude Oil

Details may not equal totals due to rounding.

Period	Total energy-related petroleum products (1)		Crude oil			
	Quantity (thousands of barrels)	Value (thousands of dollars)	Quantity (thousands of barrels)	Thousands of barrels per day (average)	Value (thousands of dollars)	Unit price (dollars)
2003						
Jan.- Dec.	4,654,638	129,580,947	3,673,596	10,065	99,094,675	26.97
Jan.-	360,017	10,180,337	268,431	8,659	7,444,163	27.73
January	360,017	10,180,337	268,431	8,659	7,444,163	27.73
February	316,557	9,995,440	247,105	8,825	7,526,491	30.46
March	395,753	12,482,600	300,689	9,700	9,101,197	30.27
April	396,513	10,743,443	314,662	10,489	8,188,808	26.02
May	407,791	10,167,192	320,541	10,340	7,727,416	24.11
June	401,212	10,560,977	311,946	10,398	7,955,140	25.50
July	426,696	11,670,580	339,669	10,957	9,068,389	26.70
August	397,015	11,270,137	319,337	10,301	8,797,303	27.55
September	394,328	10,733,700	316,193	10,540	8,371,844	26.48
October	402,340	10,856,961	327,444	10,563	8,594,549	26.25
November	363,893	9,953,160	290,205	9,674	7,695,589	26.52
December	392,524	10,966,420	317,375	10,238	8,623,786	27.17
2004						
Jan.-	388,549	11,405,335	309,437	9,982	8,835,252	28.55
January	388,549	11,405,335	309,437	9,982	8,835,252	28.55
February						
March		▲	▲		▲	▲
April		7	5		6	4
May						
June						

Even though the U.S. is one of the world's largest producers of oil, it still supplies less than half of what this country consumes. The rest has to be imported. Imports of energy-related petroleum products represent 15% to 20% of Americans' total import bill for merchandise goods, so even a moderate change in oil prices can have a marked effect on the U.S. trade balance and on economic activity. A jump in the cost of crude oil can eventually depress consumer spending, for example. By having to pay more for gasoline and heating oil, households will have less spendable income for vacations, movies, and restaurants. Conversely, a drop in oil prices stimulates the economy, because households have more cash available for discretionary spending.

- (4) This column lays out the average cost of oil per barrel imported into the U.S. for the latest month.
- (5) Here one finds the quantity of oil imported to the U.S. by month.
- (6) This is the monthly bill for importing crude.
- (7) Located in this column is the total monthly cost of crude oil, plus other energy-related imports, including liquefied propane and butane gas.

For purposes of comparison, all this data is also presented on a historical basis that goes back more than 18 months.

- **Exhibit 9** Exports, Imports, and Balance of Goods, Petroleum, and Non-Petroleum End-Use Category Totals (Not Shown)

Given how much oil can exaggerate the cost of imports, it is also useful to see trade figures with petroleum excluded from the calculation. Exhibit 9 does just that; it sums up U.S. international trade minus petroleum imports.

- **Exhibit 18** Exports and Imports of Motor Vehicles and Parts by Selected Countries

By dedicating a table to motor vehicle trade, the Commerce Department demonstrates how singularly important this industry is to the economy. Nearly seven million American workers are tied to the automotive manufacturing business, encompassing 1 out of 20 jobs. Imports of cars and trucks make up more than 15% of all merchandise goods brought into this country, and exports of U.S.-built motor vehicles represent about 12% of all goods sold internationally. Exhibit 18 breaks down motor vehicle shipments by countries the U.S. exports to and imports from. This table serves three purposes. First, purchases of such big-ticket items can offer insights into the health of consumer demand in the U.S. Second, the level of exports provides information on how well the domestic manufacturing sector is performing. Third, by analyzing the export data, one can get a few clues on the strength of demand in foreign countries.

Exhibit 18. Exports and Imports of Motor Vehicles and Parts By Selected Countries: 2004

In millions of dollars. Details may not equal totals due to rounding. (X) Not applicable. (-) Represents zero or less than one half of the measurement shown.

Country	Total		Cars		Trucks		Parts	
	January 2004	December 2003	January 2004	December 2003	January 2004	December 2003	January 2004	December 2003
	TOTAL	5,776	6,335	1,189	1,915	718	922	3,870	3,498
Australia	95	122	25	33	23	34	47	55
Austria	32	49	1	1	(-)	(-)	30	47
Belgium	25	33	3	5	1	3	21	25
Brazil	38	37	1	(-)	(-)	(-)	37	36
Canada	3,201	3,487	474	925	470	608	2,258	1,954
Germany	288	356	196	271	6	3	86	82
Japan	151	186	30	36	2	2	119	148
Korea	36	31	1	4	1	1	33	26
Mexico	1,115	1,009	197	263	86	69	832	677
Saudi Arabia	58	84	32	56	10	10	16	18
Sweden	23	27	3	3	(-)	(-)	20	24
Taiwan	15	23	4	4	2	6	9	13
United Kingdom	163	162	79	78	3	7	81	77
Other	538	729	144	235	112	179	281	315
TOTAL	15,842	18,265	8,362	10,571	1,414	1,735	6,066	5,958
Australia	64	66	45	46	(-)	(-)	19	21
Austria	45	99	36	88	(-)	(-)	9	10
Belgium	84	167	67	136	11	22	7	9
Brazil	156	155	27	26	9	6	121	123
Canada	4,470	4,950	2,192	2,517	747	963	1,531	1,470
Germany	1,654	2,695	1,240	2,241	(-)	1	413	453
Japan	3,598	3,897	2,486	2,607	57	65	1,055	1,225
Korea	1,061	1,022	918	896	(-)	(-)	143	126
Mexico	2,981	2,914	746	861	553	621	1,681	1,432
Saudi Arabia	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Sweden	152	346	132	318	3	5	17	23
Taiwan	132	122	2	6	(-)	(-)	129	115
United Kingdom	360	692	264	571	16	31	80	91
Other	1,085	1,141	206	258	18	22	861	860

- **Exhibit 10** Real Exports and Imports of Goods by Principal End-Use Category (Adjusted for Inflation) (Not Shown)

It is best to look at trade in real terms. This is the only way one can determine changes in the actual volume of goods traded. It strips away the distortional effects of price inflation and gives you a picture of the quantity of goods and services traded. Exhibit 10 adjusts both exports and imports for inflation, but only for merchandise goods. Inflation-adjusted trade in services is available only on a quarterly basis with the GDP report.

What's valuable about this table is that net exports (exports minus imports) are a key component of the GDP account. Thus, monitoring real net exports can offer an early glimpse of upcoming changes in the quarterly GDP growth rate.

The minutiae of trade statistics in this report can easily scare away many readers, and that's perfectly understandable. However, a few moments of study will show that there is a veritable gold mine of information in these tables that can be helpful to investors and business leaders.

Exhibit 6 divides the import and export of goods into six broad categories: foods and beverages, industrial supplies, capital goods, automotive vehicles (plus parts and engines), consumer goods, and other goods. This table offers a quick wrap-up of the sectors most responsible for the latest changes in the trade balance. For example, if imports surged, was it the result of consumers buying more cars, televisions, and wine, or because companies spent more on capital goods? It is preferable to have imports rise as a result of purchases of capital goods rather than consumer goods. Capital goods imports can help U.S. firms and factories operate more efficiently, create more jobs, and reduce the risk of future inflation. Imports of mostly consumer goods simply go to satisfy consumption, and by doing so, they exacerbate the trade deficit and add very little to the economy's long-term health.

Exhibits 7 and 8 go a step further. Here you can identify 150 specific commodity categories that have been imported and exported, including telecom equipment, computers, leather and furs, tractors, TVs, pleasure boats, drilling equipment, and textile sewing machines. The data can help identify U.S. industries that are showing stronger sales overseas, as well as reveal those domestic sectors possibly headed for trouble because of inroads that foreign competitors are making in the U.S. market.

- **Exhibit 14** Exports, Imports, and Trade Balance by Selected Countries and Areas

If you are looking for a breakdown of trade patterns between the U.S. and its three dozen major trading partners, you will find it in this chart. A chronic trade imbalance with certain countries not only puts pressure on currency rates but even affects foreign economic policy, especially when unfair or illegal trading practices by other nations end up hurting U.S. producers.

- **Supplemental Section: Exhibit 6-a** Exports, Imports, and Trade Balance by Country and Area (Not Shown)

Perhaps the most remarkable set of tables on this topic can be found in the supplemental section of the release. Supplemental Exhibits 6 and 6a show trade between the U.S. and virtually every nation in the world.

Exhibit 14. Exports, Imports, and Balance of Goods By Selected Countries and Areas--2004

In millions of dollars. Details may not equal totals due to rounding. (-) Represents zero or less than one half of measurement shown.
(R) - Revised. (X) - Not applicable. (Note: This exhibit is not additive. See footnote (2))

Item (1)	Balance		Exports		Imports	
	January 2004	December 2003	January 2004	December 2003	January 2004	December 2003
Total Balance of Payments Basis	-45,754 (R)	-47,164	58,181 (R)	62,366	103,935 (R)	109,529
Net Adjustments	-1,223 (R)	-1,013	-975 (R)	-790	248 (R)	223
Total Census Basis	-44,531 (R)	-46,151	59,156 (R)	63,155	103,687 (R)	109,306
North America	-8,198	-7,588	21,541	22,031	29,740	29,620
Canada	-5,223	-4,447	13,348	13,749	18,571	18,196
Mexico	-2,975	-3,141	8,193	8,283	11,168	11,424
Western Europe	-6,579	-11,103	13,583	13,914	20,163	25,017
Euro Area (2)	-4,748	-8,191	9,337	9,597	14,086	17,788
European Union	-5,940	-10,290	12,527	12,827	18,468	23,116
Austria	-204	-308	121	153	325	462
Belgium	365	320	1,264	1,266	899	945
Finland	-270	-91	136	165	407	256
France	-776	-1,415	1,485	1,465	2,261	2,880
Germany	-2,796	-4,134	2,311	2,386	5,107	6,520
Italy	-1,221	-1,371	784	984	2,005	2,355
Netherlands	777	999	1,629	1,853	852	854
Spain	66	-158	560	510	494	668
Sweden	-662	-858	235	308	896	1,166
United Kingdom	-431	-1,055	2,812	2,791	3,243	3,846
Other EU	-787	-2,219	1,192	946	1,979	3,164
European Free Trade Association	-552	-667	722	817	1,274	1,484
Norway	-325	-288	107	125	432	413
Switzerland	-204	-332	603	668	807	1,000
Other EFTA	-23	-47	13	24	36	70
Other Western Europe	-87	-145	334	271	421	417
Eastern Europe/FSR	-754	-748	586	727	1,340	1,474
Hungary	-192	-93	99	102	291	194
Poland	-50	-45	65	80	115	125
Former Soviet Republics	-360	-461	298	364	658	826
Russia	-291	-485	159	184	450	669
Other FSR	-69	24	139	180	208	156
Other EE	-152	-149	124	181	276	330
Pacific Rim Countries	-20,657	-18,488	15,145	17,886	35,802	36,374
Australia	424	522	1,018	1,094	594	572
China	-11,477	-9,874	2,593	3,320	14,070	13,194
Japan	-5,252	-5,700	3,985	4,502	9,238	10,201
Newly Industrialized Countries(NICS)	-2,289	-1,606	5,617	6,778	7,906	8,384
Hong Kong	264	691	1,071	1,367	807	676
Korea	-1,529	-1,403	1,817	2,154	3,346	3,557
Singapore	93	-46	1,233	1,291	1,140	1,337
Taiwan	-1,117	-849	1,497	1,966	2,613	2,815
Other Pacific Rim(3)	-2,064	-1,830	1,930	2,192	3,994	4,022
South/Central America	-2,332	-2,892	4,437	4,533	6,769	7,425
Argentina	12	-49	278	259	266	308
Brazil	-357	-530	1,034	1,054	1,391	1,584
Colombia	-229	-127	356	349	585	476
Other S/C A (3)	-1,757	-2,186	2,769	2,871	4,526	5,057
OPEC	-4,735	-4,619	1,419	1,599	6,153	6,218
Indonesia(3)	-582	-413	187	262	769	676
Nigeria	-766	-1,000	117	77	882	1,077
Saudi Arabia	-1,065	-802	383	447	1,448	1,249
Venezuela(3)	-1,500	-1,513	280	298	1,779	1,811
Other OPEC	-822	-890	453	515	1,275	1,405
Other Countries	-3,359	-2,906	2,911	2,981	6,270	5,887
Egypt	221	143	287	208	66	64
South Africa	-220	-90	194	333	413	423
Other	-3,360	-2,959	2,430	2,440	5,790	5,399
Uniden. ctys (4)	(-)	21	(-)	21	(X)	(X)
Timing Adjustments	(X)	244	(X)	23	(X)	-221

MARKET IMPACT

Financial-market reaction to the monthly trade data is tough to predict. Everyone recognizes the growing importance of international commerce to the U.S. economy and how flows of imports and exports can tip off investors to domestic demand, industry earnings,

pricing power, and potential changes in currency values. What lessens the value of the international trade report is its late arrival. The trade balance is the last economic release by the Census Bureau each month, and it reports on activity that took place two months back. So it's hard to get worked up when this report comes out. One factor that might provoke a sharp reaction is if the trade numbers significantly diverge from what the market or policymakers expected that month. Sudden changes in export or import flows could have implications for GDP growth estimates and the dollar, and that could startle market participants.

Bonds

Anticipating how bond investors might respond to trade data can be very tricky. There's no consistent pattern of response because much depends on the factors behind the latest trade news. Let's take a look at a sample of the scenarios investors might face.

If the monthly trade deficit turns out to be smaller than expected, this could be viewed as good news for fixed incomes. The reason? The dollar often rallies in such cases because foreign investors prefer to see the U.S. trade gap shrink. A stronger dollar will help reduce inflation pressures in the U.S., and this can lift bond prices.

Note, however, that the same report can also be viewed negatively by bondholders, because a shrinking deficit can boost GDP growth. Greater exports or fewer imports—both of which can reduce the red ink in trade—means that less is subtracted from the GDP account. If the cause is a surge in exports, this will further pump up the U.S. economy, and that can unnerve fixed-income investors and lead to a sell-off in bonds. On the other hand, if the reason for the smaller deficit turns out to be a drop in imports, it suggests that the U.S. economy might be weakening. This is considered good news for bond investors.

Now suppose that the trade deficit suddenly balloons. You might conclude that is bad news for bond investors. After all, this would normally put downward pressure on the dollar, which might raise both inflation and interest rates in the U.S. An increase in the trade shortfall means that the U.S., which is already the world's largest debtor nation, will have to borrow even more money from foreign investors to finance these additional deficits. Ah, but there might also be good news here for bonds. A higher trade deficit could also mean less economic growth, because a jump in imports will subtract from the GDP account.

With such a dizzying assortment of possible outcomes in the bond market, what is one to do? First, don't just look at the headline trade figures, but focus instead on the dynamics going on behind the scenes. If the trade balance improves, bond investors prefer the reason to be a fall in imports rather than a surge in exports. If the deficit climbs, traders hope the cause is a plunge in exports, which would at least ease economic output.

Stocks

This is not an easy call for equity players either. Basically, they prefer to see the deficit shrink as a result of vibrant demand for exports. That will keep U.S. factories humming, improve the outlook for corporate profits, and bolster the dollar's value. The only wrinkle here would come from the bond market. Should export growth be so strong that it heightens fears of inflation, interest rates would edge higher and spoil the party for stock investors. In the final analysis, though, stocks tend to do better if the trade balance improves due to an increase in sales overseas.

Dollar

While investors in the bond and stock markets agonize over how to respond to the latest international trade figures, currency traders take a more direct approach. Unless caused by a deep recession in the U.S., any improvement in the trade balance is viewed favorably for the dollar. The more goods and services foreigners buy from the U.S., the more dollars they'll need to pay for these American products.

In contrast, a worsening trade deficit can undermine the dollar. To purchase foreign goods and services, Americans have to sell dollars so they can pay for these products in local currencies. The problem is that foreign exchange traders are already swimming in a sea of surplus dollars. Flooding the market with even more dollars can only further depress the greenback's value.

CURRENT ACCOUNT BALANCE (U.S. INTERNATIONAL TRANSACTIONS)

Market Sensitivity: Low to medium.

What Is It: The broadest accounting of America's trade and investment relationship with the rest of the world.

Most Recent News Release on the Internet:

<http://bea.gov/newsreleases/international/transactions/transnewsrelease.htm>

Home Web Address: *<http://bea.gov>*

Release Time: 8:30 a.m. (ET); data is released two-and-a-half months after the reference quarter ends.

Frequency: Quarterly.

Source: Bureau of Economic Analysis, Commerce Department.

Revisions: Usually moderate. Annual benchmark changes are made in June.

WHY IS IT IMPORTANT?

The explosion in world trade over the past several decades has fundamentally altered the U.S. economic landscape. More than ten million American jobs are tied to the exports sector (a 15% jump in just two years); some nine million are supported by importers. About one-third of all U.S. business activity is now linked in some fashion to international commerce.

Given its importance to the U.S. economy, we need to delve a little deeper into precisely what we mean here by trade. One aspect of it deals with the basic exchange of goods and services between the U.S. and other countries, an area that was explored in the preceding section on international trade. However, the International Transactions release provides a more comprehensive accounting of where the U.S. stands in its economic ties with the rest of the world. For instance, besides selling and buying goods and services in foreign markets, we need to keep in mind that the U.S. also imports and exports investment capital. Every day, foreigners buy and sell U.S. stocks, bonds, and other types of assets, and Americans are major buyers of similar assets overseas. Moreover, U.S. investors get paid a return (usually in the form of dividends and interest payments) on their investments abroad—income that flows back into this country. By the same token, foreigners get a return from their investment stake in U.S. assets. The quarterly U.S. international transactions report attempts to track all these cross-border movements of physical goods and services, income flows from investments, and the purchases and sales of assets. It might sound complicated, but it really isn't.

Let's take a look at the international transactions release and see how all this information is laid out. The report is divided into two sections. The first deals with the Current

Account, which includes the merchandise trade, services, investment income flows, and unilateral transfers. The second part is titled the Capital and Financial Accounts, and it tracks the movement of actual investments and loans into and out of the U.S.

Current Account

The current account balance summarizes the net change in four components: merchandise trade, services, income flows, and unilateral transfers:

1. *Merchandise Trade Account:* This refers to goods or “visible” trade, such as the export and import of cars, home electronics, bananas, bicycles, and calculators. The trade balance is the net difference between the value of goods Americans sell to other countries (exports) and the goods Americans buy from other countries (imports). Since the mid-1970s, the U.S. has recorded annual deficits by importing far more products than it has exported. Indeed, the gap is so large it is the prime reason the U.S. has suffered deficits in the overall current account.
2. *Services Trade Account:* The services account, or “invisible” trade, is the net result of what Americans pay for services sold by foreigners (considered an import) and what foreigners spend on U.S. services (listed as an export). This kind of cross-border business includes insurance, engineering, investment banking, public relations, accounting, and advertising services. Fees from patents, copyrights, and movies also belong to this category. The balance in the services account is the only component of the current account that has consistently shown a surplus, though it is not big enough to offset the gaping shortfall from the merchandise trade account.
3. *Income Account:* A subcategory of the service account is the net income received from investing in foreign assets. When Americans invest in assets outside the U.S., such as in European or Japanese stocks and bonds, the earnings received from those assets are classified as export income because they are earned from investments Americans made abroad. Conversely, payments Americans make to foreigners who invest in U.S. assets are considered an import because they’re based on capital shipped here. An income deficit occurs when the investment income paid to foreigners exceeds the income foreigners pay U.S. investors. For most of the post–World War II period, the U.S. maintained a surplus in the income account, but since 2002, it too has slipped into the deficit column.
4. *Unilateral Transfers:* These represent one-way transfers of foreign aid, government grants, pension payments, and worker remittances (which occur when foreigners working in the U.S. send money back to their families in another country). By definition, unilateral transfers show up as a negative in the current account because they always involve money leaving U.S. shores.

The contribution that each component makes in the current account breaks down as follows (based on 2006 data):

Total Exports of Goods, Services, and Investment Income	<u>100%</u> (+)
Exports of Goods	53%
Exports of Services	21%
Income Receipts	26%
<hr/>	
Total Imports of Goods and Services and Income Payments	<u>100%</u> (-)
Imports of Goods	70%
Imports of Services	14%
Income Payments	16%
<hr/>	
Unilateral Transfers (Net)	<u>100%</u> (-)
U.S. Government Grants	33%
U.S. Government Pensions and Other Transfers	8%
Private Remittances and Other Transfers	59%

Capital and Financial Accounts

As the title suggests, this category is subdivided into the capital account and the financial account. The capital account is usually small and consists mostly of uncommon flows of certain money. For example, if the U.S. issues a loan to another country and then later decides that the borrower need not repay it (a form of debt forgiveness), the amount is entered as an import on the capital account. Another example of an entry in the capital account is the case of a U.S. resident who emigrates permanently to another country and takes along all his assets. This would be classified as an import as well.

Of far greater importance is the financial account. This table is filled with numbers showing the movement of investment capital and loans into and out of the U.S. Here is where you'll find changes in U.S. ownership of foreign stocks and bonds, and in other assets (such as an American firm acquiring an overseas company) during a given period, as well as shifts in foreign ownership of U.S. securities and private assets. Also included in this category are U.S. government agency (like the Federal Reserve) holdings of foreign currencies and securities. It also includes the reverse—what foreign central banks own of U.S. financial assets.

Taken together, the current account and the financial and capital accounts make up America's balance of payments, which represents all economic transactions between the U.S. and the rest of the world.

So how does the U.S. stack up in its trade and financial affairs? Not too well! Americans love to spend and borrow, even if it is beyond their means to do so. Since the 1980s, the U.S. has consistently consumed far more than it produces, which means that Americans increasingly rely on imports to satisfy their enormous appetites. However, to finance all this consumption, the U.S. has to borrow, on average, more than \$2 billion

every day from other nations. Total U.S. gross debt to foreigners is an astounding \$18 trillion. (Net foreign debt, which adjusts for the \$15 trillion of U.S.-owned foreign assets, was \$3 trillion.) Can such a buildup in debt continue indefinitely? No. The problem is that no one is sure at what point this massive and still-growing debt will begin to seriously destabilize the U.S. and global economy.

HOW IS IT COMPUTED?

Since the International Transactions account has numerous elements, the Bureau of Economic Analysis (BEA) has to rely on many sources for data. Trade in goods and services comes essentially from the monthly international trade report. Investment earnings are calculated using estimates of holdings, dividend-payout ratios, and interest rates, based on information from corporate reports and the U.S. Treasury. Travel receipts and payments are derived from two places. The BEA gets U.S. and foreign travel data directly from the Mexican and Canadian governments. For travel to Europe, Asia, and elsewhere, the agency relies on surveys taken by passengers while in flight either arriving in or leaving the U.S.

The data in the current account and the capital and financial accounts is seasonally adjusted, but it is not annualized. The data represents quarterly changes in trade and investment flows, or the year-end totals. The current account is not adjusted for inflation.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

- **Table 1** U.S. International Transactions—Current Account

To get a snapshot of where the U.S. stands in its trade and financial relationship with the rest of the world, go directly to the memoranda section at the very end of Table 1 and review lines 72 to 77. The result is the current account balance for the latest quarter. A negative figure reflects how much the U.S. has to borrow from overseas to help finance the appetite of American consumers, business, and government.

Can the U.S. afford to sink deeper into debt with the rest of the world? This is no academic question. There has been a vigorous debate in the economics profession about how dangerous the unending stream of current account deficits is to the future health of the U.S. economy. Many are raising alarms that if the red ink continues, sooner or later foreign creditors will decide to lessen their exposure to the U.S. economy and its stock and bond markets. The consequences of such a step could be disastrous. The dollar could dramatically weaken, and both inflation and interest rates would be driven higher.

Others argue that while these deficits cannot go on indefinitely, the U.S. economy is not in any imminent danger. If the U.S. imports a lot more, it just reflects how much stronger and healthier the American economy is compared with other countries. In addition, the U.S. is perceived as a stable and attractive place to invest because of its

March 14, 2012

Table 1. U.S. International Transactions
 [Millions of dollars, quarters seasonally adjusted]

(Credits +, debits -)	2010	2011 ^P	Change: 2010-2011	2011					Change: 2011 III-IV
				IV	I ¹	II ¹	III ¹	IV ²	
Current account									
1 Exports of goods and services and income receipts.....	2,500,817	2,843,764	342,947	656,986	687,900	715,132	724,627	716,105	-8,522
2 Exports of goods and services.....	1,837,577	2,105,045	267,468	484,747	507,602	523,864	538,190	535,389	-2,801
3 Goods, balance of payments basis.....	1,288,699	1,497,389	208,690	342,659	361,425	372,926	382,661	380,377	-2,284
4 Services.....	548,878	607,656	58,778	142,088	146,177	150,938	155,529	155,012	-517
5 Transfers under U.S. military agency sales contracts.....	17,483	17,671	188	4,141	4,231	4,474	4,534	4,431	-103
6 Travel.....	103,505	116,279	12,774	26,695	27,440	29,309	30,218	29,312	-906
7 Passenger fares.....	30,931	36,717	5,786	7,994	8,389	9,150	9,889	9,289	-600
8 Other transportation.....	39,936	42,454	2,518	10,121	10,463	10,635	10,765	10,592	-173
9 Royalties and license fees.....	105,583	120,619	15,036	27,021	28,021	29,808	30,877	31,913	1,036
10 Other private services.....	250,320	272,749	22,429	65,851	67,318	67,297	68,943	69,190	247
11 U.S. government miscellaneous services.....	1,121	1,167	46	286	314	265	303	284	-19
12 Income receipts.....	663,240	738,719	75,479	172,239	180,298	191,268	186,437	180,718	-5,721
13 Income receipts on U.S.-owned assets abroad.....	657,963	733,282	75,319	170,921	178,938	189,909	185,075	179,360	-5,715
14 Direct investment receipts.....	432,000	477,252	45,252	112,199	118,276	125,796	118,953	114,226	-4,727
15 Other private receipts.....	224,469	254,282	29,813	58,371	60,231	63,593	65,693	64,765	-928
16 U.S. government receipts.....	1,494	1,748	254	351	432	519	428	369	-59
17 Compensation of employees.....	5,278	5,437	159	1,317	1,360	1,599	1,362	1,356	-6
18 Imports of goods and services and income payments.....	-2,835,620	-3,182,655	-347,035	-735,804	-773,914	-803,056	-798,764	-806,921	-8,157
19 Imports of goods and services.....	-2,337,804	-2,665,001	-327,397	-603,496	-646,565	-669,079	-672,902	-676,455	-3,553
20 Goods, balance of payments basis.....	-1,934,555	-2,235,681	-301,126	-501,904	-542,793	-562,636	-563,529	-566,722	-3,193
21 Services.....	-403,048	-429,320	-26,272	-101,592	-103,772	-106,443	-109,373	-109,732	-359
22 Direct defense expenditures.....	-30,391	-29,581	810	-7,471	-7,570	-7,545	-7,343	-7,123	220
23 Travel.....	-75,507	-79,120	-3,613	-19,054	-19,293	-19,863	-19,993	-19,971	22
24 Passenger fares.....	-27,279	-31,104	-3,825	-7,259	-7,542	-7,693	-7,946	-7,823	23
25 Other transportation.....	-51,202	-54,484	-3,282	-12,666	-13,435	-13,933	-13,724	-13,392	332
26 Royalties and license fees.....	-33,450	-36,581	-3,131	-8,359	-8,880	-8,588	-9,396	-9,717	-321
27 Other private services.....	-180,598	-193,986	-13,388	-45,585	-45,970	-47,764	-49,802	-50,450	-648
28 U.S. government miscellaneous services.....	-4,621	-4,465	156	-1,198	-1,081	-1,057	-1,170	-1,157	13
29 Income payments.....	-498,016	-517,654	-19,638	-132,309	-127,349	-133,976	-125,862	-130,466	-4,604
30 Income payments on foreign-owned assets in the United States.....	-483,504	-503,278	-19,774	-128,700	-123,760	-130,402	-122,270	-126,846	-4,576
31 Direct investment payments.....	-151,261	-160,551	-9,190	-44,861	-38,997	-44,900	-36,006	-40,648	-4,642
32 Other private payments.....	-196,004	-206,978	-10,974	-49,993	-51,014	-51,731	-52,341	-51,892	449
33 U.S. government payments.....	-136,139	-135,749	390	-33,846	-33,749	-33,771	-33,923	-34,306	-383
34 Compensation of employees.....	-14,512	-14,375	137	-3,609	-3,590	-3,574	-3,592	-3,620	-28
35 Unilateral current transfers, net.....	-136,095	-134,550	1,545	-33,360	-32,263	-35,508	-33,489	-33,290	199
36 U.S. government grants.....	-44,717	-45,352	-635	-11,396	-10,987	-13,179	-10,812	-10,374	438
37 U.S. government pensions and other transfers.....	-10,365	-10,634	-269	-2,611	-2,629	-2,654	-2,677	-2,674	3
38 Private remittances and other transfers.....	-81,013	-78,564	2,449	-19,353	-18,647	-19,675	-20,000	-20,242	-242

liquidity, creditworthiness, and robust productivity growth—all of which mean that foreign lenders are not about to abandon the U.S. anytime soon. Finally, some will argue there is no direct link between a country's current account balance and its economic health. Just look at Japan: It had current account surpluses in the 1990s, yet its economy was stuck in a virtual depression throughout that decade.

Who's right here? That's a tough question to answer because economic theory provides little guidance on the consequences of long-term current account deficits. Practically speaking, current account deficits cannot be sustained because foreign investors will, at some point, conclude that their loan portfolios have far too many assets in dollars. In the interest of prudence, these investors could decide to shun U.S. financial assets and diversify into other currencies. Precisely when this shift will take place, and by what magnitude, are unknown. However, the prospect of a significant reversal in sentiment against the dollar is unsettling enough. To keep foreign investors interested in the U.S. and increase their holdings of dollar-denominated securities and loans, interest rates in this country would have to rise high enough to reward foreign creditors for the extra risk they face for carrying all those dollars. Of course, the downside of that scenario is that high interest rates can also derail economic growth in the U.S.

A couple of key components in the current account are worth noting because of their impact on certain U.S. business sectors:

- *Travel:* Money spent by foreign tourists in the U.S. is considered an export item, and expenditures by Americans in other countries are classified as an import. (Think of this in terms of who gets the revenues from tourism.) Since the U.S. is a popular tourist destination for people from all over the world, this country has traditionally had a surplus in the travel account. Compare lines 6 (travel by foreigners to the U.S.) and 23 (travel by Americans to other countries), and you can see whether foreign tourists have spent more in the U.S. than American travelers did in other countries, and by how much. The results have business implications for the lodging and transportation sectors.
 - *Income Receipts and Payments:* Two main categories are listed here. Line 13 (income receipts on U.S.-owned assets abroad) shows how much income Americans received from their international investments, such as interest income and dividends, as well as returns from other types of assets owned in other countries. Line 30 (income payments on foreign-owned assets in the U.S.) represents what the U.S. paid to foreigners for their investments in this country.
- **Table 1** U.S. International Transactions—Capital and Financial Accounts
- Line 40. *Net U.S.-owned assets abroad:* Americans frequently buy and sell assets in other countries. This line shows the change in the amount of foreign assets held by the U.S. government and private Americans.
 - Line 50. *Net U.S. private assets:* Here you'll find the net change in the private ownership of assets outside the U.S. This is further segmented into two groups: direct investments (as in buying a foreign company or factory) and foreign securities, on lines 51 and 52, respectively.
 - Line 55. *Net foreign-owned assets in the United States:* This is the foreign side of the transaction—specifically, the total change in foreign ownership of U.S. assets. It combines both private and government holdings.
 - Line 63. *Other net foreign assets in the United States:* A subset of line 55, this looks at the change in private foreign sector holdings of U.S. assets. This is further divided into direct investments (line 64), U.S. Treasuries (line 65), and other securities (line 66).

March 14, 2012

Table 1. U.S. International Transactions (Continued)

[Millions of dollars, quarters seasonally adjusted]

(Credits +, debits -)	2010	2011 ^a	Change: 2010-2011	2011					Change: 2011 III-IV
				IV	I ^b	II ^b	III ^b	IV ^b	
Capital account									
39 Capital account transactions, net	-152	-1,160	-1,008	-2	-29	-829	-300	-3	297
Financial account									
40 U.S.-owned assets abroad, excluding financial derivatives (increase/financial outflow (-))	-1,095,182	-396,375	608,807	-238,802	-334,721	24,446	-75,147	-10,953	64,194
41 U.S. official reserve assets	-1,834	-15,877	-14,043	200	-3,619	-6,267	-4,079	-1,912	2,167
42 Gold	0	0	0	0	0	0	0	0	0
43 Special drawing rights	-31	1,752	1,783	-10	1,961	-159	-27	-23	4
44 Reserve position in the International Monetary Fund	-1,293	-18,079	-16,786	321	-6,428	-5,974	-3,909	-1,768	2,141
45 Foreign currencies	-510	450	960	-111	848	-134	-143	-121	22
46 U.S. government assets, other than official reserve assets	7,540	-102,150	-109,690	-240	-547	-1,358	-956	-99,289	-98,333
47 U.S. credits and other long-term assets	-4,976	-5,638	-652	-867	-1,307	-2,337	-1,202	-792	410
48 Repayments on U.S. credits and other long-term assets	2,408	3,182	774	547	610	1,259	798	516	-292
49 U.S. foreign currency holdings and U.S. short-term assets	10,108	-99,694	-109,802	80	150	-279	-553	-99,012	-98,459
50 U.S. private assets	-1,010,888	-278,348	732,540	-236,762	-330,555	32,070	-70,112	90,248	180,360
51 Direct investment	-351,350	-406,241	-54,891	-92,990	-89,567	-139,209	-74,071	-103,395	-29,324
52 Foreign securities	-151,916	-92,906	59,010	-43,438	-58,171	-30,444	-40,103	35,812	75,915
53 U.S. claims on unaffiliated foreigners reported by U.S. nonbanking concerns	7,421	-393	-7,814	-5,747	-95,007	7,069	18,202	69,343	51,141
54 U.S. claims reported by U.S. banks and securities brokers	-515,043	221,192	736,235	-94,587	-87,810	194,654	25,860	88,488	62,628
55 Foreign-owned assets in the United States, excluding financial derivatives (increase/financial inflow (+))	1,245,736	783,737	-461,999	266,646	487,513	3,849	232,816	59,558	-173,258
56 Foreign official assets in the United States	349,754	164,831	-184,923	57,790	48,764	95,143	21,847	-923	-22,770
57 U.S. government securities	316,980	122,992	-193,988	63,279	48,814	76,346	13,249	-15,417	-28,666
58 U.S. Treasury securities	397,797	123,604	-274,193	79,688	33,510	79,552	28,115	-17,573	-45,688
59 Other	-80,817	-612	80,205	-16,409	15,304	-3,206	-14,866	2,156	17,022
60 Other U.S. government liabilities	12,124	8,807	-3,317	3,841	2,645	2,089	2,245	1,628	-417
61 U.S. liabilities reported by U.S. banks and securities brokers	-9,375	29,516	38,891	-7,277	-3,073	15,319	5,121	12,149	7,028
62 Other foreign official assets	30,025	3,516	-26,509	-2,053	378	1,389	1,232	517	-715
63 Other foreign assets in the United States	895,982	618,906	-277,076	208,856	438,749	-91,294	210,969	60,481	-150,488
64 Direct investment	236,226	227,866	-8,360	70,557	28,812	53,184	67,566	78,303	10,737
65 U.S. Treasury securities	256,428	141,804	-114,624	29,514	3,466	-99,320	118,910	78,748	-40,162
66 U.S. securities other than U.S. Treasury securities	120,453	-76,340	-196,793	48,431	-2,590	-10,743	-25,569	-37,438	-11,869
67 U.S. currency	28,319	54,996	26,677	13,440	12,576	13,989	9,614	18,817	9,203
68 U.S. liabilities to unaffiliated foreigners reported by U.S. nonbanking concerns	77,456	13,863	-63,593	16,758	42,045	24,204	-21,092	-31,294	-10,202
69 U.S. liabilities reported by U.S. banks and securities brokers	177,100	256,717	79,617	30,156	354,440	-112,608	61,540	-46,655	-108,195
70 Financial derivatives, net	13,735	16,775	-6,960	-504	3,220	7,504	-3,949	n.a.	n.a.
71 Statistical discrepancy (sum of above items with sign reversed)	216,761	80,464	-136,297	82,841	-37,707	88,462	-45,793	* 75,502	* 121,295
Memoranda:									
72 Balance on goods (lines 3 and 20)	-645,857	-738,292	-92,435	-159,245	-181,368	-189,711	-180,868	-186,345	-5,477
73 Balance on services (lines 4 and 21)	145,830	178,336	32,506	40,496	42,405	44,495	46,156	45,280	-676
74 Balance on goods and services (lines 2 and 19)	-500,027	-559,956	-59,929	-118,749	-138,963	-145,215	-134,712	-141,066	-8,354
75 Balance on income (lines 12 and 29)	165,224	221,065	55,841	39,930	62,949	57,292	60,575	50,250	-10,325
76 Unilateral current transfers, net (line 35)	-136,095	-134,550	1,545	-33,360	-32,263	-35,508	-33,489	-33,290	199
77 Balance on current account (lines 1, 18, and 35 or lines 74, 75, and 76)	-470,898	-473,440	-2,542	-112,179	-118,277	-123,431	-107,626	-124,105	-16,479
78 Net financial flows (lines 40, 55, and 70)	254,289	394,137	139,848	29,340	156,012	35,799	153,720	* 48,605	* -105,115

MARKET IMPACT

Bonds

There is little tradable value in the international transaction report. It is a quarterly indicator with a headline that carries few surprises for the fixed-income market because other, more timely monthly measures, such as international trade, have already told much of the story. Nor does the current account balance stand out as some sort of leading indicator. This report, however, does get a lot of attention from economists and policymakers in Washington because of concerns that mounting current accounts deficits could at some point jeopardize U.S. economic growth.

Stocks

This release has virtually no impact on equity prices.

Dollar

Traders in the foreign exchange markets look over the report. A deterioration in the U.S. current account balance will over time erode the value of the dollar. However, no one knows with any certainty when these burgeoning deficits will tip the greenback over the cliff. Conversely, if America's trade balance reverses course and begins to move closer to surplus, it would be considered highly bullish for the U.S. currency, though much depends on what's behind this improvement. If it's the result of a deep recession in the U.S., with import demand plummeting, foreigners will likely shy away from the dollar. If current account deficits were to narrow as a result of greater international demand for U.S. goods and services, the dollar should appreciate in value in the currency markets.

ASSETS AND LIABILITIES OF COMMERCIAL BANKS IN THE UNITED STATES (FEDERAL RESERVE BOARD)

Market Sensitivity: Low.

What Is It: A very timely report of business and consumer loans that banks hold on their balance sheets. It is commonly referred to as the H.8 series.

Most Current News Release on the Internet:

www.federalreserve.gov/releases/h8/current/default.htm

Home Web Address: *www.ny.frb.org*

Release Time: 4:15 p.m. (ET); released every week on Friday. If Friday falls on a national holiday, the report is made public the day before at the same time.

Frequency: Weekly.

Source: Federal Reserve Board (H.8 release)

Revisions: Revisions are made as more data is collected. The Federal Reserve provides all data in both seasonal adjustment and nonseasonal adjustment forms.

WHY IS IT IMPORTANT?

STOP! Before you rush to skip this indicator because of its ghastly title, think again. We all know the critical role banks play in the economy. They help consumers finance purchases that can range from groceries to homes. Certainly businesses rely on bank funds to buy equipment, invest in inventories, and pay for all sorts of construction activity. When you think about it, there are probably few more important measures of economic activity than the amount of credit that banks provide to the private sector. A persistent decline in bank loans has to be viewed as a worrisome development. This can occur because lenders are overly nervous about the economic outlook and begin to worry whether new borrowers will be able to repay their loans should business conditions turn sour. In such circumstances, banks may choose to cut back on issuing new credit—or put in place far tougher lending standards. But a drop in bank loans can also take place if there is less demand for credit from households and companies. For example, Americans who are increasingly anxious about job and income security will be reluctant to take on yet more debt. And firms that see demand for their products slowing down will likely hold off on plans to expand their operations or buy more inventory, thus reducing the need to borrow.

On the other hand, a steady increase in bank loans will energize an economy. All that liquidity can boost consumption and investments, all of which leads to more hiring and ultimately faster economic growth. The bottom line is that no economy can function long

without access to adequate bank credit. In this release, the Federal Reserve allows you to track in detail weekly changes in the amount and composition of outstanding bank loans to businesses and consumers.

HOW IS IT COMPUTED?

This release, often identified as the H.8 report, estimates the total amount of the assets and liabilities carried by all commercial banks in the U.S. For our purposes, we will look exclusively at the asset side of these balance sheets. The Federal Reserve receives weekly loan data from a sample of about 875 domestically chartered banks, which includes 60 or so U.S. affiliates of foreign banks. This multipage report then breaks down the loan numbers by type of institution: large domestically chartered banks (which consists of the top 25 commercial banks in the country, ranked by assets), small domestically chartered commercial banks (essentially those outside of the top 25), and foreign related institutions operating in the U.S. The loan numbers are published in seasonally adjusted and nonseasonally adjusted forms for all these bank groupings.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

The weekly report on assets and liabilities of commercial banks in the U.S. takes up 21 pages. But the section to watch in keeping with this book's theme is located on page 2. Here we see the latest weekly amounts of loans held by banks. They are subdivided into numerous categories.

- Line 9. *Loans and leases in bank credit*. This is the aggregate amount of outstanding loans made by banks to the private nonfinancial sector. The total is then broken down by category of credit.
- Line 10. *Commercial and industrial loans (C&I credit)*. This is more commonly known as business loans. It represents about 20% of total loans and leases. You might have initially thought the percentage would be higher. The reason that's not the case is that large companies rely less on banks for their primary funding needs. Fortune 500 companies can always tap the capital markets and issue stocks and bonds to raise funds, both of which are usually cheaper and more manageable than bank loans. While these large firms do have credit lines with banks, it is usually for short-term cash needs. The main customers of banks are small and medium-size firms simply because they are less able to tap the capital markets. In general, business loans are used for an array of purposes, such as to finance inventory purchases and investments in capital equipment. C&I loans typically rebound when there is confidence that the economy is on a growth path. However, we have to be careful here too, for a sudden upturn in loans has to be viewed with the same concern as a sharp contraction in credit. Here's why. Although it's true that a jump in loans can fuel faster economic growth, there are

H.8

Assets and Liabilities of Commercial Banks in the United States¹
Seasonally adjusted, billions of dollars

Page 2

March 30, 2012

Account	2011 Feb	2011 Aug	2011 Sep	2011 Oct	2011 Nov	2011 Dec	2012 Jan	2012 Feb	Week ending			
									Feb 29	Mar 7	Mar 14	Mar 21
ASSETS												
1 Bank credit	9,145.3	9,269.2	9,276.9	9,339.3	9,390.1	9,419.5	9,481.3	9,576.7	9,621.8	9,582.1	9,586.5	9,577.5
2 Securities in bank credit ²	2,432.1	2,458.5	2,465.1	2,475.5	2,487.9	2,510.8	2,546.8	2,587.5	2,609.3	2,581.5	2,588.0	2,586.6
3 Treasury and agency securities ³	1,633.6	1,660.8	1,664.8	1,675.7	1,685.4	1,695.9	1,724.0	1,754.4	1,775.9	1,757.4	1,763.6	1,769.5
4 Mortgage-backed securities (MBS) ⁴	1,104.1	1,180.9	1,202.2	1,217.6	1,229.2	1,247.6	1,264.7	1,288.0	1,299.3	1,297.5	1,300.8	1,301.0
5 Non-MBS ⁵	529.5	479.9	462.7	458.1	456.2	448.3	459.3	466.3	476.6	459.9	462.8	468.5
6 Other securities	798.5	797.8	800.2	799.8	802.5	814.9	822.8	833.1	833.4	824.1	824.4	817.1
7 Mortgage-backed securities ⁶	155.5	143.4	142.3	143.0	142.0	140.2	138.4	140.2	139.0	137.0	136.7	134.3
8 Non-MBS ⁷	643.0	654.4	657.9	656.7	660.5	674.7	686.0	692.9	694.3	687.1	687.6	682.8
9 Loans and leases in bank credit ⁸	6,713.2	6,810.7	6,811.9	6,863.8	6,902.2	6,908.7	6,934.6	6,989.2	7,012.5	7,000.6	6,998.5	6,990.9
10 Commercial and industrial loans	1,223.5	1,297.6	1,302.1	1,316.3	1,324.5	1,338.4	1,354.6	1,372.6	1,377.7	1,379.3	1,379.0	1,382.3
11 Real estate loans	3,568.3	3,485.4	3,482.1	3,485.8	3,487.7	3,479.5	3,497.2	3,532.8	3,541.5	3,539.9	3,540.3	3,534.3
12 Revolving home equity loans	574.5	557.7	555.8	552.3	550.3	547.9	548.8	550.1	548.7	547.2	546.4	545.5
13 Closed-end residential loans ⁹	1,514.1	1,497.3	1,500.9	1,516.0	1,520.5	1,517.8	1,535.3	1,556.6	1,566.7	1,567.6	1,569.8	1,567.0
14 Commercial real estate loans ¹⁰	1,479.7	1,430.4	1,425.4	1,417.5	1,416.9	1,413.8	1,413.1	1,426.0	1,426.0	1,425.1	1,424.1	1,421.8
15 Consumer loans	1,074.3	1,089.0	1,086.6	1,089.5	1,091.3	1,096.9	1,090.8	1,089.9	1,093.6	1,093.4	1,093.1	1,091.5
16 Credit cards and other revolving plans	595.3	597.6	597.3	597.4	597.4	600.2	595.4	592.3	593.2	591.9	591.5	590.8
17 Other consumer loans ¹¹	478.9	491.4	489.4	492.1	493.9	496.7	495.5	497.6	500.4	501.5	501.6	500.7
18 Other loans and leases	847.2	938.7	941.0	972.1	998.7	993.9	991.9	993.9	999.7	988.0	986.1	982.9
19 Fed funds and reverse RPs with nonbanks ¹²	206.9	260.4	263.8	275.4	297.7	290.8	281.3	286.2	294.3	284.4	280.8	285.8
20 All other loans and leases ¹³	640.3	678.3	677.2	696.7	701.0	703.1	710.7	707.8	705.4	703.6	705.3	697.1
21 LESS: Allowance for loan and lease losses	206.6	183.3	179.2	176.9	174.4	175.3	174.0	170.5	170.6	167.4	168.6	168.5
22 Interbank loans ¹²	162.1	125.9	118.3	114.1	110.3	108.5	109.9	115.2	109.6	112.4	114.8	110.3
23 Fed funds and reverse RPs with banks ¹²	133.7	114.1	107.0	103.3	100.3	97.9	98.3	103.3	97.5	101.0	102.4	97.9
24 Loans to commercial banks ¹⁴	28.3	11.8	11.3	10.8	10.0	10.6	11.7	11.9	12.1	11.4	12.4	12.4
25 Cash assets ¹⁵	1,254.2	1,897.9	1,836.9	1,707.3	1,599.7	1,596.2	1,592.3	1,601.2	1,584.5	1,608.8	1,603.4	1,576.9
26 Trading assets ¹⁶	269.9	329.8	330.9	306.5	296.4	304.7	314.4	341.0	339.0	328.0	322.9	329.0
27 Derivatives with a positive fair value ¹⁷	246.4	302.9	304.0	282.1	274.0	280.7	287.1	315.0	310.8	301.1	296.5	301.1
28 Other trading assets	23.5	26.8	26.9	24.4	22.4	24.0	27.2	26.0	28.2	26.9	26.4	27.9
29 Other assets ¹⁸	1,213.5	1,214.7	1,207.7	1,199.7	1,201.5	1,190.2	1,175.8	1,167.7	1,165.1	1,154.0	1,156.4	1,154.1
30 TOTAL ASSETS ¹⁹	11,838.5	12,654.2	12,591.6	12,489.9	12,423.7	12,443.7	12,499.8	12,631.2	12,649.3	12,617.8	12,615.3	12,579.3

Footnotes appear on the last page.

times when it can signal just the opposite. For instance, the failure of Lehman Brothers in September of 2008 sent shock waves throughout the financial community. Many companies made a mad dash to borrow funds and tap their credit lines from their banks because they feared (and rightly so) that the emerging crisis on Wall Street would soon force banks to slam shut their lending windows. As a result, loans to businesses spiked for two months (September through November that year) and then plummeted the next two years. That's why this Federal Reserve report on bank assets must be examined in collaboration with other economic indicators for a better understanding of where the economy is headed.

- Line 11. *Real estate loans*. This is now viewed as a high-risk type of credit by banks, a lesson that was painfully learned in recent years when many residential and commercial loans failed. Since the end of World War II, real estate loans of all types actually climbed year after year—even during recessions—largely because property values kept escalating! That trend came to an abrupt end during the severe slump of 2008–09. Banks are now much more wary about extending such loans, as many home buyers and commercial-properties developers will attest.

A pickup in real estate loans will occur if banks feel more optimistic about the economic outlook and after careful review of the borrowers' creditworthiness. The former is determined from a broad array of economic indicators, and the latter is tied largely to credit and employment history.

This category of bank credit is further divided into its three main components: revolving home equity loans, closed-end residential loans, and commercial real estate loans.

- Line 12. *Revolving home equity loans.* Home equity loans have been an important source of funding for home improvement as well as other types of big-ticket spending. But the collapse in home prices in recent years eviscerated the equity that homeowners once had, which is why this segment of the credit market has lagged behind most others. So long as the rate of revolving home equity loans remains depressed, it will put a damper on consumer spending.
- Line 13. *Closed-end residential loans.* This is one of the most closely watched numbers because of its impact on home sales, values, and future construction. A sustained upward trend in these loans suggests an improvement in housing fundamentals and can be used as evidence that the residential real estate market has been gaining more traction. Perversely, little or no growth in this form of credit has to be viewed with alarm. Without the participation of real estate, it is difficult for the macroeconomy to gain much speed.
- Line 14. *Commercial real estate loans.* This area covers a wide variety of building activity, including office buildings, shopping malls, hotels, factory plants, healthcare facilities, even multiunit apartment dwellings. Since the Great Recession, banks have been shy about providing new loans for commercial real estate construction. A weak or failing economy usually leads to greater vacancies, and that, in turn, makes it more difficult for property owners to collect a sufficient amount of rent to pay off their bank loans. Even when an economy bounces back, it can take years to fill up all those vacant stores and offices. As a result, banks are usually reluctant to rush into the commercial real estate lending market in the early stages of a recovery. Developers have recently been much more successful in attracting private capital, such as institutional investors, to fund new commercial construction or renovations. Why such interest among private investors? Simple. Many have become unhappy with the meager investment returns received in a low-interest-rate environment and believe that commercial real estate offers opportunities to generate a more attractive long-term return.
- Line 15. *Consumer loans.* This is the headline number on loans to individuals. Given that consumer spending makes up 70% of all economic activity, lending trends to households can be an invaluable tool in corroborating other signs of strength or weakness with consumers. Below are two broad kinds of credit: revolving credit (credit cards) and nonrevolving credit.

- Line 16. *Credit cards and other revolving plans.* We are all familiar with the ubiquitous plastic credit card. Changes in the amount of debt here can serve as a fairly good barometer of consumer confidence and future spending. However, there is some noise in this statistic. Credit cards have also become a common form of borrowing for new and small businesses that have been rejected or have faced other difficulties from bank lending officers. This is especially the case during periods of softness in the economy when lenders scrutinize prospective borrowers much more carefully. According to one small-business trade group, about 60% of small-business owners use their personal credit card or a company credit card to finance their operations.
- Line 17. *Other consumer loans.* By definition, we are talking about nonrevolving bank credit for individuals, which includes loans for autos, education, boats, home improvement, medical expenses, and even RVs. Interestingly, this loan type appears to be the quickest to respond to shifts in the business cycle. That is because households are much more sensitive to rising interest rates. Higher rates will dissuade consumers from taking out more loans. This is especially the case if the cost of credit increases because of a tightening in monetary policy by the Federal Reserve. The purpose of such action by the Fed would be to dampen economic activity. But Americans worry it could strain household finances and lead to a more serious economic downturn, one that will slow job and income growth. In contrast, low interest rates tend to encourage more consumer borrowing, and that is why we *typically* see auto and home sales lift an economy out of recession.

MARKET IMPACT

There is no market reaction to the release of this weekly report, which is surprising. This is the most interesting and useful weekly macroeconomic indicator released by the government.

TREASURY INTERNATIONAL CAPITAL (TIC) SYSTEM

Market Sensitivity: Medium.

What Is It: A report that tracks flows of investment funds entering and leaving the U.S.

Most Current News Release on the Internet: www.treasury.gov/resource-center/data-chart-center/tic/Pages/ticpress.aspx

Home Web Address: www.treas.gov

Release Time: 9:00 a.m. (ET); published near the 15th of the month and reports on cross-border capital flows that took place a month and a half earlier. (Efforts are under way to accelerate the release of this report.)

Frequency: Monthly.

Source: U.S. Department of Treasury.

Revisions: Data is subject to revisions.

WHY IS IT IMPORTANT?

It's no secret that Americans love to shop—so much so that they routinely spend more than what is in their paychecks. Nor should it be a surprise to anyone these days that the federal government regularly pays out far more than the revenues it collects from tax receipts. After all, that's why the U.S. suffers annual budget deficits. To make up for this gap between expenditures and income, both households and the federal government have to borrow. But borrow from whom? For funds to be borrowed, someone else first has to save. The savings generated by one party become the funds that are available to finance spending and investment by another. Such savings also drive the stock and bond markets and give American banks the resources to lend money to their customers. However, if American households and the federal government aren't savers, who is?

To be fair, American workers actually do contribute some savings. For instance, retirement accounts, like 401(k) plans and similar corporate pension plans, are a form of forced savings, since many employers automatically deduct certain amounts from worker paychecks at the outset. Another source of savings in the economy is from American corporations, especially when profits are strong. Companies rarely spend all their earnings, so what's left is set aside in corporate bank accounts, returned to shareholders in the form of higher dividends or stock buybacks, or invested in the financial markets. So, yes, some savings are generated in the U.S. The problem is that the amount of national savings accumulated domestically is *nowhere* near enough to fill the gap between national spending and income in this country.

The pitifully small and inadequate savings in the U.S. stands in stark contrast to that of other nations that find themselves flush with excess savings because households in those countries do not have the same propensity to spend as U.S. consumers. (Workers in

Europe, Japan, and China are known to save from 5% to 40% of their income.) What's more, the budget deficits of many foreign governments are more moderate, with some even managing to show surpluses.

Given the important role the U.S. plays in the world economy, foreign creditors have for years been very willing to hand over some of their excess savings to this country. By purchasing U.S. stocks, bonds, and other dollar assets, foreigners provide the U.S. with the capital it needs to keep domestic interest rates low and for economic growth to continue. An expanding American economy, in turn, means U.S. consumers will continue to buy more goods and services from other countries. So it appears everyone benefits from this arrangement.

Unfortunately, there is a serious downside to this relationship. America's reliance on foreign borrowing has turned into an addiction. In just the past 15 years, U.S. net foreign debt has ballooned from \$50 billion to more than \$3 trillion. Indeed, the U.S. in 2011 borrowed from foreign creditors an average of \$1million *every minute* of the day, every day of the year!

Can the pace of such borrowing continue indefinitely? Absolutely not. There will come a time when foreign creditors will find their portfolios to be so heavily exposed toward one currency—the dollar—that they will begin to scale back on new investments in the U.S. As of 2011, foreigners own about 50% of U.S. Treasury debt, nearly 30% of the U.S. corporate bonds, and 15% of the U.S. stock market. At some point foreign investors will choose to reduce their exposure to dollars by diversifying into other currencies. For Americans who are hooked on money flows from abroad, such a trend can have disastrous consequences. If the supply of foreign funds entering the U.S. diminishes, capital becomes more scarce, and that will drive up interest rates. Higher interest rates can dull economic activity in the U.S. and conceivably even bring on a recession.

How close is the U.S. to reaching the end of its credit line with foreigners? Are international creditors growing reluctant to keep underwriting America's profligacy? The answers to both depend on other global economic and political factors. So long as there are questions on the survivability of the euro—or heightened concerns about a geopolitical crisis—foreign investors will seek the safety of holding U.S. dollar assets. They might complain about the growing mountain of U.S. debt, but during periods of international political and economic instability, they typically find comfort in placing their money with the world's largest reserve currency. For behind that dollar still stands the biggest economy, the most liquid financial market, and the most powerful military on the planet.

But we also have to be realistic. It is absurd to believe that there are no consequences to this incessant borrowing from foreigners by the U.S. At some point prudence will force foreign investors to rebalance their portfolios so they are not excessively exposed to the U.S. How will you know when that moment comes?

If foreign investors begin to back away from purchasing dollar assets, the signs will show up in the monthly Treasury International Capital (TIC) report. This release measures net capital flows crossing U.S. borders—that is, how much capital comes into the

U.S. from other countries and, on the other side of the ledger, how much capital leaves the U.S. for other countries. The difference between the two reflects our current account balance (see the earlier section “Current Account”), which has been in deficit every year but one since 1982. The 2011 current account deficit amounted to 3.2% of this country’s GDP, which means Americans are consuming about 3% more than what the U.S. produces. Foreigners have (so far) picked up the tab to cover this red ink by taking the excess dollars they receive and reinvesting them into the U.S.

HOW IS IT COMPUTED?

The TIC reporting system can be traced back to 1934, when the government sought out information on cross-border flows of capital. To get the data, the government asks financial institutions (such as banks, brokerage firms, broker/dealers, nonbank organizations, and mutual fund firms), as well as nonfinancial firms (including exporters, importers, industrial firms, insurance companies, and pension funds), to fill out specific forms that inquire about cross-border transactions involving stocks, treasury securities, corporate bonds, government agency type bonds, deposits, and loans.

Although TIC data is the property of the Treasury, it is actually the Federal Reserve that has responsibility for collecting and verifying the information. And it’s no easy task. The combined data take weeks to receive and confirm, and the investment transactions are also broken down by country and market value. The figures are eventually given to the Treasury, which then publishes the TIC report with a 45-day lag each month.

- The main press release on the monthly TIC report can be found at www.treasury.gov/resource-center/data-chart-center/tic/Pages/ticpress.aspx.
- To find the major foreign owners of U.S. securities, go to www.treas.gov/tic/mfh.txt.

THE TABLES: CLUES ON WHAT’S AHEAD FOR THE ECONOMY

Before we sift for clues on what the TIC table says about the future course of the economy, it is first necessary to grow familiar with the report itself.

Though the TIC report looks quite daunting at first, it is well organized and easy to read and interpret. Two key points must be understood at the outset when examining this table. *It is written from the perspective of what foreign investors are doing in the U.S.* Are they buying or selling securities? The other important consideration is to know in which direction capital ultimately flows. Does the transaction result in money entering or leaving the U.S.? When foreign investors buy a U.S. security, money flows into the U.S. When they sell securities here, money generally flows out of the U.S.

Let’s break down the report using the numerical headings on the left.

- TIC Monthly Reports on Cross-Border Financial Flows

TIC Monthly Reports on Cross-Border Financial Flows

(Billions of dollars, not seasonally adjusted)

	2004	2005	2006	Sep-06	Oct-06	Nov-06	Dec-06	
Foreigners' Acquisitions of Long-term Securities								
1	Gross Purchases of Domestic U.S. Securities	15178.9	17157.5	21100.8	1750.4	1875.2	1928.1	1850.4
2	Gross Sales of Domestic U.S. Securities	14262.4	16145.9	19958.7	1649.9	1766.6	1805.9	1787.4
3	Domestic Securities Purchased, net (line 1 less line 2) /1	916.5	1011.5	1142.1	100.5	108.6	122.2	63.0
4	Private, net /2	680.9	891.1	956.5	83.7	83.3	115.7	39.0
5	Treasury Bonds & Notes, net	150.9	269.4	136.0	-6.1	6.2	33.1	4.5
6	Gov't Agency Bonds, net	205.7	187.6	202.0	17.3	10.9	11.8	12.5
7	Corporate Bonds, net	298.0	353.1	474.4	57.1	38.8	61.8	33.1
8	Equities, net	26.2	81.0	144.1	15.3	27.4	9.1	-11.1
9	Official, net /3	235.6	120.4	185.6	16.7	25.3	6.5	24.0
10	Treasury Bonds & Notes, net	201.1	68.7	62.5	7.7	18.5	1.0	6.1
11	Gov't Agency Bonds, net	20.8	31.6	88.8	7.9	5.3	4.0	15.5
12	Corporate Bonds, net	11.5	19.1	28.5	1.8	2.0	3.6	2.9
13	Equities, net	2.2	1.0	5.8	-0.7	-0.4	-2.1	-0.5
14	Gross Purchases of Foreign Securities from U.S. Residents	3123.1	3700.0	5568.4	427.1	509.2	533.5	521.3
15	Gross Sales of Foreign Securities to U.S. Residents	3276.0	3872.4	5814.5	449.9	524.2	570.9	568.7
16	Foreign Securities Purchased, net (line 14 less line 15) /4	-152.8	-172.4	-246.0	-22.8	-15.0	-37.4	-47.4
17	Foreign Bonds Purchased, net	-67.9	-45.1	-139.7	-13.6	-6.7	-17.6	-28.5
18	Foreign Equities Purchased, net	-85.0	-127.3	-106.3	-9.2	-8.4	-19.8	-18.9
19	Net Long-Term Securities Transactions (line 3 plus line 16):	763.6	839.1	896.1	77.7	93.5	84.9	15.6
20	Other Acquisitions of Long-term Securities, net /5	-38.8	-140.0	-165.7	-11.9	-10.4	-32.6	-13.1
21	Net Foreign Acquisition of Long-Term Securities (lines 19 and 20):	724.8	699.1	730.4	65.7	83.1	52.2	2.5
22	Increase in Foreign Holdings of Dollar-denominated Short-term U.S. Securities and Other Custody Liabilities: /6	190.1	-47.6	125.7	-10.3	0.6	17.0	6.5
23	U.S. Treasury Bills	60.0	-58.9	-9.0	-14.5	4.1	9.5	-4.9
24	Private, net	26.8	-15.6	16.0	-3.9	5.0	1.8	4.4
25	Official, net	33.2	-43.3	-25.0	-10.6	-0.9	7.7	-9.3
26	Other Negotiable Instruments and Selected Other Liabilities: /7	130.1	11.4	134.7	4.1	-3.4	7.5	11.5
27	Private, net	77.4	10.6	154.5	5.9	7.4	9.3	4.7
28	Official, net	52.8	0.8	-19.8	-1.7	-10.8	-1.8	6.7
29	Change in Banks' Own Net Dollar-Denominated Liabilities	63.9	16.4	-28.2	13.6	-7.5	1.2	-20.0
30	Monthly Net TIC Flows (lines 21,22,29) /8 of which	978.9	667.9	827.9	69.1	76.3	70.5	-11.0
31	Private, net	637.2	580.6	699.3	57.1	83.2	61.1	-42.5
32	Official, net	341.6	87.3	128.7	11.9	-6.9	9.4	31.5

1. Gross Purchases of Domestic U.S. Securities: This is the gross amount of U.S. securities foreign investors bought during the period. Since this results in money flowing into this country, it is given a positive (+) value.

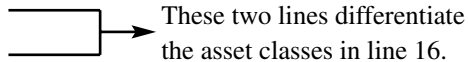
- 2. Gross Sales of Domestic U.S. Securities: The gross amount of U.S. securities that foreign investors sold in the period. Such sales result in money leaving the U.S. and thus are presented as a negative (–) number.
- 3. Domestic Securities Purchased, net: It’s the difference between lines 1 and 2. A positive number indicates that foreigners have purchased more domestic U.S. securities than they sold.

There are two types of foreign buyers. One is the private investor, such as individuals, professional traders, and foreign brokerage firms. The other represents “official” transactions, by which we mostly mean foreign central banks.

- 4. Private, net: Listings 5 through 8 tell the net amount that private foreign investors bought of (5) Treasury notes and bonds, (6) Government agency bonds, (7) Corporate bonds, and (8) Equities. Line 4 aggregates this category.
- 5. Official, net: Lines 10 through 13 indicate the net purchase by foreign central banks of the same four asset classes described above.

Up to now, we have discussed foreign transactions involving domestic U.S. securities. The next three lines refer to foreign investors buying or selling foreign securities in the U.S.

- 14. Gross Purchases of Foreign Securities from U.S. Residents: When foreigners buy “foreign” securities in the U.S., it results in money flowing into the U.S. Here’s an example: If a U.S. brokerage firm sells Mexican government bonds to a foreign investor, the proceeds flow to the U.S.
- 15. Gross Sales of Foreign Securities to U.S. Residents: Now let’s reverse the example above. Suppose a foreign investment firm sells Mexican bonds to Americans. This leads to an outflow of dollars and thus a debit on the TIC balance sheet.
- 16. Foreign Securities Purchased, net: The difference between lines 14 and 15.
- 17. Foreign Bonds Purchased, net.
- 18. Foreign Equities Purchased, net.



- 19. Net Long-Term Securities Transactions: Now we come to one of the important subtotals in the TIC report. It reflects net capital flows into the U.S. based on foreign purchases and sales of long-term securities in this country. This figure is the sum of lines 3 and 16. Long-term in the TIC report is defined as securities with an original maturity of more than one year. Equities are also considered long-term investments.

Why so much focus on long-term securities? Capital flows of long-term securities are considered a more accurate gauge of foreign confidence in the U.S. economy. These flows help finance the U.S. current account deficits. In contrast, transactions of short-maturity securities (like Treasury bills) often consist of “hot money,” where investors buy and sell the same security in a matter of days or even minutes. Such volatile trading, though providing important liquidity to the global investment community, is less

- meaningful in conveying how foreign investors view the overall strength and durability of the U.S. economy.
20. **Other Acquisitions of Long-Term Securities:** These involve essentially “nonmarket” transactions, usually between private parties. This includes stock swaps, trades in asset-back securities, and changes in holdings of nonmarketable Treasury bonds and notes. Again, a negative figure here signifies a net outflow of money from the U.S.
 21. **Net Foreign Acquisition of Long-Term Securities:** Now we simply add lines 19 and 20 to get the aggregate net foreign purchases of long-term securities in the U.S.
 22. **Increase in Foreign Holdings of Dollar-Denominated Short-Term U.S. Securities and Other Custody Liabilities:** Up until now, the TIC report has dealt with U.S. cross-border transactions of long-term securities—that is, securities with an original maturity of more than a year. This line, however, reports on monthly flows of “short-term” capital, such as Treasury bills, commercial paper, bankers’ acceptances, short-maturity government agency instruments, and short-term corporate bonds.
 23. **U.S. Treasury Bills:** Of the amount in line 22, the figure here singles out net purchases of Treasury bills, followed by those who carried out the transactions: private investors (line 24) and central banks (line 25).
 26. **Other Negotiable Instruments and Selected Other Liabilities:** This is simply the residual of line 22 less line 23, and their two primary sources: private investors (line 27) and central banks (line 28).
 29. **Change in Banks’ Own Net Dollar-Denominated Liabilities:** This aggregates the net flow of money being deposited in U.S. bank accounts by foreigners, their purchase of bank CDs, and money that American banks have borrowed from foreign institutions—versus claims that American banks have on deposits in other countries and loans to foreigners. By the way, aside from commercial banks, this line includes other types of depository institutions, such as savings and loans associations and credit unions, financial holding companies, and securities brokers and dealers.
 30. **Monthly Net TIC Flows:** Now we get to the net grand total of all monthly capital flows—short- and long-term—into the U.S. This is the sum of lines 21, 22, and 29. It’s important to realize that this entire report deals only with cross-border movement in “portfolio investments and cash deposits.” It does not include foreign direct investment from abroad, by which we mean capital entering the U.S. for the purpose of purchasing another company (a merger or acquisition) or the construction of new facilities.
 31. Total net flows from foreign private investors.
 32. Total net flows from foreign central banks.

OK, so what do we do with all this information? The TIC report offers some fresh insights into how foreign investors view the U.S. economy and financial markets. Since we depend so much on capital flows from other nations to fuel economic activity in this

country, any evidence that foreign interest in the U.S. is waning could spell big trouble for the American economy.

Line 19: Net Long-Term Securities Transactions

Let's begin with the most critical issue. If the U.S. is consuming more than it produces, it means this country has to rely on foreign suppliers to satisfy America's excess demand. This gap between consumption and production makes up the current account deficit, and the shortfall has to be financed by foreign creditors if the U.S. economy is to continue growing.

Are foreign investors blithely willing to finance this deficit? That appears to be the case of the past few years. The current account deficits in 2004 and 2005 came to \$629 billion and \$746 billion, respectively. (See the earlier section "Current Account" for how to get these numbers.) The TIC release shown here suggests that foreigners have been more than willing to cover that debt. In line 19, we see net foreign capital inflows of \$763 billion and \$839 billion those years on long-term U.S. securities. These numbers show that the U.S. has been able to entice more than enough capital from around the world. All that extra liquidity has kept U.S. interest rates low those years and has even led to rallies in the real estate and stock markets.

But are foreign investors becoming weary of financing the U.S. current account deficit year after year? Clearly, there will come a time when their portfolios will appear top-heavy with dollar-based securities, and that could prompt foreign investors to rebalance their risks and diversify into non-U.S. assets. Or perhaps they might simply find more lucrative returns in markets outside the U.S. and decide to exchange their dollar holdings for other, more profitable investments. Whatever the reason, any recent retrenchment from U.S. investments by foreigners will show up in the far-right monthly column of the TIC release. As you can see from the table, net domestic securities purchased in October, November, and December were \$109 billion, \$122 billion, and \$63 billion, respectively, which adds up to \$294 billion for the quarter. How does that stack up with the U.S. current account deficit those months? In that final quarter of the year, the current account deficit came to \$188 billion. So, again, it doesn't appear that foreign investors are turning away from the U.S.

However, the picture looks less benign when viewed from a different perspective. If you examine the ratio of capital flows to the trade deficit, a disturbing trend emerges. The rate at which capital flows are covering the trade deficit has steadily been slipping. For instance, the U.S. current account deficit in 2006 came to \$801 billion, while capital inflows (according to line 19 of the TIC report) amounted to \$896 billion. Thus, the ratio of cross-border investment flows to the U.S. current account deficit was 1.11 that year. In 2005, this ratio stood at 1.13. A disturbing trend thus appears to be under way, with fewer foreign investment flows entering the U.S. to help offset the red ink in the current account. That suggests the dollar might come under increasing downward pressure, which turned out to be the case in 2006.

Line 4: Private, Net, and Line 9: Official, Net

When looking at total net purchases of securities in the U.S., it's important to discern who the buyers are. Are foreign central banks or foreign private investors conducting most of the transactions? If a large majority of purchasers are foreign private investors, it's a sign of broad confidence in the dollar and in the future course of the U.S. economy. After all, private investors are motivated by profits. They want to be assured of making a real return on their investments in the U.S. If foreign investors become dissatisfied with their returns, they will be less inclined to buy additional U.S. stocks and bonds. Should overseas demand for dollar assets taper off, the greenback's value will fall. That could potentially destabilize world trade and become a hot international political issue. Remember, a weakened dollar maybe good for U.S. exporters (and for producers in countries whose own currencies are linked to the dollar) because it lowers the price of their products in foreign markets. However, foreign firms in Europe, Japan, and several emerging countries may yell and scream at this turn of events. A cheaper dollar automatically kicks up the value of the euro, the yen, and a host of other floating currencies, and that will hurt exporters in those countries. It would mean fewer sales abroad, higher domestic unemployment, and weaker economies.

To prevent that from happening, foreign central banks often jump in and accelerate purchases of U.S. securities to keep their local currency from appreciating too much or too rapidly. Thus, when looking at the TIC report, compare the ratio of purchases from private investors (line 4) versus that from official institutions (line 9). Generally speaking, if net private purchases make up more than 75% of the total in line 3 (net domestic securities purchased by foreigners), this should be viewed as a positive for the U.S. economy. It's a sign that private capital inflows are strong and that interest rates will remain low. On the flip side, if private investors begin to shun the U.S. market and force foreign central banks to pick up the slack, it can foreshadow tough times for the U.S. Remember, foreign central banks might be able to impact currency values in the near term, but they do not have the resources of foreign private investors in the long run. If the global community of private investors is fundamentally shifting away from dollars, foreign central banks can only temporarily stave off a sharp decline in the U.S. currency.

MARKET IMPACT

Bonds

Traders in the bond market prefer to see monthly foreign capital inflows exceed the funding needs of the U.S. trade deficit. If not enough dollars are coming into this country to match our external deficits, the consequence can be a depreciation in the dollar, which can heighten inflation pressures. Such results will hurt bond prices and raise interest rates over time.

Stocks

Investors in the equity market may initially respond favorably to a weakened dollar, because it can boost the earnings of U.S. exporters and American companies with foreign subsidiaries. But a precipitous fall in net foreign private inflows can greatly unnerve these traders too. Without those capital flows, liquidity could dry up in the U.S. and lift interest rates to levels that could threaten economic activity. Moreover, the large majority of foreign buyers of U.S. stocks are private investors, not central banks. So if the TIC reports point to a drop-off in foreign investor interest in the U.S., common stocks in this country could face significant pressure.

Dollar

Large currency traders monitor the TIC reports closely because they have to react fairly quickly to a change in sentiment toward dollar-denominated assets. Of particular interest should be the change in the contribution to net capital inflows between official sources and private investors. Investors in the foreign exchange market should use caution if there is an excessive amount of foreign central bank intervention to support the dollar. Official efforts to bolster the dollar cannot be sustained if private investors are fundamentally bearish on the greenback. Traders will also zero in on the ratio between net capital inflows and trade deficits. A jump in the ratio, in which the amount of dollars entering the U.S. is rising faster than the trade deficit, has been correlated with an increase in the value of the dollar. In contrast, a declining ratio portends trouble for U.S. currency and raises concerns about the future cost of capital in the U.S. and the economy's welfare.

CONSUMER PRICE INDEX (CPI)

Market Sensitivity: Very high.

What Is It: The most popular measure of price inflation in retail goods and services.

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WHY IS IT IMPORTANT?

Along with the employment report, the Consumer Price Index (CPI) is another one of those red-hot economic indicators that is carefully dissected by the financial markets. It's fairly obvious why it gets so much attention. Inflation touches everyone. It determines how much consumers pay for goods and services, affects the cost of doing business, causes havoc with personal and corporate investments, and influences the quality of life for retirees. Moreover, the outlook for inflation helps set labor contracts and government fiscal policy.

Changes in the CPI also alter the benefits of 55 million Social Security recipients and 45 million people on food stamps. Landlords take inflation forecasts into account to lock in future hikes in rental contracts. Judges even refer to the CPI to compute alimony and child-support payments. In short, the effects of inflation are ubiquitous. No one can escape its reach.

Where it gets a little tricky is in how to measure inflation. No less than half a dozen economic indicators purport to gauge changes in prices. They include the personal consumption expenditures price index, producer prices, import prices, employment cost index, unit labor costs, and GDP deflator. Each has its strengths and weaknesses. For example, the GDP inflation indexes cover a much broader range of items than the CPI, but the former is released only quarterly, whereas the CPI is published monthly. And while the producer price index is a monthly inflation measure, it reflects price changes mostly at the wholesale business level and does not include the cost of most services. In contrast, more than half of the CPI consists of services, which is the fastest-growing part of the economy. This makes the CPI more relevant to consumers and workers.

What exactly is the CPI? In essence, it seeks to gauge the cost of living. But right away we run into a problem. The “cost of living” is just a theoretical concept because Americans do not all pursue the same lifestyle. Thus, the best the CPI can do is measure the average change in retail prices over time for a basket consisting of more than 200 categories of assorted goods and services. These categories are then divided into eight major groups. Each group is given a weight that represents its importance in the CPI calculation. The weights are determined by surveying thousands of families and individuals about what they actually bought in 2007 and 2008. Every two years, these weights get revised to adjust for people’s changing tastes and priorities. The products in the CPI basket are eventually organized into eight major groups:

<u>Group</u>	<u>Weight in the CPI</u>
1. Housing	<u>41%</u>
Shelter 32%	
Fuel and utilities 5%	
Household furnishings and operations 4%	
2. Food and Beverages	<u>15%</u>
3. Transportation	<u>17%</u>
Private transportation 16%	
New vehicles 3%	
Motor fuel 6%	
Maintenance and repairs 1%	
Used cars and trucks 2%	
Public transportation 1%	
4. Medical Care	<u>7%</u>
5. Apparel	<u>4%</u>
6. Recreation	<u>6%</u>
7. Education and Communication	<u>7%</u>
8. Other Goods and Services	<u>3%</u>
Tobacco and smoking products 1%	

As you can see from the list, the biggest single component in the CPI is housing, with a 41% share (or weight). Transportation costs make up 17% of the index, and medical care 7%. When all the figures are compiled, the BLS puts out a CPI index number that represents the change in the total cost of these items during the latest month. The advantage of using an index number as opposed to a dollar figure is that it enables you to get a historical perspective of how inflation has performed over different time frames. Currently, the index base can be traced back to the years 1982–1984, where the average

price in the basket has been assigned a value of 100. Thus, if the CPI index stood at 200 at the end of the year and increased in the first six months of the following year to 202, inflation rose 1% in the first half of the year. Or, if you were to annualize it, prices jumped at a 2% rate.

How does inflation get started in the first place, and is it really all that bad for the economy? There are two popular explanations for what causes inflation. One is based on the Monetarist view that excessive growth in the money supply is the culprit behind sharply rising prices. If the supply of money increases at a faster rate than the output of goods and services, you have a problem because ultimately it will mean that too much money will be chasing too few products. The result is that prices for these scarce but popular items are bid up and—*voilà!*—you have inflation.

The second explanation puts less emphasis on the money supply and more on the overall demand for goods and services. This is the Keynesian view, known for its chief proponent, John Maynard Keynes. It argues that when overall demand (from consumers, businesses, the government, and foreign buyers who want American products) greatly exceeds the economy's ability to satisfy it, the resulting shortage in supply can drive up the price of goods and services and cause inflation to accelerate. How fast inflation increases depends on where the economy stands in the business cycle—or, more specifically, on how much production slack is left in the economy. A powerful pickup in the demand for goods and services immediately following a recession is not inflationary because there will likely be ample supplies and idle capacity to tap. It is only later in the cycle, when material and labor resources become increasingly scarce, that continued strong demand can fire up inflation pressures.

Equally interesting is the question of whether inflation is a bad thing. After all, higher prices allow companies to generate more revenues, which can boost stock prices and enrich investors large and small. Federal and state governments count on inflation to generate more tax revenues, which go to help balance the federal budget or finance new government spending programs. Large borrowers don't mind inflation because they can repay their loans with cheaper dollars.

So what's so awful about inflation? Plenty. Inflation creates a climate of instability and uncertainty and invites distortions in the economy. Sure, firms would love to see their revenues increase, but they prefer to accomplish this by selling more products, rather than by simply raising prices. Furthermore, companies can suffer like anyone else from inflation, especially if their own suppliers decide to bump up prices. Company employees also demand higher pay to offset the increased cost of living due to inflation. In addition, while Congress might quietly admit that inflation brings in more tax revenues, elected officials also know that rising inflation can anger voters who see their purchasing power eroding. That can cause them to take out their frustrations on Election Day. So is inflation harmful? Absolutely.

The only time inflation is deliberately sought is when an economy comes face to face with the threat of deflation, a phenomenon in which prices across the board spiral

downward. To be sure, falling prices initially sound great to shoppers. But make no mistake—deflation can be as destructive to an economy as inflation. Tumbling prices slash corporate profits, which, in turn, can lead to job layoffs. Higher unemployment reduces household income, and that causes a retrenchment in consumer spending. As more consumers back away from shopping, prices drop further, and companies are forced to let go of additional workers. It's a vicious cycle of an economy in utter collapse. The U.S. suffered deflation during the Great Depression. Between 1929 and 1933, the CPI dropped 24%. As recently as 2001 and 2002, Japan was stuck in a deflationary spiral from which it could not recover, even though interest rates dropped to virtually zero. Its economy was unable to grow and joblessness rose to an all-time high.

Ideally, the goal of government—specifically, the Federal Reserve—is to avoid both harmful inflation and deflation by pursuing policies that promote price stability. In practical terms, that means tolerating only a modest level of inflation, with prices inching up no more than 1% to 2% a year.

HOW IS IT COMPUTED?

In the first three weeks of every month, agents from the Bureau of Labor Statistics (BLS) check out stores and conduct telephone interviews with about 26,000 retail outlets and other businesses, and 4,000 housing units—all located in 87 urban areas. Prices are collected on 80,000 items and services, including eyeglasses, hamburgers, dental exams, cars, gasoline, legal fees, beer, computers, cereal, funeral services, and rental units. Every month, the same basket of goods and services is analyzed to get a sense of how prices are behaving.

On the surface, the physical process of tracking prices looks fairly straightforward. However, in the real world it is rarely that easy. Sometimes data collectors in the field have to use their own judgment to determine whether the price of a particular item has gone up or down—even if that product's price tag hasn't changed at all. How could this be? The reason is that a change in packaging or advances in technology can alter a product's "effective price."

To illustrate this point, here are three typical scenarios the government confronts each month. Suppose a five-fluid-ounce bottle of detergent cost \$5 last month. Let's say the company that makes this detergent wants to attract more buyers and decides to add one more ounce to each bottle—without changing the price. You now get six fluid ounces of detergent, or 20% more, for the same \$5. Government staffers will correctly view this as a *drop* in inflation and record the effective price as falling from \$5 last month to \$4 this month, a savings of 20%. After all, you're getting more for each dollar spent on detergent.

Here's a second example, and one especially irksome to consumers. You went shopping last month and bought a ten-ounce bag of potato chips for \$5. This month you notice

that while the packaging and price haven't changed, you're surprised (and upset) to see that the new bag holds just eight ounces of chips, 20% less than last month. Though you're still paying \$5 for that bag, the government classifies it as a price *increase* to \$6, or an increase of 20%. Why? Because in this instance you receive less for each dollar spent.

The third example demonstrates how technological changes can influence a product's true cost. In this case, you spent \$3 a month ago for a 100-watt light bulb that lasts about 50 hours. Let's say that during the course of the year, you replace that bulb three times to get 200 hours of usage, for a total annual expense of \$12. Now suppose the manufacturer discontinues that bulb and introduces a new high-tech 100-watt bulb that costs \$6—twice as much as the old bulb—but the new one lasts 200 hours. Even though you will pay 100% more for each new 100-watt light bulb, when you take into account its technological improvement (it lasts four times as long as the older light bulb), the effective price of the new bulb actually drops by half and thus *lowers* inflation. Simply put, instead of spending \$12 a year to get 200 hours of usage with the older bulb, you will now pay just \$6 a year for the same duration. The point of this whole exercise is to show how computing changes in the CPI requires more than merely jotting down prices on thousands of products. Often other considerations have to be made to get the most accurate reading on how the cost of living has changed.

After all the data is collected, seasonal adjustment factors are applied to correct for variations that can commonly occur during the year. For example, prices of oranges and other fruits typically edge higher in the winter because that's when supplies of such foods dwindle, even though demand remains strong. Seasonal adjustments try to iron out such abrupt shifts in prices, but the process is imperfect. For instance, oil prices can fluctuate wildly as a result of geopolitical shocks.

To reduce some of the statistical noise in the inflation data and to provide a better understanding of the genuine trend in inflation, the government publishes an index known as the core-CPI, which is the CPI without the unstable components of food and energy. Most economists see core-CPI as the best measure of the underlying inflation rate.

CPI-W Versus CPI-U

After receiving the raw data and subjecting it to seasonal adjustment factors, the BLS comes up with inflation figures for two different population groups. One index is called the CPI-W (with the "W" standing for wage earners and clerical workers). It covers 32% of the working population. Although only one in three employees is covered, the CPI-W is still important to monitor because it's the benchmark used to figure out pay increases in collective bargaining agreements and for yearly cost-of-living adjustments on Social Security checks.

The other and much broader measure is the CPI-U (for all urban workers). It includes not only wage and clerical workers, but also professionals, the self-employed, managers, technical workers, and short-term workers. It's a broad enough population to cover 87% of consumers. Because it comprises so many more people, the CPI-U gets most of the attention in the media and financial markets.

Geographic Coverage

Besides measuring how inflation behaved at the national level, the monthly CPI release also describes how prices changed in different regions of the country. This enables analysts to compare cost-of-living changes in a variety of communities. For example, the BLS publishes inflation data for 27 specific local areas. They were chosen because of their size and importance to the economy. Of the 27 regions, the BLS releases inflation data on 3 every month:

1. Chicago-Gary-Kenosha, IL-IN-WI
2. Los Angeles-Riverside-Orange County, CA
3. New York-Northern NJ-Long Island, NY-NJ-CT-PA

Data for 11 other metropolitan areas is published every other (odd or even) month to make the price-collection process more manageable:

1. Atlanta, GA (even)
2. Boston-Brockton-Nashua, MA-NH-ME-CT (odd)
3. Cleveland-Akron, OH (odd)
4. Dallas-Fort Worth, TX (odd)
5. Detroit-Ann Arbor-Flint, MI (even)
6. Houston-Galveston-Brazoria, TX (even)
7. Miami-Fort Lauderdale, FL (even)
8. Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD (even)
9. San Francisco-Oakland-San Jose, CA (even)
10. Seattle-Tacoma-Bremerton, WA (even)
11. Washington-Baltimore, DC-MD-VA-WV (odd)

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

The CPI has only limited value as a forecasting tool. It can point to a couple of inflation hot spots that could become problematic for an economy down the road. This enables businesses to anticipate costs ahead of time. Evidence that inflation pressures are mounting can also help money managers reassess investment strategies. Union leaders rely on inflation forecasts to negotiate better pay terms for their rank and file. What the CPI cannot do, however, is function as a leading indicator of economic activity. If anything, the CPI is a lagging indicator. Price increases start to ease after a recession is well under way and don't accelerate again until a year or more after the recovery has begun. Therefore, the CPI has no real value as a predictor of turning points in the economy.

- **Table A** Percent Changes in CPI for Urban Consumers (CPI-U)

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Table A. Percent changes in CPI for Urban Consumers (CPI-U)

Expenditure Category	Seasonally adjusted							Compound annual rate 3-mos. ended Jan.'04	Un- adjusted 12-mos. ended Jan.'04
	Changes from preceding month								
	2003						2004		
	July	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.		
1 ► All Items	.2	.4	.3	-.1	-.2	.2	.5	2.0	1.9
Food and beverages	.1	.3	.3	.4	.4	.5	-.1	3.6	3.5
Housing	.2	.1	.1	.2	-.1	.2	.4	2.2	2.2
Apparel	-.2	.1	.2	.2	-.5	-.3	-.3	-4.5	-1.9
Transportation	.1	1.2	.9	-1.4	-1.3	-.2	1.7	.5	1.0
Medical care	.4	.3	.4	.2	.3	.5	.2	4.2	3.8
Recreation	.1	.0	.1	-.1	.2	.1	.0	1.1	.9
Education and communication	.3	.4	.2	.0	.2	.2	.1	1.8	1.3
Other goods and services	.4	.2	.1	.1	.0	.2	.3	2.0	1.7
Special indexes:									
Energy	.3	3.1	3.3	-3.5	-3.0	.3	4.7	7.8	7.8
Food	.1	.4	.2	.5	.4	.5	.0	3.8	3.5
2 ► All items less food and energy	.2	.1	.1	.2	.0	.1	.2	.8	1.1

Every CPI release has two headline inflation numbers.

- (1) *All items*: This lists the monthly percentage change in the CPI for all items.
- (2) *Core-CPI*: This subset, known as core-CPI, is what the CPI would be if food and energy costs were excluded. The Federal Reserve prefers to monitor this subset of inflation when it deliberates on monetary policy.

Why subtract the food and energy components? Because these two items, which account for nearly 25% of the CPI, bounce around quite a lot month to month due to temporary factors such as crop failures or drops in global oil supplies. As

a result, food and energy costs can potentially distort the true inflation picture in the U.S. By excluding these two commodities, it is possible to get a more accurate portrait of the inflationary pressures affecting the economy.

Of course, from a consumer's point of view, core-CPI has little significance. After all, food and energy are indispensable commodities in our economy. We can't simply ignore them, and it would be risky for anyone to make sweeping long-term forecasts about inflation and real economic growth that rely solely on core-CPI. In any event, the differential between these two CPI inflation measures over time is not that great. In the ten years leading up to 2005, they were typically less than 1 percentage point apart annually.

- (3) *Change in the CPI trend:* Don't rely on just one month's CPI data to tell you much about trends in inflation. It is far more useful to look at the annualized 3-, 6-, and 12-month percentage changes to get a better sense of how inflation is behaving. Table A presents the latest 12-month changes for the CPI and for each of the major CPI components.

• **Table 1** Consumer Price Index for All Urban Consumers (CPI-U): U.S. City Average, by Expenditure Category and Commodity and Service Group

Aside from the headline CPI number, it's helpful to look at how inflation has behaved for individual commodities and services, especially housing, transportation, and medical care. That's where the next two tables come in.

- (4) *Medical care:* One of the biggest expenses for companies is paying for employee healthcare coverage. Firms planning their future budgets will want to set aside an amount for such expenditures, but how much? Executives can approximate such costs by looking at the medical care component in the CPI release, which itself is divided into four categories, including professional and hospital services. Monitoring the previous pace of price changes in these subcategories gives you some sense of where such costs may go in the months ahead.
- (5) *Personal computers and peripheral equipment:* Given the pervasive use of PCs, software, and peripherals and their contribution to overall productivity growth in the U.S., the BLS regularly monitors price changes in these products. Faster computers and better software are constantly being introduced. This has led to significant price changes in computer technology, which is well documented in the CPI data. Firms that are budgeting to purchase new computer systems can get a sense of how prices might behave in the future by extrapolating recent trends.

Table 1. Consumer Price Index for All Urban Consumers (CPI-U): U.S. city average, by expenditure category and commodity and service group

(1982-84=100, unless otherwise noted)

Expenditure category	CPI-U								
	Relative importance, December 2003	Unadjusted indexes		Unadjusted percent change to Jan. 2004 from—		Seasonally adjusted percent change from—			
		Dec. 2003	Jan. 2004	Jan. 2003	Dec. 2003	Oct. to Nov.	Nov. to Dec.	Dec. to Jan.	
All items	100.000	184.3	185.2	1.9	0.5	-0.2	0.2	0.5	
All items (1967=100)	-	552.1	554.9	-	-	-	-	-	
Food and beverages	15.384	184.1	184.3	3.5	.1	.4	.5	-1	
Food	14.383	183.6	183.8	3.5	.1	.4	.5	.0	
Food at home	8.256	184.1	184.0	4.1	-1	.6	.7	-3	
Cereals and bakery products	1.202	202.9	203.9	2.1	.5	.1	.1	.1	
Meats, poultry, fish, and eggs	2.320	181.1	179.9	11.3	-7	2.7	1.0	.0	
Dairy and related products .....	.842	173.0	172.4	3.6	-3	-4	1.1	-3
Fruits and vegetables	1.221	232.4	232.4	2.3	.0	.3	.3	-1.8	
Nonalcoholic beverages and beverage materials .....	.905	139.3	140.7	.1	1.0	-9	.7	.3
Other food at home	1.765	163.0	162.8	.6	-1	-5	.6	-4	
Sugar and sweets .....	.305	161.0	163.0	1.4	1.2	.4	-5	-3
Fats and oils .....	.251	157.7	160.7	3.1	1.9	-1	.5	1.1
Other foods	1.210	179.6	178.0	-1	-9	-8	.8	-7	
Other miscellaneous foods ^{1 2} .....	.308	109.8	109.1	-5	-6	-1.5	.7	-6
Food away from home ¹	6.127	184.3	184.9	2.8	.3	.3	.3	.3	
Other food away from home ² .....	.332	122.9	123.9	3.3	.8	.2	.3	1.0
Alcoholic beverages ¹	1.001	188.7	189.4	1.9	.4	.3	.1	.4	
Housing	42.089	185.1	186.3	2.2	.6	-1	.2	.4	
Shelter	32.878	214.1	215.2	2.0	.5	.1	.2	1	
Rent of primary residence ³	6.157	207.9	208.3	2.5	.2	.2	.2	1	
Lodging away from home ²	2.954	112.9	117.2	2.5	3.8	-7	1.1	-2	
Owners' equivalent rent of primary residence ^{3 4}	23.383	222.2	222.6	1.9	.2	.1	.1	1	
Tenants' and household insurance ^{1 2} .....	.385	114.3	114.8	.8	.4	-1.5	.0	.4
Fuels and utilities	4.741	153.6	156.3	7.0	1.8	-7	.5	1.6	
Fuels	3.830	136.5	139.2	7.5	2.0	-1.0	.4	1.9	
Fuel oil and other fuels .....	.231	137.0	149.9	9.7	9.4	1.0	-5	6.8
Gas (piped) and electricity ³	3.599	143.3	145.5	7.3	1.5	-1.2	.6	1.6	
Water and sewer and trash collection services ² .....	.910	119.8	120.6	5.1	.7	.6	.3	.5
Household furnishings and operations	4.470	124.7	125.3	-1.6	.5	-2	-1	.4	
Household operations ^{1 2} .....	.704	122.6	122.7	1.6	.1	-2	.2	1
Apparel	3.975	119.0	115.8	-1.9	-2.7	-5	-3	-3	
Men's and boys' apparel	1.024	118.0	115.5	-5	-2.1	.1	.0	-1	
Women's and girls' apparel	1.704	110.9	105.7	-1.8	-4.7	-8	-4	-7	
Infants' and toddlers' apparel .....	.195	119.2	117.7	-2.8	-1.3	-1.6	-8	-2
Footwear .....	.778	118.5	115.9	-3.2	-2.2	-3	-3	-8
Transportation	16.881	154.7	157.0	1.0	1.5	-1.3	-2	1.7	
Private transportation	15.817	150.8	153.2	.9	1.6	-1.4	-2	1.9	
New and used motor vehicles ²	7.912	94.4	94.3	-4.0	-1	-4	-5	-1	
New vehicles	4.817	138.0	138.0	-1.2	.0	-1	-1	-1	
Used cars and trucks ¹	2.007	131.0	130.8	-11.8	-2	-2.3	-8	-2	
Motor fuel	3.249	127.8	136.7	8.2	7.0	-5.1	.0	8.1	
Gasoline (all types)	3.222	127.2	136.1	8.3	7.0	-5.1	.1	8.1	
Motor vehicle parts and equipment ¹ .....	.369	107.7	108.0	.2	.3	.0	-2	.3
Motor vehicle maintenance and repair	1.349	198.0	198.2	2.3	.1	.2	.5	.1	
Public transportation	1.064	205.6	206.3	2.0	.3	-3	-8	.2	
Medical care	6.074	302.1	303.6	3.8	.5	.3	.5	.2	
Medical care commodities	1.499	265.0	265.5	2.0	.2	-1	.3	.1	
Medical care services	4.575	311.9	313.8	4.3	.6	.5	.5	.3	
Professional services	2.749	264.1	265.5	3.0	.5	.2	.5	.2	
Hospital and related services ³	1.489	407.0	409.7	6.2	.7	1.0	.5	.3	

See footnotes at end of table.

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Table 1. Consumer Price Index for All Urban Consumers (CPI-U): U.S. city average, by expenditure category and commodity and service group-Continued

(1982-84=100, unless otherwise noted)

CPI-U Expenditure category	Relative importance, December 2003	Unadjusted indexes		Unadjusted percent change to Jan. 2004 from—		Seasonally adjusted percent change from—		
		Dec. 2003	Jan. 2004	Jan. 2003	Dec. 2003	Oct. to Nov.	Nov. to Dec.	Dec. to Jan.
		Recreation ²	5.872	107.7	107.9	0.9	0.2	0.2	0.1	0.0
Video and audio ²	1.736	103.3	103.6	.2	.3	.1	-.1	-.3
Education and communication ²	5.948	110.9	111.1	1.3	.2	.2	.2	.1
Education ²	2.841	139.4	140.1	7.3	.5	.4	.7	.5
Educational books and supplies .....	.219	342.8	345.4	4.8	.8	-.1	2.4	-.5
Tuition, other school fees, and childcare	2.623	401.7	403.6	7.5	.5	.5	.6	.6
Communication ²	3.107	88.2	88.1	-4.2	-.1	-.1	-.3	-.3
Information and information processing ^{1 2}	2.925	86.2	86.1	-4.7	-.1	-.2	.0	-.1
Telephone services ^{1 2}	2.315	97.2	97.0	-3.4	-.2	.1	.0	-.2
Information technology, hardware and services ^{1 5} .....	.610	15.3	15.3	-10.5	.0	-1.3	-.6	.0
Personal computers and peripheral equipment ^{1 2} .....	.230	16.2	16.2	-16.9	.0	-1.2	-.6	.0
Other goods and services	3.776	300.2	301.4	1.7	.4	.0	.2	.3
Tobacco and smoking products ¹ .....	.806	470.4	473.0	.1	.6	-.1	.3	.6
Personal care	2.970	179.0	179.7	2.2	.4	.0	.2	.2
Personal care products ¹ .....	.680	153.4	153.8	.5	.3	-.3	.1	.3
Personal care services ¹ .....	.650	194.3	194.6	2.1	.2	-.7	.1	.2
Miscellaneous personal services	1.448	287.1	288.8	3.8	.6	.5	.2	.3

• **Table 3** Consumer Price Index for All Urban Consumers (CPI-U): Selected Areas, All Items Index

(6) *Selected local areas:* The inflation outlook can vary, depending on where you live or work in the country. Obviously, the rise in the cost of living in New York City is not expected to be the same for Cleveland. The CPI report breaks down the inflation rates by geographic regions and population-size areas. Why can this table be helpful? If you're interested in relocating your factory or are a retiree seeking a community with a lower cost of living, you can compare the rates of inflation for each of these regions and draw some conclusions about future price changes there. In addition to the areas listed in this table, the BLS publishes semiannual inflation rates of more than a dozen other metropolitan communities in its January and July issues of the CPI Detailed Report, which is separate from the monthly release but can be found on the same BLS Web site.

MARKET IMPACT

Bonds

An unexpected jump in the CPI can slash bond values and propel yields higher. Bond losses are likely to be even worse if the core-CPI surges as well because it represents a deterioration in the underlying rate of inflation. Conversely, a benign CPI report showing

Table 3. Consumer Price Index for All Urban Consumers (CPI-U): Selected areas, all items index

(1982-84=100, unless otherwise noted)

CPI-U	Pricing schedule 1	All items									
		Indexes			Percent change to Jan.2004 from—			Percent change to Dec.2003 from—			
		Oct. 2003	Nov. 2003	Dec. 2003	Jan. 2004	Jan. 2003	Nov. 2003	Dec. 2003	Dec. 2002	Oct. 2003	Nov. 2003
U.S. city average	M	185.0	184.5	184.3	185.2	1.9	0.4	0.5	1.9	-0.4	-0.1
Region and area size²											
Northeast urban	M	195.4	195.1	194.9	195.9	2.8	.4	.5	2.8	-.3	-.1
Size A - More than 1,500,000	M	197.7	197.3	197.1	197.9	3.0	.3	.4	3.0	-.3	-.1
Size B/C - 50,000 to 1,500,000 ³	M	115.2	115.3	115.0	116.0	2.6	.6	.9	2.1	-.2	-.3
Midwest urban	M	179.1	178.9	178.4	179.4	1.8	.3	.6	1.7	-.4	-.3
Size A - More than 1,500,000	M	181.7	181.4	180.9	181.8	2.0	.2	.5	1.7	-.4	-.3
Size B/C - 50,000 to 1,500,000 ³	M	113.6	113.6	113.3	114.1	1.9	.4	.7	1.7	-.3	-.3
Size D - Nonmetropolitan (less than 50,000)	M	171.8	171.4	171.5	171.8	.6	.2	.2	1.2	-.2	-.1
South urban	M	178.1	177.5	177.5	178.2	1.8	.4	.4	1.7	-.3	0.0
Size A - More than 1,500,000	M	180.1	179.1	179.2	179.8	1.8	.4	.3	1.9	-.5	.1
Size B/C - 50,000 to 1,500,000 ³	M	113.6	113.3	113.3	113.8	1.9	.4	.4	1.5	-.3	-.0
Size D - Nonmetropolitan (less than 50,000)	M	175.6	175.4	175.1	175.3	1.2	-.1	.1	1.6	-.3	-.2
West urban	M	189.4	188.5	188.3	189.4	1.5	.5	.6	1.5	-.6	-.1
Size A - More than 1,500,000	M	191.9	191.0	190.6	191.7	1.3	.4	.6	1.4	-.7	-.2
Size B/C - 50,000 to 1,500,000 ³	M	115.5	114.9	115.2	116.0	1.9	1.0	.7	1.9	-.3	-.3
Size classes											
A ⁴	M	169.5	168.9	168.7	169.4	2.0	.3	.4	2.0	-.5	-.1
B/C ³	M	114.1	113.9	113.8	114.6	2.0	.6	.7	1.7	-.3	-.1
D	M	176.9	176.6	176.5	176.9	1.3	.2	.2	1.6	-.2	-.1
Selected local areas⁵											
Chicago-Gary-Kenosha, IL-IN-WI	M	185.8	185.6	185.5	185.4	1.5	-.1	-.1	1.7	-.2	-.1
Los Angeles-Riverside-Orange County, CA ...	M	187.8	187.1	187.0	188.5	1.8	.7	.8	1.8	-.4	-.1
New York-Northern N.J.-Long Island, NY-NJ-CT-PA	M	200.0	199.4	199.3	199.9	2.7	.3	.3	3.2	-.4	-.1
Boston-Brockton-Nashua, MA-NH-ME-CT	1	-	206.5	-	208.4	4.3	.9	-	-	-	-
Cleveland-Akron, OH	1	-	177.6	-	178.4	2.8	.5	-	-	-	-
Dallas-Fort Worth, TX	1	-	175.9	-	175.7	1.0	-.1	-	-	-	-
Washington-Baltimore, DC-MD-VA-WV ⁶	1	-	116.7	-	117.1	2.2	.3	-	-	-	-
Atlanta, GA	2	180.1	-	179.0	-	-	-	-	1.0	-.6	-
Detroit-Ann Arbor-Flint, MI	2	183.3	-	181.3	-	-	-	-	.9	-.1	-
Houston-Galveston-Brazoria, TX	2	166.1	-	164.1	-	-	-	-	2.7	-.2	-
Miami-Fort Lauderdale, FL	2	181.6	-	181.6	-	-	-	-	2.1	.0	-
Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD	2	190.3	-	189.0	-	-	-	-	2.0	-.7	-
San Francisco-Oakland-San Jose, CA	2	196.3	-	195.3	-	-	-	-	1.1	-.5	-
Seattle-Tacoma-Bremerton, WA	2	193.7	-	191.0	-	-	-	-	.5	-.4	-

6 ▶

little or no inflation is bullish for fixed-income securities, with bond prices generally rising and interest rates easing.

Stocks

Equity investors also detest sharp increases in the CPI, especially core-CPI, because it leads to higher bond rates, which raises the cost of corporate borrowing. Although revenues and perhaps even profits might jump in an inflationary environment, that kind of income is worth much less to shareholders who prefer to see earnings improve from

greater sales volume, not price hikes. Furthermore, the threat of inflation will almost certainly force the Federal Reserve to jump in and raise interest rates, which is also anathema to shareholders.

In contrast, if inflation is quiescent, it will keep interest rates from rising and buoy stock prices. Investors usually place a higher value on the stream of future earnings at such times because it will stem from greater sales and/or higher productivity.

Dollar

The effect inflation has on the dollar is less clear. As is often the case in a healthy economic expansion, rising U.S. interest rates can make the dollar attractive. But if rates surge primarily on account of growing inflation concerns, it can hurt the U.S. currency. Higher U.S. inflation erodes the value of dollar-based investments held by foreigners, so a sustained increase in the CPI can have a negative influence on the greenback.

Having said that, bear in mind that currency traders are also sensitive to other nuances. For instance, if players in the foreign exchange markets believe the Federal Reserve has moved quickly and deftly to smother inflation pressures, it's likely the dollar will hold its ground or even appreciate in value.

PRODUCER PRICE INDEX (PPI)

Market Sensitivity: Very high.

What Is It: Measures the change in prices paid by businesses.

Most Current News Release on the Internet: www.bls.gov/ppi

Home Web Address: www.bls.gov

Release Time: 8:30 a.m. (ET); announced two to three weeks after the reporting month ends.

Frequency: Monthly.

Source: Bureau of Labor Statistics, Department of Labor.

Revisions: The monthly data is subject to one revision that is published four months later. Annual revisions are published in February with the January data, and it can go back five years.

WHY IS IT IMPORTANT?

Inflation is public enemy number one to the financial markets. It can wipe out the value of bond portfolios, depress stock prices, and push interest rates higher. So when the first major inflation number of the month comes out, a distinction that belongs to the Producer Price Index (PPI), it should come as no surprise that everyone pounces on it. The PPI measures changes in prices that manufacturers and wholesalers pay for goods during various stages of production. Any whiff of inflation here could eventually be transmitted to the retail level. After all, if business has to pay more for goods, it is more likely to pass on some of those higher costs to consumers. (As we'll see later, the relationship between producer prices and consumer prices is actually not that simple.)

The producer price index is really not just one index, but a family of indexes. There are price indexes for each of the three progressive stages of production: crude goods, intermediate goods, and finished goods. The one that grabs all the headlines and most excites financial markets is the last one, the PPI for finished goods. It represents the final stage of processing just before these goods are shipped to wholesalers and retailers. Prices at this last stage of production are often determined by cost pressures encountered in the crude and intermediate steps, which is why it is important to monitor all three stages.

PPI Crude Goods

The crude goods index represents the cost of raw materials entering the market for the first time. Examples of crude food supplies are wheat, cattle, and soybeans. Nonfood crude items include coal, crude petroleum, sand, and timber. Changes in the prices of these commodities are generally based on supplies, which can be subject to large swings as a result of droughts, animal disease, and geopolitical factors. A spurt in prices at this early stage will be felt at the intermediate stage.

PPI Intermediate Goods

The intermediate goods index reflects the cost of commodities that have undergone transitional processing before becoming the final product. Items like flour, certain animal feeds, paper, auto parts, leather, and fabric fall into this category. Again, changes in prices here can be transferred to the final stage, which is finished goods.

PPI Finished Goods

The finished goods index is the most closely watched measure in the entire PPI report. It consists of apparel, furniture, automobiles, meats, gasoline, and fuel oil. Any inflation at this stage is considered serious because these are the products retailers pay for and thus can influence the price tag consumers will see.

Do changes in the producer prices dictate what consumer prices will do? Many economists claim there is little correlation between the two. But that conclusion is not a fair one. Much depends on which of the three main PPI indexes is chosen as a predictive tool for future consumer price inflation. During the 1970s and 1980s, shifts in the price of crude and intermediate goods often preceded changes in the CPI. However, that relationship has been less reliable since the 1990s. What has stood the test of time is the link between PPI for finished goods and the CPI. Sure, they might diverge on a month-to-month basis, but they tend to move in tandem over the longer term, usually in the range of six to nine months. This complicated relationship exists because the two inflation measures have some important differences and similarities. One difference is that the PPI does not take into account the price of most services. In the CPI, services like housing and medical care make up more than half of the index. One area where both of these inflation gauges share common ground is in “consumer products.” That sector accounts for nearly 75% of the PPI for finished goods. So if prices leap higher here, chances are the CPI will also be under pressure to rise.

In addition to keeping a close eye on the PPI for finished goods, the investment community studies a subset known as core-PPI, a measure that excludes the bumpy categories of food and energy. Those two commodity groups make up a large 40% of the finished PPI, so any abnormal weather pattern or a temporary disruption in oil supplies can greatly distort the inflation numbers and mislead analysts. To get a more accurate reading of the underlying inflation trend, the core-PPI for finished goods is given equal and sometimes even greater consideration than the total index.

HOW IS IT COMPUTED?

The producer price series began in 1902, making it the nation’s oldest inflation measure. The government computes the PPI as follows: Every month, around the week that includes the 13th, the Labor Department receives answers to questionnaires requesting prices on about 100,000 different items from nearly 30,000 firms around the country.

A basket is formed of goods representing items at all stages of production: crude, intermediate, and finished. Which commodities are selected for the basket and what weight each has in the PPI depends on how much revenue these goods generate in the economy. The weights are reviewed and modified every five years or so to reflect changes in what industries are selling. Currently, the weights are determined based on sales patterns seen in 2002, and that led to a reassignment of the weights in the PPI in early 2007.

Certain categories are intentionally left out of the PPI basket. Among them are imported goods and most services. Excise taxes are also not included. However, the cost of special promotional programs, such as low-interest financing and rebates, is included to the extent it reduces the price for manufacturers.

To see how prices have changed over months and years, the government establishes a baseline using an index that starts at 100 and reflects the average price of goods in 1982. So, for example, if the index for finished goods prices rises to 120, it means that inflation for that category has climbed 20% since 1982. In a deflationary environment, in which prices actually decline, the index could fall from 100 to 90, a drop of 10%.

A breakdown of the PPI for finished goods and their relative importance is as follows:

Finished consumer products	73%
Finished consumer foods (19%)	
Finished consumer goods (54%)	
Capital equipment	27%
	100%

THE TABLES: CLUES ON WHAT’S AHEAD FOR THE ECONOMY

- **Table A** Monthly and Annual Percent Changes in Selected Stage-of-Processing Price Indexes

A summary of major changes for the month in the producer price index can be found here:

- (1) Of particular interest are price changes along the production pipeline, from crude to intermediate to finished goods. You can easily locate trouble spots that show the greatest inflation (or deflation) pressures in each of the three stages of production. By knowing where price pressures originate, you can logically jump ahead and assume that some of it will be passed on to the next stage, and ultimately to consumer prices. But don’t look at the PPI as an unflinching predictor of the CPI on a month-to-month basis. A correlation does exist, but over a six- to nine-month time frame.
- (2) A longer-term perspective is a better way to view the PPI numbers. Table A lists how producer price inflation for finished goods has performed over the past 12 months. Corresponding annual changes for crude and intermediate levels are found in Table B of the report.

Table A. Monthly and annual percent changes in selected stage-of-processing price indexes, seasonally adjusted

Month	Finished goods					Inter- mediate goods	Crude goods
	Total	Foods	Energy	Except foods and energy	Change in finished goods from 12 months ago (unadj.)		
2002							
Sept.	0.3	-0.4	1.2	0.3	-1.8	0.5	2.2
Oct.	.8	.4	3.4	.3	.7	.7	2.2
Nov.	-.3	.4	-1.6	-.1	1.0	-.1	3.7
Dec.	-.3	.4	.2	-.6	1.2	-.1	2.0
2003							
Jan.	1.4	1.9	4.6	.3	2.5	1.2	7.6
Feb.	1.1	.4	7.4	-.1	3.3	2.0	5.2
Mar.	1.4	.2	5.4	.7	4.0	2.1	13.0
Apr.	-1.7	.8	-8.1	-.7	2.4	-2.3	-15.8
May	-.4	r .1	r -2.9	r .1	2.5	-.7	r 1.4
June	r .6	r .3	r 3.3	-.1	2.9	.5	r 4.6
July	.1	-.2	.3	.2	3.0	.2	-2.9
Aug.	.4	.7	1.2	.1	▲ 3.4	.5	▲ -1.4
Sept.	▲ .3	1.2	.1	0	▲ 2 3.5	▲ -1	▲ 3.4

▲
1

• **Table B** Monthly and Annual Percent Changes in Selected Price Indexes for Intermediate Goods and Crude Goods

- (3) Here you can find the yearly changes in producer prices for the crude and intermediate stages of production for each of the past 12 months. What stands out is how volatile price changes can be. These wild fluctuations stem mostly from unpredictable swings in food and energy costs. Such commodities can rise or fall as a result of droughts, winter freezes, or tensions in the Middle East—factors that have nothing to do with the business cycle itself.
- (4) Fortunately, the government also publishes the PPI for each stage of production, but without food and energy. This so-called core rate covers about two-thirds of the items in the PPI and is a more accurate portrayal of the underlying rate of inflation in the economy.

Here we see the monthly price changes for core-crude goods and for core-intermediate goods. (Price movements for core-finished goods are in Table A.)

While the core rate of producer prices can tell you something about future inflation pressures, you should not ignore the food and energy components. After all,

Table B. Monthly and annual percent changes in selected price indexes for intermediate goods and crude goods, seasonally adjusted

Month	Intermediate goods				Crude goods			
	Foods	Energy	Except foods and energy	Change in intermediate goods from 12 months ago (unadj.)	Foods	Energy (unadj.)	Except foods and energy	Change in crude goods from 12 months ago (unadj.)
2002								
Sept.	1.1	2.2	0.1	-0.6	1.3	4.6	-0.2	3.1
Oct.	-.3	3.4	.2	1.6	.2	5.1	.3	15.4
Nov.	.5	-1.2	.1	2.4	1.1	7.8	1.4	13.7
Dec.	1.0	-.5	-.1	3.2	1.3	3.3	.2	24.7
2003								
Jan.	1.5	5.6	.4	4.5	5.3	13.0	1.3	28.7
Feb.	.7	7.9	.7	6.6	.7	9.9	3.4	36.7
Mar.	-.3	10.2	.4	8.0	-1.8	30.1	-.3	46.8
Apr.	.1	-11.0	-.2	4.6	1.2	-30.7	-1.1	18.2
May	r 1.1	r -4.4	0	4.2	r 2.0	r 1.9	r -.7	19.1
June	r 1.8	r 2.1	0	4.5	r -.7	r 11.7	r -.6	29.4
July	-.4	1.3	▲ 4	▲ -1	4.4	-3.0	▲ -4.4	▲ .8
Aug.	.2	2.4	.1	4.4	3.7	-7.4	3.7	20.9
Sept.	2.3	-2.3	.1	3.7	7.0	.6	2.3	22.3

those two commodities are, in the final analysis, essential to the U.S. economy. So a general rule is to look at the core rate to detect month-to-month changes in inflation. But when longer projections of economic growth and inflation are made, the core rate becomes less meaningful, since we ultimately pay for food and energy. Thus, the core rate can serve as a proxy for near-term inflation, whereas the total finished goods index can be helpful in determining the behavior of consumer prices in the longer term.

MARKET IMPACT

Bonds

The PPI may not be an ideal leading indicator of consumer prices, but you'd never know that from the way the bond market reacts. Producer price inflation is one of the hottest economic indicators released by the government. Fixed-income investors intuitively believe that a jump in the PPI can be a wake-up call that consumer price inflation is headed higher in the future. Second, since it is the first key inflation gauge the government puts out every month, the market tends to view it with greater sensitivity. If the PPI

detects rising price pressures in the economy, it could depress bond prices and force interest rates higher. No change, or an actual decline in producer prices, is viewed favorably by bond holders because it suggests the absence of any troublesome inflation.

Stocks

For the most part, equities respond much the same way bonds do to signs of inflation. A jump in the PPI means higher production costs for companies, and this can erode profits and endanger dividends. Although some stock investors argue that a little inflation is a good thing because it allows producers to charge more for goods, which bolsters revenues, there is a point beyond which inflation pressures can do more harm than good to equities. The problem is that there is no consensus on where that threshold is.

Dollar

A rise in the PPI is a tough call for participants in the foreign exchange market. Normally, the dollar benefits from a little pickup in inflation, since this propels U.S. short-term interest rates higher. A fast-rising inflation report, however, can hurt the dollar, because the Federal Reserve can respond so aggressively as to jeopardize U.S. economic growth altogether. By and large, a gradual rise in inflation that is accompanied by a well-timed tightening of monetary policy is likely to lead to an appreciation of U.S. currency.

EMPLOYMENT COST INDEX

Market Sensitivity: Medium to high.

What Is It: The most comprehensive measure of labor costs.

Most Current News Release on the Internet:

www.bls.gov/news.release/pdf/eci.pdf

Home Web Address: *www.bls.gov*

Release Time: 8:30 a.m. (ET); released in the final week of January, April, July, and October and covers the quarter that ended a month earlier.

Frequency: Quarterly.

Source: Bureau of Labor Statistics, Department of Labor.

Revisions: Not on a quarterly basis. Revisions are announced annually with the release of first-quarter data, and the changes can go back several years.

WHY IS IT IMPORTANT?

Inflation is the scourge of any economy. It drives interest rates higher and can punish stock prices. Thus, any indicator that serves as an early-warning system of rising inflation pressures would be of great value to investors and business leaders. Topping the list as perhaps the best harbinger of pricing pressures is the Employment Cost Index (ECI). The ECI tracks changes in the cost of labor, the single biggest expense companies face. Labor-related outlays on wages, salaries, and the gamut of fringe benefits (such as vacations, health insurance, and Social Security) account for more than 70% of the cost of making a product. Employees make up such a huge proportion of operating expenses that any significant acceleration in compensation can quickly cut into corporate profits and pressure companies to pass on these additional costs to consumers in the form of higher prices.

Historically, when rising labor costs fuel inflation, they can unleash a vicious cycle that is hard to stop. As retailers hike their prices to offset higher employee expenses, workers will eventually demand bigger increases in wages and salaries just to keep up with inflation. Should employers again comply and pay workers more money, this soon brings about another jump in retail prices. This self-perpetuating escalation in inflation, known among economists as a wage-price spiral, is so destructive to an economy that it stands high on the Federal Reserve's enemy watch list.

To be fair, companies can respond to higher labor costs in ways other than raising prices. Firms might choose to absorb the extra expense and grudgingly accept slimmer profits for the time being. Or they can decide that given how expensive labor has become, it makes more sense to simply dismiss a large number of employees and instead invest in new technology that would permit the same or even greater output but with fewer workers. Last, companies can simply decide to relocate their production facilities to other

countries where labor is much cheaper. All of these responses to rising U.S. labor costs have significant consequences for the economy and the financial markets. By choosing to raise prices, firms can ignite inflation. At some point the Federal Reserve is likely to jump in and raise interest rates before a wage-price spiral gets out of hand. Should companies decide to absorb the extra costs, it will cut into earnings and adversely affect stock prices. Moving operations offshore can lead to higher joblessness in the U.S. and more government spending on unemployment insurance. For all these reasons, the ECI is monitored closely by Federal Reserve officials, money managers, business executives, and union leaders.

HOW IS IT COMPUTED?

The ECI is based on surveys of both private and public sectors (local and state only; the federal payroll is excluded). Every quarter, about 9,400 establishments in private industry, involving 48,000 occupational observations, and 1,400 establishments in state and local governments, public schools, and public hospitals, covering 9,300 occupational groupings, are queried on labor cost issues. The surveys are conducted for the pay period that includes the 12th day of the month in March, June, September, and December. All the information is then boiled down to 800 occupational classifications, which make up a fixed basket of job types.

Questions are asked about changes in wages, salaries, and benefits. Wage and salary data is collected on a straight-time hourly pay basis. For employees not paid on an hourly basis, a computation is made based on salary divided by the corresponding hours worked. Also included are production bonuses, incentive earnings, commission payments, and cost of living adjustments. Excluded from this calculation is premium pay for overtime and for work performed on weekends and holidays. Shift differentials are also excluded. Another major category not included in the ECI is stock options and restricted stocks.

Benefits covered by the ECI are paid vacations, sick leave, holidays, premium pay for overtime, shift differentials, insurance benefits, retirement and savings benefits, Social Security, Medicare, and federal- and state-mandated social insurance programs.

Changes in wages and salaries, as well as the cost of benefits, are then converted into an index (beginning with an index reference of 100 to reflect labor costs in 2005). Thus, if compensation costs stood at 105 at the end of one year and then rose to 110 by the close of the following year, labor costs increased by 4.8% over those 12 months. Separate indexes in this report show how these expenses changed in the private and public sectors, by labor union status, among industrial and occupational groups, and by geographic regions.

Figures are presented in both seasonal and nonseasonal adjustment form. The numbers for each quarter are not annualized.

THE TABLES: CLUES ON WHAT’S AHEAD FOR THE ECONOMY

• **Table A** Major Series of the Employment Cost Index

Table A. Major series of the Employment Cost Index
(Percent change)

Category	3-month, seasonally adjusted		12-month, not seasonally adjusted				
	Sep. 2011	Dec. 2011	Dec. 2010	Mar. 2011	June 2011	Sep. 2011	Dec. 2011
CIVILIAN WORKERS¹							
Compensation ²	0.3	0.4	2.0	2.0	2.2	2.0	2.0
Wages and salaries	0.3	0.4	1.6	1.6	1.6	1.6	1.4
Benefits	0.1	0.6	2.9	3.0	3.6	3.2	3.2
PRIVATE INDUSTRY							
Compensation ²	0.4	0.4	2.1	2.0	2.3	2.1	2.2
Wages and salaries	0.4	0.4	1.8	1.6	1.7	1.7	1.6
Benefits	0.1	0.7	2.9	3.0	4.0	3.3	3.6
STATE AND LOCAL GOVERNMENT							
Compensation ²	0.0	0.3	1.8	1.8	1.7	1.5	1.3
Wages and salaries	-0.2	0.3	1.2	1.2	1.2	1.0	1.0
Benefits	0.3	0.3	2.9	3.3	3.0	2.5	2.1

- (1) Want to know how labor costs have behaved lately? This is the place to begin. This table shows both quarterly and annual changes in compensation expenses—whether they’ve been climbing, falling, or holding steady. The left side of the chart notes the percentage change in labor cost in each of the last two quarters.
- (2) Data on the right reports on how such costs have behaved on an annual basis.
- (3) Besides total compensation costs, you can also see the percentage changes by the table’s two basic components: wages and salaries, and benefit costs. Looking at the behavior of these two categories is important, because they can tell you whether it was pay hikes or a jump in benefits that most contributed to higher compensation costs. Detailed percentage changes are available for all civilian workers and their two principal groupings: private industry and state and local government.

Is the economy facing inflation pressures? It's simple enough to find out. Take the annual percentage change in compensation costs for private industry, and compare it with the annual change in non-farm productivity (see the section "Productivity and Costs") for the comparable period. Ideally, you want to see annual compensation costs rise no faster than the pace of annual productivity growth. Companies showing steady improvements in productivity can afford to give employees raises without hurting profits or raising prices. However, if employee compensation consistently climbs faster than productivity growth, the seeds have been sown for higher inflation down the road. This can spell trouble for consumers, companies, and the overall economy.

Some analysts consider average hourly earnings (AHE) data from the main employment report to be a better predictor of wage inflation because it is more timely. Average hourly earnings come out monthly; the ECI is released quarterly. But timeliness is not everything. Average hourly earnings considers only workers who receive hourly pay, whereas ECI covers both hourly and salaried workers. Moreover, AHE does not include benefits costs; the ECI incorporates all major expenses (pay and benefits) that businesses incur as a result of their workforce.

- **Table 6** Employment Cost Index for Total Compensation for Private Industry Workers, by Bargaining Status, Region, and Area
 - (4) Highlighted here are the growth differences in compensation costs between union and nonunion workers. Each category is further divided by goods-producing (mostly manufacturing) and service industries. Changes in labor costs are then reported on a monthly, quarterly, and yearly basis.
 - (5) Another area of interest to corporate leaders and investors is to see how labor costs are behaving in different parts of the country. Knowing which regions show the greatest increase or decrease in total compensation can tell quite a bit about the local economy and even influence corporate decisions on where to relocate their headquarters or build new plants.

MARKET IMPACT

Bonds

Bond traders react to the ECI much as they do for any forerunner of inflation. A larger-than-expected jump in the index is disconcerting to these investors and can provoke enough sales of fixed-income securities to significantly drive up yields. Investors fear that rising labor costs without a concurrent increase in productivity can fire up price pressures and eventually force the Fed to raise interest rates before wage inflation firmly sets in. A stable or weaker-than-expected ECI is viewed as positive for the bond market.

Table 6. Employment Cost Index for total compensation¹, for private industry workers, by bargaining status and census region and division

(Not seasonally adjusted)

Bargaining status and census region and division		Indexes (Dec. 2005 = 100)			Percent changes for—					
		Dec. 2010	Sep. 2011	Dec. 2011	3-months ended—			12-months ended—		
					Dec. 2010	Sep. 2011	Dec. 2011	Dec. 2010	Sep. 2011	Dec. 2011
Bargaining status										
4 ▶	Union	114.8	117.4	117.9	0.2	0.3	0.4	3.3	2.4	2.7
	Goods-producing industries ²	113.9	116.3	116.9	.1	-.1	.5	3.5	2.2	2.6
	Manufacturing	110.5	113.2	113.8	.0	-.5	.5	4.4	2.4	3.0
	Service-providing industries ³	115.5	118.3	118.8	.3	.5	.4	3.2	2.7	2.9
	Nonunion	112.1	114.2	114.5	.3	.4	.3	1.8	2.1	2.1
	Goods-producing industries ²	110.2	112.5	112.9	.1	.3	.4	1.8	2.2	2.5
	Manufacturing	110.0	112.8	113.0	.1	.3	.2	2.3	2.6	2.7
	Service-providing industries ³	112.7	114.7	115.0	.4	.3	.3	1.9	2.1	2.0
	Census region and division⁴									
5 ▶	Northeast	113.6	115.7	116.1	.4	.3	.3	2.3	2.3	2.2
	New England	114.1	116.2	116.3	.6	.2	.1	2.3	2.5	1.9
	Middle Atlantic	113.4	115.5	116.0	.4	.3	.4	2.3	2.2	2.3
	South	112.8	114.7	115.0	.3	.3	.3	1.9	2.0	2.0
	South Atlantic	113.3	115.1	115.4	.3	.4	.3	1.6	1.9	1.9
	East South Central	110.9	113.0	113.2	-.1	.3	.2	1.5	1.8	2.1
	West South Central	112.7	114.7	115.0	.4	.3	.3	2.5	2.2	2.0
	Midwest	111.3	113.6	113.9	.3	.3	.3	2.5	2.3	2.3
	East North Central	110.5	113.1	113.2	.2	.4	.1	2.5	2.5	2.4
	West North Central	113.2	115.0	115.6	.4	.2	.5	2.3	2.0	2.1
	West	112.5	114.6	115.1	.2	.3	.4	1.7	2.0	2.3
	Mountain	112.8	114.8	115.3	-.2	.8	.4	1.6	1.6	2.2
	Pacific	112.4	114.6	115.1	.4	.1	.4	1.7	2.3	2.4

Stocks

A sustained increase in labor costs is also bearish for the stock market. If wages and benefits climb faster than productivity, business costs swell, which then jeopardizes corporate profits. Moreover, this can compel the Fed to act. How quickly this all unfolds depends on where the economy stands in the business cycle and how vulnerable it is to an outbreak of inflation.

Dollar

No dependable pattern emerges between the ECI and the dollar's value in foreign exchange markets. Obviously, if labor costs pick up, this can propel interest rates higher, which normally would attract foreign investors to the dollar. However, higher labor costs can also erode the competitiveness of U.S. companies selling goods and services overseas and worsen the trade deficit—a distinct negative for the dollar. By and large, if players in the currency markets believe that the Federal Reserve is successfully piloting the economy into a gentle slowdown and can forestall an outbreak of wage inflation, it would strengthen the dollar.

IMPORT AND EXPORT PRICES

Market Sensitivity: Medium.

What Is It: Records price changes of goods bought and sold by the U.S. in foreign markets.

Most Current News Release on the Internet: www.bls.gov/mxp

Home Web Address: www.bls.gov

Release Time: 8:30 a.m. (ET); data is released about two weeks after the reported month.

Frequency: Monthly.

Source: Bureau of Labor Statistics, Department of Labor.

Revisions: Each release contains monthly revisions and corrections that go back three months. Changes affecting the weights of products in the basket of goods bought and sold in foreign markets are made every January and reflect shifts in trade patterns two years earlier.

WHY IS IT IMPORTANT?

When it comes to measuring inflation, the economic indicators that first come to mind are consumer prices, producer prices, and the personal consumption expenditure (PCE) deflators. Less well known is another series by the government—one that looks at the behavior of import and export prices. Why look at the cost of trade? Americans spend \$2.5 trillion a year buying foreign products. These purchases make up more than 16% of GDP, so a major swing in import prices can have a palpable impact on inflation in this country. If the price of imported oil climbs sharply, consumers can end up paying more for gasoline and heating oil. A poor crop of coffee beans in Venezuela will effectively raise the price of a morning cup of caffeine. In addition, if the value of the dollar drops sharply against the major world currencies, it makes imports more expensive over a broad spectrum of goods and services.

Another reason to monitor import and export price indexes is that they have a direct bearing on the competitive position of the U.S. in foreign markets. Should American-made products get too pricey overseas because of inflation at home or a strengthening dollar, foreign buyers will stop ordering from the U.S. and seek other, cheaper suppliers. Since exports account for 14% of GDP, a significant drop in sales to other nations will reduce the earnings of major American companies and retard overall economic growth in this country.

The official reason for establishing these price indexes in the first place was to convert the monthly U.S. trade figures from current dollars into real dollars. Tracking trade flows in real terms is vital. If you simply tally all the sales in trade in current dollars, you're still left wondering whether America's higher import bill was the result of more

products being purchased or because foreigners raised prices. The same applies to exports. If the value of U.S. shipments to other nations increased from one period to the next, was it because American firms actually sold more goods, or did they just hike prices? By using the information from this report, analysts can determine the real volume of imports and exports traded.

HOW IS IT COMPUTED?

Every month, information on export and import prices is collected on more than 20,000 products from more than 6,000 companies and other sources. The Bureau of Labor Statistics asks these companies to report on the transaction price of trades that occur close to the beginning of every month. Most imports are priced on a “free on board” (FOB) basis, and reflect the value of products at the foreign port of exportation. The seller is responsible for placing the goods on a boat or plane, but after that, the responsibility passes to the importer. The FOB price does not include the cost of insurance and duty taxes. On the export side, the majority of products are recorded with “free alongside ship” (FAS) prices, which represent their value before loading. The exporter is responsible only for placing the goods alongside the ship or plane. The price includes insurance and the cost of transporting everything up to the port of departure. However, the buyer pays the cost of actually loading the goods.

All prices collected are then weighed against a fixed market basket of goods that were imported and exported. Weights for the products in the basket are updated every year and reflect changes in consumption patterns that occurred two years earlier. The series uses a base year of 2000 to represent an index of 100.

Revisions are routine with each monthly release, and they can go back three months. The figures in the report are not seasonally adjusted.

THE TABLES: CLUES ON WHAT’S AHEAD FOR THE ECONOMY

- **Cover Page** Percent Changes in Import and Export Price Indexes

This release deserves a close look because it tracks one of the most important economic forces to influence domestic inflation, growth, and corporate profits.

- (1) To begin with, the summary table permits a quick glance at the latest trend in import and export price movements by showing month-to-month percentage changes for the past year. If import prices are on the rise, it will put upward pressure on consumer price inflation, whereas a sustained fall in import prices can lead to disinflation (in which the rate of inflation is decelerating) or, in rare instances, deflation (where the CPI is actually falling). Given the volatile nature of petroleum prices and how they can skew the total cost of imports, you should keep an eye on price patterns for both total imports and nonpetroleum imports.

Percent changes in import and export price indexes
by End Use category
- not seasonally adjusted -

Month	IMPORTS			EXPORTS		
	All Imports	Petroleum Imports	Non-petroleum Imports	All Exports	Agricultural Exports	Nonagricultural Exports
<u>2002</u>						
October	0.0	-0.1	0.0	-0.1	-1.8	0.1
November	-0.9	-8.2	-0.1	0.1	2.0	-0.1
December	0.6	5.6	0.2	-0.2	-0.5	-0.2
<u>2003</u>						
January	1.8	14.6	0.3	0.3	0.1	0.4
February	1.7	11.3	0.3	0.6	-0.4	0.6
March	0.6	-1.1	1.0	0.2	-0.4	0.3
April	-3.1	-18.8	-1.0	-0.1	0.4	-0.1
May	-0.7	-5.0	-0.2	0.1	2.5	-0.2
June	0.9	5.4	0.4	-0.2	-0.5	-0.1
July	0.5	5.2 r	0.0 r	-0.1	-0.1 r	-0.1
August	0.0 r	1.8 r	-0.3	0.0	-1.0 r	0.1
September	-0.4 r	-5.0 r	0.2	0.4	5.6 r	-0.1
October	0.1	2.3	-0.1	0.3	2.5	0.1
October 2001-02	1.9	32.2	-0.4	0.4	5.9	0.0
October 2002-03	0.9	3.4	0.7	1.4	10.5	0.6

r = revised to reflect late reports and corrections by respondents.

▲
1

▲
2

(2) Generally, a pickup in export prices, if sustained, can hurt U.S. foreign sales. However, there are a couple of caveats here. Much depends on how badly the rise in the price of U.S.-made goods hurts American competitiveness overseas. Often it does, especially if other foreign suppliers are offering similar-quality products more cheaply. On the other hand, U.S. companies might successfully hold on to their foreign customers despite the higher price if the product is considered relatively unique or far superior in quality compared to its closest competitor.

Looking at the export side of this table, most investors and economists focus on changes in non-agricultural export prices—a section that’s made up mostly of manufactured goods and services. A drop in export prices will attract more foreign orders and thus raise U.S. corporate income.

The dominant factor behind changes in import and export prices is the rise and fall of the dollar’s value in the currency market. A strengthening dollar reduces the price of imports but makes U.S. exports more expensive in foreign markets. A depreciating dollar

raises the cost of imports. The flip side is that American exporters have an easier time getting foreign orders because their products drop in price outside the U.S. The following sections illustrate how changes in export and import prices can influence costs, profits, and growth in this country.

A Weak Dollar

Suppose France sells wine to the U.S. at a price of 25 euros per bottle. With an exchange rate of one dollar for each euro, the price of each bottle for American consumers is \$25. Now let's say the dollar falls in value, and it now costs \$1.25 to acquire each euro (that is, each U.S. dollar gets you only 0.80 euros). The price of the imported wine has now jumped from \$25 to \$31.25 ($25 \text{ euros} \times \$1.25 = \$31.25$), a 25% hike. Now imagine the broader inflationary implications of such a drop in the dollar's value, because in addition to wine, Americans import from Europe cars, cheese, apparel, perfumes, art, and furniture. Moreover, with imports now pricier, domestic companies will be emboldened to lift their own prices as well because they have less to worry about from foreign competition.

A weaker dollar also enables exporters to sell products abroad at a lower, more competitive price. Here's how: Say an American firm sells jeans to Europeans for \$25 a pair. Prior to the dollar's fall, foreigners would be able to pick up a pair of American jeans for 25 euros. But once the U.S. currency falls to $\$1.25 = 1 \text{ euro}$, the price of those jeans to Europeans drops from 25 euros to 20 euros ($\$25 / \$1.25 = 20$), making them 20% cheaper. The lower price can spur more sales, lift earnings of U.S. exporters, and boost overall GDP growth.

A Strong Dollar

When the dollar's value climbs in currency markets, a different set of dynamics takes place for exporters and importers. Instead of having an equal exchange rate of $\$1 = 1 \text{ euro}$, let's say the U.S. currency jumps in value by 25%. Thus, Americans can now receive 1.25 euros for each U.S. dollar (or $1 \text{ euro} = \text{U.S. } \0.80). This poses a serious problem for American exporters, because a jump in the dollar's value drives up the cost of those jeans for Europeans from 25 euros to 31.25 euros. U.S. firms, fearful that fewer people will buy jeans at that higher price, might decide to keep the European price unchanged at 25 euros just to stay competitive. However, that strategy will cost the company some revenue with each pair of jeans sold. By holding the price tag at 25 euros, the U.S. jeans producer is now getting just \$20 for every pair of jeans sold, not the previous \$25 ($25 \text{ euros} \times \text{U.S. } \$0.80 = \$20$).

Importers and American consumers, on the other hand, are happy to see a muscular dollar because foreign products are now cheaper. When the value of the U.S. currency strengthened from $\text{U.S. } \$1 = 1 \text{ euro}$ to $\text{U.S. } \$1 = 1.25 \text{ euros}$, the bottle of French wine for Americans fell from \$25 to \$20. However, what's great for U.S. shoppers can be awful for domestic producers, who now have to compete with lower-priced foreign goods

entering this country. These American companies thus are now under immense pressure to keep their own prices down or face losing sales to imports. Multiply this by thousands of other commodities coming into the U.S., and you can begin to see how a strong U.S. currency can help reduce domestic inflation, but it can also hurt the earnings of many companies.

- **Table 3** U.S. Import Price Indexes and Percent Changes for Selected Categories of Goods (Not Shown)

This table contains a more detailed list of how import prices have fared for commodities, capital goods, foods, and other key categories of products. Equity analysts can seek out industries that thrive when import prices fall, and they can veer away from businesses that are threatened by low-price foreign goods being shipped to the U.S.

- **Table 4** U.S. Export Price Indexes and Percent Changes for Selected Categories of Goods (Not Shown)

Similar to Table 3, this page focuses on exports. Changes in exchange rates can provide economists and investors with better insights into how competitively priced U.S. products are in foreign markets. Keep in mind that half the earnings of S&P 500 firms come from business generated outside the U.S.

- **Table 7** U.S. Import Price Indexes and Percent Changes by Locality of Origin

The prices of U.S. imports can drop precipitously if they originate from nations with ailing currencies. That's where Table 7 comes in. It looks at several of our most important trading partners—Canada, the European Union, Latin America, Japan, and Asia's Newly Industrialized Countries—and the change in import prices over time for each of these regions. U.S. importers prefer to deal with nations whose currencies are weak because they can purchase goods more cheaply from them than from stronger-currency nations. U.S. exporters, on the other hand, face serious hardships selling into a market whose local currency is slipping. For one thing, countries with weak currencies are usually in economic distress and are unlikely to buy much from the U.S. anyway. Moreover, the dollar's relative strength will probably price many American products out of that market.

MARKET IMPACT

Bonds

The release on import and export prices is not a major market mover, though participants in the fixed-income market might find some forward-looking signs of inflation pressures, or the lack thereof. Higher import prices can potentially unnerve bond investors who are

Table 7 U.S. Import Price Indexes and Percent Changes by Locality of Origin
January 2006-January 2007 2000=100, unless otherwise noted

Description	Percentage of U.S. Imports ^{1/}	Index		Percent Change				
		December 2006	January 2007	Annual		Monthly		
				Jan. 2006 to Jan. 2007	Sept. 2006 to Oct. 2006	Oct. 2006 to Nov. 2006	Nov. 2006 to Dec. 2006	Dec. 2006 to Jan. 2007
<u>2/</u> Industrialized Countries.....	44.813	117.1	116.4	1.6	-2.2	1.5	0.9	-0.6
Nonmanufactured Articles.....	4.582	187.4	170.9	-13.8	-14.0	9.0	8.9	-8.8
Manufactured Articles.....	39.766	111.7	112.1	3.5	-0.9	0.8	0.0	0.4
<u>3/</u> Other Countries.....	55.204	111.9	109.4	-1.6	-2.7	-0.1	1.0	-2.2
Nonmanufactured Articles.....	11.023	190.5	176.7	-9.2	-9.1	-1.1	3.6	-7.2
Manufactured Articles.....	43.982	100.9	100.1	0.5	-0.7	0.1	0.3	-0.8
Canada.....	17.052	129.6	127.5	-2.3	-4.4	2.6	1.9	-1.6
Nonmanufactured Articles.....	3.871	190.1	171.9	-16.6	-15.7	12.8	9.3	-9.6
Manufactured Articles.....	12.851	118.7	119.5	2.3	-1.2	0.3	-0.1	0.7
<u>4/</u> European Union.....	17.908	120.6	121.2	4.4	-0.7	0.1	0.7	0.5
Nonmanufactured Articles.....	0.389	199.0	185.4	-13.1	-5.8	-5.1	1.2	-6.8
Manufactured Articles.....	17.406	119.1	119.8	4.8	-0.5	0.4	0.7	0.6
France (Dec. 2003=100).....	1.888	105.7	106.3	3.2	1.0	-0.1	0.7	0.6
Germany (Dec. 2003=100).....	5.008	106.1	106.1	3.9	0.3	0.6	0.3	0.0
United Kingdom (Dec. 2003=100).....	2.845	115.7	115.1	-0.4	-2.1	-0.9	0.3	-0.5
<u>5/</u> Latin America.....	17.619	136.3	133.5	-0.5	-2.8	-0.6	0.6	-2.1
Nonmanufactured Articles.....	4.822	195.9	183.0	-7.7	-8.0	-0.5	4.0	-6.6
Manufactured Articles.....	12.721	125.9	125.7	2.4	-0.5	-0.7	-0.8	-0.2
Mexico (Dec. 2003=100).....	10.163	118.6	118.1	2.0	-1.9	-0.1	0.1	-0.4
<u>6/</u> Pacific Rim (Dec. 2003=100).....	33.452	98.5	98.3	-0.5	-0.3	-0.1	0.1	-0.2
China (Dec. 2003=100).....	14.941	97.3	97.3	-0.8	-0.2	0.1	0.0	0.0
Japan.....	8.308	94.1	94.2	-0.4	-0.2	-0.1	0.0	0.1
<u>7/</u> Asian NICs.....	6.124	89.1	88.7	-0.3	-0.1	-0.2	0.1	-0.4
<u>8/</u> ASEAN (Dec. 2003=100).....	5.993	98.0	96.6	0.1	-0.7	-0.3	0.0	-1.4
<u>9/</u> Asia Near East (Dec. 2003=100).....	3.765	169.2	161.1	-4.4	-6.4	-1.0	3.2	-4.8

hypersensitive to even the slightest scent of rising inflation. In contrast, a decline in the price of imports helps keep inflation under control, though this report alone is unlikely to significantly lift bond prices.

Stocks

Here, too, any response to this report is likely to be modest. That's not to say it's of minor importance to equity investors. Corporate profitability is very much affected by both import and export price movements. If the cost of imports drops, some U.S. firms—specifically, those that buy product components from other nations—stand to gain because this lowers production costs. Others will suffer from cheaper imports as foreign competitors threaten to grab a bigger share of the American market. Should imports

become more expensive, the situation gives U.S. companies room to lift their own prices and increase profits. Yet other firms will feel the pinch of higher import costs.

In terms of exports, a drop in price can generate higher sales for U.S. firms selling abroad, whereas higher export prices can reduce foreign demand for U.S. goods and hurt corporate revenues. How this plays out in the stock market depends on the extent to which individual firms are exposed to the global marketplace. Generally speaking, the major equity indexes do not move much in response to this economic indicator, unless import prices surge to a level that fires up inflation pressures.

Dollar

The foreign exchange market normally does not spring into action as a result of this report. For these traders, much of the news on how exchange rate movements influence import and export prices has already been discounted. What alarms foreign investors is a situation in which the dollar's weakness or strength becomes so detrimental to the U.S. economy that it impels Washington to intervene in the currency market. Such actions are rare, but they cannot be totally dismissed among investors. What might trigger such a step? Several events can. Sharply higher import inflation, a significant deterioration in competitiveness, or an unacceptable widening of America's foreign trade deficit could at some point trigger remedial action by U.S. policymakers. That action can range from delicately crafted expressions of concern by administration officials about the dollar's value to direct intervention by the government in the currency markets.

PRODUCTIVITY AND COSTS

Market Sensitivity: Medium.

What Is It: Measures changes in the efficiency of workers who produce goods and services.

Most Current News Release on the Internet: www.bls.gov/lpc/

Home Web Address: www.bls.gov

Release Time: 8:30 a.m. (ET); the initial report is released about five weeks following the end of the quarter.

Frequency: Quarterly.

Source: Bureau of Labor Statistics, Department of Labor.

Revisions: Can be substantial. This first revision appears a month after the preliminary figures, and a second revision comes out 30 days after the initial revision. Subsequent changes to productivity data depend on revisions to GDP and employment data.

WHY IS IT IMPORTANT?

Here's a question: What single feat allows an economy to grow faster without any inflation, helps U.S. exporters win markets overseas, and enriches both households and corporations simultaneously? The answer is productivity growth. Productivity is the output in goods and services employees produce for each hour of labor worked. It serves as a way of measuring how well companies are using their employees and their physical capital (by which we mean land, material resources, and equipment).

Productivity is by far the most important determinant in the long-term health and prosperity of an economy. Here's why: Labor costs account for some 70% of all business expenses, so if companies are not using workers efficiently, it's an enormous waste of resources. With a productive workforce, however, an economy can produce enough supplies to meet the demands of consumers and businesses without causing shortages and higher prices. In addition, if workers produce more each hour, companies can increase sales and generate greater revenues. That will boost profits, which, in turn, can be used to distribute bigger dividends to shareholders, stimulate more business investment spending, or lead to greater pay for workers. Indeed, you might even be able to do all three at the same time. On the other hand, poor productivity growth is a recipe for economic stagnation. It invites inflation, higher unemployment, weaker growth, and little or no gains in real income. The plain fact is that strong labor productivity growth is not just preferable but essential in an environment where U.S. companies face serious global competition.

That last point was painfully learned back in the 1970s and early 1980s, when productivity growth was close to flatlining. The U.S. economy at the time was reeling from soaring energy costs and several deep recessions. Moreover, American firms were losing

customers overseas as well as in the United States as foreign competitors charged onto the scene with less-expensive, often better-quality cars, appliances, home electronics, and other products. Once overly confident that no nation could challenge America's post-World War II economic supremacy, companies here suddenly found themselves wholly unprepared to go up against their more agile foreign rivals.

After years of complacency, American industry finally awoke to the urgency of retooling their factories and operating more nimbly. Hundreds of plants were closed in the late 1980s and early 1990s. A wave of mergers, acquisitions, and consolidations followed, effectively burying companies that were no longer able to operate profitably. Just as corporate America began to work more efficiently, rapid technological innovation in the mid- and late 1990s contributed another large boost to productivity growth. These events have not only helped the U.S. regain its competitiveness in global trade, but also fundamentally altered the way Americans work and live. Cellphones, laptops, e-mail, high-speed telecommunication networks, and computer-based machine tools have spawned a true productivity revolution. But such major technology-driven breakthroughs in productivity are quite rare in history, occurring perhaps only once or twice every hundred years.

Far more common is the type of productivity swing that normally accompanies a business cycle. The ups and downs of cyclical productivity growth are better understood and tend to follow a predictable pattern. First, productivity typically falls when an economy approaches recession. The reason is that companies initially cut back production as demand shrinks, but they continue to hold on to employees—at least until it becomes clear that business will not turn up anytime soon. Thus, for a brief period, productivity plummets because output drops—but the number of people on payrolls remains unchanged. The next stage in the productivity cycle occurs when employers realize they have little choice but to begin layoffs. After all, with corporate revenues shrinking, it becomes too costly to keep idle or underutilized workers. As a result, during a recession companies try to get by with as few workers as possible. Third, as demand gradually picks up again and the economy starts to recover, productivity often surges because companies first rev up their production lines but hold off on hiring back workers. It's only when the economy begins to demonstrate sustainable growth that employers resume hiring. As more people are put back to work, the number of hours on the job increases, and productivity growth tapers off. This type of cyclical productivity has been faithfully observed for decades.

However, something quite bizarre occurred in the recession of 2001 and during the subsequent recovery. For the first time in modern history, productivity growth continued even during the economic downturn and further accelerated well into the recovery phase. Also unusual was that fewer workers were called back well after the economy rebounded. The reason for this is still debated among economists. Many believe that companies invested heavily in new productivity-enhancing technologies in the 1990s, with particular emphasis on utilizing computers and software. There were also significant improvements

in management techniques that enabled firms to operate more efficiently. Existing workers also underwent retraining to improve their skills.

All these developments have had a profound impact on the economy. The streamlining of corporations allowed the U.S. to better compete in the international marketplace. But there was also a troubling side effect. The need for labor diminished. For instance, the U.S. economy in 2011 produced a record amount of goods and services—and accomplished this with seven million fewer workers! This prompted many to wonder whether the business community was now operating under a new paradigm in which future increases in output could be achieved more easily and cheaply by improving the quality of the domestic and foreign capital stock (such as high-tech equipment, modern assembly lines, and outsourcing production) rather than by hiring more U.S. workers.

If true, this sounds wonderful to companies because they can satisfy consumer demand with a smaller, less costly, more efficient workforce. On the downside, though, is the prospect that sustained productivity growth can severely disrupt traditional patterns of job creation in the U.S. economy. Workers with outmoded skills will have far greater difficulty finding work in a period of high productivity growth and might have to relocate to another state, learn a new trade, or both.

Does productivity growth itself lead to a higher unemployment rate over the longer term? Conventional wisdom says no. Greater operating efficiencies produce more corporate profits, and this fosters higher investment spending by business. These outlays fuel the formation of new businesses, which leads to more employment opportunities. Indeed, the unemployment rate has remained near historic lows over the past decade.

Nevertheless, some economists still wonder whether the traditional relationship between economic growth, corporate profits, and employment has changed. If productivity can surge during both recessions and expansions, this could represent a historic shift in how the economy functions, specifically in terms of job creation. Meanwhile, as the debate continues, policymakers and economists are paying much more attention to the quarterly productivity data.

The report on productivity and costs contains three major components: output per hour (labor productivity), compensation per hour, and unit labor costs:

- *Output per hour of all persons:* Productivity reflects how efficient labor is at producing goods and services, normally referred to as output per hour. Calculating productivity is relatively straightforward. We look at how much labor and capital are put to work at companies. These represent the inputs. Next, we track how much is produced from these inputs. The relationship between input and output reflects the level of productivity. If a company can increase production (or output) with the same or fewer inputs, its productivity is on the rise. This will increase profit margins, improve earnings, and usually lead to higher wages. However, if a firm's inputs remain the same even as output is slowing, its productivity is slipping, and this will quickly reduce corporate profits and perhaps even lead to layoffs.

How is productivity calculated? It's a fairly simple formula. How much did the private, non-farm economy produce? Divide that number by the number of hours worked to make those goods and services. (For example, let's look at a kitchen appliance manufacturer. Productivity in this case would be based on how many toasters factory workers assembled in a single hour.)

- *Compensation per hour*: This is the average hourly rate of compensation given to employees in non-farm business. (Continuing with the example of toasters, how much did that company compensate its workers per hour?) Compensation includes wages and salaries, bonuses, commissions, exercised stock options, and the value of employee-paid benefits. These include health costs, social security funds, and private pensions. After total compensation is calculated, it is divided by the number of hours worked.
- *Unit labor costs*: Once we have the two components just described—output per hour and compensation per hour—we can determine the unit labor costs, which represent the cost of labor to produce a single unit of product. (Using the illustration of the company making toasters, unit labor costs would show how much the manufacturer pays its workers for each toaster they make.) Recall that labor is the greatest cost to production, representing more than two-thirds of all business expenses. As unit labor costs go up, employers will either pass on these additional expenses to consumers in the form of higher prices, or absorb them and take a cut in profits. Suppose compensation per hour jumps by 3%, but labor productivity (output per hour) increases by only 2%. In that case, the cost of labor (or unit labor costs) rises by 1%. There is a close statistical correlation between changes in unit labor costs and the behavior of consumer prices in the future. If unit labor costs ratchet up, prices at the retail level will eventually climb too.

Let's assume that instead of productivity increasing 2%, it actually jumps by 4%. Now, with labor output per hour greater than the increase in compensation per hour (3%), the result is a drop in unit labor costs of 1%. Whenever labor costs fall due to higher productivity, the economy benefits greatly. Corporate profits increase, which in turn buoys stock prices. Moreover, there's less need for companies to raise prices, and they might very well reward their workforce for their efficiency with higher compensation. The combination of higher pay and dormant inflation leads to a higher standard of living for workers.

HOW IS IT COMPUTED?

Non-farm productivity and labor costs are compiled from numerous sources. Data on hours worked comes from the monthly payroll employment report (see the section "Employment Situation"). For output, the government uses total GDP minus the output generated by the government, nonprofit institutions, the employees of private households,

the rental value of owner-occupied dwellings, and the farm sector. Strip out all these factors and you're still left with a hefty 80% of the GDP.

Labor compensation figures come from the Bureau of Labor Statistics and the Bureau of Economic Analysis. They include direct labor income from wages and salaries, tips, bonuses, commissions, and exercised stock options. Also added to labor compensation are indirect payments, such as employee-paid benefits for healthcare, Social Security funds, and private pensions. In this release, total compensation costs are presented in both current dollars and inflation-adjusted dollars.

Revisions tend to occur frequently with productivity data—and for obvious reasons. Many of the statistical sources that underlie this indicator, like GDP and hours worked, are themselves subject to periodic revisions. Thus, any change in those measures automatically leads to revisions in the productivity and cost data too.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

- **Table 2** Non-Farm Business Sector: Productivity, Hourly Compensation, Unit Labor Costs, and Prices

When it comes to monitoring productivity numbers, players in the financial markets prefer to track the non-farm business sector, which makes up 75% of the GDP and is the focus of this table.

- (1) The second column, formally labeled “Output per hour of all persons,” is the best overall indicator of the economy’s efficiency. It records the percentage change in labor productivity from one quarter to the next, as well as over the past year. Labor productivity is considered a leading indicator of inflation in the economy. Higher output per hour is essential if the economy is to grow rapidly without inciting inflation.

To figure out just how fast the economy can expand before inflationary pressures heat up, take the annual growth of labor productivity in this table and *add* that to the yearly increase in the labor force (or working-age population). If *output per hour* has averaged a 2.5% annual rate in the last several quarters and the labor force increases by 1% a year, the economy generally can grow as fast as 3.5% annually in the long run without arousing price pressures.

This table can also offer some insights into future employment trends. If economic growth exceeds productivity growth, it will encourage more hiring. By adding more workers, companies hope to increase output to satisfy the economy’s rising demand for goods and services.

- (2) About midway across the page is a column called “Compensation per hour,” and it provides some clues on emerging wage pressures. Because labor represents a significant portion of business costs, experts follow the compensation numbers

Table 2. Nonfarm business sector: Productivity, hourly compensation, unit labor costs, and prices, seasonally adjusted

1	Year and quarter	Output per hour of all persons	Output	Hours of all persons	Compensation per hour (1)	Real compensation per hour (2)	Unit labor costs	Unit non-labor payments (3)	Implicit price deflator (4)
Indexes 1992=100									
2001	I	116.9	140.7	120.3	136.7	111.3	117.0	113.5	115.7
	II	117.4	139.7	119.0	137.4	111.0	117.1	114.9	116.3
	III	118.3	139.4	117.8	138.2	111.4	116.8	116.8	116.8
	IV	120.7	140.4	116.3	138.9	112.1	115.1	119.0	116.5
	ANNUAL	118.3	140.1	118.4	137.8	111.4	116.5	116.1	116.3
2002	I	123.4	142.5	115.5	140.2	112.8	113.6	121.5	116.4
	II	123.7	142.9	115.5	141.5	112.9	114.4	121.2	116.8
	III	125.5	144.7	115.3	142.2	112.8	113.3	123.1	116.9
	IV	126.0	145.3	115.3	142.8	112.7	113.3	124.3	117.3
	ANNUAL	124.7	143.9	115.4	141.7	112.8	113.6	122.5	116.9
2003	I	126.7	145.8	115.1	r143.7	r112.4	r113.4	r125.2	117.7
	II	r128.9	r147.5	114.4	r145.0	r113.2	r112.5	r127.5	117.9
	III	131.4	150.6	114.6	146.1	113.4	111.2	131.0	118.4
Percent change from previous quarter at annual rate(5)									
2001	I	-0.4	-0.9	-0.5	4.3	0.5	4.7	0.8	3.3
	II	1.6	-2.7	-4.3	2.0	-1.2	0.3	5.0	2.0
	III	3.4	-0.8	-4.1	2.4	1.5	-0.9	6.6	1.7
	IV	8.3	2.9	-5.0	2.1	2.7	-5.7	7.7	-1.0
	ANNUAL	1.9	-0.1	-2.0	3.6	0.8	1.7	2.4	1.9
2002	I	9.3	6.2	-2.9	3.7	2.4	-5.2	8.7	-0.2
	II	1.0	0.9	0.0	3.9	0.3	2.9	-0.9	1.4
	III	5.9	5.2	-0.6	2.0	-0.2	-3.7	6.6	0.1
	IV	1.7	1.7	0.0	1.6	-0.4	-0.1	3.9	1.4
	ANNUAL	5.4	2.7	-2.5	2.8	1.2	-2.4	5.6	0.5
2003	I	2.1	1.4	-0.7	r2.6	r-1.2	r0.4	r2.8	1.4
	II	r7.0	r4.6	r-2.2	r3.6	r3.0	r-3.2	r7.4	r0.8
	III	8.1	8.8	0.7	3.1	0.8	-4.6	11.6	1.5
Percent change from corresponding quarter of previous year									
2001	I	2.0	1.4	-0.6	4.5	1.1	2.5	1.4	2.1
	II	1.1	-0.6	-1.6	4.6	1.1	3.5	-0.3	2.1
	III	1.7	-0.8	-2.5	3.0	0.3	1.3	3.7	2.2
	IV	3.2	-0.4	-3.5	2.7	0.9	-0.5	5.0	1.5
	ANNUAL	1.9	-0.1	-2.0	3.6	0.8	1.7	2.4	1.9
2002	I	5.6	1.3	-4.0	2.5	1.3	-2.9	7.0	0.6
	II	5.4	2.3	-3.0	3.0	1.7	-2.3	5.4	0.5
	III	6.1	3.8	-2.1	2.9	1.3	-3.0	5.4	0.1
	IV	4.4	3.5	-0.9	2.8	0.5	-1.6	4.5	0.7
	ANNUAL	5.4	2.7	-2.5	2.8	1.2	-2.4	5.6	0.5
2003	I	2.6	2.3	-0.3	r2.5	r-0.4	r-0.1	r3.1	1.1
	II	4.1	3.2	-0.9	r2.4	r0.3	r-1.6	r5.2	0.9
	III	4.7	4.1	-0.6	2.7	0.5	-1.9	6.4	1.3

closely, especially as they relate to productivity growth. The link between *compensation per hour* and *output per hour* shows up vividly in the nearby column titled “Unit labor costs,” which is an excellent indicator of how painful labor costs are to business. As long as *output per hour* rises faster than *compensation per hour*, it will drive down the all-important *unit labor costs*. Should *unit labor costs* start to rise, which can happen when compensation expenses climb faster than productivity, it can unleash the destructive forces of inflation.

One interesting point here is that once productivity growth takes hold, it is likely to foster even more capital investment spending. The reason is that in a highly competitive global marketplace, the pressure is on for manufacturers, wholesalers, and retailers to keep their sales prices as low as necessary to hold on to customers. In this environment, companies will not be able to improve profits simply by raising the price of their products. Otherwise, consumers here and abroad will react by quickly shopping elsewhere. Since it becomes increasingly difficult to rely on pricing as a way to fatten profits, the other option is to further reduce operating costs, and that can be accomplished by achieving even higher levels of productivity.

MARKET IMPACT

Bonds

Fixed-income traders rarely get excited at quarterly releases, even for one as important as productivity. That's because some of the components, such as output and hours worked, have already been published in separate reports. Still, reaction in the bond market to the productivity report might vary, depending on how inflation and labor costs have been behaving in the background. The primary point here is that higher productivity levels keep inflation in check. However, a fall in productivity during times of rising wages will upset the bond market and lead to a sell-off, with prices falling and yields rising.

Stocks

The equity market in this instance will react much like bonds. Higher productivity growth translates into lower unit labor costs and bigger corporate profits—events that can propel stocks to higher prices. Flat or declining productivity is viewed as bearish for equity prices.

Dollar

The dollar will also be on better footing if there are firm gains in U.S. productivity. By operating efficiently, companies in this country will be in a better position to compete with foreigners, an important prerequisite to lowering the monthly trade and current account deficits.

EMPLOYER COSTS FOR EMPLOYEE COMPENSATION

Market Sensitivity: Low.

What Is It: Measures dollar cost per hour of having an employee on payroll.

Most Current News Release on the Internet:

www.bls.gov/news.release/ecec.toc.htm

Home Web Address: *www.bls.gov*

Release Time: 10:00 a.m. (ET); released nearly three months after the end of the reported quarter.

Frequency: Quarterly.

Source: Bureau of Labor Statistics, Department of Labor.

Revisions: No revisions.

WHY IS IT IMPORTANT?

For years, economists have been clamoring for more information on labor costs. Employee compensation plays a pivotal role in determining future inflation and economic growth. A rise in wages can boost household confidence, fuel consumer spending, and keep the economy running smoothly. For business, however, a rise in the cost of labor can have adverse consequences on competitiveness and profits. If employee expenses, which account for about three-fourths of all business costs, climb too quickly, they can eventually ignite inflation. Given the enormous importance of compensation costs in the economy, it is easy to see why so much attention is focused on this subject. The Employment Cost Index does track changes for such expenses, but the results are put out in the form of an index. More helpful to some analysts would be labor cost data presented in actual dollar terms.

Now there is a quarterly series that does precisely that. This release, which comes with the unfortunate appellation of Employer Costs for Employee Compensation (ECEC), looks at the average cost per hour in dollars of having an employee on payroll. It was originally put out just once a year, but the annual data quickly became outdated for those who tried to project future economic trends. As a result, starting in the fall of 2002, the Bureau of Labor Statistics began to publish it every quarter. Economists applauded the change, but the financial markets and the press have so far given this series surprisingly little notice even though it is easier to relate to. It's expected that the ECEC will shortly be recognized as an effective and reliable gauge of actual labor costs and possibly even become a leading indicator of consumer spending and inflation.

HOW IS IT COMPUTED?

The ECEC is based on a population survey involving both the private and public sector (local and state only; the federal payroll is excluded). Every quarter, the Bureau of Labor

Statistics makes inquiries into labor costs at about 10,000 establishments in private industry involving 50,000 occupational observations. It also includes 1,400 establishments in state and local governments, public schools, and public hospitals covering 3,500 occupational groupings. The surveys are conducted for the pay period that includes the 12th day of the month in March, June, September, and December.

The same sampling is used to compute both the Employment Cost Index and the Employer Costs for Employee Compensation. After the raw data arrives, there is a slight difference in how these two labor cost measures are calculated, and this can cause them to diverge on an annual basis. The Employment Cost Index uses a fixed weight for different occupational groups that's updated about every ten years, the last being in 2002. On the other hand, the ECEC reformulates its weights every quarter based on changes in the number of people at work for the jobs listed in the sampling data.

Wages and Salary

The data is collected on a straight-time hourly pay basis. For employees not paid on an hourly basis, a computation is made based on salary, which is then divided by the corresponding hours worked. Also included are production bonuses, incentive earnings, commission payments, and cost-of-living adjustments. Excluded from this calculation is premium pay for overtime and for work performed on weekends and holidays.

Benefits

Benefits covered by the ECEC are paid vacations, sick leave, holidays, premium pay for overtime, shift differentials, insurance benefits, retirement and savings benefits, Social Security, Medicare, and federal- and state-mandated social insurance programs.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

Labor cost measures, such as Average Hourly Earnings and the Employment Cost Index, have demonstrated some qualities as leading indicators of consumer spending and economic growth. The new quarterly ECEC series is expected have to similar predictive values. Precisely how well it correlates with these key variables in the economy has yet to be determined.

- **Table 1** Employer Costs Per Hour Worked for Employee Compensation and Costs as a Percent of Total Compensation

Want to know how much it costs on average for companies to have employees? You'll find all the key compensation figures in this table, along with their percentage of total labor expenses. For example, in September 2006, average total compensation (pay and benefits) for civilian workers came to \$27.31 per hour. The table then breaks down that amount to show its two components: wages and salary at \$19.12 per hour, and benefits expenses at \$8.18 per hour. The latter is

Table 1. Employer costs per hour worked for employee compensation and costs as a percent of total compensation: Civilian workers, by major occupational and industry group, September 2006

Compensation component	Occupational group							
	All workers ¹		Management, professional, and related		Sales and office		Service	
	Cost	Percent	Cost	Percent	Cost	Percent	Cost	Percent
Total compensation	\$27.31	100.0	\$45.77	100.0	\$20.73	100.0	\$14.97	100.0
Wages and salaries	19.12	70.0	32.46	70.9	14.78	71.3	10.63	71.0
Total benefits	8.18	30.0	13.31	29.1	5.95	28.7	4.34	29.0
Paid leave	1.91	7.0	3.67	8.0	1.40	6.8	0.87	5.8
Vacation	0.89	3.3	1.66	3.6	0.67	3.2	0.41	2.7
Holiday	0.63	2.3	1.18	2.6	0.47	2.3	0.27	1.8
Sick	0.29	1.1	0.62	1.3	0.20	1.0	0.14	0.9
Other	0.10	0.4	0.21	0.5	0.06	0.3	0.05	0.3
Supplemental pay	0.69	2.5	1.12	2.4	0.45	2.2	0.27	1.8
Overtime and premium ⁴	0.25	0.9	0.16	0.3	0.13	0.6	0.15	1.0
Shift differentials	0.06	0.2	0.09	0.2	0.02	0.1	0.05	0.4
Nonproduction bonuses	0.37	1.4	0.87	1.9	0.29	1.4	0.06	0.4
Insurance	2.22	8.1	3.30	7.2	1.80	8.7	1.23	8.2
Life	0.05	0.2	0.08	0.2	0.03	0.2	0.02	0.1
Health	2.09	7.6	3.07	6.7	1.70	8.2	1.18	7.9
Short-term disability	0.05	0.2	0.07	0.2	0.03	0.2	0.02	0.1
Long-term disability	0.04	0.1	0.08	0.2	0.03	0.1	(⁵)	(⁶)
Retirement and savings	1.18	4.3	2.19	4.8	0.65	3.2	0.57	3.8
Defined benefit	0.74	2.7	1.33	2.9	0.31	1.5	0.46	3.1
Defined contribution	0.44	1.6	0.87	1.9	0.35	1.7	0.11	0.7
Legally required benefits	2.19	8.0	3.03	6.6	1.64	7.9	1.40	9.3
Social Security and Medicare	1.54	5.6	2.48	5.4	1.23	5.9	0.87	5.8
Social Security ⁷	1.22	4.5	1.95	4.3	0.99	4.8	0.70	4.6
Medicare	0.31	1.1	0.53	1.2	0.24	1.2	0.17	1.2
Federal unemployment insurance	0.03	0.1	0.02	(⁶)	0.03	0.2	0.03	0.2
State unemployment insurance	0.15	0.5	0.14	0.3	0.14	0.7	0.12	0.8
Workers' compensation	0.48	1.8	0.39	0.8	0.25	1.2	0.37	2.5

further segmented, listing the hourly cost to companies for providing paid leave, health and life insurance, retirement savings, and legally required benefits.

This first table is quite broad in that it encompasses all civilian workers in both private industry and state and local governments. Subsequent tables in this 24-page report, though not included in this book, list the costs for different segments of the active workforce. For example, Table 2 in the release shows labor costs in dollars for different occupational and industry groups.

Table 5 compares the compensation costs for union versus non-union employees.

Table 6 records labor expenses in the goods- versus service-producing sectors.

Table 7 quantifies how compensation expenses differ across regions of the country.

Table 8 notes labor costs at firms of various sizes. That is, it computes the average hourly expense for labor at companies with up to 99 employees, up to 500 employees, and more than 500 employees.

One question that arises here is which measure—the ECI or the ECEC—you should use to get a better sense of labor cost changes across American industry. The answer depends on what you’re looking for. The ECEC gives you the average compensation in dollar terms during a certain period, while the ECI measures the change in the cost of compensation from one period to the next. One problem with the ECEC release is that it does not contain any historical tables. To see changes in the dollar-based ECEC over several quarters and years, follow these steps:

1. Go to the Bureau of Labor Statistics Web site at *www.bls.gov/ncs/ect/home.htm*.
2. Scroll down until you see Databases. You will see a category for Employer Cost for Employee Compensation. Click Top Picks and choose one or more labor cost categories. These BLS Web sites actually contain a wealth of information on the labor market and are fairly easy to explore even for the layman.

MARKET IMPACT

Again, this quarterly indicator hasn’t received much notice from the investment community. That recognition will come after it develops a track record as a useful indicator that can anticipate future labor costs, corporate profit margins, and consumer spending.

REAL EARNINGS

Market Sensitivity: Low to medium.

What Is It: Measures the change in worker earnings after adjusting for inflation.

Most Current News Release on the Internet:

www.bls.gov/news.release/realer.toc.htm

Home Web Address: *www.bls.gov*

Release Time: 8:30 a.m. (ET); published in the middle of the month the same day the CPI is released and refers to earnings in the previous month.

Frequency: Monthly.

Source: Bureau of Labor Statistics, Department of Labor.

Revisions: Changes are made monthly and are the result of revisions in the previous month's employment report or the CPI.

WHY IS IT IMPORTANT?

Just how much do American workers earn these days after adjusting for inflation? This is a critical issue since people work hard for their money and rising prices can rob them of their purchasing power. If incomes fail to grow at or above the rate of inflation, Americans have less to spend on food, clothing, vacations, and gasoline. The result is lower living standards and discontented consumers. Labor unrest might follow as workers demand more pay to offset the corrosive effects of higher prices. On the other hand, if workers achieve true gains in real incomes, where earnings exceed the pace of inflation, more can be purchased with each paycheck, and that can promote further economic growth. Thus, tracking real earnings can be helpful in forecasting future trends in consumer spending.

Yet the stock and bond markets do not react at all to this report. The reason is that the real-earnings report simply combines two different sets of dated statistics. It's based on earnings from the previous employment release and then gets adjusted for inflation using the Consumer Price Index (CPI), which happens to be published at the same time as Real Earnings.

Another reason this indicator fails to command much attention is that earnings from work represent just one source of household income. It does not include profit sharing or increases in household wealth due to capital gains from financial assets (like stocks and bonds) and real estate, all of which play a role in the psychology of spending.

HOW IS IT COMPUTED?

Data on average weekly earnings is collected from the monthly jobs release (see the section "Employment Situation")—specifically, the payroll reports of private non-farm

establishments. To get the real average weekly earnings for employees in the private sector, economists take the current dollar earnings for the week and adjust them for changes in the Consumer Price Index for all urban consumers (CPI-U). The outcome is real average weekly earnings based on 1982–1984 dollars.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

- **Table A-1** Current and Real Earnings for All Employees on Private Nonfarm Payrolls, Seasonally Adjusted

Table A-1. Current and real (constant 1982–1984 dollars) earnings for all employees on private nonfarm payrolls, seasonally adjusted

	Feb. 2011	Dec. 2011	Jan. 2012 ^P	Feb. 2012 ^P
Real average hourly earnings ¹	\$ 10.31	\$ 10.24	\$ 10.23	\$ 10.20
Real average weekly earnings ¹	\$353.49	\$353.31	\$353.03	\$352.05
Consumer Price Index for All Urban Consumers.....	222.008	227.033	227.505	228.433
Average hourly earnings.....	\$ 22.88	\$ 23.25	\$ 23.28	\$ 23.31
Average weekly hours.....	34.3	34.5	34.5	34.5
Average weekly earnings.....	\$784.78	\$802.13	\$803.16	\$804.20
OVER-THE-MONTH PERCENT CHANGE				
Real average hourly earnings ¹	-0.3	0.1	-0.1	-0.3
Real average weekly earnings ¹	-0.4	0.4	-0.1	-0.3
Consumer Price Index for All Urban Consumers.....	0.4	0.0	0.2	0.4
Average hourly earnings.....	0.1	0.1	0.1	0.1
Average weekly hours.....	0.0	0.3	0.0	0.0
Average weekly earnings.....	0.1	0.4	0.1	0.1
OVER-THE-YEAR PERCENT CHANGE				
Real average hourly earnings ¹	-0.2	-1.0	-1.1	-1.1
Real average weekly earnings ¹	0.9	-0.3	-0.5	-0.4
Consumer Price Index for All Urban Consumers.....	2.1	3.0	2.9	2.9
Average hourly earnings.....	1.9	2.1	1.8	1.9
Average weekly hours.....	1.2	0.6	0.6	0.6
Average weekly earnings.....	3.1	2.7	2.4	2.5

This table answers a fundamental question: Are American workers making a decent wage? That is, are earnings rising above the cost of living? If so, consumers are enjoying a rise in purchasing power, which promotes more spending and supports economic growth. But if pay increases fail to keep pace with inflation on a consistent basis, consumers will not be able to maintain their standard of living for long—unless they use up more of their savings or borrow funds to help maintain their consumption. The latter clearly poses long-term risks for the economy. A buildup in household debt and diminishing personal savings will eventually damage consumer balance sheets and force many to scale back spending. Given that household expenditures make up 70% of economic activity, it doesn't take a rocket scientist to see that a persistent erosion in consumer purchasing power can be harmful to an economy.

The chart provides a snapshot of worker pay and how it has grown relative to the cost of living. For example, it tells us in real dollar terms what the latest average

hourly and weekly earnings are for employees in the private sector, and how that has changed from the previous month and year-ago level. The example cited shows that pay levels for both have been losing ground to inflation over both time frames.

See for yourself: In February 2011, average hourly earnings adjusted for inflation stood at \$10.31. A year later, purchasing power dropped to \$10.20—even though *nominal wages on an hourly basis actually rose* during that time from \$22.88 an hour to \$23.31 an hour. A similar disturbing trend can be seen with average real weekly pay. It fell from \$353.49 in February 2011 to \$352.05 a year later. What's troubling is that this occurred despite the fact that *both the number of hours worked and nominal wages rose over the year*. The reason for the erosion in real pay is clear. Although workers received a 1.9% increase in nominal hourly pay and a 2.5% increase in weekly earnings, the cost of living during the year jumped by an even larger 2.9%.

Now, let's turn this analysis on its head. Could it be dangerous for an economy if consumer purchasing power rose year after year? After all, companies that continuously hand out generous raises to workers can erode profits, anger shareholders, and force these firms to raise the prices of their products. That would further heat up inflation pressures and hurt consumers.

So can we have both rising corporate profits and an increase in household purchasing power? The answer is an unequivocal yes! The secret is to improve business productivity (typically by relying more on fuel-efficient technology and better employee training) so that firms are able to produce and sell more while keeping operating costs contained. That generates faster profit growth, which companies can then share with their employees and shareholders.

The chart thus helps investors and economists forecast consumer expenditures, personal bankruptcies, and corporate earnings, and might even serve as an indicator of future labor turmoil, especially if there is a sustained decline in real earnings.

MARKET IMPACT

Bonds

The real-earnings report does not have any effect on the fixed-income market because it is overshadowed by the market-moving CPI, which is released simultaneously.

Stocks

The equity market does not react to this report.

Dollar

The U.S. currency is not sensitive to real earnings.

YIELD CURVE

Market Sensitivity: Medium.

What Is It: The range of yields on Treasury securities from short- to long-term maturities.

Web Addresses: www.stockcharts.com/charts/YieldCurve.html and
www.bloomberg.com/markets/rates/index.html

Frequency: Always available.

Source: Treasury markets.

WHY IS IT IMPORTANT?

When it comes to predicting the future course of the economy, only one indicator stands above all others in terms of accuracy: the yield curve. No other measurement has demonstrated as much success in warning of upcoming turning points in business activity. The yield curve is a collection of yields plotted on a graph that covers the entire spectrum of maturities on U.S. Treasury securities. What distinguishes the yield curve from all other economic indicators is that historically, at least, it's not something produced by a government agency or private group. Instead, it is shaped by the financial markets and is supposed to reflect the collective wisdom of investors at any moment in time on the likely direction of the economy and inflation.

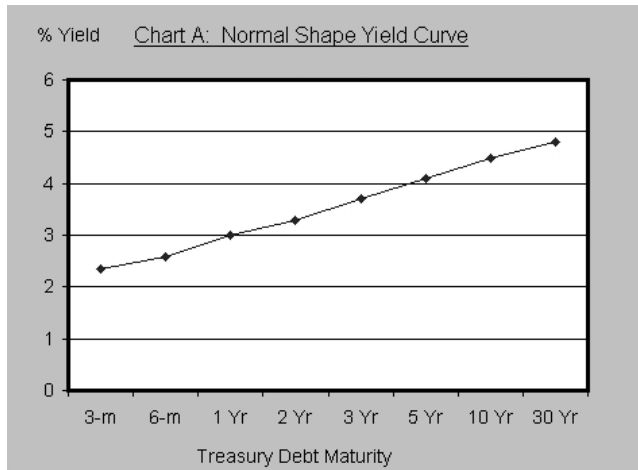
However, since 2008 the rules of the game have changed, hopefully temporarily. The Federal Reserve has chosen to intervene in the fixed-income market on a scale never seen before, and this has temporarily undermined the yield curve as a forecasting tool. Traditionally, the central bank relies on controlling short-term rates as a way to keep the economy and employment growing, while holding inflation in check. Longer-term rates were always left to the private capital markets to shape. Then came the severe recession of 2008–09. At first, the Fed drove short-term rates to near zero in December 2008. But when even that failed to revive business activity, the Fed undertook an extraordinary set of actions that included buying trillions of dollars in longer-term securities for its own balance sheet (known as quantitative easing) in an effort to bring longer-term rates down as well. They hoped that by dramatically lowering the cost of borrowing across the entire maturity spectrum, it would encourage more business and consumer spending, lift economic growth, and bring unemployment down more quickly.

That experiment is still underway. But forecasters who relied on the yield curve in the past to predict economic trends now question its usefulness. That's because it will likely take several years for the Fed to sell those securities back into the private sector before these rates normalize again.

Still, the yield curve cannot be ignored because it does influence the cost of funds for individuals, companies, and even the government. In time, as the Fed reduces its holdings

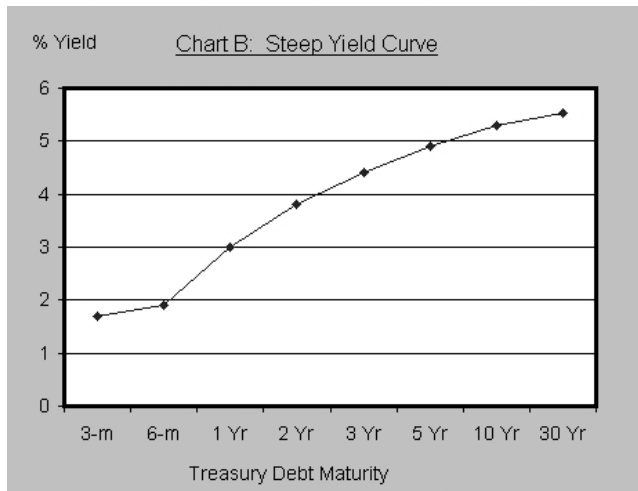
of Treasury and other long-term securities, the yield curve should regain its reputation as a key tool to forecast turning points in the business cycle.

What precisely do we even mean by “yield curve”? All yield-curve graphs have the same characteristics. They begin on the left with the shortest maturities, which in most cases are 3-month Treasuries, and then progress to 6-month, 1-year, 2-, 5-, 10-, all the way up to 30-year bonds at the far-right side of the curve. What makes the yield curve such a powerful forecasting tool is its shape after you plot the yields on a graph. The curve can slope up gradually or steeply, appear totally flat, or be completely inverted. In a normal yield curve, the yield starts off low on short maturities and then gradually rises as the duration of the security lengthens (see Chart A). Why is this considered normal? Because in a typical economic expansion, investors demand a higher rate of return on longer-maturing Treasury debt. After all, if they decide to purchase a 10- or 30-year bond, investors want extra compensation in the form of a higher yield for all the unknown risks they face over the coming years. These risks can include inflation swings, political turmoil, and war. In contrast, those investors buying short-term Treasuries have far less risk to worry about and thus are willing to accept a lower yield. It’s much easier to foresee what will happen in the next few months than to predict conditions two or three decades ahead.



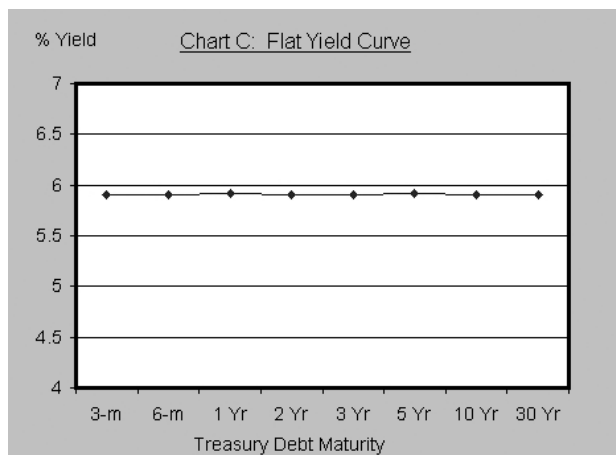
If a normal yield curve consists of a very gradual increase in interest rates over time, a steep yield curve is an extreme version of that, with yields climbing to higher levels much more rapidly than on a normal curve (see Chart B).

This can occur when the economy is starting to pick up speed, causing fresh anxieties that inflation can become more problematic in the near future. Such worries might provoke investors into selling longer-term Treasury securities, especially if they believe that the Federal Reserve is moving too slowly to contain emerging price

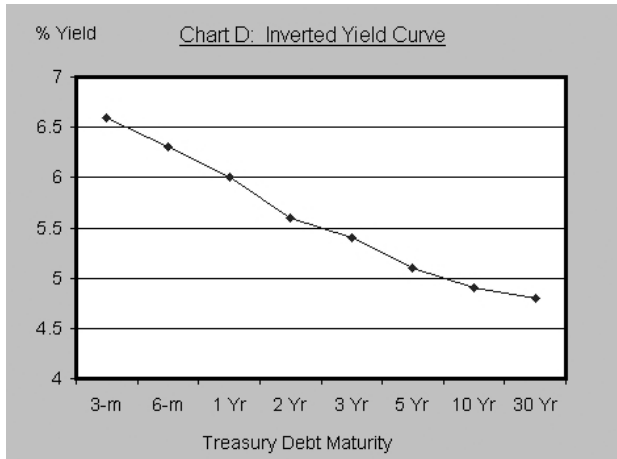


pressures. This will depress bond prices and drive longer-term yields higher. (On the other hand, if the Fed is perceived to be acting quickly to preempt an outbreak of inflation, investors could actually rush in to buy long-term Treasuries to lock in high yields while bond prices are still relatively cheap. In that case, a steep yield curve will not materialize. You can see how timely Federal Reserve intervention, or lack thereof, can greatly influence yields across the entire range of bond maturities.)

A flat yield curve exists when both short- and long-term securities provide nearly identical yields. It's the first major shot across the bow, to warn that the economy is in trouble and in danger of slipping into recession (see Chart C), a scenario that markedly lessens the risk of inflation. Traders often buy bonds in such circumstances to capture higher longer-term yields. The result is that bond prices appreciate and yields move down closer to short-term rates.



An inverted yield curve, in which short-term rates are materially higher than long-term rates, is the siren call that a recession is in the offing (see Chart D). It reflects the view that the Fed is keeping short-term rates too high (with money getting scarce) and that an economic downturn is a virtual certainty.



HOW IS IT COMPUTED?

Plotting a yield curve is easy enough. Several major newspapers (*New York Times*, *Wall Street Journal*, and the *Financial Times*), as well as numerous financial sites on the Internet (see the Web locations listed at the beginning of this section), have a table listing the latest yields on Treasury debt. You don't have to graph them to determine whether the slope of the curve is normal, flat, or inverted. Simply jot down the published yields for the following Treasury securities:

- 3-month bill
- 6-month bill
- 1-year bill
- 2-year note
- 3-year note
- 5-year note
- 10-year note/bond
- 30-year bond

A normal yield curve has a spread, which is the difference in yield between the 30-year bond and the short 3-month bill, of about 2.5 percentage points. Anything much

greater than that would be considered a steep yield curve. A flat curve is one in which treasuries across most maturities all huddle close to the same rate, and an inverted curve is whenever the 3-month bill rate is higher than that of the 10- or 30-year bond. A key point to appreciate is that while the Federal Reserve sets yields at the shortest end of the curve by governing the overnight federal funds rate, it's the market that typically determines all other yields.

THE TABLES: CLUES ON WHAT'S AHEAD FOR THE ECONOMY

As stated earlier, economists and investors have been grappling with how to interpret the yield curve nowadays given the Fed's involvement in the long-term market. But most believe that after the Fed unloads the recently purchased securities on its balance sheets, the yield curve will regain its use as an exceptional forecasting tool.

So what can you learn from the yield curve once the Fed is out of the picture? After plotting the yields, determine the curve's shape. If the yield curve is flat or inverted, chances are that the economy is, or will soon become, sluggish. Indeed, when the curve is inverted, the odds greatly increase that a recession is unavoidable. Just how certain can we be that a recession will occur? Let history be a guide. The yield curve inverted before each of the seven recessions from 1969 to 2007. No other indicator has shown such consistency, not even the stock market. When a recession is under way, short-term rates often plunge as the demand for money and credit dries up and the Federal Reserve pumps more funds into the economy to make borrowing even cheaper. Should the economy respond and start to turn up, the combination of very low yields on short-term Treasuries and a rebound in yields on 10- and 30-year bonds can produce a steep yield curve. It is symptomatic of an economy moving from recession to growth again. After healthy growth resumes, the Fed lifts short-term rates a little, and the yield curve returns to its more normal spread of about 2.5 percentage points.

Clearly, the yield curve has had an enviable track record of predicting turning points in the economy. But there are many other factors that can affect the shape of the yield curve too. Countries such as China, Japan, OPEC, and South Korea, which depend on exports for much of their economic growth, will take the surplus dollars they earn from their sales to the U.S. and buy Treasuries too. Such purchases enable these countries to better manage the value of their own currencies in foreign exchange markets. These countries do not want to have an overly strong currency because that can harm their exports. To keep their currency from significantly appreciating, they will buy more U.S. government securities since that lifts the dollar's value.

Does this mean the yield curve has permanently lost its relevance? Absolutely not. Much depends on the *magnitude* of the inverted yield curve and its duration—not simply because it happens to be nominally inverted. One report by the Federal Reserve Bank of St. Louis calculated the probabilities of a recession based on the yield curve as follows: If the curve is normal so that the 10-year Treasury bond yield is more than 1.2 percentage points above the three-month bill, the chance of recession is less than 5%. When the yield

curve flattens and the two have essentially the same yield, the probability of recession rises to 25%. If the curve ends up inverted such that the yield on 3-month bills stands 2.4 percentage points *above* the 10-year bond, the odds leap to 90% that an economic downturn will materialize within the next 18 months.

MARKET IMPACT

Bonds

Expectations of future growth and inflation by fixed-income traders determine which Treasury debt maturities are the most attractive to buy. Such preferences help shape the yield curve. However, since the outlook for economic activity and price behavior can change, the yield curve is constantly in a state of motion.

Stocks

The equity market has not taken the yield curve seriously in the past, despite its proven forecasting record. This is surprising because stock prices are based on expectations of future corporate earnings and overall business activity, both of which can be foreseen by the behavior of the yield curve. Indeed, studies have shown that the yield curve can serve as an effective market-timing strategy, yet it remains underappreciated among portfolio managers.

Dollar

Foreign-investor reaction to a flat or inverted yield curve is difficult to predict. Much depends on the magnitude of the inverted yield curve, which is how much higher short-term rates are above long-term rates, and how U.S. short-term rates stack up against those of other countries. It is possible that active foreign traders might choose to avoid investing in the U.S. because a flat or inverted yield curve is a harbinger of anemic growth, if not recession. That will cause the dollar to depreciate in foreign exchange markets. However, if the yield curve is so inverted that U.S. short-term rates are markedly higher than those of other nations, it can attract an influx of “hot money” from overseas as foreign investors seek to take advantage of the greater returns they can receive here. What do we mean by “hot money”? It’s fast-moving money from investors around the world who are constantly on the hunt for the highest possible short-term gains. The instant an investment loses its appeal (for example, when U.S. yields fall relative to their foreign counterparts), that hot money quickly leaves the borders of one country for another lucrative region of the world. Thus, the dollar might bounce up in value when there is an inverted yield curve, but its strength would be very tenuous.

A steep yield curves suggests stronger economic growth and rising short-term rates in the months ahead. This will likely attract foreign investors to purchase and hold dollar-based financial assets.

OTHER NOTEWORTHY U.S. ECONOMIC INDICATORS

CREDIT MANAGER'S INDEX

What Is It: A report that evaluates credit conditions in the business sector.

Most Current News Release on the Internet: <http://web.nacm.org/cmi/cmi.asp>

Release Time: 9:00 a.m. (ET); released the last business day of the month and covers conditions in that month.

Frequency: Monthly.

Source: National Association of Credit Management (NACM).

It is often said that credit is the lifeblood of an economy. Consumers certainly use it extensively when they go shopping. But it's also true that companies rely on credit when they purchase equipment, supplies, and inventories. Sellers of these goods are willing to extend credit to their business customers so that they will come back and buy more. When the economy is growing, these customers typically increase purchases, often on credit, and they tend to make timely payments. But when business conditions start to sour, firms that financed their purchases might find it more difficult to come up with the funds to make their scheduled payments. This begins to raise some red flags on the health of the economy and should be a concern to investors and business leaders. One way to keep an eye on such trends is to follow the Credit Manager's Index.

Every month the National Association of Credit Management, a trade group of credit managers and collection professionals, surveys members to see whether credit conditions are improving or deteriorating. The index focuses on credit conditions at the business-to-business level and is based on answers to some key questions: Have credit managers observed that their corporate customers are having a tougher time meeting their financial obligations? Have disputes with creditors increased? Are more companies seeking bankruptcy protection from creditors? Are applications for credit increasing or decreasing?

A material change in business credit conditions can be a fairly good leading indicator of economic turning points, and for that reason this metric has attracted more interest among professional forecasters and investors.

SMALL BUSINESS ECONOMIC TRENDS

What Is It: An important report that tells us how confident small companies are about the economy, and how that will affect their own future business plans.

Most Current News Release on the Internet: www.nfib.com/research-foundation/surveys/small-business-economic-trends

Release Time: 7:30 a.m. (ET); released the second Tuesday of each month and contains observations made during the previous month.

Frequency: Monthly.

Source: National Federation of Independent Business (NFIB).

Anyone who ignores this survey does so at great peril. Small businesses are the most dynamic part of the U.S. economy—so much so that they create two out of every three new jobs. Small businesses are also the first to ramp up production and hire workers as an economy emerges from recession, and the first to shut down factories and dismiss workers when business activity weakens. This tendency to react quickly and adroitly to the changing economic climate is why it's important to know what the small-business community thinks about the economic outlook. These expectations can greatly influence trends in employment and capital spending.

Fortunately, the National Federation of Independent Business (NFIB) releases a monthly survey that takes the pulse of this business group. Among the most closely watched measures in this report is a table called the Small Business Optimism Index. It summarizes what executives think about future business conditions and why. What follows next, however, is just as crucial. Based on their answers to key questions, we get to see what actions these firms say they are inclined to take in the coming months: Is it a good time to expand? What plans do they have about pricing? Are they going to accelerate hiring? Will they buy more inventories in the coming months? Are they going to increase capital expenditures? The survey even asks small-business owners to identify the single biggest problem they face. The NFIB, which has more than 350,000 members, began its survey as a quarterly report back in 1973. But as interest grew in getting more timely data from this important sector, it began to conduct a monthly poll, starting in 1986.

CASS FREIGHT INDEX

What Is It: A report that assesses the monthly volume and transportation costs of freight moving across North America.

Most Current News Release on the Internet: www.cassinfo.com/frtindex.html

Release Time: No specific time of day; released in the first week of every month and covers shipping activity during the preceding month.

Frequency: Monthly.

Source: Cass Information Systems, Inc.

At the very core of a functioning modern economy is the efficiency of its supply-chain network. When we say “supply chain,” we are talking in large part about a nationwide transportation system (trucks, planes, and railroad cars) that carries critical commodities and finished goods to a variety of destinations that include ports, factories, wholesalers, and retailers across North America. Monitoring the ebb and flows of traffic in the supply-chain network can tell us a great deal about how the economy is performing. Two major indicators that do this very well are the monthly Cass Freight Index and the Weekly Railroad Traffic report, which is covered in the next section.

The Cass Freight Index actually consists of two measures. The first reflects the volume of products that are shipped in a particular month. As you can imagine, when an economy gathers more steam, factories increase orders for basic materials so that they can speed up production. Retailers will ask suppliers to deliver more inventories to satisfy rising consumer demand. Manufacturers are also shipping greater volumes of goods to key U.S. ports for loading on merchant ships destined to fast-growing emerging countries. A strong U.S. and international economy will have the entire supply-chain network busy transporting items to where they are needed. On the other hand, a weakening global economy will do the reverse, with the volume of shipments diminishing.

The second measure tracked by Cass Freight Index reflects changes in the cost of shipping. Obviously, numerous factors can influence expenditures—the cost of fuel, shortages of shipping capacity, and the competition for qualified drivers, which can drive up wages. All these factors can have an inflationary impact on the U.S. economy, especially at the producer price level. The report itself is put together by Cass Information Systems, which processes more than \$20 billion in freight transactions annually on behalf of 350 large shippers. Both the freight volume and the expenditure data are derived directly from these operations.

WEEKLY RAILROAD TRAFFIC (FREIGHT)

What Is It: A timely report on the volume and types of commodities carried by rail freight cars across the country.

Most Current News Release on the Internet:

www.aar.org/NewsAndEvents/Freight-Rail-Traffic.aspx

Release Time: Between 11 a.m. and 1 p.m. (ET); released every Thursday and covers freight rail traffic in the preceding week.

Frequency: Weekly.

Source: Association of American Railroads.

Very few economic reports possess the qualities of being both exceptionally timely and sensitive to shifts in the business cycle. One that does have such attributes is the weekly report on freight traffic in North America by the Association of American Railroads (AAR). This release, formally called Weekly Railroad Traffic, contains separate tables on freight rail traffic in the U.S., Canada, and Mexico and is based on reporting by 13 major railroads. The data is presented in a well-organized format. First, it looks at traffic in terms of carloads, which can be in boxcars, hoppers, or tank cars, and they often carry raw or intermediate-level commodities. These goods generally make their way to factories. The AAR tracks some 20 different commodities that these carloads transport, including lumber, petroleum products, coal, chemicals, and metals. An economy on the rebound will increase demand for these items, and that shows up in the number of freight cars carrying such commodities during the preceding week.

The report also monitors rail traffic of intermodal units. Intermodals are structures physically placed on rail cars that can be carried on different modes of transportation. For instance, a flatbed rail car can carry a trailer (with wheels) that eventually gets hooked to a truck at a final destination. Another intermodal unit is an enclosed container (which has no wheels) that is lifted off a rail car and moved onto either a cargo ship or a flatbed truck. Intermodal units generally contain finished goods and get delivered to warehouses or retail stores. Both carloads and intermodal units move in tandem with the business cycle. However, some commodities carried on carloads—such as lumber or chemicals—can serve as leading indicators of economic activity, which is why the Weekly Railroad Traffic reports can be useful in understanding where the economy stands in the business cycle.

ARCHITECTURE BILLINGS INDEX

What Is It: The index measures demand for architectural services and can foreshadow commercial construction activity.

Most Current News Release on the Internet:

www.aia.org/practicing/economics/

Release Time: 8:30–9:00 a.m. (ET); released the third or fourth Wednesday of each month and covers activity in the preceding month.

Frequency: Monthly.

Source: American Institute of Architects.

One of the largest sectors in the U.S. economy is commercial construction. This \$800 billion industry accounts for about 5% of GDP and employs millions of workers. It is also an excellent barometer of overall confidence in the U.S. economy. Indeed, when the economy is on a sustained growth path, spending on commercial construction typically accelerates faster than most other sectors. But then when doubts arise about the economic outlook, few sectors fall faster. Given the planning and capital costs involved in nonresidential construction, confidence in the economic outlook is an essential prerequisite for these projects to proceed. To help fellow architects better assess the climate for commercial construction activity, the American Institute of Architects (AIA) in 1995 began to poll a number of architecture firms for the latest trends in billing for services. Today, some 300 architecture companies participate in a monthly survey to report whether billings have increased, decreased, or remained the same in the preceding month. The AIA then computes a diffusion index in which a score of more than 50 indicates that most firms are seeing an increase in activity, whereas a score below 50 means that respondents have seen a decline in business.

One reason the Architecture Billings Index has grown in popularity among forecasters is that an increase in billings can foreshadow a pickup in construction activity within the next 9 to 12 months. A construction boom will not only benefit architects but also increase the demand for construction material, equipment, and labor, all of which help fuel more economic activity.

S&P/CASE-SHILLER U.S. NATIONAL HOME PRICE INDEX

What Is It: Many people believe this series is the most reliable in calculating changes in the price of single-family homes.

Most Current News Release on the Internet:

www.homeprice.standardandpoors.com

Release Time: 9:00 a.m. (ET); released the last Tuesday of each month and contains home price changes of two months earlier.

Frequency: Monthly.

Source: Standard & Poor's, Fiserv, and MacroMarkets LLC.

Although there are a dozen or so indicators that track changes in home prices around the country, many analysts point to the S&P/Case-Shiller series as perhaps the most accurate of the bunch. Two economics professors and a private money manager—Robert Shiller of Yale, Karl Case at Wellesley, and Allen Weiss—collaborated in the 1980s and 1990s to come up with a more precise calculation of how much home prices change over time. Shiller, in particular, has earned a well-deserved reputation for being far ahead of the curve in spotting dangerous excesses in the valuation of assets, particularly in real estate and stock prices. The S&P/Case-Shiller Home Price Index represents a continuation of the excellent research he and his colleagues have done. What makes this series stand out is that it tracks only homes that sold at least twice during a covered period. By following price changes for the same single-family home over time, one can get a more reliable measure of how real estate values change. In contrast, prices published by the Commerce Department and by Realtors can be skewed because they can include a different mix of homes sold each month.

Case-Shiller indexes are calculated monthly, and are based on a three-month moving average. For example, January's data will be shaped by sales that have also taken place in November and December. Keep in mind that Case-Shiller does not report prices by giving a dollar figure. Instead, an index is compiled from which percent changes are calculated to show how prices have moved from the preceding month and from a year-ago level. The year-over-year figure is judged to be more meaningful. Its two most popular metropolitan groupings are the 10- and 20-city composite price indexes.

CHAPTER 4

International Economic Indicators: Why Are They So Important?

U.S. economic indicators help us understand what is happening in the domestic economy. However, to be a successful investor or an effective corporate leader in today's highly integrated global economy also requires knowledge of what is going on beyond U.S. borders. A CEO who wants to sell products overseas or an investor who seeks to achieve higher returns on stocks and bonds should be familiar with indicators that gauge the health of foreign economies.

Why place so much emphasis on the international business climate? One reason is that most of the growth in the world economy is taking place within the emerging countries, not the large industrial nations. Secondly, the performance of U.S. corporate profits, stocks and bonds, and the dollar is affected by foreign developments more than ever before. A recession in Europe harms not only companies on that continent, but many U.S.-based firms as well. Close to half of the earnings of S&P 500 firms originate from sales outside the U.S. Companies in the energy and technology sectors, for example, generate more than half of their revenues abroad. Moreover, it just makes good business sense to be aware of new opportunities that become available in markets outside the U.S. By diversifying into Europe, Asia, and Latin America, one is no longer bound to the economic swings of just one country. Indeed, there is much fertile territory to choose from in other markets. Equity investors, for example, can pick from more than 45,000 public companies that are listed on world stock exchanges, 75% of which are outside the U.S.

To be sure, there are additional risks to consider when investing overseas. One of the biggest is adverse movements in currencies. If you own securities or other assets in another country and their currency climbs in value against the dollar, great! The overall return on that investment gets an added lift because it is more valuable in dollar terms. However, should that currency happen to weaken relative to the dollar, the investment will be less valuable or perhaps even turn into a loss when it is sold and the proceeds are converted back to dollars. Thus, shifts in foreign exchange values can potentially make or break a foreign investment.

Given the risks currencies pose, wouldn't it make more sense to simply shy away from international markets? Absolutely not. There is nothing inherently mysterious about the movement of the dollar, euro, yen, British pound, or any of the other major free-floating currencies in the foreign exchange markets, for ultimately, the long-term value of a currency is determined by a country's economic fundamentals. Is the economy growing? Does inflation remain under control? Are consumers and businesses confident about the future of their economy? Are government fiscal policies responsible? Does the country have adequate savings for investments? Is its international trade account in reasonable balance? These are the issues that have the greatest influence in determining currency values. Sure, exchange rates might fluctuate in the short term due to differences in interest rates or from occasional uncertainties born of economic or political instability. But, by and large, the true value of a currency is based on the economic soundness and vitality of the country behind it.

Another criticism heard about entering foreign markets is that the benefits of global diversification have been oversold. According to this argument, markets overseas increasingly appear to march in lock step with those in the U.S., so why bother investing elsewhere, where the risks are greater? It is true that during periods of crises, whether they be economic, political, or military, markets around the world tend to move in unison. However, such moments of high global tension are uncommon, and these parallel movements in the value of assets around the world are usually very brief—a matter of days or weeks at most. Generally, foreign financial markets tend to pursue their own direction. Canada's stock market historically has a 65% correlation with the U.S.; for the U.K. it is 50%. German equities have a 55% correlation, and Japan has less than 20% relationship. Case in point: Just look at the best and worst performers by national stock markets over the last several years, as shown in Table 4.1.

Table 4.1 Ranking Stock Market Performance by Country (Based on Local Currencies)

	2008	2009	2010	2011
Best Performers	Tunisia	Brazil	Philippines	Venezuela
	Costa Rica	Russia	Thailand	Indonesia
	Morocco	Peru	Peru	U.S.
Worst Performers	Iceland	Ghana	Greece	Greece
	Bulgaria	Nigeria	Spain	Egypt
	Ukraine	Costa Rica	Italy	Italy

Source: The Economic Outlook Group, LLC.

As you can see, the U.S. is listed just once among the top performers in recent years. The point of this table is to underscore the importance of keeping an open mind about

investing in foreign markets, especially in the emerging countries. While no one can predict with certainty which economies and financial markets will outperform others, one outcome is assured. Over the next generation we will see hundreds of millions of new middle-class consumers emerge in the developing countries, and they will be the main driving force in the global economy for decades to come. There should thus be no dispute that the virtues of diversifying investments abroad remain as valid as ever.

This chapter is designed to take you to the next level, which is to identify the foreign indicators that provide the best read on current and future global economic conditions. Certain barometers of economic activity abroad should be followed with the same regularity and scrutiny as U.S. indicators so that investors and business managers have a chance of achieving success in international markets. The problem, much like with the U.S., is that there is a vast amount of foreign economic data in the public domain. Hundreds of countries churn out thousands of statistics on a regular basis. Even if you narrowed down the number of countries worth monitoring to two dozen, the task of following all the indicators that flow from these nations can still be overwhelming. Besides the sheer variety of international statistics, many of them are difficult to locate when needed. Often they are defined and computed differently than indicators in the U.S. and can vary greatly in quality. A large number are not even presented in English.

This section tries to overcome these problems. In the following pages, we select the most important foreign economic indicators for closer study. They represent the three major non-U.S. markets in the world: Europe, Asia, and Latin America. As is the case with U.S. economic statistics, these foreign indicators are released to the public on a predetermined schedule. Calendars of international economic releases can be found on the Web sites listed at the start of Chapter 6, “Best Web Sites for International Economic Indicators.” All the international indicators presented here are available on the Internet. They originate from either official government or private association Web sites, are free to the public, and can be viewed in English.

Finally, note that international data is presented in different formats. Many countries use commas instead of decimal points and a period or a space instead of a comma to indicate the thousands place. For example, the U.S. and Germany both represent numbers using decimal points and commas, but sometimes the symbols are interchanged (2,325.77 versus 2.325,77). At other times, Germany (and France) might use a space as the digit-grouping symbol (2 325,77).

International dates are also displayed differently around the world. In the U.S., the month precedes the day; Europeans mostly use day-month-year, whereas Asian cultures use year-month-day. Why isn't there a single standard for all countries now that world economic and financial systems are so closely integrated? Tradition and politics. These two hurdles are difficult to overcome. Those favoring a uniform worldwide format will have a long wait. In the meantime, one has little choice but to get used to these local customs and move on.

GERMAN INDUSTRIAL PRODUCTION

What Is It: Industrial output in Europe's largest economy.

Most Current News Release on the Internet:

www.destatis.de/EN/Homepage.html

Home Web Address: *www.destatis.de*

Release Time: 11:00 a.m. (Continental time); released the first or second week of the month and refers to activity two months earlier (so March data describes production in January).

Frequency: Monthly.

Source: Federal Statistics Office, Germany (Statistisches Bundesamt, Deutschland).

Revisions: Revisions can occur with each release and cover the two preceding months.

We begin with Germany, Europe's richest and most populous country. Its output alone accounts for a third of everything produced in the Eurozone, the name given to the region of 17 countries* that use the euro currency. Germany thus holds enormous sway over the Continent's well being. It is the country all of Europe relies on to help solve the region's economic woes. However, Germany's influence also extends far beyond Europe. It is the world's fifth-largest economy and the second-biggest exporter. It is also a key trading partner of the U.S. and an important investor. Trade between the two countries now exceeds \$140 billion. Outside of Europe, the U.S. is Germany's biggest economic partner. Indeed, German companies account for about 800,000 jobs in the U.S., and American firms have established roughly 500,000 positions in Germany.

Given the dominance of its economy over Europe and the fact that it is a key player in the world as well, Germany's industrial production figure ranks at the top of the must-watch list. Though industrial output accounts for less than a quarter of the country's GDP, this indicator has been correlated with GDP changes in the Eurozone overall. Thus, investors and business executives who want to spot early signs of strength or weakness in Europe will find Germany's industrial production index a good leading indicator.

* As of this writing, 17 countries use the euro as their currency: Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia, and Spain.

Production index - Production industries - Germany

Economic Indicators
Please select

Time Series
Please select

- └ Geography
- └ Population
- └ Employment
- └ Elections
- └ Education and culture
- └ Social security schemes
- └ Health
- └ Justice
- └ Construction and housing
- └ Environment
- └ Agriculture, fisheries
- └ Industry, crafts
- └ Domestic trade, hotel and restaurant industry, tourism
- └ Transport
- └ Money and banking, services
- └ Foreign trade
- └ Businesses, business notifications
- └ Prices
- └ Wages and salaries
- └ Household budget surveys, time use
- └ Finance and taxes
- └ National accounts
- Microcensus
- Census
- Information society
- International data

Search

**Production index
Production industries
Germany**

2000 = 100

Year	Month	Non-adjusted value		Working day and seasonally adjusted value (X-12-ARIMA)	
		Value	Change on the corresponding month of the previous year in %	Value	Change on the previous month in %
2006	Dec	105,1	1,3	111,7	-0,5
	Nov	121,7	6,3	112,3	2,0
	Oct	115,2	7,0	110,1	-1,1
	Sep	115,6	2,6	111,3	-0,5
	Aug	106,2	7,8	111,9	1,3
	Jul	108,5	5,8	110,5	0,9
	Jun	111,9	-0,1	109,5	0,1
	May	112,3	13,2	109,4	1,3
	Apr	101,6	-4,5	108,0	2,1
	Mar	116,5	11,4	105,8	-0,9
	Feb	99,3	5,6	106,8	0,7
	Jan	99,4	7,0	106,1	0,2
2005	Dec	103,8	4,4	105,9	0,3
	Nov	114,5	5,0	105,6	-0,8
	Oct	107,7	0,8	106,4	1,5
	Sep	112,7	3,7	104,8	1,3
	Aug	98,5	4,8	103,5	-1,0
	Jul	102,6	0,0	104,5	1,0
	Jun	112,0	5,1	103,5	1,2
	May	99,2	1,6	102,3	-0,2
	Apr	106,4	5,3	102,5	1,3
	Mar	104,6	-4,8	101,2	0,1
	Feb	94,0	0,0	101,1	-1,4
	Jan	92,9	2,9	102,5	1,3

Time series analysis by BV4.1



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GERMAN IFO BUSINESS CLIMATE INDEX

What Is It: German business leaders assess the current and future economic climate.

Most Current News Release on the Internet: www.cesifo-group.de/portal/page/portal/ifoHome/a-winfo

Home Web Address: www.cesifo-group.de/portal/page/portal/ifoHome

Release Time: 10:30 a.m. (Continental time); published the third or fourth week of the survey month.

Frequency: Monthly.

Source: The CESifo Group.

Revisions: Tend to be rare. Periodic revisions occur as a result of changes in seasonal adjustment factors.

Among the most anticipated economic statistics to come out in Europe every month is Germany's IFO Business Climate Index. From the time it was launched in 1949, this series has proven to be a very good leading indicator of how the German economy and, more broadly, the European economy will perform in the weeks ahead. Of course, a similar claim was made of the industrial production index. But what makes the IFO report such a sensitive one for investors is the timeliness of the data—the results are released the same month the survey is taken.

At the start of every month, the Institute questions more than 7,000 German business leaders and senior managers covering the manufacturing, construction, wholesale, and retailing industries. All are asked to appraise Germany's current business situation (good/satisfactory/poor), as well as their expectations over the next six months (more favorable/unchanged/more unfavorable). Their answers form the basis of the total Business Climate Index and its two principal subcomponents: the Present Situations Index, which assesses current economic conditions, and the Expectations Index, where those queried are asked to forecast what the business environment might be a half year later.

Of the three index results, European financial markets tune in more closely to the expectations series. History has shown that movements in the Expectations Index tend to lead changes in the Eurozone's industrial production by about two or three months. Thus, if the IFO expectations gauge turns up, odds are it will shortly be followed by an acceleration in factory output in Germany and perhaps much of Europe as well.

After the reunification of Germany, the IFO Institute initially published two separate business climate readings—one for eastern Germany and the other for western Germany. However, in 2004, the decision was made to combine the two sets of data to represent business activity in Germany as a whole. Economists at the IFO believed that the business cycles for these two regions had by now largely converged, even though they were still

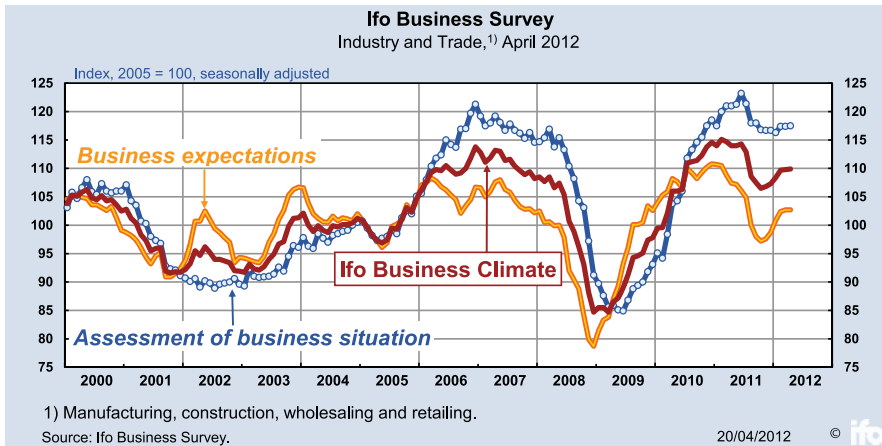
operating at different output levels. Thus, the IFO Business Climate Index now publishes a united German series for its headline index. Those who still want to see separate performance data for western and eastern Germany can do so by searching the more detailed IFO database on its Web sites.

Finally, it is interesting to note that the IFO Business Climate Index appears to have a close correlation with the U.S.'s own Institute for Supply Management (ISM) manufacturing report. Over the years, a persistent rise in the ISM numbers has, after a six-month lag, been accompanied by an increase in the German IFO expectations index. Given the size and importance of the American economy in the world, this probably is not all that surprising. This linkage between the two surveys is yet another illustration of how interwoven the international economy has become.

Germany (Index, 2005 = 100, seasonally adjusted)

Month/year	04/11	05/11	06/11	07/11	08/11	09/11	10/11	11/11	12/11	01/12	02/12	03/12	04/12
Climate	114.0	114.0	114.3	112.9	108.6	107.5	106.5	106.8	107.3	108.4	109.7	109.8	109.9
Situation	121.0	121.3	123.2	121.4	118.0	118.0	116.8	116.7	116.7	116.3	117.4	117.4	117.5
▶ Expectations	107.4	107.2	106.1	104.9	100.0	98.0	97.2	97.6	98.7	100.9	102.4	102.7	102.7

Source: Ifo Business Survey.



For long time-series in Excel format consult www.cesifo-group.de/langereihen.



Source: IFO Institute for Economic Research, used with permission.

GERMAN CONSUMER PRICE INDEX (CPI)

What Is It: The main price inflation gauge for Europe's largest economy.

News Release on the Internet: www.destatis.de (click "English")

Home Web Address: www.destatis.de

Release Time: 7:00 a.m. (Continental time); the preliminary CPI is published around the 25th of every month. Final figures are released two weeks later.

Frequency: Monthly.

Source: Federal Statistics Office Germany (Statistisches Bundesamt Deutschland).

Revisions: Monthly report on the CPI might contain revisions for earlier months.

As the economic pillar of Europe, Germany can serve as the engine of growth for the Continent, or it can be responsible for dragging down the region. Which role Germany ultimately plays depends on many factors, but none more important than the performance of its own inflation. Germany's CPI can have a powerful impact on the economies of other European nations and on the policies of the European Central Bank (ECB), which sets short-term interest rates for all 17 countries using the euro currency.*

If German inflation is increasing at a troubling rate, the ECB will likely raise interest rates even if the other neighboring economies show their inflation to be relatively tame. On the other extreme, should Germany get caught up in a deflationary spiral in which prices are consistently falling, the ECB is expected to jump in and lower rates to preempt a similar collapse in prices from spreading to the rest of the continent.

Germany's CPI has been on the radar screen of investors worldwide for decades. Its high profile can be traced to the country's oath to avoid at all costs a repetition of the catastrophic hyperinflation it experienced in the 1920s, when prices for essentials like bread and milk jumped several hundred percent every day, making its national currency essentially worthless. That painful memory led the Bundesbank (Germany's central bank) after World War II to set in stone a tough, inflexible, anti-inflationary policy, and it has never veered from that stance. For decades the Bundesbank showed zero tolerance for the slightest whiff of inflation beyond 2% a year. It made no difference whether the economy was weak or unemployment was sky-high. The primary mandate of the central bank was to keep inflation close to zero and protect Germany's currency, the deutsche mark, at all costs, even if it meant lifting and holding rates at painfully high levels. Although Germany's dogged defense against inflation contributed to years of chronically high joblessness, it also made its currency one of the most revered in the world.

* See the earlier section on German industrial production for the names of 17 countries sharing the euro.

During talks to establish the euro in the 1990s, Germany made clear to European negotiators that it would join the currency union only if the new European Central Bank agreed to pursue the same tough anti-inflationary position shown by the Bundesbank. German officials wanted the euro to have the kind of respectability in global currency markets that the mark had. That would mean keeping interest-rate decisions for Eurozone nations out of the hands of politicians. Even today, Germany's influence on the ECB is palpable; Europe's central bank firmly toes the line that it will not permit inflation to exceed the 2% range for the Eurozone.

This does not mean the ECB as a matter of policy will disregard all other economic stresses in the region. During the gravest moments of the Eurozone's sovereign debt crisis, for example, the central bank surprised many by showing a more pragmatic side. As the danger of sovereign defaults in Europe grew in 2011, many feared that the fallout would ultimately lead to a catastrophic collapse of the Eurozone. But the ECB boldly dropped short-term rates to a historic low and lent out massive amounts of low-cost funds to nervous European banks—and did so *even though* inflation in the region remained above the central bank's target.

Let's take a closer look at Germany's inflation measure itself. The CPI measures the average change in prices for all goods and services bought by households for the purpose of consumption. In the middle of the month, about 560 price collectors, working out of state government offices across Germany, collect prices on a basket of 750 specific goods and services. Overall, approximately 400,000 prices are obtained each month, including taxes (value-added and excise taxes) and price discounts (such as sales or rebates). The Federal Statistics Office (FSO) then compiles these price changes for six key German states (Baden-Württemberg, Bavaria, Brandenburg, Hesse, North Rhine-Westphalia, and Saxony) and announces the much-awaited preliminary inflation rate for the month, along with the latest 12-month change.

Another virtue of the German CPI is how current it is. The government puts out a provisional estimate of inflation around the third or fourth week of the month. A final CPI is published two weeks later, between the 10th and 15th of the following month. It is the provisional figures, though, that traders in the financial markets react to most because the difference between the preliminary German CPI and the revised numbers tends to be negligible.

Without meaning to complicate this subject, it is necessary to know that the FSO also calculates another version of Germany's inflation every month, which is in the same press release. Why produce two CPI versions? The reason for the second version is to follow a standardized European formula for measuring the CPI. This allows business leaders, investors, and economists to more accurately compare Germany's inflation rates with those of its neighboring countries. Called the Harmonized Index of Consumer Prices (HICP), and dubbed "hiccup," it is the official inflation computation for the 27 member states of the European Union (EU), plus Norway, Iceland, and Switzerland. When all is

said and done, though, the difference between the national definition of the German CPI and the Harmonized CPI for Germany is not significant.

Federal Statistical Office
Germany

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Price indices

■ Values
■ % change on the previous year

Price indices
Germany

Original value
% change on the previous month

		Consumer price index	Index of retail prices	Index of producer prices of industrial products ¹⁾	Index of selling prices in wholesale trade	Foreign trade prices	
						Index of import prices	Index of export prices
2004	Apr	0,3	-	0,4	-	-	-
	Mar	0,3	0,4	0,6	1,3	-	-
	Feb	0,2	-0,1	0,1	0,3	-	-
	Jan	0,1	0,1	-0,2	0,5	-	-
	Dec	0,8	-	-	-0,1	-0,5	-0,2
2003	Nov	-0,2	-	-	-0,1	-	0,1
	Oct	-	0,1	-	0,1	0,1	-0,1
	Sep	-0,1	0,3	0,1	0,7	-0,2	0,2
	Aug	-	-0,2	-	0,4	0,8	0,1
	Jul	0,2	-0,2	0,2	0,2	0,2	-
	Jun	0,3	0,1	-	-	-0,1	-0,2
	May	-0,2	-0,1	-0,3	-0,0	-1,4	-0,4
	Apr	-0,3	-0,2	-0,2	-1,1	-2,0	-0,1
	Mar	0,1	0,1	0,2	0,6	-0,6	-

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Germany

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Price indices

■ Values
■ % change on the previous month

Price indices
Germany

Original value
% change on the previous year

		Consumer price index	Index of retail prices	Index of producer prices of industrial products ¹⁾	Index of selling prices in wholesale trade	Foreign trade prices	
						Index of import prices	Index of export prices
2004	Apr	1,6	0,4	0,9	-	-	-
	Mar	1,1	0,2	0,3	0,8	-	-
	Feb	0,9	-0,1	-0,1	0,1	-	-
	Jan	1,2	0,3	0,2	0,4	-	-
	Dec	1,1	0,7	1,8	1,3	-2,5	-0,2
2003	Nov	1,3	0,8	2,0	1,5	-1,1	-
	Oct	1,2	0,7	1,7	0,8	-2,5	-0,2
	Sep	1,1	0,5	2,0	0,6	-2,6	-0,1
	Aug	1,1	0,4	2,0	0,8	-1,7	-0,2
	Jul	0,9	0,3	1,9	0,4	-2,0	-0,2
	Jun	1,0	0,3	1,4	0,5	-2,7	0,3
	May	0,7	-0,1	1,4	-0,2	-3,0	-0,1
	Apr	1,0	-0,2	1,7	0,3	-3,0	0,3
	Mar	1,2	-	1,7	1,3	-0,8	0,6
	Feb	1,3	-	1,9	1,6	0,6	0,9
	Jan	1,1	-0,4	1,5	1,2	0,5	0,6

¹⁾ Domestic sale

ZEW INDICATOR OF ECONOMIC SENTIMENT

What Is It: A popular, near-real-time survey of confidence from top investors in Germany.

Most Current News Release on the Internet: www.zew.de/en/publikationen/Konjunkturerwartungen/Konjunkturerwartungen.php3

Home Web Address: www.zew.de/en/index.php3

Release Time: 11:00 a.m. (local time); released midmonth and covers survey results of the same month.

Frequency: Monthly.

Source: ZEW Centre for European Economic Research.

This final indicator from Germany came into being two decades ago and has two impressive features going for it. First, the report is released in the same month the survey covers, which makes it quite timely, and second, it has a fairly impressive track record as a leading economic indicator of the German economy. Here's how it is designed. The ZEW Centre for European Economic Research solicits responses from around 300 investors and analysts during the first two weeks of every month on what they expect economic conditions in Germany will be in six months. More specifically, they are asked about their outlook for inflation, short- and medium-term interest rates, the yield on ten-year German government bonds, stock market indexes, currencies, the profitability of firms, and even forecasts on the price of oil.

But here's one other aspect about this release that makes it so worthwhile to follow. These financial experts are told to assess future conditions not only in Germany, but also for the Eurozone, the United States, Japan, Great Britain, France, and Italy. The questions are all on a single page, which allows for faster processing of the responses and a quicker turnaround time for the results to be released to the public. Thus, each month we get a near-real-time appraisal from European investors on where they see certain key world economies heading.

The calculation used to compute the index is quite direct. The index represents the difference between the percentage share of analysts who are optimistic and the share of analysts who are pessimistic. So if 55% of participants expect the German economic situation to improve within the next six months, 20% expect no change, and 25% expect the economic situation to deteriorate, the ZEW Indicator of Economic Sentiment would have an index value of plus 30. A positive number thus means that the share of optimists outweighs the share of pessimists, and vice versa.

This report is closely followed by European investors and economists and is known to be highly correlated with the IFO Business Climate Index mentioned earlier. That makes it a major market-mover in Europe.

ZEW - Financial Market Survey: Results May 2012						
Current economic situation	good	normal	bad	balance		
Eurozone	1.4 (-2.3)	37.0 (-6.6)	61.6 (+8.9)	-60.2	(-11.2)	
Germany	47.3 (+3.7)	49.5 (-4.0)	3.2 (+0.3)	44.1	(+3.4)	
USA	9.5 (-1.2)	76.0 (+0.4)	14.5 (+0.8)	-5.0	(-2.0)	
Japan	2.2 (-0.5)	63.7 (+7.8)	34.1 (-7.3)	-31.9	(+6.8)	
United Kingdom	0.4 (-1.5)	38.3 (-5.0)	61.3 (+6.5)	-60.9	(-8.0)	
France	1.5 (-3.1)	55.0 (-8.5)	43.5 (+11.6)	-42.0	(-14.7)	
Italy	1.1 (-0.1)	17.6 (-7.6)	81.3 (+7.7)	-80.2	(-7.8)	
Economic expectations	improve	no change	get worse	balance		
Eurozone	22.2 (-6.7)	53.2 (-2.1)	24.6 (+8.8)	-2.4	(-15.5)	
Germany (ZEW Indicator)	30.2 (-6.4)	50.4 (+0.2)	19.4 (+6.2)	10.8	(-12.6)	
USA	34.8 (-9.2)	56.0 (+7.5)	9.2 (+1.7)	25.6	(-10.9)	
Japan	26.6 (-6.6)	65.9 (+4.6)	7.5 (+2.0)	19.1	(-8.6)	
United Kingdom	18.7 (-0.5)	65.3 (-3.8)	16.0 (+4.3)	2.7	(-4.8)	
France	13.4 (-7.5)	58.0 (-3.5)	28.6 (+11.0)	-15.2	(-18.5)	
Italy	16.4 (-3.7)	56.0 (-1.5)	27.6 (+5.2)	-11.2	(-8.9)	
Inflation rate	increase	no change	decrease	balance		
Eurozone	25.4 (-4.0)	47.5 (+3.4)	27.1 (+0.6)	-1.7	(-4.6)	
Germany	33.8 (+/-0.0)	45.1 (+1.3)	21.1 (-1.3)	12.7	(+1.3)	
USA	30.5 (-1.6)	51.4 (+2.5)	18.1 (-0.9)	12.4	(-0.7)	
Japan	17.3 (-1.5)	75.8 (-0.2)	6.9 (+1.7)	10.4	(-3.2)	
United Kingdom	22.0 (-4.6)	54.1 (+2.6)	23.9 (+2.0)	-1.9	(-6.6)	
France	23.6 (-5.0)	50.6 (+0.8)	25.8 (+4.2)	-2.2	(-9.2)	
Italy	22.6 (-6.7)	46.2 (+1.4)	31.2 (+5.3)	-8.6	(-12.0)	
Short-term interest rates	increase	no change	decrease	balance		
Eurozone	6.4 (-2.0)	76.2 (-1.7)	17.4 (+3.7)	-11.0	(-5.7)	
USA	6.8 (-3.6)	91.1 (+4.1)	2.1 (-0.5)	4.7	(-3.1)	
Japan	3.0 (-2.5)	95.9 (+2.6)	1.1 (-0.1)	1.9	(-2.4)	
United Kingdom	5.7 (-3.5)	87.1 (+4.0)	7.2 (-0.5)	-1.5	(-3.0)	
Long-term interest rates	increase	no change	decrease	balance		
Germany	59.3 (-2.3)	34.3 (-2.6)	6.4 (+4.9)	52.9	(-7.2)	
USA	53.2 (-3.8)	44.0 (+2.1)	2.8 (+1.7)	50.4	(-5.5)	
Japan	24.9 (-4.1)	74.7 (+4.1)	0.4 (+/-0.0)	24.5	(-4.1)	
United Kingdom	41.0 (-5.0)	56.0 (+4.3)	3.0 (+0.7)	38.0	(-5.7)	
Stock market indices	increase	no change	decrease	balance		
STOXX 50 (Eurozone)	48.3 (+3.1)	33.1 (-7.0)	18.6 (+3.9)	29.7	(-0.8)	
DAX (Germany)	59.9 (+6.8)	24.2 (-8.5)	15.9 (+1.7)	44.0	(+5.1)	
TecDax (Germany)	52.6 (+5.6)	31.7 (-7.3)	15.7 (+1.7)	36.9	(+3.9)	
Dow Jones Industrial (USA)	56.5 (+5.3)	30.8 (-8.3)	12.7 (+3.0)	43.8	(+2.3)	
Nikkei 225 (Japan)	44.8 (+5.1)	43.2 (-3.7)	12.0 (-1.4)	32.8	(+6.5)	
FT-SE-100 (UK)	36.5 (+4.3)	45.7 (-8.1)	17.8 (+3.8)	18.7	(+0.5)	
CAC-40 (France)	35.7 (+1.2)	39.4 (-6.1)	24.9 (+4.9)	10.8	(-3.7)	
MITel (Italy)	34.2 (+5.5)	39.0 (-9.7)	26.8 (+4.2)	7.4	(+1.3)	
Exchange rates (vs. Euro)	appreciate	no change	depreciate	balance		
Dollar	35.4 (+4.0)	43.7 (-0.3)	20.9 (-3.7)	14.5	(+7.7)	
Yen	18.1 (+2.6)	55.3 (+3.6)	26.6 (-6.2)	-8.5	(+8.8)	
UK Pound	21.6 (+6.4)	50.0 (-2.7)	28.4 (-3.7)	-6.8	(+10.1)	
Swiss Franc	8.5 (+0.8)	75.2 (+2.3)	16.3 (-3.1)	-7.8	(+3.9)	
Commodities	increase	no change	decrease	balance		
Oil (Brent Crude)	23.7 (-5.4)	51.8 (+7.9)	24.5 (-2.5)	-0.8	(-2.9)	
Sectors	improve	no change	get worse	balance		
Banks	13.6 (-8.1)	43.0 (+2.1)	43.4 (+6.0)	-29.8	(-14.1)	
Insurance companies	13.8 (-1.0)	47.9 (-0.6)	38.3 (+1.6)	-24.5	(-2.6)	
Automobile	17.9 (-1.8)	60.0 (+0.2)	22.1 (+1.6)	-4.2	(-3.4)	
Chemicals / Pharmaceuticals	30.1 (-0.5)	61.5 (+0.4)	8.4 (+0.1)	21.7	(-0.6)	
Steel	21.9 (+1.3)	54.2 (-1.1)	23.9 (-0.2)	-2.0	(+1.5)	
Electronics	20.8 (-0.7)	66.9 (-2.3)	12.3 (+3.0)	8.5	(-3.7)	
Mechanical engineering	25.8 (-1.7)	56.7 (-1.4)	17.5 (+3.1)	-8.3	(-4.8)	
Retail / Consumer goods	34.6 (-0.2)	55.0 (+4.1)	10.4 (-3.9)	24.2	(+3.7)	
Construction	34.3 (-2.4)	51.5 (+1.7)	14.2 (+0.7)	20.1	(-3.1)	
Utilities	12.6 (+1.2)	63.9 (+1.5)	23.5 (-2.7)	-10.9	(+3.9)	
Services	25.1 (+3.0)	68.2 (-4.4)	6.7 (+1.4)	18.4	(+1.6)	
Telecommunications	13.0 (+1.7)	71.0 (-2.9)	16.0 (+1.2)	-3.0	(+0.5)	
Information technology	35.5 (+3.5)	56.4 (-4.9)	8.1 (+1.4)	27.4	(+2.1)	

Note: 284 analysts participated in the May-survey which was conducted during the period 4/30-5/14/2012. Analysts were asked about their expectations for the next 6 months. Numbers displayed are percentages (month-over-month percentage point changes in parentheses). Balances refer to the difference between positive and negative assessments.

Source: ZEW Centre for European Economic Research, used with permission.

JAPAN INDUSTRIAL PRODUCTION

What Is It: Measures the change in monthly industrial output.

Most Current News Release on the Internet: www.meti.go.jp/english/statistics

Home Web Address: www.meti.go.jp/english

Release Time: 8:50 a.m. (local time); a preliminary report is released in the final week of the next month. A revised report is published another two to three weeks later. (For example, data on October is announced during the last week in November, to be followed by another report on revisions in mid-December.)

Frequency: Monthly.

Source: Ministry of Economy, Trade, and Industry (METI).

Revisions: Monthly and annual revisions are frequent and can be substantial.

Few modern economies have faced as many predicaments as Japan. After achieving one of the highest growth rates in the world from the 1960s to the 1980s, Japan has since struggled to regain its footing. A severe stock market and real estate crash brought repeated recessions in the 1990s, with many labeling those years as Japan's lost decade. To get the country back on its feet, Japan's central bank lowered short-term rates to near zero, and the government put through a series of financial and regulatory reforms to encourage more borrowing, spending, and investment. The results were encouraging. After several false starts earlier this decade, the economy appeared to be on the mend. But then came the devastating earthquake in 2011, which shook the nation to its core. The violent movement of the earth unleashed a horrific tsunami and brought the country close to a nuclear catastrophe with the meltdown of its Fukushima reactor. While the economy will ultimately benefit from the billions being poured in to rebuild the affected area, Japan's woes are far from over. It still faces an aging population, high public debt, an excessive reliance on exports for economic growth, and has to rely on imports to supply virtually all the fuel it needs.

Despite all these challenges, Japan's importance to the international economy and its influence in global capital markets remains largely undiminished. It holds title as the biggest exporter of investment capital in the world and owns an economy exceeded in size only by the U.S. and China. It sells \$850 billion worth of goods and services a year to other nations. Japanese companies are also powerful competitors in several major industries, such as autos, electronics, and robotics. Moreover, the yen continues to stand alongside the U.S. dollar and the euro as one of the three most important currencies. For all these reasons, global investors and business leaders, especially those in the U.S., closely monitor Japan's economic health.

Also looming large for Americans is the fact that Japan is the second-largest foreign owner of U.S. Treasury securities. As a result, Japanese banks, insurance companies, and

government agencies have helped fund the U.S. government budget for years, lending hundreds of billions of dollars. However, this is also a cause for concern. Serious financial and economic problems in Japan could easily spill over into the U.S. Investors in Japan, for example, might decide to purchase less U.S. Treasury debt or even sell some of their holdings in dollar-based financial assets. They can also choose to manipulate the value of the yen to help export sales. Indeed, few countries in the world intervene in the currency markets as much as Japan.

Given the ability of Japan's economy to affect asset values in world capital markets and to sway currency markets, foreign investors know they have to stay informed about the soundness of the economy. That means paying particularly close attention to its industrial production, which many experts consider to be one of the best barometers of business activity in Japan. Analysts prefer to monitor industrial output over GDP because the former comes out sooner, responds faster to changes in the business climate, and is rich with information on the country's manufacturing and mining industries. In fact, Japan's industrial production release is more comprehensive in its coverage of the economy than its U.S. counterpart. Case in point: Japan's monthly production report even includes forecasts of how key manufacturers are expected to perform in the next two months.

In view of all the attention paid to Japanese manufacturers, it might be surprising to learn that manufacturing activity makes up less than a quarter of the GDP. But this figure is very misleading because the actual impact that manufacturers have on the economy is much greater. For example, exports represent a primary engine of growth for Japan. Strong foreign demand for cars, digital cameras, HDTVs, and computer accessories feeds right through to the domestic economy by stimulating capital investment spending, employment, and overall output.

Japan started measuring industrial production in 1953, and it now includes virtually all privately owned companies in mining and manufacturing, regardless of size. The main task of the industrial production series is to compute monthly changes in output for 536 items. Figures are also given for the actual quantity of goods being produced, shipped, and kept in inventory for many commodities.

The initial release, called the Preliminary Report on Indices of Industrial Production, is published a month after the period being covered ends. A revised release is issued about three weeks later. One can access the industrial production report in two ways. There is a summary report on the Web (www.meti.go.jp/english/statistics/). Inside that report is another link where you can download the complete 72-page release as a PDF file. The tables shown in this section come from that detailed report. Data is presented in both English and Japanese and is well organized, with years and dates on the right. Figures are seasonally adjusted with an index base of 100 that is currently tied to the year 2005. Keep in mind that revisions are frequent and can be very large.

- **Mining and Manufacturing: Industrial Production**
 - (1) This is the summary page of the industrial production report. It provides the latest monthly and annual changes in output. (The release shows it was up 0.8% for the month of October and up 3.6% over the year.) A black triangle near a number indicates a decline. Other pages in the report (not included here) provide additional details on the strength and weakness of individual sectors.
- **Mining and Manufacturing: Shipments**
 - (2) Industrial shipments represent actual sales and can be used to determine demand. If shipments are increasing, this will likely lead to further increases in production in the months ahead. Should shipments begin to slacken, it will cause inventory levels to swell and discourage future production. (In the table, shipments climbed 1.2% for the month and 5.1% over the year.)
- **Mining and Manufacturing: Inventories and Inventory Ratios**
 - (3) This section sheds light on the supply-and-demand pressures in the industrial sector. A rise in the inventory index reflects the quantity of goods produced that remains unsold. The inventory ratio index is similar to the inventory-sales ratio in the U.S., except that it uses an index rather than months of supply on hand. The ratio, which represents inventories divided by shipments, can be a leading indicator of future industrial output.
- **Survey of Production Forecast**
 - (4) Included in the industrial production release is a projection of what output is expected to be the next two months. It's a useful addition because the numbers provide a sense of where the economy might be heading. (The data in this table shows that production is predicted to increase 3.1% in November but drop 0.9% in December.) This page also breaks down the main components of production, enabling you to identify which sectors will help raise output and which will drag it down. (For example, General Machinery output is predicted to surge 18.7% in November and fall 8.8% in December.) However, you should view this forecast table with some skepticism. Projections historically tend to be on the high side.

平成12年 = 100
index, 2000 = 100

(1. 鉱工業 : Mining and manufacturing)

	生産 Production				生産者出荷 Shipments					
	季節調整済指数 Seasonal Adjustment Index		原指数 Original Index		季節調整済指数 Seasonal Adjustment Index		原指数 Original Index			
	前月(前)比 %Change From Previous Month(Quarter)	前年 前月(前)比 %Change From Previous Year	前月(前)比 %Change From Previous Month(Quarter)	前年 前月(前)比 %Change From Previous Year	前月(前)比 %Change From Previous Month(Quarter)	前年 前月(前)比 %Change From Previous Year	前月(前)比 %Change From Previous Month(Quarter)	前年 前月(前)比 %Change From Previous Year		
平成 12 年		100.0	5.7		100.0	5.8		C.Y.	2000	
13 年		93.2	▲ 6.8		93.7	▲ 6.3			2001	
14 年		92.0	▲ 1.3		93.5	▲ 0.2			2002	
平成12年度		99.9	4.3		100.0	4.4		F.Y.	2000	
13年度		90.8	▲ 9.1		91.6	▲ 8.4			2001	
14年度		93.3	2.8		94.8	3.5			2002	
平成14年Ⅲ期	93.4	1.7	93.9	3.3	94.6	1.0	95.5	3.4	Q3	2002
Ⅳ期	93.8	0.4	95.2	6.0	95.3	0.7	96.7	6.7	Q4	
平成15年Ⅰ期	94.1	0.3	94.1	5.5	95.8	0.5	96.9	5.7	Q1	2003
Ⅱ期	93.4	▲ 0.7	91.9	2.2	96.0	0.2	92.8	3.0	Q2	
Ⅲ期	94.6	1.3	94.7	0.9	96.8	0.8	97.5	2.1	Q3	
平成14年 8月	93.3	0.3	86.8	1.2	94.9	1.6	88.3	2.3	Aug.	2002
9月	94.0	0.8	97.4	5.2	95.4	0.5	101.1	4.9	Sep.	
10月	94.1	0.1	97.0	5.4	95.7	0.3	97.0	6.5	Oct.	
11月	93.7	▲ 0.4	95.2	5.4	95.6	▲ 0.1	97.5	7.0	Nov.	
12月	93.6	▲ 0.1	93.3	7.0	94.7	▲ 0.9	95.5	6.6	Dec.	
平成15年 1月	95.2	1.7	87.7	8.1	96.9	2.3	88.0	8.4	Jan.	2003
2月	93.5	▲ 1.8	90.9	4.6	96.4	▲ 0.5	93.6	6.0	Feb.	
3月	93.6	0.1	103.6	3.9	94.1	▲ 2.4	109.0	3.1	Mar.	
4月	92.2	▲ 1.5	90.7	3.0	95.0	1.0	91.3	3.3	Apr.	
5月	94.6	2.6	90.2	1.3	96.8	1.9	90.3	1.1	May	
6月	93.4	▲ 1.3	94.8	2.4	96.3	▲ 0.5	96.8	4.4	Jun.	
7月	93.9	0.5	97.1	▲ 0.3	95.3	▲ 1.0	97.8	0.7	Jul.	
8月	93.2	▲ 0.7	85.7	▲ 1.3	95.8	0.5	88.2	▲ 0.1	Aug.	
9月	96.7	3.8	101.4	4.1	99.4	3.8	106.5	5.3	Sep.	
10月	97.5	0.8	100.5	3.6	100.6	1.2	101.9	5.1	Oct.	

1

2

	生産者在庫 Inventory				生産者在庫率 Inventory Ratio					
	季節調整済指数 Seasonal Adjustment Index		原指数 Original Index		季節調整済指数 Seasonal Adjustment Index		原指数 Original Index			
	前月(前)比 %Change From Previous Month(Quarter)	前年 前月(前)比 %Change From Previous Year	前月(前)比 %Change From Previous Month(Quarter)	前年 前月(前)比 %Change From Previous Year	前月(前)比 %Change From Previous Month(Quarter)	前年 前月(前)比 %Change From Previous Year	前月(前)比 %Change From Previous Month(Quarter)	前年 前月(前)比 %Change From Previous Year		
平成 12 年		99.0	2.1		100.0	▲ 3.2		C.Y.	2000	
13 年		98.3	▲ 0.7		110.4	10.4			2001	
14 年		90.4	▲ 8.0		102.0	▲ 7.6			2002	
平成12年度		97.8	2.3		101.3	▲ 0.2		F.Y.	2000	
13年度		91.8	▲ 6.1		111.4	10.0			2001	
14年度		86.7	▲ 5.6		99.4	▲ 10.8			2002	
平成14年Ⅲ期	92.5	▲ 0.2	89.6	▲ 9.9	99.0	▲ 2.1	98.7	▲ 12.4	Q3	2002
Ⅳ期	92.3	▲ 0.2	90.4	▲ 8.0	98.7	▲ 0.3	96.1	▲ 12.6	Q4	
平成15年Ⅰ期	90.9	▲ 1.5	86.7	▲ 5.6	98.9	0.2	99.8	▲ 9.3	Q1	2003
Ⅱ期	90.4	▲ 0.6	91.8	▲ 2.5	97.7	▲ 1.2	99.6	▲ 3.4	Q2	
Ⅲ期	91.2	0.9	88.4	▲ 1.3	98.8	1.1	98.7	0.0	Q3	
平成14年 8月	92.1	▲ 0.8	93.7	▲ 11.4	98.5	▲ 0.2	105.6	▲ 12.4	Aug.	2002
9月	92.5	0.4	89.6	▲ 9.9	99.7	1.2	92.1	▲ 12.3	Sep.	
10月	93.0	0.5	93.2	▲ 8.7	98.9	▲ 0.8	97.4	▲ 12.3	Oct.	
11月	91.4	▲ 1.7	92.3	▲ 9.5	97.9	▲ 1.0	95.4	▲ 13.7	Nov.	
12月	92.3	1.0	90.4	▲ 8.0	99.4	1.5	95.5	▲ 11.9	Dec.	
平成15年 1月	93.5	1.3	95.5	▲ 5.5	100.0	0.6	112.5	▲ 9.2	Jan.	2003
2月	91.4	▲ 2.2	93.9	▲ 6.5	96.9	▲ 3.1	101.5	▲ 10.3	Feb.	
3月	90.9	▲ 0.5	86.7	▲ 5.6	99.9	3.1	85.3	▲ 8.2	Mar.	
4月	90.8	▲ 0.1	88.5	▲ 4.2	98.1	▲ 1.8	96.8	▲ 4.3	Apr.	
5月	91.2	0.4	91.6	▲ 3.2	96.9	▲ 1.2	102.4	▲ 2.7	May	
6月	90.4	▲ 0.9	91.8	▲ 2.5	98.1	1.2	99.7	▲ 3.1	Jun.	
7月	91.6	1.3	93.9	▲ 1.3	99.3	1.2	99.1	0.6	Jul.	
8月	90.6	▲ 1.1	92.2	▲ 1.6	100.0	0.7	107.2	1.5	Aug.	
9月	91.2	▲ 0.7	88.4	▲ 1.3	97.1	▲ 2.9	89.7	▲ 2.6	Sep.	
10月	90.9	▲ 0.3	91.1	▲ 2.3	94.0	▲ 3.2	92.6	▲ 4.9	Oct.	

(注) 生産者製品在庫の年、年度及び四半期の数値は期末値である。
各比率は、伸び率(%)である。以下、2.8 頁まで同様。

平成15年11月の製造工業生産予測調査結果

Survey of Production Forecast, November 2003

(1)前月比 季節調整済
Month to Month Percent Change (Seasonal Adjustment)

		%		
業 種		10月 Oct. Last Month	11月 Nov. 見込み This Month	12月 Dec. 見込み Next Month
4 ▶	製 造 工 業 Manufacturing	(2.8)	3.1	▲ 0.9
	鉄 鋼 業 Iron and Steel	(1.2)	▲ 1.7 (1.6)	▲ 1.1
	非 鉄 金 属 工 業 Non-Ferrous Metals	(2.0)	▲ 0.4 (▲ 1.4)	0.4
	金 属 製 品 工 業 Fabricated Metals	(2.8)	▲ 0.1 (1.1)	▲ 1.1
4 ▶	一 般 機 械 工 業 General Machinery	(4.0)	18.7	▲ 8.8
	電 気 機 械 工 業 Electrical Machinery	(▲ 3.2)	4.3 (▲ 1.1)	6.8
	情 報 通 信 機 械 工 業 Information and Communication Electronics Equipment	(4.2)	▲ 2.3 (1.7)	2.0
	電 子 部 品 ・ デ バ イ ス 工 業 Electronic Parts and Devices	(2.9)	7.7 (7.3)	2.2
	輸 送 機 械 工 業 Transport Equipment	(1.0)	▲ 0.8 (▲ 0.2)	0.8
	化 学 工 業 Chemicals	(3.5)	2.4 (1.6)	▲ 0.8
	紙 ・ パ ル プ 工 業 Pulp and Paper	(2.7)	2.2 (▲ 0.1)	▲ 0.4
	そ の 他 Others	(▲ 0.6)	▲ 2.2 (▲ 4.3)	▲ 2.2
	(特掲) 電 気 機 械 工 業 (旧 分 類) Electrical Machinery(1995 Version)	(5.2)	4.4 (4.0)	2.1

(2)実現率及び予測修正率
Realization Ratio and
Amendment Ratio

		%	
10月の 実 現 率 Realization Ratio		11月の 予 測 修 正 率 Amendment Ratio	
	▲ 1.1		▲ 0.5
	4.0		0.6
	1.4		2.5
	▲ 1.1		▲ 2.4
	▲ 7.2		▲ 3.7
	▲ 1.8		3.6
	▲ 1.4		▲ 5.2
	▲ 3.8		▲ 3.4
	0.6		▲ 0.1
	▲ 0.1		0.6
	▲ 2.0		0.2
	0.9		3.0
	▲ 2.7		▲ 2.3

(参考)

製 造 工 業 Manufacturing (原 系 列) Original	(▲ 0.8)	▲ 0.5 (▲ 0.2)	0.2
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※ ()内は前月調査による前月比を示す。
Parentheses indicates the month-to-month percent change in the previous survey

JAPAN'S TANKAN SURVEY

What Is It: A widely anticipated report on business confidence in Japan.

Most Current News Release on the Internet:

www.boj.or.jp/en/statistics/tk/index.htm/

Home Web Address: *www.boj.or.jp/en/*

Release Time: 8:50 a.m. (local time); results are published at the start of April, July, and October, and in mid-December.

Frequency: Quarterly.

Source: Bank of Japan.

Revisions: Statistical corrections are rare. Revisions merely reflect changes in confidence and plans from one quarter to the next.

Aside from the U.S., Japan has arguably the most extensive collection of economic indicators in the world, much of it in English and freely available on the Web. Perhaps that's to be expected from the third-largest economy (after the United States and China). Among the reports Japan churns out is the Tankan survey, which has gained worldwide recognition for its sweeping coverage, forward-looking features, and quick release to the public. International investors and managers of multinational companies look to the Tankan report for the latest reading on the state of the Japanese economy and its forecasts of business activity in the months ahead. What gives this survey extra credibility is the agency behind it. The Tankan survey is produced by the Bank of Japan, the country's central bank, and its results can be used to formulate future monetary policy. As a result, this closely watched quarterly report has a history of moving stock prices and currencies.

Often described as a business confidence survey, the Tankan survey is really much more than that. Indeed, this report offers more insight into what the business community is thinking than does any comparable U.S. economic indicator. If you want to know about Japanese plans for future capital investments, employment, or expectations of pricing power, and predictions of where the yen will likely be valued in the future, this release covers all this and a lot more.

The survey itself is conducted quarterly by the Research and Statistics Department at the Bank of Japan. Questionnaires are sent out the last month of every quarter—March, June, September, and December—to about 11,000 firms. These companies are differentiated by their size—large (on average 22% of the sample), medium (27%), and small (51%)—and by industry type, with more going to nonmanufacturers (60%) than to manufacturing (40%). Amazingly, the response rate of these surveys tends to be better than 98%!

Respondents are asked to answer eight broad questions:

1. Business conditions (favorable or unfavorable?)
2. Supply-and-demand conditions (excessive demand or excessive supply?), inventories (excessive or insufficient?), and prices (rising or falling?)
3. Sales and current profits (% change)
4. Fixed investment at non-financial institutions (% change)
5. Fixed investments at financial institutions (%)
6. Employment (excessive employment or insufficient?)
7. Corporate finance (easy or tight monetary conditions?)
8. Business conditions at financial institutions (favorable or unfavorable?)

Of the eight topics, five seek qualitative assessments that require a judgment call (topics 1, 2, 6, 7, and 8). After these responses are collected, a diffusion index is computed by simply calculating the percentage of businesses reporting a negative tone and subtracting it from the percentage indicating a positive tone. The remaining three questions (3, 4, and 5) ask for quantitative changes in percentage terms regarding recent performance, as well as expectations about how this will change in the future.

The following sections highlight a few of the most useful tables in the Tankan survey.

- **Business Conditions for Large Manufacturers**

- (1) Manufacturing is one of the main engines of growth in Japan because it includes the country's vital export industry. In this table, we see confidence improved in December (actual result) to a net 11, representing a 10-percentage-point gain in confidence from September's survey. However, these same manufacturers have predicted a slight deterioration in conditions in the next few months, because the diffusion index on the forecast dropped back to 8.

Aside from the summary number at the top of the table, confidence levels are also broken down into broad industry categories such as motor vehicles and industrial machinery.

- **Business Conditions for Nonmanufacturers**

- (2) This section is a good measure of the strength of consumer demand in Japan. Large nonmanufacturers conduct most of their business in the country and do not benefit much from strong export growth. One can look at the headline figure to get an idea of domestic demand, as well as how specific sectors are doing. For example, retailers noted that conditions barely improved over the past quarter, moving from -14 to -13. Note, however, that more of them appeared optimistic about conditions in the subsequent three months because the forecast index rose to -5.

TANKAN Summary (December 2003)

119th Short-Term Economic Survey of All Enterprises in Japan
186th Short-Term Economic Survey of Principal Enterprises in Japan

Not to be released before 8:50 a.m. on
Friday, December 12, 2003

December 12, 2003
Research and Statistics Department
Bank of Japan

Number of sample enterprises	Manufacturing		Total	Response rate
	Manufacturing	Nonmanufacturing		
All Enterprises	3,561	4,643	8,204	98.3%
Large enterprises	738	627	1,365	99.2%
Medium-sized enterprises	1,036	1,576	2,612	98.4%
Small enterprises	1,787	2,440	4,227	97.9%
Principal Enterprises	369	291	660	99.8%
(Memo) Financial institutions	-	-	168	100.0%

Responding Period: November 10th to December 11th.

Memo: Average of predicted exchange rates expected by large manufacturing enterprises

	FY2002		FY2003		(yen per US dollar)	
	1H	2H	1H	2H		
	June 2003 survey	122.37	123.74	121.06	117.88	117.97	117.79
Sept 2003 survey	-	-	-	117.99	118.47	117.53
Dec 2003 survey	-	-	-	114.68	118.08	111.40

I. Business Conditions

	(Net percentage of respondents who reported "Favorable")																	
	Large enterprises						Medium-sized enterprises						Small enterprises					
	Sept 2003 survey		Dec 2003 survey		Changes		Sept 2003 survey		Dec 2003 survey		Changes		Sept 2003 survey		Dec 2003 survey		Changes	
	Actual result	Forecast	Actual result	Changes in revision			Forecast	Actual result	Forecast	Actual result			Changes in revision	Forecast	Actual result	Forecast		
Manufacturing	1	3	11	10	8	-10	-8	-1	9	-5	-4	-23	-19	-13	10	-15	-2	
Textiles	-34	-14	-14	20	-3	11	-41	-41	-32	9	-33	-1	-47	-43	-43	4	-37	6
Lumber & wood products	-11	-11	11	22	-11	-22	-14	-23	-10	4	-20	-10	-26	-27	-17	9	-25	-8
Pulp & paper	21	29	29	8	29	0	-20	-13	-7	13	-7	0	-22	-16	-12	10	-13	-1
Chemicals	6	5	13	7	9	-4	-12	-6	-4	8	-3	1	-13	-11	-5	8	-7	-2
Petroleum & coal products	-29	-29	0	29	-15	-15	-10	-10	20	30	0	-20	-19	-28	-15	4	-19	-4
Ceramics, stone & clay	-22	-26	-13	9	-13	0	-32	-21	-24	8	-23	1	-55	-49	-49	6	-47	2
Iron & steel	15	19	27	12	23	-4	11	0	8	-3	3	-5	-9	-11	-1	8	-11	-10
Nonferrous metals	-35	-25	10	45	0	-10	-4	9	13	18	9	-4	-5	9	13	9	0	0
Food & beverages	0	6	2	2	6	4	-6	-4	-2	4	-3	-1	-18	-12	-15	3	-16	-1
Processed metals	-7	4	14	21	7	-7	-28	-17	-14	14	-11	3	-25	-21	-13	12	-16	-3
Industrial machinery	15	14	19	4	19	0	-14	-11	-7	7	-10	-3	-13	-10	0	13	0	0
Electrical machinery	-5	3	7	12	8	1	-5	-7	6	11	-2	-8	-25	-18	-2	23	-7	-5
Shipbuilding & heavy machinery	-40	-60	-60	-20	-40	20	25	33	25	0	17	-8	-35	-26	-36	-1	-36	0
Motor vehicles	24	17	35	11	26	-9	12	7	17	5	14	-3	21	11	22	1	15	-7
Precision machinery	0	0	15	15	4	-11	7	4	25	18	14	-11	-7	-7	3	10	-5	-8
Basic materials	-6	-3	9	15	5	-4	-18	-14	-9	9	-10	-1	-30	-28	-23	7	-23	0
Processing	2	6	11	9	10	-1	-7	-6	2	9	-3	-5	-18	-15	-8	10	-10	-2
Nonmanufacturing	-13	-8	-9	4	-7	2	-25	-22	-21	4	-20	1	-31	-30	-28	3	-29	-1
Construction	-26	-30	-29	-3	-25	4	-25	-27	-29	-4	-31	-2	-36	-43	-36	0	-44	-8
Real estate	20	20	20	0	20	0	4	0	4	8	8	-12	-11	-4	8	-4	0	0
Wholesaling	4	4	16	12	13	-3	-20	-17	-16	4	-15	1	-35	-30	-31	4	-32	-1
Retailing	-14	0	-13	1	-5	8	-32	-22	-28	4	-22	6	-45	-40	-44	1	-40	4
Transportation	-17	-12	-9	8	-15	-6	-26	-25	-17	9	-24	-7	-28	-29	-22	6	-24	-2
Communications	40	20	22	-18	11	-11	0	-12	0	0	0	0	23	16	30	7	15	-15
Electric & gas utilities	-6	12	12	18	12	0	0	0	0	0	0	0	-15	-7	-4	11	-4	0
Services	-17	-10	-11	6	-9	2	-25	-24	-20	5	-19	1	-23	-20	-20	3	-22	-2
Leasing	-11	-11	11	22	0	-11	-15	-20	-7	8	-15	-8	-27	-28	-20	7	-19	1
All industries	-6	-2	1	7	1	0	-20	-16	-14	6	-13	1	-28	-26	-22	6	-24	-2
	All Enterprises																	
Manufacturing	-15	-12	-5	10	-7	-2												
Nonmanufacturing	-27	-24	-23	4	-24	-1												
All industries	-21	-19	-15	6	-17	-2												

(Notes) 1. Response rate = The number of enterprises responding to the question of Business Conditions (or that of financial institutions responding to the question of Fixed Investment) / (The number of sample enterprises * 100)

2. Actual result: Judgement at the time of the survey. Forecast: Judgement at the time of three months hence.

Changes in revision of actual results = "Actual results of current survey" minus "Actual results of the previous survey".

Changes of forecast = "Forecast of current survey" minus "Actual results of current survey".

- Business Conditions at Small Enterprises

- (3) Are all businesses benefiting from economic growth, or just a few? How widespread is the recovery in Japan? By comparing the sentiment levels of large and small companies, one can tell whether businesses across the board are seeing an improvement in sales and profits—or if these gains are limited to mainly large enterprises.

- Average Exchange Rates Predicted by Large Manufacturers

- (4) How the yen is valued in relation to other currencies can make all the difference in how successful Japanese exporters are at selling products in foreign markets. This table represents the best guess by major Japanese manufacturers as to what value the yen will average in the first and second halves of the year, as well as for the year as a whole. Indeed, there is a correlation between how cheap the yen is expected to be and the level of business confidence by large manufacturers. The lower the yen's value in foreign exchange markets, the more upbeat manufacturers become because it effectively drops the price of Japanese-made goods abroad.

- Prices by Large Enterprises

- (5) Companies that can raise prices generally achieve higher earnings and hire more workers. However, there are times when businesses find it difficult to lift prices. Either competition prevents them from doing so, or the economy is undergoing a deflationary spiral in which prices are under continuous pressure to fall. The latter has been a serious problem with Japan throughout the 1990s and beyond. This index represents the percentage of companies saying their prices had risen versus those that lowered prices. The numbers show that slightly more firms in the latest survey have raised prices. The index for large manufacturers inched up from -23 in September to -21 in the December survey. But that might prove to be just a brief reprieve because the expectations index fell back to -24.

- Fixed Investment

- (6) Capital spending is another major contributor to economic growth. It serves as a marker of confidence that companies have about future business activity. Here we see large manufacturers planning to boost investment spending by 11.1% in Japan's 2003 fiscal year, compared to what was spent the previous year.

2. Supply and Demand Conditions, Inventories, and Prices

(% points)

		Large enterprises					
		Sept 2003 survey		Dec 2003 survey			
		Actual result	Forecast	Actual result	Forecast		Changes
					Changes in revision		
Supply and demand conditions for products and services	Manufacturing	-23	-23	-19	4	-20	-1
Diffusion index of "Excess demand" minus "Excess supply"	Basic materials	-27	-28	-22	5	-21	1
	Processing	-21	-21	-17	4	-20	-3
Overseas supply and demand conditions for products :	Manufacturing	-12	-12	-6	6	-7	-1
Diffusion index of "Excess demand" minus "Excess supply"	Basic materials	-17	-17	-12	5	-11	1
	Processing	-10	-10	-4	6	-5	-1
Inventory level of finished goods and merchandise:	Manufacturing	20	14	20	0	13	-7
Diffusion index of "Excessive or somewhat excessive" minus "Insufficient or somewhat insufficient"	Basic materials	23	17	24	1	17	-7
	Processing	19	12	18	-1	12	-6
Wholesalers' inventory level:	Manufacturing	22	19	18	-4	16	-2
Diffusion index of "Excessive or somewhat excessive" minus "Insufficient or somewhat insufficient"	Basic materials	24	21	25	1	19	-6
	Processing	21	17	16	-5	15	-1
5 ▶ Change in output prices:	Manufacturing	-23	-23	-21	2	-24	-3
Diffusion index of "Rise" minus "Fall"	Basic materials	-11	-10	-4	7	-11	-7
	Processing	-28	-28	-29	-1	-29	0
Change in input prices:	Manufacturing	-2	-4	-1	1	-1	0
Diffusion index of "Rise" minus "Fall"	Basic materials	8	6	12	4	9	-3
	Processing	-5	-8	-5	0	-6	-1

Fixed Investment (Year-to-year growth rate, %)

		FY2002		FY2003	
			Adjustment ratio	(Forecast)	Adjustment ratio
Large enterprises	Manufacturing	-17.4	-	11.1	0.0
	Nonmanufacturing	-11.1	-	1.6	1.3
	All industries	-13.6	-	5.2	0.7
Medium-sized enterprises	Manufacturing	-11.5	-	4.8	3.0
	Nonmanufacturing	-2.0	-	2.8	-0.7
	All industries	-3.2	-	3.0	-0.3
Small enterprises	Manufacturing	-4.0	-	-1.7	7.1
	Nonmanufacturing	-2.5	-	1.2	5.9
	All industries	-2.9	-	0.5	6.2
All Enterprises	Manufacturing	-14.2	-	7.6	1.6
	Nonmanufacturing	-5.4	-	2.1	1.1
	All industries	-7.7	-	3.4	1.3

• Production Capacity

(7) Lots of unused factory capacity poses problems for an economy. It will depress business spending in the future and perhaps even lead to plant closings and layoffs. In contrast, a reduction in excess plant capacity suggests that customer

orders are rising and more factories are being utilized to satisfy this demand. The diffusion index shows the net percentage of companies that claim to have too much excess capacity. Figures here show that fewer companies are experiencing idle assembly lines; the index for excessive capacity fell from 17 to 14. The forecast is for even greater use of existing capacity, since the number is expected to drop to 12.

Production Capacity		(Net percentage of respondents who reported "Excessive capacity")					
		Sept 2003 survey		Dec 2003 survey			
		Actual result	Forecast	Actual result	Changes in revision	Forecast	Changes
7 ► Large enterprises	Manufacturing	17	15	14	-3	12	-2
	Nonmanufacturing	7	6	6	-1	5	-1
	All industries	13	11	11	-2	9	-2
Medium-sized enterprises	Manufacturing	18	15	12	-6	11	-1
	Nonmanufacturing	4	1	4	0	2	-2
	All industries	9	7	7	-2	6	-1
Small enterprises	Manufacturing	18	15	15	-3	14	-1
	Nonmanufacturing	8	6	7	-1	5	-2
	All industries	12	10	10	-2	9	-1
All Enterprises	Manufacturing	19	15	14	-5	13	-1
	Nonmanufacturing	6	5	6	0	4	-2
	All industries	11	9	10	-1	8	-2

As rich as the Tankan survey is with information on the private business sector in Japan, there are two cautionary points to consider. First, since the powerful Bank of Japan is behind this report, the firms queried are aware that their responses might have a bearing on monetary policy by the central bank. Therefore, respondents could be tempted to shape their answers in a way that can result in a favorable interest-rate policy. Second, a large part of the survey depends on forecasts, which might turn out to be inaccurate. Aside from these caveats, the Tankan survey is viewed by the international investment community as a valuable and well-regarded economic report.

MANUFACTURING PURCHASING MANAGERS INDEX (PMI) BY COUNTRY AND REGION

What Is It: A timely series of reports on manufacturing activity in different countries and regions.

Most Current News Release on the Internet:

www.markiteconomics.com/Survey/Page.mvc/PressReleases

Home Web Address: *www.ntc-research.com/*

Release Time: Varies with different countries. A schedule of upcoming releases can be viewed here:

www.markiteconomics.com/Survey/Page.mvc/DiaryofReleaseDates

Frequency: Monthly.

Sources: Markit Economics (formerly NTC Economics), J.P. Morgan, HSBC Holdings plc, Institute for Supply Management (ISM), International Federation of Purchasing and Supply Management (IFPSM).

Revisions: Markit Economics does not revise the monthly survey data after the first publication. However, seasonal adjustment factors are revised from time to time.

The popularity of the U.S. purchasing manager surveys has spawned a bunch of similar measures in other countries. The U.S. Purchasing Managers Index (PMI) for manufacturing, produced by the Institute for Supply Management, is one of the hottest economic indicators out every month. It has demonstrated a solid track record of anticipating turning points in the business cycle and for being way ahead of the curve in detecting a buildup of inflation pressures. Indeed, it is so highly regarded by investors, economists, and policymakers that many other nations have developed their own PMI series in recent years, all basically modeled after the U.S. The purchasing managers survey was launched in the U.K. in 1991, followed by Germany (1996), France (1998), Japan (2002), and China (2005). All told, purchasing manager indexes are available for more than two dozen countries and they can tell us quite a lot about activity in these individual countries and, together, the strength of the global economy.

Collecting all this data is a London-based firm called Markit Economics. When it comes to global economic intelligence, few companies can match the vast array of financial, business, and economic information it provides. For the Purchasing Managers series, the firm gathers data from more than 16,000 companies across more than 20 countries every month, and seeks to track activity in manufacturing, services, retail, and construction sectors. In addition to producing a PMI for the Eurozone, Markit Economics teamed up with HSBC, another global financial services company, to come up with a PMI series of China, and with J.P. Morgan for a global PMI—and the results for all can be seen on Markit Economics' Web site.



The image shows a screenshot of the Markit Economics website's 'Press releases' page. The page has a blue header with the 'Markit Economics' logo and a background image of puzzle pieces. On the left, there is a navigation menu with options like 'About PMI data', 'How to use PMI data', and 'Press releases'. The main content area is titled 'Press releases' and contains a table with two columns: 'Title' and 'Release Date'. The table lists various international PMI reports, including Global, Brazil, Eurozone, Greece, Germany, France, Italy, Czech Republic, Spain, Turkey, Poland, Russia, and India, with their respective release dates and times.

Title	Release Date
Global: JPMorgan Global Manufacturing PMI	02 May 2012 16:00
Brazil: HSBC Brazil Manufacturing PMI	02 May 2012 14:00
Brazil: HSBC Brazil Manufacturing PMI (Português)	02 May 2012 14:00
UK: CIPS / Markit UK Construction PMI	02 May 2012 09:30
Eurozone: Markit Eurozone Manufacturing PMI (Italiano)	02 May 2012 09:00
Eurozone: Markit Eurozone Manufacturing PMI (Français)	02 May 2012 09:00
Greece: Markit Greece Manufacturing PMI (Ελληνικά)	02 May 2012 09:00
Eurozone: Markit Eurozone Manufacturing PMI (Deutsch)	02 May 2012 09:00
Greece: Markit Greece Manufacturing PMI	02 May 2012 09:00
Eurozone: Markit Eurozone Manufacturing PMI (Español)	02 May 2012 09:00
Eurozone: Markit Eurozone Manufacturing PMI	02 May 2012 09:00
Germany: Markit / BME Germany Manufacturing PMI	02 May 2012 08:55
Germany: Markit / BME Germany Manufacturing PMI (Deutsch)	02 May 2012 08:55
France: Markit France Manufacturing PMI	02 May 2012 08:50
France: Markit France Manufacturing PMI (Français)	02 May 2012 08:50
Italy: Markit / ADACI Italy Manufacturing PMI	02 May 2012 08:45
Italy: Markit / ADACI Italy Manufacturing PMI (Italiano)	02 May 2012 08:45
Czech Republic: HSBC Czech Republic Manufacturing PMI	02 May 2012 08:30
Czech Republic: HSBC Czech Republic Manufacturing PMI (Čeština)	02 May 2012 08:30
Spain: Markit Spain Manufacturing PMI	02 May 2012 08:15
Spain: Markit Spain Manufacturing PMI (Español)	02 May 2012 08:15
Turkey: HSBC Turkey Manufacturing PMI	02 May 2012 08:00
Turkey: HSBC Turkey Manufacturing PMI (Türkçe)	02 May 2012 08:00
Poland: HSBC Poland Manufacturing PMI	02 May 2012 08:00
Poland: HSBC Poland Manufacturing PMI (Język Polski)	02 May 2012 08:00
Russia: HSBC Russia Manufacturing PMI (Русский язык)	02 May 2012 06:00
India: HSBC India Manufacturing PMI	02 May 2012 06:00
Russia: IISDC Russia Manufacturing PMI	02 May 2012 06:00

We'll focus on three of the most eagerly awaited international PMI manufacturing reports: one on the Eurozone, a Global index, and one on China.

EUROZONE MANUFACTURING PMI

Established in 1997, the Eurozone Manufacturing PMI is one of the first composite indicators out every month on conditions in eight countries: Germany, France, Spain, Italy, Ireland, Greece, Austria, and the Netherlands. They represent 92% of all manufacturing activity in the euro currency area. The report is based on responses from 3,000 purchasing executives. Markit Economics collects the data from the individual national surveys as well and then recomputes a regional index for each of the major questions asked. Finally, an overall headline index is calculated to reflect total manufacturing activity in the region.

At the heart of the surveys are questions to purchasing managers that cover six key themes:

1. Is the level of new orders received by your company higher than, the same as, or lower than one month ago?

This question addresses the issue of demand in the economy. If demand for goods increases, it will drive up manufacturing output.

2. Is the level of output in your company higher than, the same as, or lower than one month ago?

The focus here is on whether there's been a shift in production to higher levels because of new orders.

3. Is the stock of items purchased by your company higher than, the same as, or lower than one month ago?

For manufacturers to keep their production lines running smoothly, they need to have an ample supply of raw materials on hand. But as output accelerates, supplies typically diminish and purchasing managers need to reorder more stock. Thus, the purchase of new items is linked to the pace of production.

4. Are supplier delivery times experienced by your company longer than, the same as, or shorter than one month ago?

Just because a purchasing manager places an order to replenish its stock of raw materials doesn't necessarily mean it will arrive overnight. Suppliers generally can ship raw materials to manufacturers faster in a slow economy. In a booming economy, however, when lots of orders for raw materials are coming in at the same time, suppliers can't instantly satisfy all the demand. Bottlenecks emerge, and even suppliers have their own production constraints. As a result, shipments to manufacturers slow and this leads to delays in deliveries. Thus, longer lead times between orders and deliveries of raw materials are a sign of faster economic growth, whereas rapid deliveries suggest slower business activity.

5. Is the average input price experienced by your company higher than, the same as, or lower than one month ago?

It should come as no surprise that when many manufacturers increase orders simultaneously, demand for raw materials can outstrip supplies. This places upward pressure on factory input prices.

6. Is the level of employment at your company higher than, the same as, or lower than one month ago?

There is a link between employment in manufacturing and production. Greater demand for new orders often leads to more employment. However, over time, the relationship between jobs and output turns more tenuous. Given the high cost of labor, manufacturers might try investing more in improving productivity than in expanding their workforce to raise output. Thus, production could increase at a faster pace than job growth in the long run.

The results are presented in the form of a diffusion index. A reading of less than 50 indicates a contraction of activity, above 50 points to an expansion, and an index of exactly 50 says that no change has occurred.

In addition, an aggregate index is computed using a weighted average of five (of the six) queries above. It is based on the following formula: The new orders response is given a 30% weight, output 25%, employment 20%, supplier delivery times 15%, and stocks of items purchased 10%. You'll notice that the PMI index on prices is left out of the equation. Though input prices are a very good leading indicator of producer price inflation, changes in prices can occur for many reasons that have nothing to do with the business cycle. Strikes, currency movements, restrictions in supplies by foreign producers, and bizarre weather all influence input prices of raw materials regardless of the pace of economic activity. As a result, the change in price data is excluded from the total survey index.

GLOBAL MANUFACTURING PMI

First released in October 2003, the Global PMI series wants to be considered a gauge of world manufacturing trends. It functions the same way as the Eurozone purchasing managers report, except that it includes a larger sample. J.P. Morgan and Markit Economics have worked together to collect responses from 9,000 purchasing managers in 30 countries that collectively represent 86% of the world's total manufacturing output. Again, what makes this report so useful are the questions asked; they inquire about real activity (specifically, output, new orders, input prices, and employment) and do not solicit personal or subjective views. A reading of 50 indicates no change from the preceding month. Below 50 is a sign of contraction, and above 50 points to an expansion.

I should add that in addition to a manufacturing index, there are also separate releases on activity in the service sector for the Eurozone and Global PMIs. Services account for a predominant share of the GDP in most modern industrial economies. Although that's not the case with the large emerging countries, even they have seen services grab an increasingly larger share of their economies in recent years.

So which PMI series—manufacturing or services—can better foreshadow economic turning points? For Europe the answer appears to be the purchasing managers index for services since there is evidence that this index has a better correlation with changes in GDP than the manufacturing PMI. But if you are trying to anticipate shifts in “global” economic activity, most investors still track the global manufacturing PMI. The reason is that for the U.S. and in most developing countries, the goods-producing sector tends to respond more immediately to changes in demand than services. However, given the dynamic growth in services worldwide, you can expect the Global PMI Services Index to match the influence of its manufacturing cousin over the next decade.



News Release

Purchasing Managers' Index®
MARKET SENSITIVE INFORMATION
EMBARGOED UNTIL: 09:00 (UK Time), 2 April 2012

Markit Eurozone Manufacturing PMI® – final data

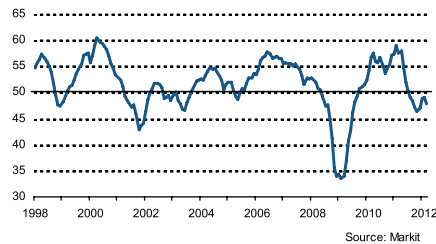
Eurozone manufacturing downturn worsens in March

Data collected 13–23 March.

- Final Manufacturing PMI® at three-month low of 47.7 in March, down from February's 49.0
- Further signs that manufacturing weakness is spreading from periphery to the core
- Cost pressures build

Manufacturing PMI® (overall business conditions)

Eurozone FMP®, 50 = no change in business conditions on month



At 47.7 in March, the seasonally adjusted Markit Eurozone Manufacturing PMI® fell to a three-month low (unchanged from the earlier flash estimate). New orders contracted at a faster rate than in February, leading to falling output and further job losses.

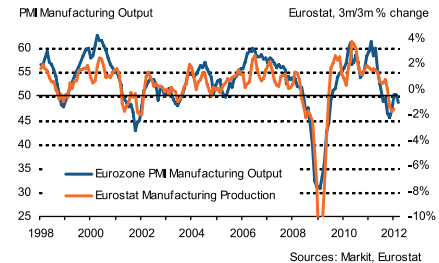
There were further signs that the manufacturing malaise already exhibited at the periphery of the currency bloc was spreading to the core. The German PMI fell below the neutral 50.0 mark for the first time in 2012 so far, while French manufacturing contracted at the sharpest pace since June 2009.

The bright spots were modest improvements in business conditions in Ireland and Austria and a weaker rate of decline in Greece, although the latter had seen its PMI hit a record low in February.

Countries ranked by Manufacturing PMI® (Mar.)

Austria	51.5	3-month low
Ireland	51.5	10-month high
Netherlands	49.6	2-month low
Germany	48.4	3-month low
Italy	47.9	6-month high
France	46.7	33-month low
Spain	44.5	3-month low
Greece	41.3	3-month high

Manufacturing Output



Manufacturing output contracted across the region as a whole for the first time in three months, as inflows of new orders declined at an accelerated pace. Moreover, both output and new work fell across the three consumer, intermediate and investment goods sectors.

Demand was weaker in both domestic and export markets. New export orders fell for the ninth month running, but to a lesser extent than signalled by the earlier flash estimate. Germany remained the main drag on new export orders, seeing a further marked reduction, though foreign demand also declined for Spanish and Greek manufactures.

Source: Markit Economics, used with permission.



News Release

MARKET SENSITIVE INFORMATION

EMBARGOED UNTIL: 11:00am (US EASTERN TIME) 2 April 2012

JPMorgan Global Manufacturing PMI™

Produced by JPMorgan and Markit in association with ISM and IFFSM

Global manufacturing growth holds steady through Q1 2012

The global manufacturing sector posted further modest expansions in production, new orders and employment at the end of Q1 2012. However, input cost inflationary pressure continued to surge upwards, mainly as a result of high oil and transportation prices.

At 51.1 in March, little-changed from 51.2 in February, the **JPMorgan Global Manufacturing PMI™** posted above the no-change mark of 50.0 for the fourth month running.

Production also expanded for the fourth consecutive month in March, following a brief growth hiatus in November 2011. Although the rate of increase reached a nine-month high, it remained slightly below the long-run survey average. Growth continued to accelerate in the US, but this was offset by contractions in the Eurozone and China.

The rate of output expansion in India slowed sharply, but remained well above the global average. Among the other major industrial nations, pockets of resilience were seen in Japan, the UK, South Korea, Brazil and Russia, which all saw faster growth in March than February.

Following a further increase in March, levels of incoming new orders have expanded throughout the opening quarter of the year. Although the rate of increase remained only modest, it was nonetheless an improvement on the contractions seen towards the end of 2011. A broadly similar trend was signalled for incoming new export business.

Input price inflation surged higher in March. The rate of increase hit an eight-month peak, although was still mild compared to those signalled during Q1 2011. All of the nations covered by the survey reported an increase.

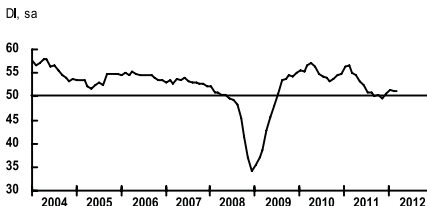
March data indicated that supply-chain constraints were subsiding. Average vendor lead times showed a slight improvement during the latest survey period, after lengthening in each of the prior 31 months.

Manufacturing employment rose for the twenty-eighth consecutive month in March. Job creation was recorded in the US (nine-month high), India, Brazil, Taiwan, South Korea Canada and Turkey. Payroll numbers were reduced in the Eurozone, China, Japan, Russia, Poland and Switzerland.

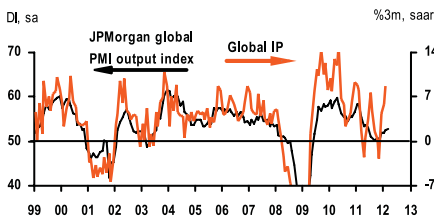
Commenting on the survey, David Hensley, Director of Global Economics Coordination at JPMorgan, said:

"The global PMI was little changed in March and remained at a relatively low level consistent with subdued growth in goods expenditures. The growth of global manufacturing, which has been strong relative to the PMI due to the recovery in flood-ravaged Thailand and the resulting restoration of supply chains, is poised to moderate as implied by the PMI."

JPMorgan Global Manufacturing PMI



Global manufacturing output



Global Manufacturing PMI™ Summary

50 = no change on previous month.

	Feb	Mar	Change	Summary, rate of change
Global PMI	51.2	51.1	-	Expanding, slower rate
Output	52.6	52.7	+	Expanding, faster rate
New Orders	51.4	51.1	-	Expanding, slower rate
Input Prices	56.7	57.0	+	Rising, faster rate
Employment	51.1	51.2	+	Rising, faster rate

Source: Markit Economics, JP Morgan Chase Bank, used with permission.

Finally, getting Eurozone and Global PMI data from the Internet is relatively easy, though the amount of free information provided is limited. Details on both series are available primarily to clients. Nevertheless, there is some useful material on the Web that makes it worthwhile to check out.

CHINA MANUFACTURING PMI

Thanks to the combined efforts of HSBC and Markit Economics, we are now able to get more precise economic data on China, and it couldn't come at a more important time. For the past three decades, China has been the fastest-growing economy on the planet. What's truly mind-boggling is that it took just five years for the country to cruise past the United Kingdom, Germany, and Japan to become the second-largest economy in the world. Some have argued that China is now within a generation of exceeding even the U.S. If so, it wouldn't be unprecedented. For much of recorded history, China had the largest economy in the world, before it flamed out in the 19th century and most of the 20th century as civil wars, conflicts with Japan, and the reign of Mao Zedong damaged the country. Since 1978, however, it has bounced back in spectacular fashion, and China is once again a palpable force in the global economy.

Today, investors, economists, business leaders, and policymakers spend as much time wondering about the economic outlook in China as they do the U.S. and Europe. One important metric that helps analysts understand the underlying momentum driving the Chinese economy is the HSBC/Markit Economics monthly report on China's Purchasing Manager's Manufacturing Activity Index. This survey is based on replies from purchasing managers representing more than 400 small, medium, and large manufacturers in China, including both private and state-owned enterprises. HSBC then releases two PMI reports on China each month. The first is the "Flash" report, based on 85% to 90% of the survey responses. That is followed a week later with a "Final" PMI. Both publish diffusion indexes on manufacturing output, new orders, new export orders, employment, backlogs of work, prices, inventory of finished goods, quantity of purchases, and delivery times.

(The HSBC/Markit Economics PMI report on China should not be confused with China's own purchasing managers series, which often comes out on the same day. The country's own National Bureau of Statistics and the China Federation of Logistics & Purchasing use a larger sample and a different methodology than HSBC to come up with its own purchasing managers index. What happens when the two purchasing managers reports on manufacturing head in different directions? In such circumstances, we have to put greater weight on HSBC/Markit Economics series because their methodology is more transparent than the government's. In fact, no one quite knows what goes into the government survey and that opaqueness raises some skepticism about its validity.)

The surprisingly quick acceptance by the public of purchasing manager surveys as a whole comes at a time when there is much frustration with the slow release of official economic statistics by governments. Some, like the GDP, are published 60 to 70 days after the quarter ends. Another complaint about official data is that countries use different methods to come up with the same indicators. This complicates efforts to make comparisons between economies. Finally, figures can be of such poor quality that they are frequently followed by substantial revisions.

HSBC Purchasing Managers' Index™ Press Release

compiled by markit

Embargoed until: 10:30 (Beijing), 23 April 2012

HSBC Flash China Manufacturing PMI™

Manufacturing output down for second successive month, albeit at marginal rate

Key points

- **Flash China Manufacturing PMI™ at 49.1 (48.3 in March), 2-month high.**
- **Flash China Manufacturing Output Index at 49.1 (47.3 in March), 2-month high.**

Data collected 12–19 April.

The HSBC Flash China Manufacturing *Purchasing Managers' Index™ (PMI™)* is published on a monthly basis approximately one week before final PMI data are released, making the HSBC PMI the earliest available indicator of manufacturing sector operating conditions in China. The estimate is typically based on approximately 85%–90% of total PMI survey responses each month and is designed to provide an accurate indication of the final PMI data.

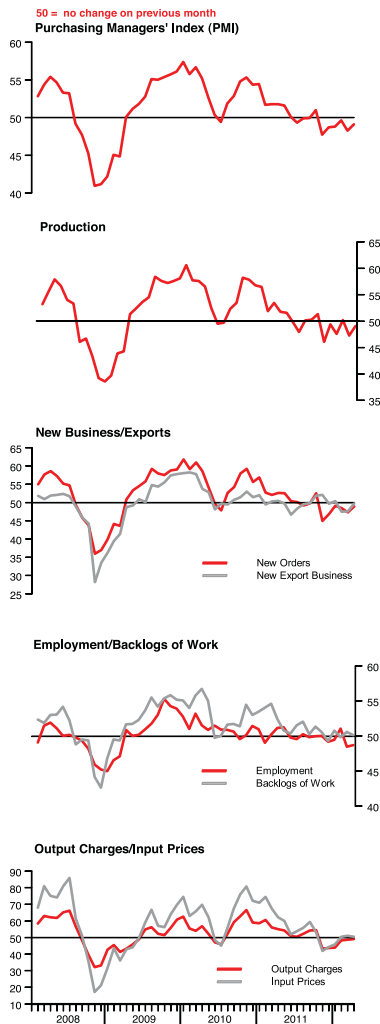
China Flash Manufacturing PMI™ Summary

50.0 = no change on previous month (seasonally adjusted)

PMI	Contraction, slower rate
Output	Contraction, slower rate
New Orders	Contraction, slower rate
New Export Orders	Contraction, slower rate
Employment	Contraction, slower rate
Backlogs of Work	Expansion, slower rate
Output Prices	Decline, slower rate
Input Prices	Inflation, slower rate
Stocks of Purchases	Contraction, faster rate
Stocks of Finished Goods	Broadly stable, fall last month
Quantity of Purchases	Contraction, slower rate
Suppliers' Delivery Times	Lengthening, slower rate

Commenting on the Flash China Manufacturing PMI survey, Hongbin Qu, Chief Economist, China & Co-Head of Asian Economic Research at HSBC said:

"As April flash PMI ticked higher, this suggests that the earlier easing measures have started to work and hence should ease concerns of a sharp growth slowdown. That said, the pace of both output and demand growth remains at a low level in an historical context and the job market is under pressure. This calls for additional easing measures in the coming months. We expect monetary and fiscal easing to speed up in 2Q."



In contrast, the Eurozone, Global, and Chinese PMI series overseen by Markit Economics employ the same basic methodology with all the countries, so comparisons are much easier to make. What's more, revisions to the data are extremely rare. This is not to say that these international surveys are without shortcomings. One problem is that they make no effort to quantify the degree of change. For instance, if a large number of purchasing managers say they witnessed just a modest improvement in activity in the latest month, that alone is enough to propel the index sharply higher. Nevertheless, the purchasing manager series has gained a large following with investors and has on numerous occasions moved markets with the release of its data.

OECD COMPOSITE LEADING INDICATORS (CLI)

What Is It: A statistical guide to forecast business activity in the world's largest economies.

Most Current News Release on the Internet: www.oecd.org/std/cli

Home Web Address: www.oecd.org

Release Time: Noon (Continental time); data is released in the second week of the month and refers to activity two months earlier. (For example, January's release reports leading indicators for November.)

Frequency: Monthly.

Source: Organization for Economic Cooperation and Development (OECD).

Revisions: The previous month's data is frequently revised with each new release.

Investors and policymakers love to follow leading economic indicators because of their look-ahead qualities. They are supposed to predict short-term movements in an economy by using measures that are highly sensitive to upcoming changes in business conditions. The U.S. has its own set of domestic leading economic indicators from the Conference Board, a business research group in New York (see the section "Index of Leading Economic Indicators [LEI]" in Chapter 3, "The Most Influential U.S. Economic Indicators"). On a global scale, however, the best-known and most closely studied equivalent is the OECD's own Composite Leading Indicators (CLI). This Paris-based international organization computes a leading economic indicator index for 29 member countries and 6 major nonmember nations. The regional zones covered are the Total OECD area, the Eurozone currency area, the G7 countries, and the Big Five Asian economies (see Table 4.2). Although some countries produce their own in-house leading indicators, it's the OECD's own indexes that make the big headlines and draw the greatest interest among money managers and policymakers.

Using economic data from its member countries, the OECD calculates CLI indexes designed to forecast what's ahead for industrial production in the OECD nations and regions. Why industrial production and not the more broad-based GDP? First, industrial output is seen as an effective proxy for GDP because, historically, turning points in industrial production have coincided with the overall economy. Second, using industrial production as a reference point is more practical because that data comes out every month, whereas the GDP is available only quarterly.

Table 4.2 OECD Groupings and Other Regions in the Composite Leading Indicators**1. OECD Total (34 member countries)**

Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States

2. Euro Currency Zone (17 countries)

Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia, and Spain

3. Major Five Asia Countries

China, India, Indonesia, Japan, and Korea

4. G7 (major 7 economies)

Canada, France, Germany, Italy, Japan, United Kingdom, and United States

Now for the obvious question: Does the OECD's CLI really work? Is it reliable in picking up signals of a pending slowdown or rebound in economic growth? Here we get one of those "Yes, but..." answers. To begin with, anticipating turning points is not easy. Signs are often elusive or ambiguous. Second, much depends on the quality of the underlying data from national governments, not to mention the judgment calls involved in setting up the leading indicator models and the assumptions behind them. By and large, the OECD's leading indicator series gets a thumbs-up from economists and large investors. Even central bankers review the CLI data when setting interest-rate policy for the euro currency zone. Over the years, the CLI has proven to be an effective early-warning system, able to identify peaks and troughs in economic activity some nine months in advance.

The OECD has been publishing the CLI since 1981, and the methodology is fairly straightforward. Financial indicators with a reputation for being ahead of the economic curve are chosen as components of this indicator. Among the most common national components used by the OECD to calculate the CLI are stock prices, building permits, monetary data, and production orders. Indeed, more than 100 components are employed to come up with a monthly (Table 1) "Composite Leading Indicators."

- (1) If there are three consecutive months of year-over-year negative or positive changes, chances are the economy or a region is within 6 to 12 months of reaching a high or low point in economic activity.
- (2) The OECD also provides a brief assessment on whether recent trends in the Composite Leading Indicators signal an upcoming turning point in the business cycle.



Paris, 10 April 2012
OECD Composite Leading Indicators
News Release

First issue with GDP as the reference series (for details see the [note](#))

Table 1: Composite Leading Indicators**

	Ratio to trend, amplitude adjusted					Month on Month rate of change					1	2
	(long term average =100)					(%)					Year on Year rate of change (%)	Economic cycle outlook
	2011		2012			2011		2012			Latest month	
	Oct	Nov	Dec	Jan	Feb	Oct	Nov	Dec	Jan	Feb		
OECD Area	100.0	100.1	100.2	100.3	100.5	-0.0	0.1	0.1	0.2	0.2	-0.5	regained momentum
Euro Area	99.8	99.6	99.6	99.6	99.6	-0.2	-0.1	-0.1	-0.0	0.0	-1.9	potential turning point
Major Five Asia*	99.3	99.4	99.6	100.0	100.4	0.0	0.1	0.2	0.3	0.4	-0.4	regained momentum
Major Seven	100.0	100.1	100.3	100.5	100.7	-0.0	0.1	0.2	0.2	0.2	-0.4	regained momentum
Canada	99.7	99.7	99.7	99.7	99.7	-0.1	-0.0	-0.0	0.0	0.0	-1.1	activity around long term trend
France	100.0	99.9	99.8	99.7	99.7	-0.1	-0.1	-0.1	-0.1	-0.0	-1.3	continued sluggish activity
Japan	100.3	100.4	100.6	100.8	101.1	0.0	0.1	0.2	0.2	0.3	0.3	regained momentum
Germany	99.5	99.3	99.2	99.2	99.2	-0.4	-0.2	-0.1	0.0	0.0	-3.1	potential turning point
Italy	99.9	99.7	99.6	99.5	99.4	-0.3	-0.2	-0.2	-0.1	-0.1	-2.1	continued sluggish activity
United Kingdom	99.4	99.3	99.3	99.4	99.5	-0.3	-0.1	-0.0	0.1	0.1	-2.0	potential turning point
United States	100.1	100.4	100.7	101.0	101.3	0.1	0.2	0.3	0.3	0.3	0.5	regained momentum
Brazil	98.0	97.9	98.1	98.4	98.8	-0.2	-0.0	0.1	0.3	0.4	-2.0	potential turning point
China	99.4	99.6	99.9	100.4	101.0	0.0	0.2	0.3	0.5	0.6	-0.1	regained momentum
India	97.8	97.9	98.1	98.4	98.6	0.0	0.2	0.2	0.2	0.2	-1.6	potential turning point
Russia	101.3	101.3	101.3	101.3	101.4	-0.0	0.0	0.0	0.0	0.1	-1.2	signs of regained momentum

* China, India, Indonesia, Japan and Korea.

** From the release of April 2012 the OECD switches to using GDP as the reference for CLI's construction, ceasing to rely on the IIP as an intermediate target, except for China. CLI data for 33 OECD member countries and 6 OECD non-member economies are available at: http://stats.oecd.org/wbos/default.aspx?datasetcode=MEI_CLI

Easily the most eye-opening set of statistics the OECD makes available are the macroeconomic indicators for most of the world's major economies. Besides the Composite Leading Indicators, you will also find information on GDP, consumer prices, employment, and much more. It's an extraordinary Internet site by the OECD with a multitude of uses for investors, business managers, and economists—and it is freely available! That comprehensive database can be found at http://stats.oecd.org/Index.aspx?DatasetCode=MEI_CLI.

CHINA INDUSTRIAL PRODUCTION

What Is It: Measures the monthly change in China's industrial output.

Most Current News Release on the Internet:

www.stats.gov.cn/english/statisticaldata/monthlydata

Home Web Address: *www.stats.gov.cn/english*

Release Time: Between 10:00 a.m. and 1:30 p.m. (local time); the report is first released in Chinese two weeks after the month ends.

Frequency: Monthly.

Source: National Bureau of Statistics of China (NBS).

Revisions: Corrections to data may occur more frequently in the future as China endeavors to improve the accuracy of its statistics.

Let's begin with stating the obvious. China's blazing economic progress the past three decades has been unmatched by any country in modern history. From the catastrophic social and economic failures of the Cultural Revolution (1966–1976), China has managed to bounce back with such ferocity that it seems the planet's center of economic gravity has shifted to the Far East. After all, no country produces more steel, cement, mobile phones, color TVs, and cars. Indeed, one can argue that given China's manufacturing capabilities and its massive financial resources, it is difficult to justify calling China an "emerging economy." The country has assembled several world-class industries, including aviation, autos, and computers. Its technological prowess is already a cut above that of most industrial countries. China owns the second-fastest supercomputer, built the fastest passenger train in the world, and has launched an astronaut into space, only the third country to do so. All of this has helped catapult the People's Republic of China to become the world's second-largest economy. These are hardly the attributes of a struggling emerging country. China, of course, argues that it has still not "emerged" enough to be classified an industrial economy because its per capita GDP (the size of its economy divided by population) remains among the lowest in the world, which is true. But one fact is beyond dispute: China looms large as a genuine economic superpower.

Certainly as a consumer market, China offers opportunities limited only by imagination. Here is a nation of 1.3 billion people and growing, including a labor force of more than 800 million, all eager to work and spend money. Consumer demand has been climbing steadily the past two decades as households have been driven to improve their standard of living. That can be seen not only by their larger and better-furnished residences, but also in the use of high-tech consumer products. Despite government controls, China's Internet population is now the largest in the world, with more than 500 million citizens surfing the Web (as of 2012), an exponential jump from just 620,000 users 15 years earlier.

The broader question is, what intentions do China's top political leaders have for the country? Government officials talk about fortifying their "socialist market economy," a strange brew in which socialist ideals can be met in conjunction with a more liberal, open, and capitalistic economy. What is so interesting is that this bizarre mix has so far worked quite well for China. Its economy has grown nearly 10% a year the past two decades. Moreover, Chinese policymakers have successfully steered the country away from several global economic storms, including the Asian financial crisis and the Russian debt default in the late 1990s, the collapse of the dot.com bubble (2000–01), and the 2008–09 global economic downturn. They avoided these pitfalls largely because the government quickly ordered policies that were designed to protect their economy from outside shocks. Case in point: While other major economies were in free-fall during the 2008–09 recession, the Chinese government quickly implemented a nearly \$600 billion stimulus program. The result? At a time when most other economies were shrinking, China's GDP grew an annual average of more than 7% from 2008 to 2010.

Impressive? Yes. But the absence of any parliamentary debate on economic policy is not a practice to emulate. For there are also signs that Communist China is starting to bump up against the limits of Capitalist China. For instance, even though the country has grown much wealthier in recent years, the inequality in income among its population is getting wider and may incite more social unrest. All that spectacular growth has simply not translated into greater prosperity for the vast majority of its people. Indeed, inequality in China is growing at a faster rate than in Brazil or India, according to the World Bank.

To reduce the income gap and address other economic problems, there is evidence that China is creeping toward a more market-oriented economy. More than half of the business sector is now in private hands. Concrete steps are being taken to shift economic decision making away from a centralized, command-style system. What's more, China's ascension to the World Trade Organization in 2003 is supposed to bring its economic and currency policies more in line with world standards, but that process has been agonizingly slow so far. In the meantime, China's rapid expansion and massive consumer market continue to attract international investors and multinational business leaders. Large foreign investment bankers see in China a rich source of new clients as an increasing number of companies there are being permitted to access global capital markets to raise funds. Credit ratings firms, such as Standard & Poor's, Fitch, and Moody's, are also charging into China to assess the creditworthiness of its companies and government agencies. China itself has become a major player in the international community. With a war chest of more than \$3 trillion in foreign exchange reserves, by far the largest in the world thanks to its cumulative trade surpluses, China is in a position to buy huge chunks of foreign government bonds, stocks, real estate, and other types of assets.

And yet, even with all the attributes that make it an economic superpower, the country has at least one noticeable problem: Many foreigners suspect that China puts out dubious statistics about its economy. This poses a genuine problem for foreign firms and investors who need to appraise the country's current and future well-being. Longtime

observers have complained that China's economic numbers are less accurate than those of other industrialized countries, even going so far as to say that key officials "cook the books" to impress foreign investors and lenders. In recent years analysts have charged that China was overestimating its GDP growth to lure foreign capital. At other times, there were accusations that Chinese statisticians were intentionally underestimating growth to create the impression that the economy was not overheating.

Behind these statistical problems lies an antiquated data collection system, one that can be traced back to the old command economy days. During the 1950s and 1960s, Communist party headquarters relied extensively on production reports from local managers, who would often lie about output figures to curry favor with party leaders. Small-town Communist officials were often promoted based on the economic performance in their region, so it was in their best interest to embellish the figures. Thus, to some extent, the problem was not so much at the headquarters level in Beijing, but with the field reports from local and municipal managers. Today, China's National Bureau of Statistics (NBS) still gathers output figures much the same way as before, though the fabrication is believed to be less widespread. Nevertheless, China still has no independent method in place to check the veracity of local production reports.

This doesn't mean Beijing officials are sitting idle. They are well aware that without a trustworthy source of economic information, it will be hard for foreigners to make investment decisions or for Chinese leaders to carry out the right fiscal and monetary policies. The NBS has been working in earnest to upgrade the quality of its economic reports. Among the modifications introduced recently was a change in the manner in which statistics are collected. For example, Chinese officials decided in March 2005 that data collectors should be placed under the authority of the NBS. This can help redress many of the statistical inaccuracies that originate from local municipalities. Second, the government revamped how GDP is computed. This redesign was critical. The traditional statistical reporting method failed to capture the growth under way in the expanding service industries, such as real estate agents, business consultants, and companies offering communication services. To correct this shortcoming, the government conducted its first-ever nationwide economic census in 2004, and the results were startling. At the end of 2005, China announced that its economy was actually much larger than previously thought. Virtually all of the upward revision came from services, which turned out to represent more than 40% of all economic activity, nearly 10 percentage points higher than its prerevision share. It was fresh evidence that China's economy is becoming more diversified than first believed.

In 2011, the NBS took another important step to bring its economic statistics more in line with Western standards. The agency began to publish GDP growth rates on a quarterly basis, rather than just note how output has changed from the same quarter a year ago. China has also gotten much tougher with government employees who abuse the economic data. When two officials sought to enrich themselves by leaking the numbers on GDP, retail sales, and consumer price inflation before their scheduled release, prosecutors cracked down hard by giving them stiff prison sentences.

Chinese (GB) Chinese (BIG5)

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Classifications & Methods | Statistical Data | Press Release | International Cooperation | Publications

May 2, 2012 Wednesday

Overall Economic Development was Stable in the First Quarter

Statistical Data

China Statistical Database

Monthly Quarterly
Annual Other

Special Topics

World Statistics Day 2010.2010

International Association for Official Statistics Conference

Fourth International Conference on Agriculture Statistics

International Symposium on Statistical Cooperation

18th Roundtable on Business Survey Frames

News & Events Release Calendar

- Investment in Fixed Assets(Excluding Rural Households) by Region (2012.01-03)(05.02)
- Investment in Fixed Assets(Excluding Rural Households) by Industry (2012.01-03)(05.02)
- Investment in Fixed Assets(Excluding Rural Households) (2012.01-03)(05.02)
- Total Volume of Post and Telecommunications Services (2012.03)(05.02)
- Total Volume of Transportation (2012.03)(05.02)
- Industrial Profits Decreased from January to March(04.20)
- Average Price of Food in 50 Cities, April 11-20, 2012(04.24)
- Retail Price Index by Category (2012.03)(04.20)
- Consumer Price Index (CPI) by Region (2012.03)(04.20)
- Consumer Price Index (CPI) by Category (2012.03)(04.20)
- Total Retail Sales of Consumer Goods (2012.01-03)(04.19)

International Cooperation

- Mr. Ma Jiantang Participated in the 43rd Session of the United Nations Statistical Commission(03.09)
- H.E. Li Keqiang Conferred with the Main Guests Participating the International Forum on Monitoring National Development(10.14)
- International Forum on Monitoring National Development Held in Beijing(10.13)
- The Third Meeting of the Heads of the National Statistical Institutions of BRICS Held in Beijing(10.09)

Statistical Studio

Related Links

- Other Gov Agencies
- International Organizations
- Stat Websites by Country

Another way that China has moved to bring its economic reports up to global standards was to make the data more accessible to everyone in the world. Here we see an earnest attempt by China's NBS to construct a user-friendly Web site with detailed information on economic output, inflation, and other measures of performance, and much of it in English. By going to the home page of the National Bureau of Statistics (www.stats.gov.cn/english), one can begin to stay on top of the country's key economic data.

- (1) Release Calendar: The NBS makes available an economic calendar for key economic statistics.
- (2) Statistical Data: High-frequency economic indicators—such as retail sales, industrial production, consumer prices, and GDP—can be found based on their schedule of releases.

- (3) Press Releases: A very good start to get the latest economic data can be found here. View a sample of a press release on industrial production below.
- (4) NBS's Press Release on Industrial production: Topping the list of perhaps the best and most timely measures of economic performance in China is its industrial production series. It measures changes in output for the industrial sector of the economy, which includes manufacturing, mining, and utilities. Industrial Production is a key metric for economic forecasting and can anticipate changes in inflation. For example, high levels of industrial production can heat up pricing pressures and ultimately force the government to clamp down on output by raising interest rates or curbing bank loan growth, or both. Every month, the NBS issues a seven-page report on industrial output that contains the latest official analysis, a detailed table of how key sectors have performed, and graphics that illustrate how production and its components performed over the past 12 months.

Anyone who wants to monitor the latest trends in China's economy should familiarize themselves with China's NBS online Web site. Having said that, we have to return to one big underlying concern. China does not do itself any favors by keeping secret the methodology of how it computes many of these economic indicators. To bolster public confidence in its economic data, the government needs to be much more transparent on how the data is gathered, what weights are being given to different sectoral groups, and what calculations are used to compute these statistics.

Chinese (GB) Chinese (BIG5)



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National Bureau of Statistics of China



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4 ► Industrial Production Operation in March 2012

National Bureau of Statistics of China 2012 04 16 13:52:55

In March 2012, the total value added of the industrial enterprises above designated size was up 11.9 percent year-on-year (the following growth rates of value added are real growth rates, i.e., deducting price factors), increased 0.5 percent over the first two months. In March, the total value added of the industrial enterprises above designated size went up by 1.22 percent month-on-month. In the first quarter, the total value added of the industrial enterprises above designated size was up 11.6 percent.

Analysis on different types of enterprises showed that, in March, the year-on-year growth of the state-owned enterprises, collective enterprises, state holding enterprises, enterprises funded by foreign investors or investors from Hong Kong, Macao and Taiwan province increased 8.0, 9.3, 13.7 and 8.2 percent respectively.

In March, the year-on-year growth of heavy industry increased 11.2 percent, and went up 13.9 percent for the light industry.

Grouped by different sectors, in March, all the 41 industrial divisions kept year-on-year growth. Of this total, the growth of textile industry was 16.9 percent; the manufacture of raw chemical materials and chemical products, up by 12.6 percent; the manufacture of non-metallic mineral products, up by 13.2 percent; the ferrous metal smelting and pressing, up by 9.5 percent; the manufacture of general machinery, 9.8 percent; the manufacture of automobile industry, 10.9 percent; the manufacture of railways, shipbuilding, aerospace and other transportation equipment, 7.0 percent; the manufacture of electric machinery and equipment, 11.8 percent; the manufacture of communication equipment, computers and other electronic equipment, 12.2 percent; and the production and supply of electricity, gas and water, up 7.6 percent.

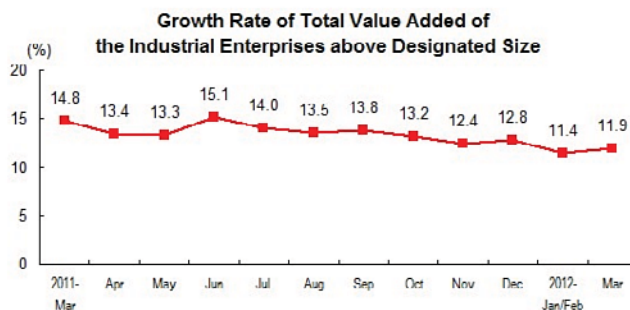
In terms of different regions, in March, the value-added of eastern region increased 10.4 percent year-on-year; the central region went up by 15.4 percent; western region rose by 13.0 percent.

In terms of different products, of the total 471 products, the output of 346 products in March showed a year-on-year growth. Of this total, the output of electricity was 410.9 billion kilowatt-hours, daily output stood at 13.3 billion kilowatt-hours, up by 7.2 percent; that of pig iron was 83.33 million tons, daily output reached 2.69 million tons, up by 10.2 percent; that of cement was 179.28 million tons, daily output hit 5.78 million tons, up by 7.9 percent; that of crude oil was 38.37 million tons, daily output reached 1.24 million tons, up by 2.0 percent; that of ten kinds of nonferrous metals was 2.94 million tons, daily output grew to 95 thousand tons, up by 3.3 percent; that of ethylene was 1.30 million tons, daily output reached 42 thousand tons, down by 4.8 percent; that of motor vehicles was 2024 thousand sets, daily output topped 65 thousand sets, up by 5.1 percent; that of cars was 1000 thousand sets, daily output totaled 32 thousand sets, up by 3.3 percent.

The sales ratio of industrial products in March was 97.3 percent, or 0.6 percentage points lower than that in the same period of last year. The total export delivery value of industrial enterprises was 878.0 billion yuan, a nominal year-on-year increase of 10.4 percent.

Industrial Production Operation in March

Indicators	Mar		Jan-Mar	
	Absolute Value	Increase rate Y/Y (%)	Absolute Value	Increase rate Y/Y (%)
Value-added of Industry Above Designated Size	...	11.9	...	11.6
Grouped by Light & Heavy Industry				
Light Industry	...	13.9	...	13.2
Heavy Industry	...	11.2	...	11.0
Grouped by Status of Registration				
State Owned & State-holding Enterprises	...	8.0	...	7.2
Collective-Owned Enterprises	...	9.3	...	9.7
Joint Stock Enterprises	...	13.7	...	13.0
Enterprises with Funds from Hong Kong, Macao and Taiwan, and Foreign Funded Enterprises	...	8.2	...	6.4
The Value-Added of the Main Industrial Sectors				
Manufacture of Textile	...	16.9	...	15.1
Manufacture of Chemical Raw Material and Chemical Products	...	12.6	...	13.3
Manufacture of Nonmetal Mineral Products	...	13.2	...	14.6
Manufacture of Ferrous Metal Smelting and Pressing	...	9.5	...	8.7
Manufacture of General Machinery	...	9.0	...	0.0
Manufacture of Transport Equipment	...	10.9	...	8.0
Manufacture of Railways, Shipbuilding, Aerospace and Other Transportation Equipment	...	7.0	...	5.9
Manufacture of Electric Machinery and Equipment	...	11.8	...	10.8
Manufacture of Communication Equipment, Computers and Other Electronic Equipment	...	12.2	...	11.2
Production and Supply of Electricity, Gas and Water	...	7.6	...	6.5
Output of Major Products				
Electricity (100 million kWh)	4109	7.2	11446	7.1
Pig Iron (10,000 tons)	8333	10.2	22246	6.5
Cement (100 tons)	17928	7.9	39910	7.3



INDIA: INDUSTRIAL PRODUCTION AND INFLATION

What Is It: The two main indicators are among the most relevant in monitoring India's economy.

Most Current News Release on the Internet: http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=84

Home Web Address: http://mospi.nic.in/Mospi_New/site/Home.aspx

Release Date:

Industrial Production: Second week of the month.

The "New" Consumer Price Index: Third week of the month.

Wholesale Price Index: Second week of the month.

Frequency: Monthly.

Source: Central Statistical Organization, Ministry of Statistics & Programme Implementation.

India's emergence as an economic power often gets overshadowed by its giant neighbor to the east. That's unfortunate. Not only is India coming into its own, but many believe that the country will eventually surpass China in both population and total output by 2050. What's so compelling about India is that its stunning growth since the early 1990s can be traced to a strategy that sets it apart from other developing countries in the region. From the beginning, India cleverly positioned itself so that it did not have to compete head-to-head with China and the other Asian countries. Indeed, what India did was defy the textbook path toward economic development. Virtually all emerging countries in the 20th century used their cheap labor and whatever capital they could scrape together to build up their manufacturing or agricultural capabilities. Exports and construction became the key drivers of economic growth for these countries.

However, India followed a strikingly different road by capitalizing on its own unique comparative advantage. India, like China, enjoys a large population (1.2 billion versus 1.3 billion for China), but the characteristics of these two groups differ in important respects. India's labor force is younger, is more traveled, and speaks English. Given these attributes, business leaders concluded that economic success would more likely come from services, and less from manufacturing. As a result, the country now offers a panoply of important services to the world, including banking, insurance, engineering, media, software, business outsourcing, medical diagnostics, telecommunications, and film entertainment. (India's film industry, for example, is the biggest in the world, in both the number of movies produced and the number of tickets sold.)

India has thus bucked the trend by choosing to rely more on services than manufacturing or natural resources as a means to achieve healthy economic growth. This decision has propelled its \$1.7 trillion economy to be the third largest in Asia and eleventh largest in the world. Moreover, India's blistering growth rate has led to an escalation in wages

among service-sector employees, and especially for skilled workers. This has enhanced family income and stimulated domestic demand. To give you a sense of how rapidly the country is changing, back in 1991, India had a total of five million telephone lines in the country. Now it is adding five million new phone connections each month!

One of the burning questions investors ask is whether India's economy can continue to race ahead as it has. Can it conceivably even overtake China in total output? The answer to both questions is yes, though the latter is probably a few decades away. India's prospects look bright for several reasons. First, the country has undertaken substantial political and economic reforms the past two decades. It has rejected socialism, opened its economy to more imports, deregulated industries, allowed the rupee to float more freely, and reduced barriers to trade.

Second, India's leaders also realized that the country cannot depend on services forever to keep its economy robust. And they certainly do not want the country to be viewed as simply a back-office operation for American companies that consists mainly of call centers, customer help lines, and computer programmers. So fresh domestic and foreign capital has also been directed to establish a sophisticated manufacturing industry, one that utilizes state-of-the-art technology and embraces the latest techniques of just-in-time inventory. The results have so far been impressive. India's annual growth in manufacturing is now accelerating at about the same pace as services. All told, India's service industry accounts for 63% of the GDP; the industrial sector contributes 20%; and agriculture, which was the backbone of its economy shortly after the country gained independence, has now taken a back seat in the 21st century and contributes only 17% to the GDP.

Given the country's extraordinary economic accomplishments, international investors are making the inevitable comparisons with China. Though China's economy is four times the size of India's, the question often asked is, who really will have the edge in the years ahead?

Certainly both countries have enormous potential to grow and prosper. But there are some important differences between them that might shape their economic destiny:

- Cultural purists may yell and scream about it, but the fact remains that English is the language of international business. In this respect, India has a big advantage over China. The medium of communication in India's colleges and universities is English. Indeed, India is the world's largest English-speaking country. The ability of workers and management to effectively communicate with customers and investors around the world is critically important to attract foreign capital and to find new markets for Indian-made products.
- India has a long tradition of democracy and known for having a transparent legal system. In contrast, China, while it has made some strides to decentralize its economy and allow more local autonomy, is still run by an autocratic Communist leadership. Its legal system is far from a model of transparency, and its courts are subject to political pressure. What's more, social unrest has increased in China,

especially in rural farm areas. Such strife is symptomatic of a country that is struggling to pursue two inherently conflicting goals: allowing more market capitalism in the economy, and preserving its Communist political heritage and the ideologies that stem from it. The social tension that comes from pursuing two incongruous objectives is not expected to subside anytime soon. With so much uncertainty about China's long-term stability, investors may place greater faith in the future of a more open India.

- No economy can prosper unless it has a healthy banking system that can finance consumer and business activity. India's banking system, though much smaller than China's in terms of assets, is far healthier and better capitalized. India's loans, for example, are priced according to risk, so interest rates tend to be higher than those in China. China has historically chosen to keep rates artificially low, in part because policymakers want to keep its currency (the yuan) undervalued. However, that has also allowed Chinese banks to issue such artificially low-interest-rate loans to domestic borrowers, including failing state-owned enterprises, and that raises questions about the future viability of such loans. Keep in mind that China has had to bail out its banks more than once in the past decade. Meanwhile, India's regulators appear determined to keep its banks financially sound from the outset. They demand high capital requirements for lenders and make sure that these institutions have sufficient provisions set aside against bad loans.
- Unlike India, China faces a serious demographic squeeze in coming years. The Communist country has implemented a "one family, one child" policy, and Chinese households have mostly adhered to it. As a result, birthrates and family sizes have been shrinking since 1980. No such policy exists in India; consequently, its population is much younger on average and more dynamic. Experts predict that India will end up with a larger population than China in the next five years or so. If that trend materializes, it will have profound implications for both countries. As China struggles to service an aging workforce that draws down national savings, India will enjoy a more youthful, active, and prosperous labor force. This can help catapult India's economy past China by midcentury.

But it's not all smooth sailing for India. If the economy is ever to meet its full potential, India will first have to address some serious internal shortcomings. One is the critical need to upgrade its creaking infrastructure. India's road transportation system is in dismal shape. Highways make up less than 5% of its road network, and this makes it tough to transport goods around the country. In addition, there is a critical shortage of lodging facilities, and this has hurt both tourism and foreign business travel in the country. There were only 140,000 hotel rooms in all of India in 2011, whereas China had more than ten times as many. Also in dire need of expansion are India's ports. There are not enough of them to handle all the merchant ships that arrive and leave with goods, and this has hampered the flow of both imports and exports. Government officials also have to beef up the

nation's power-generating system. Right now India does not have enough plants to satisfy the electrical demands of a fast-growing economy. Blackouts are not uncommon, even in Bangalore, where the country's high-tech computer and software industry is situated.

Aside from having a lagging infrastructure, India continues to be stigmatized by its stifling bureaucracy, red tape, corruption, and set of rigid labor rules that makes it quite difficult for companies to lay off employees. Unless these deficiencies and administrative problems are corrected, India will have great difficulty achieving world-class economic status.

If the government fails to follow up with the needed public investments, it will stunt the economy's growth for years and probably bring higher rates of inflation. On the other hand, if officials allocate enough resources to improve roads, ports, electrical generation, and airports, as well as reduce bureaucratic delays, the benefits will be lasting and significant. Whichever course the country takes, the results will show up in the macroeconomic data, particularly with industrial production and inflation. To monitor these and other key economic indicators of India, one can go online to the Ministry of Statistics—specifically, the Central Statistical Organization (CSO).

The latest data on the major macroeconomic indicators has been assembled on one page, found at http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=84.

The Web page breaks down as follows:

1. *GDP at current prices.*
2. *GDP at constant prices.* (To view the entire press release of the latest quarterly GDP report, go to http://mospi.nic.in/Mospi_New/upload/mospi_press_releases.htm?status=1&menu_id=120.)
3. *The key components of GDP.*
4. *Industrial production:* Total and broken down by its three major segments: mining, manufacturing, and electricity. But more revealing are the three main categories of product: capital goods, intermediate goods, and consumer goods.
5. *Inflation:* The CSO publishes a dizzying array of inflation measures, seven to be exact. They are the GDP implicit price index, no fewer than five variants of consumer price inflation, and the wholesale price index (WPI).

The implicit price index is a quarterly measure and thus is not especially timely. Of the five CPI measures, the three most useful are the recently introduced groupings of CPI Urban (which is based on surveys taken from 310 towns), CPI rural (based on 1,181 villages across India), and the combined CPI (a series that began in 2012 and serves as the headline retail price inflation in the country). The newly constructed national CPI will likely replace the wholesale price index as the main benchmark for monetary policy action by India's central bank. For years, the Reserve Bank of India had relied on the wholesale price index as a barometer of price pressures in the country. But critics complained that the WPI often understated inflation because it looked only at product

prices at the wholesale level and largely ignored the cost of services, a sector that plays an increasingly important role in the economy. Economists in India took note of how the rest of the world focused on the CPI because it ultimately reflected prices to the end user, namely consumers. As a result, we believe that the three CPI measures will in time overshadow the WPI as the best leading indicator of monetary policy.

6. *Wholesale Price Index (WPI)*: India's WPI is similar to the Producer Price Index in other countries. It is sensitive to price changes in commodities and industrial goods but, as stated previously, has little representation in services.

REAL SECTOR						
Advance Release Calendar				Last Updated:		
April 30, 2012						
This page is updated periodically. Unless otherwise indicated, data are preliminary when first released. Data are not seasonally adjusted.						
SDDS Category and Component	Data	Unit of Description	Period of latest data	Latest Data	Previous data @	Percentage change from previous to latest period
1		2	3	4	5	6
National Accounts						
1 ▶	Gross Domestic Product (GDP)	Rs.Crore	Oct/11- Dec11	2150159	1882269	14.2
	(at current prices)					
1.	Agriculture	Rs.Crore	Oct/11- Dec11	450149	409549	9.9
2.	Industries	Rs.Crore	Oct/11- Dec11	545327	488227	11.7
3.	Services	Rs.Crore	Oct/11- Dec11	1154683	984495	17.3

National Accounts						
2 ▶	Gross Domestic Product (GDP)	Rs.Crore	Oct/11- Dec11	1339603	1262794	6.1
	[at Constant (2004-2005) prices]					
3 ▶	1. Agriculture	Rs.Crore	Oct/11- Dec11	230168	221044	2.7
	2. Industries	Rs.Crore	Oct/11- Dec11	349958	341114	2.6
	3. Services	Rs.Crore	Oct/11- Dec11	759477	697635	8.9

National Accounts						
	Gross Domestic Product (GDP) (Implicit Price Index)	Index 2004-05 =100	Oct/11- Dec11	160.5	149.1	7.7
	1. Agriculture	Index 2004-05 =100	Oct/11- Dec11	195.6	182.8	7.0
	2. Industries	Index 2004-05 =100	Oct/11- Dec11	155.8	143.1	8.9
	3. Services	Index 2004-05 =100	Oct/11- Dec11	152.0	141.1	7.7

<u>Production Index</u> Industrial Production)		(Index of			
4 ▶ General	Index 2004-05 =100	February/12	174.9	166.0	4.1
1. Mining		February/12	134.8	132.0	2.1
2. Manufacturing		February/12	186.5	179.4	4.0
3. Electricity		February/12	145.1	134.3	8.0
Use-Based Classification					
1. Capital Goods	Index 2004-05 =100	February/12	262.2	237.0	10.6
2. Intermediate Goods	Index 2004-05 =100	February/12	143.2	144.0	-0.6
3. Consumer Goods	Index 2004-05 =100	February/12	199.5	200.0	0.2
5 ▶ Consumer Price Index(CPI)					
1. CPI-Industrial Workers (CPI [IW])	2001-100	March/12	201	185	8.65
2. CPI-Rural Labourers (CPI [RL])	1986-87=100	March/12	626	584	7.19
3. CPI-Rural	2010=100	March/12	116.3	106.9	8.79
4. CPI Urban	2010-100	March/12	114.6	103.9	10.30
5. CPI-Combined	2010=100	March/12	115.6	105.6	9.47
6 ▶ 1. Wholesale Price Index (WPI)	2004-05=100	March/12	159.8	149.5	6.89

BRAZIL'S INDUSTRIAL PRODUCTION AND THE IBC-BR ECONOMIC ACTIVITY INDEX

What Is It: Two important economic statistics on Brazil. The first reflects industrial output, and the second is considered a leading indicator of the country's GDP.

News Release on the Internet:

Industrial Production: www.ibge.gov.br/english/presidencia/default_ant.php
and www.bcb.gov.br/?INDICATORS

IBC-Br Economic Activity Index: www.bcb.gov.br/?INDICATORS

Release Time:

Industrial Production: 9:30 a.m.(local time); the report is released about 40 days after the survey month ends. (Thus, January's release refers to industrial performance in November.)

IBC-Br Economic Activity Index: 10:20 a.m. (local time); published about 45 days after the reference month.

Frequency: Monthly.

Sources: Brazilian National Statistics Institute, Brazilian Institute for Geography and Statistics (IBGE), and the Central Bank of Brazil.

Revisions: Both reports are subject to revisions.

There is no country on the planet—not a single developing or industrial nation—that possesses the near-perfect set of attributes Brazil has. And if you suspect I'm guilty of hyperbole here, think again. Brazil may be classified as an emerging economy, but it also has as a well-diversified industrial sector—including one of the largest aerospace industries in the world, a major auto producer, a global-size energy company—and has the engineering know-how and resources to even build a nuclear submarine. But let's not stop there.

Brazil is endowed with a mind-boggling array of physical and natural resources, thanks to the Amazon basin. It is energy self-sufficient (a fact that bears repeating for emphasis), has ample arable land, possesses massive offshore oil fields, enjoys a benign climate, is gifted with thousands of miles of magnificent beaches, and is surrounded by other democratically elected developing nations. To many foreign investors, Brazil just about defines what the "promised land" should look like.

The country thus has all the prerequisites to become a prosperous leader in the global economy, and that has not escaped the attention of foreign investors. Indeed, many look upon Brazil as having even greater economic potential than the two Asian giants. China might have matchless human assets with 1.3 billion people (versus Brazil's more modest 200 million citizens), but it also is rapidly running out of critical natural resources. India has a large population and a fast-growing economy, but it too is highly dependent on imports of oil and other vital commodities. Looked at in terms of per capita GDP (a way

of measuring a country's standard of living), Brazil recorded a per capita GDP of \$11,769 in 2011, far higher than that of China (\$8,382) and three times that of India (\$3,694), according to the IMF.

In many respects, Brazil is already a star player in the global arena. It has just surpassed Britain to become the world's sixth-largest economy. Closer to home, Brazil easily outweighs its neighbors in economic size, accounting for more than 40% of Latin America's total GDP.

Facilitating all this progress have been the political and economic reforms the country has undertaken the past three decades. After more than half a century of strong military influence in the government, the country made a fateful transition to mass electoral democracy in the mid-1980s. This shift was all the more remarkable because it occurred smack in the middle of the Latin American debt crisis. In addition to establishing a vigorous democracy with a multiparty system, Brazil's leaders have liberalized the domestic capital markets. They allowed their currency to float in foreign exchange markets, crafted a new fiscal spending plan, opened the economy to more competition, embarked on a privatization program, and passed legislation to further deregulate the economy. Moreover, in a bold forward-looking move, policymakers successfully placed the country on a path toward energy independence. Brazil's ethanol program, along with newfound oil, transformed the country from being a net importer of oil in the 1980s to one that is energy self-sufficient in 2006, and now destined to be a major oil exporter.

The results for Brazil's economy have been palpable. The country has weathered global economic downturns better than its neighbors. While the U.S. and Europe struggled with recession after the tech-bubble burst of 2000 and 2001, economic activity in Brazil continued to expand without interruption. It even weathered the global financial downturn of 2008–09 with relatively minor damage. The country was one of the last to fall into recession in 2008 but among the first to resume growth in 2009. In fact, Brazil's GDP bounced back with a robust 7.5% growth rate in 2010 and a respectable 2.7% in 2011 (beating out the performance of the U.S. and Europe).

Still, Brazil needs to do more. Its central bank, which carries out monetary policy, does not yet have full independence and thus can be subject to political influence. The country continues to have severe social problems due to sharp inequalities in its income distribution. It also has a creaky infrastructure that requires attention, and it needs to further reform its judicial system.

But make no mistake: Brazil's economy is on the move and international investors have eagerly returned to help expand the country's industrial and service sectors. Anyone monitoring economic activity in Brazil has to focus on at least two key indicators: industrial production and the IBC-Br Economic Activity Index.

INDUSTRIAL PRODUCTION

The first important indicator is industrial production, which represents 27% of the country's GDP (with services contributing 67% and agriculture 6%). To measure industrial

output, the government surveys 8,500 establishments on the output of 900 different products. Brazil’s Institute for Geography and Statistics (IBGE) compiles the data, announces the news, and publishes an online press release in English. There are two excellent online sources to view the latest data on Brazil’s industrial production.

One source is IBGE’s Web site (www.ibge.gov.br/english/presidencia/default_ant.php), shown here.



Industrial output increases by 1.3% in February

February 2012 / January 2012	1.3%
February 2012 / February 2011	-3.9%
Accumulated in 2012	-3.4%
Accumulated in 12 months	-1.0%
Quarterly Moving Average	0.1%

In February of 2012, the industrial output **increased by 1.3% compared with the immediately previous month**, in the seasonally adjusted series, recovering part of the loss of 1.5% of the previous month. This is the **highest result since the 2.2% registered in February of 2011**.

Compared with February of 2011, the total industrial output dropped 3.9%, the sixth consecutive negative rate in that type of comparison and the most significant one since September of 2009 (-7.6%).

As a result, the industrial sector accumulated a **loss of 3.4% in the first two months of 2012. The annual rate**, indicator accumulated in the last twelve months, **contracted 1.0% in February of 2012**, keeping the downward trade started in October of 2010 (11.8%). It registered **the most substantial loss since February of 2010 (-2.6%)**.

Industrial Output Indicators by Category of Use
Brazil - February 2012

Categories of Use	Change (%)			
	February/January'	February 12/ February 11	Accumulated Jan-Feb	Accumulated last 12 months
Capital goods	5.7	-16.0	-14.6	-1.0
Intermediate goods	2.3	0.4	-1.1	-0.3
Consumer goods	-0.2	-5.4	-3.0	-1.8
Durable	-4.3	-22.1	-15.4	-6.1
Semi- and non-durable	1.1	0.6	1.2	0.6
Overall industry	1.3	-3.0	-3.4	-1.0

Source: IBGE, Directorate of Surveys, Coordination of Industry.

Another government agency, the Central Bank of Brazil (www.bcb.gov.br/ ?INDICATORS), does a slightly better job of presenting the industrial production tables along with other important economic indicators—though without any accompanying commentary. What’s more, the information has to be downloaded onto a spreadsheet, but it’s a step well worth the effort.

After the data is downloaded from Brazil's central bank, the top part of the page notes the monthly value-added index of industrial production, and the bottom has all the percentage changes with the following time frames:

- The latest monthly change (using seasonally adjusted figures).
- Change over the past 12 months (using the observed data, not seasonally adjusted).
- Change in the year so far versus the same period the previous year (using observed data).
- Change in the past 12 months from the prior 12 months (using observed data).

The page also breaks down industrial production as follows:

- General industrial production index: An overall snapshot of industrial output.
- Capital goods: An indicator that tells whether companies are investing.
- Intermediate goods: A helpful leading sign of future production.
- Consumer durable goods: A category that consists of household appliances and home electronics.
- Consumer nondurable goods: Here we refer mainly to food and clothing. Both consumer durable and nondurable goods output are linked to the growth in wages and personal income.

THE IBC-BR ECONOMIC ACTIVITY INDEX

The second key indicator on Brazil is the IBC-Br Economic Activity Index (www.bcb.gov.br/?INDICATORS). It's published monthly by Brazil's central bank and is closely watched by analysts who consider it a reliable leading indicator of the country's quarterly GDP performance. The Economic Activity Index was originally released as a regional statistic, but the central bank expanded its coverage to the national economy in 2010. The index now incorporates estimates for the monthly output of Brazil's three sectors—industrial, services, and agriculture—and computes an index using a methodology similar to calculating the GDP. By tracking both industrial production and the Economic Activity Index, investors can get an excellent overview on the health of the Brazilian economy and its likely direction.

Economic indicators

Apr 14, 2004

I.23 - Industrial production (general and by category of use)

1992 = 100

Period	General		Capital goods		Intermediate goods		Consumer goods						
							Total		Durable		Nondurable and semidurable		
	Observe data	Seasonally adjusted ^{1/}	Observe data	Seasonally adjusted ^{1/}	Observe data	Seasonally adjusted ^{1/}	Observe data	Seasonally adjusted ^{1/}	Observe data	Seasonally adjusted ^{1/}	Observe data	Seasonally adjusted ^{1/}	
2003	Jan	124.37	133.45	111.48	122.49	130.23	139.20	115.06	125.87	166.03	182.28	106.27	115.71
	Feb	121.43	132.56	117.44	120.28	124.97	138.45	111.79	123.15	170.08	173.57	102.04	115.20
	Mar	128.90	132.92	116.23	121.33	140.12	139.76	113.34	123.33	159.35	173.08	105.27	114.81
	Apr	128.16	132.99	119.84	122.98	136.05	138.43	114.69	123.43	177.63	171.80	104.24	115.15
	May	133.42	132.00	123.88	122.86	141.42	137.24	119.82	121.58	178.31	172.20	109.93	113.72
	Jun	128.16	130.26	117.96	119.20	135.99	133.72	114.21	120.13	161.63	172.83	105.93	110.79
	Jul	136.91	131.14	129.12	124.27	143.79	136.25	122.09	118.42	174.88	177.74	112.95	108.07
	Aug	138.07	133.03	128.36	127.18	143.50	138.42	125.01	120.44	176.03	174.71	116.07	110.00
	Sep	145.53	138.49	140.49	135.25	147.29	142.13	134.61	125.58	209.97	199.72	122.15	113.52
	Oct	153.66	142.20	157.68	143.24	151.81	142.84	144.82	126.54	231.72	208.18	130.58	113.53
	Nov	145.24	142.73	158.61	156.13	140.49	142.61	138.23	127.94	228.68	213.63	123.61	114.75
	Dec	132.19	139.79	134.94	144.27	131.29	143.61	126.40	130.43	185.07	208.93	116.37	118.02
2004	Jan	128.91	138.94	128.97	146.03	133.55	143.72	117.92	130.74	190.58	213.36	106.07	117.08
	Feb	123.59	136.42	129.66	142.54	130.34	142.57	109.54	126.20	174.37	201.91	98.91	114.75
1 ►	% month	-4.13	-1.81	0.53	-2.39	-2.41	-0.80	-7.10	-3.47	-8.51	-5.37	-6.75	-1.99
	% month (-1)	-2.48	-0.61	-4.42	1.22	1.72	0.08	-6.71	0.23	2.98	2.12	-8.85	-0.79
	% month (-2)	-8.99	-2.06	-14.92	-7.60	-6.55	0.70	-8.56	1.95	-19.07	-2.20	-5.86	2.85
2 ►	% month year (-1)	1.78	2.92	10.41	18.50	4.30	2.98	-2.01	2.48	2.53	16.33	-3.06	-0.39
3 ►	% year	2.73	3.52	12.98	18.87	3.41	3.11	0.27	3.18	8.58	16.70	-1.60	0.40
4 ►	% 12 months	-0.03	0.47	3.94	5.65	1.88	2.07	-2.99	-1.80	2.66	5.39	-4.22	-3.28

Economic Indicators

May 2, 2012

I.54 - Index of Economic Activity of the Central Bank (IBC-Br)			
2002=100			
Period	Index of Economic Activity of the Central Bank (IBC-Br)		
	Observed data	Seasonally adjusted data	
2011	Jan	130.11	139.59
	Feb	132.33	140.30
	Mar	147.12	140.96
	Apr	143.89	139.99
	May	143.04	140.18
	Jun	139.42	139.88
	Jul	141.29	140.17
	Aug	143.39	139.39
	Sep	139.80	139.27
	Oct	139.48	138.46
	Nov	139.26	140.16
	Dec	138.19	140.79
2012	Jan	131.99	140.53
	Feb	133.47	140.20
% month		1.12	-0.23
% same month year (-1)		0.86	-0.07
% month (-1) of year (-1)		1.44	0.67
% month (-2) of year (-1)		1.47	1.57
% year		1.15	0.30
% 12 months		1.91	2.05

Source: Banco Central

CANADA: INTERNATIONAL MERCHANDISE TRADE COMPOSITE LEADING INDICATORS IVEY PURCHASING MANAGERS INDEX

What Is It: Three economic measures on Canada that move markets.

Home Web Address for Statistics Canada: www.statcan.gc.ca/start-debut-eng.html

Home Web Address for Ivey Purchasing Managers Index:
<http://iveypmi.uwo.ca/english/index.htm>

Release Time:

International Merchandise Trade: 8:30 a.m. (ET); released the second week of each month.

Composite Leading Indicators: 8:30 a.m. (ET); released the third week of each month.

Ivey Purchasing Managers Index: 10:00 a.m. (ET); released the fourth working day of the following month.

Frequency: Monthly.

Sources: Statistics Canada; Richard Ivey School of Business, Western University, Canada.

We have all heard of the “stress tests” that regulators imposed on U.S. banks recently to determine whether they can survive future economic shocks. The tests involve putting banks through a series of near-cataclysmic scenarios to see how financially sturdy they are. It’s an imperative exercise to prevent future bailouts by taxpayers. But here’s a question: Why waste a perfectly horrendous financial crisis? Let’s look back and see which major industrial economies and banks came out of the 2008–09 global catastrophe relatively unscathed. After all, *that* event was the ultimate stress test, so wouldn’t it be interesting to see who passed through this devastating experience with minimal damage?

It turns out only two advanced countries came through in good form, Canada and Australia. We’ll begin with Canada and discuss Australia in the next section.

What is so appealing about Canada is its enormous economic diversity and overall financial soundness—a combination all too rare these days. By economic diversity, I mean to highlight both the wealth of its natural resources *and* the country’s highly skilled workforce in manufacturing and services. When it comes to financial soundness, we look to the integrity of the banking industry, because no economy can function well without a vibrant group of banks to help finance economic activity. Let’s view each separately.

Canada’s economy can be divided into three distinct sectors: resources, manufacturing, and services.

RESOURCES

That it has such a vast assortment of natural resources should not come as a complete surprise since the country has the second-largest landmass in the world (exceeded only by Russia). Central and western Canada in particular have seen rapid growth in the production of oil, lumber, diamonds, gold, nickel and uranium—to make the short list. Yet even parts of eastern Canada, like Newfoundland and Labrador, areas that long relied on the fishing industry for income, are now leading the way with new oil and gas exploration. And it is all paying off. Canada has the third-largest proven oil reserves in the world (more than Kuwait and Russia *combined*). It is also the eighth-largest oil exporter, shipping more crude than half the OPEC countries.

MANUFACTURING

Aside from its abundance of resources, Canada also has a huge manufacturing base, the biggest of which is the production of autos, thanks to its ties with the U.S. motor vehicle industry. Although Canada's auto sector has gotten much of the spotlight, foreign investors are keenly aware of the country's other major producers, such as agricultural machinery, oil and gas drilling equipment, pharmaceuticals, high-tech electronics, and shipbuilding.

SERVICES

Where Canada has recently impressed observers the most is in the strength and stability of its financial services sector. When the world economy tanked in 2008–09, many large international banks would have collapsed had governments not come to their rescue with prodigious injections of capital. Bank bailouts were particularly extensive in the U.S., Britain, Germany, and Netherlands, and in one case, Iceland, the banks had to be nationalized. But there was no such government assistance for the Canadian banks. No taxpayer bailout was needed here. No special entity had to be created to buy toxic assets.

What made Canada's banking system stand out? First, it has always been more tightly regulated than banks in the U.S. or Europe. For instance, Canadian banks are not permitted to make high-risk loans, such as adjustable-rate mortgages with five-year teaser rates, a practice that was common in the U.S. and ended up shocking American borrowers once rates rebounded. In contrast, when Canadian banks issued variable-rate mortgages, they would adjust the rates daily to conform to the market. Second, Canadian banks were better capitalized than their American and European counterparts. Third, lenders in Canada displayed a different management style. They were much more risk-averse, avoiding subprime mortgages and other less-creditworthy borrowers. Perhaps the single biggest factor that kept the Canadian banks out of trouble was their practice of holding on to the mortgages they originated, a policy that prompted them to make prudent lending decisions from the start. If those mortgages failed, the banks themselves would suffer the consequences. But U.S. banks scoffed at such a practice. Why be cautious at all? U.S.

lenders chose not to hold on to the mortgages they originated. Instead, those loans were quickly packaged with other mortgages, converted into highly complex securities, and sold to unsuspecting investors. These concocted instruments ended up causing an enormous real estate and mortgage bubble that eventually triggered a historic economic and financial meltdown. Although Canada also slipped into recession briefly in 2009, the downturn proved much less severe than in most other countries. But what wowed many investors and policymakers was the inherent strength of its financial sector. Canada's banks came to be recognized as the strongest in the world.

To be sure, Canada's economy has some vulnerabilities. Its impressive industrial capabilities and immense natural resources have led to a rush of foreign investment into the country, and that has lifted the value of the Canadian dollar to levels that have challenged exporters.

In addition, Canada's economy is still very closely tied to the U.S., thanks largely to the 1989 Canada Free Trade Agreement and the 1994 North American Free Trade Agreement. Indeed, a change in interest rates by the U.S. Federal Reserve can affect both countries, since 75% of Canada's exports (mostly autos and parts, agriculture products, and oil) are destined for the U.S. Yet Canada has also taken concrete steps to expand its trading relationship with other countries. Merchandise trade with China, for example, has more than tripled in just the past ten years.

For all the reasons cited above, there will continue to be growing interest in Canada's financial and real economy by investors. To best track business activity in the country, one can turn to the government's main economic Web site, Statistics Canada. While some access to its database requires payment, there are also several valuable sites within Statistics Canada that are freely available.

- **Main Free Site for Statistics Canada**

www.statcan.gc.ca/start-debut-eng.html

- **International Trade**

Statistics Canada publishes a monthly summary on the country's trade flows around the world. It provides fresh insights into the demand that foreigners have for Canadian goods, which can affect GDP growth, employment, and the Canadian dollar. To access the latest trade numbers, begin with the main Statistics Canada Web address above. Click the listing on "International Trade," and you arrive at a page with a category on the left entitled "Canadian International Merchandise Trade." Proceed to that Web site, and you will get the most recent statistics, with an option to view the PDF version of the report.

- (1) The latest details on where Canadian exports are headed.
- (2) A list of key countries and amounts that Canada imports.
- (3) Types of commodities and finished goods that Canada exports and imports.

Table 1
Merchandise trade: Principal trading areas – Seasonally adjusted, current dollars

		February 2011 ^f	January 2012 ^f	February 2012	January to February 2012	February 2011 to February 2012
		millions of dollars			% change	
Principal trading areas						
	Total exports	35,609	41,195	39,606	-3.9	11.2
	United States	26,305	30,425	29,270	-3.8	11.3
1 ▶	Japan	973	761	927	21.8	-4.7
	European Union ¹	2,795	3,455	3,550	2.7	27.0
	Other OECD countries ²	1,474	1,558	1,620	4.0	9.9
	All other countries	4,062	4,995	4,239	-15.1	4.4
	Total imports	35,630	39,249	39,314	0.2	10.3
	United States	21,701	24,367	24,463	0.4	12.7
2 ▶	Japan	853	932	932	0.0	9.3
	European Union ¹	3,561	3,526	3,627	2.9	1.9
	Other OECD countries ²	2,482	3,036	3,040	0.1	22.5
	All other countries	7,034	7,388	7,252	-1.8	3.1
	Trade balance	-21	1,946	292	...	...
	United States	4,604	6,058	4,807	...	...
	Japan	120	-171	-5	...	...
	European Union ¹	-766	-71	-77	...	...
	Other OECD countries ²	-1,008	-1,478	-1,420	...	...
	All other countries	-2,972	-2,393	-3,013	...	...

^f revised

... not applicable

1. The European Union includes Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom.

2. Other countries in the Organisation for Economic Co-operation and Development (OECD) include Australia, Canada, Iceland, Mexico, New Zealand, Norway, South Korea, Switzerland and Turkey. Effective February 2012, Chile and Israel are included in "Other OECD countries."

Note(s): Totals may not equal the sum of their components.

Table 2
Merchandise trade: Principal commodity groupings – Seasonally adjusted, current dollars

		February 2011 ^f	January 2012 ^f	February 2012	January to February 2012	February 2011 to February 2012
		millions of dollars			% change	
Total exports		35,609	41,195	39,606	-3.9	11.2
	Agricultural and fishing products	3,251	3,766	3,590	-4.7	10.4
	Energy products	8,865	11,494	10,698	-6.9	20.7
	Forestry products	1,790	1,780	1,781	0.1	-0.5
	Industrial goods and materials	8,746	9,240	9,362	1.3	7.0
	Machinery and equipment	6,267	6,618	6,670	0.8	6.4
	Automotive products	4,605	6,109	5,383	-11.9	16.9
	Other consumer goods	1,306	1,333	1,240	-7.0	-5.1
	Special transactions trade ¹	318	351	359	2.3	12.9
	Other balance of payments adjustments	461	503	522	3.8	13.2
	Total imports	35,630	39,249	39,314	0.2	10.3
	Agricultural and fishing products	2,625	2,768	2,738	-1.1	4.3
	Energy products	3,712	4,268	5,047	18.3	36.0
	Forestry products	215	222	206	-7.2	-4.2
	Industrial goods and materials	7,566	8,271	8,448	2.1	11.7
	Machinery and equipment	9,858	10,689	10,466	-2.1	6.2
	Automotive products	5,622	6,579	6,172	-6.2	9.8
	Other consumer goods	4,850	5,061	4,800	-5.2	-1.0
	Special transactions trade ¹	400	561	587	4.6	46.8
	Other balance of payments adjustments	783	830	851	2.5	8.7

^f revised

1. These are mainly low valued transactions, value of repairs to equipment, and goods returned to country of origin.

Note(s): Totals may not equal the sum of their components.

- Index of Composite Leading Indicators—Canada

Table 1
Leading indicators

	October 2011	November 2011	December 2011	January 2012	February 2012	March 2012	Last month of data available
	% change						
4 ► Composite leading indicator (1992=100)	256.8	259.0	260.4	262.0	263.8	264.9	0.4
Housing index (1992=100) ¹	132.7	133.0	134.1	135.1	133.6	134.4	0.6
Business and personal services employment ('000)	3,038	3,050	3,061	3,072	3,073	3,078	0.2
S&P/TSX stock price index (1975=1,000)	12,578	12,359	12,161	12,097	12,301	12,329	0.2
Money supply, M1 (millions of dollars, 1992) ²	232,560	234,314	236,339	238,319	239,335	240,188	0.4
U.S. Conference Board leading indicator (1992=100) ³	140.4	140.3	140.3	140.3	140.6	141.3	0.5
Manufacturing							
Average workweek (hours)	36.9	37.3	37.5	37.7	37.8	37.9	0.3
New orders, durables (millions of dollars, 1992) ⁴	25,574	26,496	26,683	26,639	27,056	26,728	-1.2
Shipments/inventories of finished goods ⁴	1.90	1.92	1.93	1.96	1.99	2.00	0.01 ⁵
Retail trade							
Furniture and appliance sales (millions of dollars, 1992) ⁴	3,001	2,980	2,945	2,919	2,914	2,908	-0.2
Other durable goods sales (millions of dollars, 1992) ⁴	10,753	10,822	10,903	10,872	10,899	10,973	0.7
Unsmoothed composite leading indicator	260.9	264.0	261.8	266.5	266.0	266.6	0.2

1. Composite index of housing starts (units) and house sales (multiple listing service).

2. Deflated by the Consumer Price Index for all items.

3. The figures in this row reflect data published in the month indicated, but the figures themselves refer to data for the month immediately preceding.

4. The figures in this row reflect data published in the month indicated, but the figures themselves refer to data for the second preceding month.

5. Difference from previous month.

The Canadian government releases its own monthly index to forecast economic activity. It is composed of ten components that together can help foretell turning points in the business cycle. Four of the ten indicators come from sources outside of Statistics Canada. They are the Housing Index, whose source is the “Multiple Listing Services”; the TSE 300 Stock Price Index; the M1 Money Supply from the Bank of Canada; and the U.S. Conference Board’s Index of Leading Economic Indicators. Canada’s composite leading indicator and its ten components are smoothed so as to reduce erratic movements. Statistics Canada uses a five-month moving average to reduce some of the volatility in the leading index.

www.statcan.gc.ca/daily-quotidien/120420/dq120420b-eng.htm

- (4) The release contains the composite index and its ten components. The composite index is presented in both smoothed form (based on a five-month moving average) and the unsmoothed spot measure.

- Ivey Purchasing Managers Index (not shown)

A market-sensitive report that measures monthly changes in economic activity based on responses from purchasing managers from across Canada. It is conducted by the Richard Ivey School of Business at Western University. Among the questions asked are whether purchases last month were higher, the same, or lower than the previous month. The same basic inquiry is made about employment, inventories, prices, and delivery times. A diffusion index is calculated in which a number above 50 shows an increase, whereas below 50 shows a decrease in that component.

<http://iveypmi.uwo.ca/english/historic-data/index.htm>

Finally, a list of available economic indicators from Statistics Canada and when they are to be released can be found here:

www.statcan.gc.ca/nea-cen/dates/index-eng.htm#bop

AUSTRALIA: CONSUMER PRICES RETAIL TRADE INTERNATIONAL TRADE

What Is It: Three critical barometers on Australia's economic health.

Most Current News Release on the Internet:

Consumer Prices: www.abs.gov.au/ausstats/abs@.nsf/mf/6401.0/

Retail Trade: www.abs.gov.au/ausstats/abs@.nsf/mf/8501.0

International Trade: www.abs.gov.au/ausstats/abs@.nsf/mf/5368.0

Home Web Address: www.abs.gov.au/

Release Time:

Consumer Prices: Quarterly, 11:30 a.m., local time; published the last full week in January, April, July, and October, and refers to the preceding quarter.

Retail Trade: Monthly, 11:30 a.m., local time; usually published the first week of the month and covers retail sales two months earlier.

International Trade: Monthly, 11:30 a.m., local time; released the first or second week of the month and covers trading activity two months earlier.

Source: Australia Bureau of Statistics.

Only one advanced economy successfully sidestepped the 2008–09 global financial wreckage: Australia. While the U.S. and Europe faced the worst economic collapse since the 1930s, business “down under” just kept humming along. In fact, the last time Australia slipped into recession was in 1991, which means the country has enjoyed uninterrupted growth for more than 20 years. That’s one of the longest periods of continuous economic expansion ever recorded.

How has the country managed to pull this off? We know that the business cycle has not been outlawed in the South Pacific. So was this extraordinary stretch of growth due to luck—or clever design? The answer is, a lot of both.

In terms of luck, Australia inherited several bonuses. For example, although its cultural and geopolitical ties are firmly rooted in the West, its geographic proximity to the world’s fastest-growing economies enabled Australia to lock up some very lucrative trade deals. What countries, like China and India, need most to fuel their supercharged economies are vast quantities of raw material. And it just so happens that Australia is well endowed with precisely the kind of natural and industrial commodities its neighbors most need.

Australia’s well-being, however, was also the result of design. The Reserve Bank of Australia (RBA), for instance, has pursued a cautious monetary policy. When most other central banks rushed to slash short-term rates to near zero during the 2008–09 global

downturn and then followed with more unconventional forms of monetary easing, the RBA chose not to follow suit. Instead, it pursued a more modest approach, never allowing the benchmark cash rate to fall below 3%. That careful, deliberate approach helped avoid the kind of debt and housing bubble that plagued so many Western countries. Credit must also be given to Australia's financial institutions. Bank managers were always more conservative in their lending practices and never succumbed to the temptation of making a fast buck by building up excessive leverage or recklessly dishing out mortgages, actions that brought crippling losses to Wall Street. All that good governance by Australian banks paid off. When most of the world was seized by a global credit crunch late in the last decade, Aussie banks kept their strong credit ratings and thus were easily able to raise capital to buttress their balance sheets.

Australia's leaders also acted smartly with a well-timed economic stimulus package to keep the economy out of trouble. Arguably the most effective actions that set Australia on the right course were the sweeping structural reforms introduced in the 1980s and 1990s. Those changes loosened up the domestic economy, carefully deregulated the financial sector, lowered import tariffs, allowed the Australian dollar to float, and reduced barriers to allow more foreign capital into the country. All these factors have helped insulate Australia against economic shocks, kept the country's jobless rate low (it helps when you have a population of just 23 million), and provided the backdrop for a vibrant financial services sector.

If there is one popular explanation why foreign investors have found Australia so compelling, it is how the country has hitched its economy to the growth prospects of China, India, Indonesia, and South Korea, and yet still maintains large trading ties with the U.S., Japan, and the U.K.

Who are Australia's biggest customers?

Eight of its ten biggest export markets are in Asia:

1. China
2. Japan
3. South Korea
4. India
5. Taiwan
6. United States
7. New Zealand
8. Thailand
9. United Kingdom
10. Singapore

(Based on 2010–2011 data)

But one also has to be careful here. Could Australia's economy be too dependent on the growth of its Asian trading partners? What if economic activity slows markedly in this region? Another concern is the large amount of foreign capital inflows. True, it is a sign of confidence in Australia, but the flood of money entering the country can become problematic too. By having an open economy, capital inflows can push up the value of the Australian dollar, drive property prices higher, and heat up inflation pressures—all of which could slow GDP growth. This is why investors must remain vigilant in monitoring the country's economic statistics. The best source for such data is the Australian Bureau of Statistics. Although they publish hundreds of economic indicators, here are some of the most sensitive for the financial markets:

- To begin with, you can get a quick look at Australia's very latest economic barometers here:

www.abs.gov.au/AUSSTATS/abs@.nsf/ViewContent?readform&view=ProductsbyReleaseDate&Action=Expand&Num=1.1

- Snapshots of all its key macroeconomic indicators and their statistics are shown on this Web page:

www.abs.gov.au/ausstats/abs@.nsf/mf/1345.0

- Consumer Price Index (Not Shown)

Most industrial countries release CPI figures every month. Australia, however, publishes inflation data on a quarterly basis. The government relies on about 10,500 respondents to get 100,000 different price quotations, and then prepares a 36-page report on retail price inflation.

www.abs.gov.au/ausstats/abs@.nsf/mf/6401.0/

- Retail Trade

Are Australian consumers still in a spending mood? The answer has a major influence on the stock and bond market. A sharp escalation in expenditures can drive inflation higher and force the central bank to act. In contrast, a dramatic and sustained slowdown in consumer outlays can also be worrisome since it could worsen unemployment, hurt corporate profits, and cut GDP growth. This measure compares total sales of goods and services in retail stores in Australia (but excludes auto sales).

www.abs.gov.au/AUSSTATS/abs@.nsf/mf/8501.0

- (1) The 24-page retail sales report divides the data into three parts: “Original,” which essentially represent non–seasonally adjusted numbers; the “Seasonally Adjusted” series; and the “Trend” numbers. This last group attempts to smooth out the monthly numbers by applying a complicated moving average formula. Of the three, the seasonally adjusted and trend data warrant close watching.

2

RETAIL TURNOVER, By Industry Group—Percentage change from previous month

Month	Food retailing	Household goods retailing	Clothing, footwear & personal accessory retailing	Department stores	Other retailing	Cafes, restaurants & takeaway food services	Total
	%	%	%	%	%	%	%
ORIGINAL							
2010							
December	14.5	26.5	53.8	61.4	31.6	12.5	25.7
2011							
January	-11.5	-28.7	-41.2	-48.7	-31.9	-14.0	-24.6
February	-9.0	-11.4	-13.8	-20.9	-4.8	-8.0	-9.9
March	8.3	9.8	14.2	18.3	10.6	10.8	10.2
April	-0.9	-3.3	4.8	11.4	-3.1	-1.9	-0.5
May	-1.9	4.3	4.8	-4.3	1.8	0.2	0.3
June	-2.3	4.2	-5.0	4.5	-0.3	-3.3	-0.8
July	5.5	-2.0	-5.9	4.1	5.6	7.2	3.4
August	0.6	3.2	-2.5	-15.6	1.5	1.4	-0.2
September	-1.0	0.9	5.5	4.0	0.0	0.2	0.4
October	4.0	4.2	4.4	4.4	0.8	2.6	3.4
November	-0.4	4.1	2.8	18.2	9.6	-1.0	3.2
December	15.9	24.5	59.9	64.5	28.6	9.4	25.4
2012							
January	-14.1	-27.4	-40.5	-50.1	-33.8	-9.1	-25.0
February	-4.9	-11.2	-14.8	-16.9	-0.6	-6.5	-7.1
SEASONALLY ADJUSTED							
2010							
December	0.1	1.5	1.8	-1.4	-0.9	0.5	0.3
2011							
January	1.9	-3.6	-3.2	1.7	2.3	-1.3	0.1
February	0.3	2.1	2.4	0.4	0.9	1.0	1.0
March	-0.3	-0.3	-0.2	-2.8	0.2	0.0	-0.4
April	0.9	0.4	1.5	3.6	1.6	-0.1	1.0
May	-0.3	0.1	-2.4	-2.1	-1.0	0.0	-0.6
June	0.1	-0.7	-0.4	-2.9	1.0	-0.5	-0.2
July	1.1	0.1	-3.8	1.2	2.0	1.3	0.7
August	0.5	1.5	-0.2	-1.0	0.3	1.3	0.6
September	0.2	1.0	0.4	0.1	0.1	0.8	0.4
October	0.2	0.3	1.3	-0.8	-0.6	0.1	0.1
November	0.2	-0.4	0.0	0.0	-0.4	0.4	0.0
December	-0.5	0.0	3.7	1.5	0.2	-2.0	0.0
2012							
January	0.1	-2.0	-0.2	-0.1	0.3	4.2	0.3
February	0.3	-0.5	-1.4	0.7	1.8	-0.7	0.2
TREND							
2010							
December	0.5	0.0	-0.4	-0.1	0.2	-0.8	0.1
2011							
January	0.6	-0.1	0.0	0.0	0.4	-0.4	0.2
February	0.5	-0.1	0.2	0.0	0.7	0.0	0.3
March	0.4	-0.1	0.2	-0.1	0.8	0.1	0.3
April	0.3	0.0	-0.3	-0.3	0.9	0.2	0.2
May	0.3	0.2	-0.8	-0.5	0.8	0.3	0.2
June	0.3	0.4	-1.2	-0.7	0.8	0.5	0.2
July	0.4	0.5	-1.2	-0.7	0.6	0.6	0.3
August	0.4	0.6	-0.9	-0.6	0.4	0.6	0.3
September	0.3	0.5	0.0	-0.4	0.1	0.6	0.3
October	0.2	0.2	0.7	0.0	0.0	0.5	0.2
November	0.1	-0.1	1.0	0.2	0.0	0.4	0.2
December	0.0	-0.4	0.9	0.3	0.1	0.4	0.1
2012							
January	0.0	-0.5	0.8	0.3	0.2	0.5	0.1
February	0.0	-0.6	0.7	0.4	0.3	0.4	0.1

(2) Six broad retail sales categories are presented, with details on each in the body of the report.

- **International Trade**

With foreign trade representing a hefty 40% of Australia's GDP, not only is tracking the monthly numbers on exports and imports essential to understanding the health of the economy, it can also serve as a forecasting tool for business activity and exchange rates.

www.abs.gov.au/AUSSTATS/abs@.nsf/mf/5368.0

(3) Of particular interest are the swings in trade with its key partners, given the dominant role they play in Australia's overall trade picture.

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INTERNATIONAL MERCHANDISE TRADE(a), By country and country groups

	EXPORTS				IMPORTS(b)				BALANCE OF MERCHANDISE TRADE	
	2010-11	8 months ended Feb 2012	8 months ended February 2011	8 months ended February 2012	2010-11	8 months ended Feb 2012	8 months ended February 2011	8 months ended February 2012	2010-11	8 months ended February 2012
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m		
3 ▼ Belgium	1 324	143	836	999	1 645	164	1 088	1 141	-321	-142
Brazil	1 519	52	970	911	882	54	570	496	637	415
Canada	1 345	114	860	960	1 762	193	1 154	1 328	-417	-367
■ China	64 856	5 720	41 649	50 071	41 109	2 817	28 419	29 722	23 747	20 349
Denmark	237	11	95	128	941	64	663	743	-703	-615
Egypt(c)	593	33	386	308	39	1	18	28	554	280
Fiji	300	19	206	207	187	14	132	132	113	75
Finland	226	11	96	201	862	94	502	671	-637	-470
France	1 123	94	647	701	3 798	270	2 557	2 526	-2 675	-1 825
Germany	2 115	141	1 334	1 461	10 247	809	6 717	7 312	-8 132	-5 852
Hong Kong (SAR of China)	3 257	258	2 162	2 002	1 153	74	805	786	2 105	1 216
■ India	15 761	1 024	9 985	9 402	2 083	188	1 420	1 624	13 678	7 778
Indonesia	4 780	347	2 931	3 650	5 751	352	3 756	4 109	-971	-458
Iran	157	26	104	140	121	2	112	52	36	89
Iraq	327	13	116	125	—	—	—	—	327	125
Ireland	123	5	85	56	2 177	142	1 475	1 397	-2 054	-1 340
Israel	227	20	152	167	608	56	400	434	-380	-267
Italy	1 274	41	832	802	4 845	351	3 192	3 516	-3 571	-2 714
■ Japan	46 967	3 491	30 749	34 881	16 693	1 837	11 777	13 700	30 274	21 181
Korea, Republic of	22 556	1 581	14 723	15 664	6 985	678	4 476	5 020	15 571	10 644
Kuwait	617	42	361	344	317	57	207	332	301	13
Malaysia	4 059	343	2 577	3 117	8 814	792	5 723	5 799	-4 756	-2 682
Mexico	888	93	426	781	1 592	108	1 042	1 230	-705	-449
Netherlands	3 024	337	1 847	2 509	1 385	142	905	1 136	1 640	1 374
■ New Zealand	7 691	599	5 206	5 217	7 364	539	4 826	5 024	327	193
Pakistan	381	11	246	268	175	21	110	116	207	152
Papua New Guinea	2 213	226	1 417	1 579	3 474	129	2 167	2 271	-1 260	-691
Philippines	1 484	150	1 014	1 080	442	33	302	298	1 042	782
Saudi Arabia	1 502	147	956	1 021	369	88	205	350	1 132	671
■ Singapore	5 464	477	3 457	4 321	11 408	999	7 053	10 094	-5 944	-5 773
South Africa	1 614	136	1 119	1 168	1 006	51	699	533	608	634
Spain	857	77	503	595	1 702	150	1 094	1 304	-845	-709
Sweden	496	7	287	237	2 316	183	1 485	1 745	-1 820	-1 509
Switzerland	410	57	221	495	2 515	264	1 614	2 116	-2 105	-1 620
■ Taiwan	9 109	670	5 911	5 933	3 616	235	2 422	2 617	5 493	3 315
Thailand	6 952	275	4 650	3 740	9 118	680	6 300	5 535	-2 166	-1 795
Turkey	427	59	310	532	485	44	328	312	-58	220
United Arab Emirates	2 199	133	1 515	1 479	3 125	304	1 580	2 785	-926	-1 306
United Kingdom	6 604	682	4 223	5 816	5 985	737	3 813	4 919	619	897
■ United States of America	9 055	692	5 797	6 561	23 226	2 077	15 041	18 049	-14 171	-11 488
Viet Nam	1 801	164	1 192	1 365	2 668	223	1 830	2 002	-866	-636
Other Countries(b)	9 800	766	6 407	6 943	21 086	1 892	13 836	16 201	-11 285	-9 258
Total	245 724	19 290	158 564	177 939	214 080	17 909	141 818	159 507	31 644	18 432
APEC	193 931	15 311	125 636	142 002	148 529	12 069	99 215	110 447	45 403	31 554
ASEAN	24 706	1 770	15 938	17 389	39 392	3 086	25 747	28 747	-14 686	-11 358
Developing Countries	155 332	12 133	100 004	110 976	110 214	8 698	72 858	81 252	45 119	29 724
Least Developed Countries	2 284	154	1 547	1 492	378	54	232	393	1 906	1 099
European Union(d)	17 862	1 579	11 115	13 807	38 514	3 320	25 224	28 344	-20 652	-14 537
OECD	107 747	8 318	69 711	79 506	101 727	9 302	67 273	76 839	6 020	2 667

— nil or rounded to zero (including null cells)

(a) See Time series spreadsheets for details of all countries.

(b) From September 2008 imports data with confidentiality restrictions 'no commodity details' or 'no value details' are included in Other countries.

(c) Exports of Alumina to Egypt are excluded from country total and included in the 'Other Countries' category.

(d) The European Union includes 27 member countries for all periods.

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CHAPTER 5

Best Web Sites for U.S. Economic Indicators

Until the 1990s, large economic research firms would charge clients thousands of dollars to churn out statistics on the U.S. and international economies. Today, thanks to the Internet and the intense competition among financial services companies to attract customers, anyone can easily obtain economic or financial data directly from the Web at no cost. This chapter lists online resources that provide such information free.

SCHEDULE OF RELEASES

- **Get a calendar of U.S. economic releases:**

www.dailyfx.com/calendar/briefing/

www.nber.org/releases/

<http://fjdweek.econoday.com/>

ECONOMIC NEWS

- **Latest stories on the economy:**

www.bloomberg.com/news/economy/

<http://money.cnn.com/news/economy/>

www.cnbc.com

www.marketwatch.com/economy-politics

<http://news.yahoo.com/economy/>

FREE MOBILE PHONE APPS ON THE ECONOMY

- **A2Z Economy**
- **FRED Economic Data**
- **Mobile.Bloomberg.com**

- **Bloomberg Radio Plus**
- **CNBC RT**
- **Labor Stats (U.S. Dept. of Labor)**

THE U.S. ECONOMY

- **Most recent GDP report:**
www.bea.gov/newsreleases/national/gdp/gdpnewsrelease.htm
- **Historical data on the GDP and its components:**
<http://research.stlouisfed.org/fred2/categories/18>
- **Industrial Production and Capacity Utilization:**
www.federalreserve.gov/releases/g17/current
- **Factory Orders (formally known as Manufacturers' Shipments, Inventories, and Orders):**
www.census.gov/manufacturing/m3/prel/pdf/s-i-o.pdf
- **Advanced Report on Durable Goods Orders:**
www.census.gov/manufacturing/m3/adv/pdf/durgd.pdf
- **Chicago's Institute for Supply Management (ISM-Chicago):**
www.ism-chicago.org/insidepages/reportsonbusiness/
- **Business Inventories (also known as Manufacturing and Trade Inventories and Sales):**
www.census.gov/mtis/www/data/pdf/mtis_current.pdf
- **U.S. Leading Economic Indicators Index (as well as the Coincident and Lagging Indicators):**
www.conference-board.org/data/bcicountry.cfm?cid=1
- **Manufacturing activity from the Institute for Supply Management (ISM):**
www.ism.ws/ISMReport/index.cfm
- **Non-manufacturing (service) activity from the Institute for Supply Management (ISM):**
www.ism.ws/ISMReport/index.cfm

- **Dates and lengths of past recessions and expansions (business cycle data):**

www.nber.org/cycles/cyclesmain.html

- **Small Business Economic Trends:**

www.nfib.com/research-foundation/surveys/small-business-economic-trends

- **Cass Freight Index:**

www.cassinio.com/frtindex.html

- **Weekly Railroad Traffic (freight):**

www.aar.org/NewsAndEvents/Freight-Rail-Traffic.aspx

CONSUMER BEHAVIOR

- **Personal Income and Spending:**

www.bea.gov/newsreleases/national/pi/pinewsrelease.htm

- **Real Earnings:**

www.bls.gov/news.release/realer.toc.htm

- **Retail Sales:**

www.census.gov/retail/marts/www/marts_current.pdf

- **E-Commerce Retail Sales:**

www.census.gov/retail/mrts/www/data/pdf/ec_current.pdf

- **International Council of Shopping Centers:**

<http://reports.wxtrends.com/reports/icscweekly.pdf>

- **Consumer Debt (formally known as Consumer Credit Outstanding):**

www.federalreserve.gov/releases/g19

- **Bloomberg Consumer Comfort Index:**

www.bloomberg.com/consumer-comfort-index/

- **Consumer Sentiment by the University of Michigan:**

www.sca.isr.umich.edu/main.php

- **Consumer Confidence by the Conference Board:**

www.conference-board.org/data/consumerconfidence.cfm

- **AAll Investor Sentiment Survey:**

www.aaii.com/sentimentsurvey

- **Household Debt Device:**
www.federalreserve.gov/releases/housedebt/default.htm
- **Credit Card Delinquencies:**
www.aba.com/Press+Room/pr_releasesmenu.htm
- **Personal and Business Bankruptcy Filings:**
www.abiworld.org/am/template.cfm?section=press_releases
- **Google Insights:**
www.google.com/insights/search/
- **Las Vegas Gaming Revenues:**
<http://gaming.nv.gov/mrrindex.htm>
- **Credit Manager's Index:**
<http://web.nacm.org/cmi/cmi.asp>

EMPLOYMENT CONDITIONS

- **Employment Situation Report:**
<http://stats.bls.gov/news.release/empstat.toc.htm>
- **Mass Layoffs:**
www.bls.gov/mls
- **Weekly Claims for Unemployment Insurance:**
www.ows.doleta.gov/unemploy/claims_arch.asp
- **Job Openings and Labor Turnover:**
www.bls.gov/news.release/pdf/jolts.pdf
- **ADP National Employment Report:**
www.adpemploymentreport.com
- **The Conference Board Help-Wanted Online:**
www.conference-board.org/data/helpwantedonline.cfm
- **ADP National Employment Report:**
www.adpemploymentreport.com/
- **Corporate Layoff & Hiring Announcements:**
www.challengergrey.com/press/press.aspx

HOME SALES AND CONSTRUCTION ACTIVITY

- **Housing Starts:**

www.census.gov/construction/nrc/pdf/newresconst.pdf

- **Housing Market Index—Builders' perception of the current and future market for new single-family homes (National Association of Home Builders):**

www.nahb.org (type "HMI" in the search box)

- **Single-Family Existing Home Sales (National Association of Realtors):**

www.realtor.org/topics/existing-home-sales/data

- **Pending Home Sales (for existing homes):**

www.realtor.org/topics/pending-home-sales

- **New Home Sales:**

www.census.gov/construction/nrs/pdf/newressales.pdf

- **Construction Spending:**

www.census.gov/c30

- **Weekly Mortgage Applications (Mortgage Bankers Association):**

www.mortgagebankers.org/NewsandMedia

- **Home Affordability Index (National Association of Realtors):**

www.realtor.org/topics/housing-affordability-index

- **S&P/Case-Shiller U.S. National Home Price Index:**

www.homeprice.standardandpoors.com

- **Architecture Billings Index:**

www.aia.org/practicing/economics/

INTERNATIONAL TRADE

- **International Trade:**

www.bea.gov/newsreleases/international/trade/tradnewsrelease.htm

- **Export and Import Prices:**

www.bls.gov/mxp

- **Current Account Balance (International Transactions):**
<http://bea.gov/newsreleases/international/transactions/transnewsrelease.htm>
- **Treasury International Capital System (TIC):**
www.treasury.gov/resource-center/data-chart-center/tic/Pages/ticpress.aspx#1

INFLATION PRESSURES

- **Consumer Price Index (CPI):**
www.bls.gov/cpi/
- **Producer Price Index (PPI):**
www.bls.gov/ppi
- **Productivity and Costs:**
www.bls.gov/lpc/
- **Employer Costs for Employee Compensation:**
www.bls.gov/news.release/ecec.toc.htm
- **Employment Cost Index:**
www.stats.bls.gov/news.release/eci.toc.htm
- **Historic rates of U.S. inflation (the CPI) going back to 1913:**
www.usinflationcalculator.com/
- **Estimates of U.S. inflation going back to 1800:**
www.minneapolisfed.org/community_education/teacher/calc/hist1800.cfm
- **Compute what inflation does to a dollar from one period to another:**
www.westegg.com/inflation/
www.eh.net/ehresources/howmuch/dollarq.php

FEDERAL RESERVE REPORTS

Surveys from regional Federal Reserve Banks:

- **Federal Reserve Bank of Philadelphia:**
www.phil.frb.org/econ/bos/index.html
- **Federal Reserve Bank of Richmond:**
www.richmondfed.org/research/regional_economy/surveys_of_business_conditions/manufacturing/index.cfm

- **Federal Reserve Bank of Kansas City:**
www.kc.frb.org/mfgsurv/mfgmain.htm
- **Federal Reserve Bank of New York:**
www.ny.frb.org/survey/empire/empiresurvey_overview.html
- **Federal Reserve Bank of Chicago:**
www.chicagofed.org/economic_research_and_data/cfnai.cfm
- **Federal Reserve Board's Beige Book:**
www.federalreserve.gov/frbindex.htm
- **Federal Open Market Committee (FOMC) Statement:**
www.federalreserve.gov/monetarypolicy/fomccalendars.htm
- **Assets and Liabilities of Commercial Banks in the United States (Federal Reserve Board):**
www.federalreserve.gov/releases/h8/current/default.htm

THE FEDERAL BUDGET

- **Current projections as well as historical data on the U.S. federal budget:**
www.cbo.gov/
- **Latest proposed budget of the U.S.:**
www.whitehouse.gov/omb/budget

INTEREST RATES

- **Latest interest rates on mortgages, mortgage refinancings, home equity loans, auto loans, and credit cards:**
www.bankrate.com/brm/rate/avg_natl.asp
- **Historical interest rates on Federal funds and Treasury securities:**
www.federalreserve.gov/releases/h15/data.htm
- **Current interest rates on Federal funds and Treasury securities:**
www.federalreserve.gov/releases/h15/update/
www.bloomberg.com/markets/rates/

MONEY AND CREDIT

- **Figures on the U.S. money supply:**
www.federalreserve.gov/releases/h6/current
- **Data on U.S. bank reserves:**
www.federalreserve.gov/releases/h3/
- **Historical figures on consumer loans by all commercial banks:**
<http://research.stlouisfed.org/fred2/series/CONSUMER/49>
- **Current and historical numbers on commercial and industrial loans outstanding by commercial banks:**
<http://research.stlouisfed.org/fred2/series/BUSLOANS/49>

U.S. DOLLAR

- **Dollar's exchange rate with virtually any currency in the world:**
www.x-rates.com/
www.xe.com/ucc/
www.oanda.com/converter/classic
- **Historical foreign exchange rates:**
www.federalreserve.gov/releases/h10/hist/
www.oanda.com/converter/classic
- **Dollar's performance versus its major trading partners:**
www.federalreserve.gov/releases/h10/summary

ONE-STOP SHOPPING FOR ECONOMIC STATISTICS

- **Locate common economic indicators:**
www.economicindicators.gov
- **Raw data of U.S. economic statistics for graphing purposes:**
www.economagic.com/
<http://research.stlouisfed.org/fred2/>
- **Economic Report of the President (which contains a comprehensive collection of economic indicators going back more than 50 years):**
www.gpoaccess.gov/eop/index.html

- **Economic Indicators by the Joint Economic Committee (U.S. Congress):**

www.gpoaccess.gov/indicators/

OTHER USEFUL ECONOMIC SOURCES ON THE WEB

- **Federal Reserve Board's Flow of Funds:**

www.federalreserve.gov/releases/z1/

- **Glossary of economic and financial terms:**

www.mondovisione.com/media-and-resources/glossary/

www.economist.com/economics-a-to-z

UNCONVENTIONAL ECONOMIC INDICATORS

- **Exhibitor Relations Co.:**

Movie ticket sales. Helps track changes in discretionary spending by consumers.

www.ercboxoffice.com/index.php?section=movies&subsection=reports

- **Travel Industry Association:**

Provides monthly data on air, rail, and road travel that can reflect business and consumer spending. Click "View Recent Indicators."

<http://ustraveltracker.com/>

- **GasBuddy Organization, Inc.:**

Chart updates oil and gas prices around the U.S.

www.gasbuddy.com/gb_retail_price_chart.aspx?time=24

- **American Staffing Association:**

A weekly index that gauges the number of people hired for temporary or contract work.

www.americanstaffing.net/statistics/staffing_index.cfm

- **National Restaurant Association:**

A monthly report titled "Restaurant Performance Index" provides data on current restaurant activity, as well as the latest outlook. Each report is released at the end of the month.

www.restaurant.org/pressroom/news-releases/

- **The Innovation Group:**

Contains recent data on gaming activity around the country.

www.theinnovationgroup.com/statistics.asp

- **Business Roundtable:**

*An organization that each quarter polls CEOs from major U.S. companies on their economic outlook and how that will affect corporate hiring and spending plans.
<http://businessroundtable.org/studies-and-reports/>*

- **Global Business Travel Association:**

*A trade group that releases quarterly statistics on recent business travel and looks at future trends.
www.gbta.org/lists/news/Allitems_foundation.aspx*

- **RealtyTrac:**

*Issues a monthly report on home foreclosure statistics that is current and comprehensive.
www.realtytrac.com/content/foreclosure-market-report*

CHAPTER 6

Best Web Sites for International Economic Indicators

(Only those available in English are listed here.)

CALENDAR OF RELEASES FOR FOREIGN ECONOMIC DATA

www.fxstreet.com/fundamental/economic-calendar/

www.forexfactory.com/calendar.php

SOURCES OF GLOBAL ECONOMIC NEWS

www.cnbc.com/

www.reuters.com

www.iht.com/frontpage.html

www.bloomberg.com

<http://money.cnn.com/news/>

www.marketwatch.com/

ECONOMIC STATISTICS FROM OTHER COUNTRIES

- Europe

- Eurozone

<http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/>

<http://eurocoin.cepr.org/index.php?q=node/64>

- Albania:

www.instat.gov.al

- Andorra:

www.estadistica.ad

- Austria:

www.statistik.at/index_englisch.shtml

- Belarus:

www.government.by/en/

- Belgium:

<http://statbel.fgov.be/>

- Bosnia and Herzegovina:

www.fzs.ba/Eng/index.htm

- Bulgaria: www.nsi.bg/Index_e.htm
- Croatia: www.mingorp.hr/defaulteng.aspx
- Czech Republic: www.czso.cz/eng/redakce.nsf/i/home
- Denmark: www.dst.dk/en
- Estonia: www.stat.ee/
- Finland: www.stat.fi/index_en.html
- France: www.insee.fr/en/home/home_page.asp
- Germany: www.destatis.de/EN/Homepage.html
www.ifo.de
www.ifo-business-climate-index.info
www.bundesbank.de/index.en.php
- Greece: www.statistics.gr/portal/page/portal/ESYE
- Hungary: www2.pm.gov.hu/web/home.nsf/frames/english
- Iceland: <http://eng.fjarmalaraduneyti.is/statistics/>
- Ireland: www.cso.ie/
- Italy: www.istat.it/English/index.htm
- Latvia: www.csb.gov.lv/en
- Liechtenstein: www.liechtenstein.li/
- Lithuania: www.std.lt/web/main.php
- Luxembourg: www.statistiques.public.lu/en/actors/statec/index.html
- Macedonia: www.economy.gov.mk/
- Malta: www.nso.gov.mt/
- Moldova: www.statistica.md/
- Montenegro: www.monstat.org/eng/index.php
- The Netherlands: www.cbs.nl/en/
www.cpb.nl/en/
www.dnb.nl/dnb/homepage.jsp?lang=en
- Norway: www.ssb.no/www-open/english/
- Poland: www.stat.gov.pl/english/
- Portugal: www.ine.pt/ajuda/mapa_eng.html
- Romania: www.insse.ro/cms/rw/pages/index.en.do
- Russia: www.cbr.ru/eng
- Serbia: www.nbs.rs/internet/english/index.html
- Slovakia: <http://portal.statistics.sk/showdoc.do?docid=359>
- Slovenia: www.stat.si/eng/
- Spain: www.ine.es/welcoing.htm
- Sweden: www.scb.se/
- Switzerland: www.bfs.admin.ch/bfs/portal/en/index.htm
- Turkey: www.tcmb.gov.tr/yeni/eng/index.html

- Ukraine: www.ukrstat.gov.ua/
- United Kingdom: www.statistics.gov.uk/
www.bankofengland.co.uk
- Asia
 - Afghanistan: <http://cso.gov.af/en>
 - Armenia: www.armstat.am
 - Azerbaijan: www.azstat.org/indexen.php
 - Bahrain: www.mofne.gov.bh/
 - Bangladesh: www.bangladesh-bank.org/
 - Cambodia: www.nis.gov.kh/
 - China (PRC): www.china.org.cn/english
<http://english.peopledaily.com.cn/>
www.stats.gov.cn/english/index.htm
www.stats.gov.cn/english/statisticaldata/index.htm
www.stats.gov.cn/english/statisticaldata/monthlydata
www.pbc.gov.cn/english/
www.geoinvestor.com/countries/china/main.htm
www.xinhuanet.com/english/business.htm
 - Cyprus: www.centralbank.gov.cy/nqcontent.cfm?a_id=1&lang=en
 - Georgia: www.nbg.gov.ge/?lng=eng
 - Hong Kong: www.info.gov.hk/censtatd/home.html
 - India: www.rbi.org.in/
<http://mospi.nic.in/>
http://mospi.nic.in/Mospi_New/site/home.aspx
<http://finmin.nic.in/>
www.censusindia.net/
 - Indonesia: <http://dds.bps.go.id/eng/>
 - Iran: www.cbi.ir/default_en.aspx
 - Iraq: www.cbi.iq/
 - Israel: www.cbs.gov.il/engindex.htm
www.bankisrael.gov.il/firsteng.htm
 - Japan: www.tse.or.jp/english/
www.esri.cao.go.jp/index-e.html
www.meti.go.jp/english
www.meti.go.jp/english/statistics
www.stat.go.jp/english/
www5.cao.go.jp/keizai3/getsurei-e/index-e.html
www.boj.or.jp/en/index.htm
www.esri.cao.go.jp/en/sna/menu.html
www.cao.go.jp/index-e.html

- Jordan: www.dos.gov.jo/dos_home_e/main/
- Kazakhstan: www.eng.stat.kz/Pages/default.aspx
- Korea (South): www.korea.net/korea/kor_loca.asp?code=E0112
- Kuwait: www.cbk.gov.kw/WWW/index.html
- Kyrgyzstan: www.nbkr.kg/index.jsp?lang=ENG
- Laos: www.nsc.gov.la/
- Lebanon: www.cas.gov.lb/
- Macao: www.dsec.gov.mo/e_index.html
- Malaysia: www.statistics.gov.my/
- Maldives: www.mma.gov.mv/statis.php
- Mauritius: <http://bom.intnet.mu/>
- Mongolia: www.mongolbank.mn/eng/default.aspx
- Nepal: www.cbs.gov.np/
- Oman: www.cbo-oman.org/
- Pakistan: www.ead.gov.pk/
- Palestinian Authority: www.pcbs.org/
- Papua New Guinea: www.spc.int/prism/country/pg/stats/
- Philippines: www.nscb.gov.ph/
- Qatar: www.qsa.gov.qa/eng/
- Saudi Arabia: www.saudinf.com/main/e1.htm
www.sama.gov.sa/sites/SAMAEN/Pages/Home.aspx
- Singapore: www.singstat.gov.sg/
- Sri Lanka: www.statistics.gov.lk/index.asp
- Syria: www.syria-report.com/
www.syrecon.org/index.php?newlang=eng
- Taiwan: <http://eng.stat.gov.tw/mp.asp?mp=5>
- Tajikistan: www.nbt.tj/en/
- Thailand: http://web.nso.go.th/en/stat_theme_eco.htm
- Turkey: www.tcmb.gov.tr/yeni/eng/index.html
- United Arab Emirates: www.economy.ae/english/Pages/default.aspx
www.mof.gov.ae/en/Pages/default.aspx
- Vietnam: www.gso.gov.vn/default_en.aspx?tabid=494&itemid=1631
- Yemen: www.economywatch.com/world_economy/yemen/index.html
- North America
 - Anguilla: <http://gov.ai/statistics/statistics.htm>
 - Aruba: www.cbs.aw/cbs/home.do
 - Bahamas: www.bahamascentralbank.com/
 - Barbados: www.centralbank.org.bb/

- Belize: www.cbs.aw/cbs/home.do
- Bermuda: www.bma.bm/
- Canada: www.statcan.ca
www.bankofcanada.ca/en/
- Cayman Islands: www.cimoney.com.ky
- El Salvador: www.bcr.gob.sv/
- Greenland: www.stat.gl/default.asp?lang=en
- Guatemala: www.banguat.gob.gt/en/
- Honduras: www.bch.hn/eng/index.php
- Jamaica: www.statinja.com/
- Mexico: www.banxico.org.mx/sitioIngles/index.html/
www.shcp.gob.mx/english/Paginas/default.aspx
- Netherlands Antilles: www.centralbank.an/
- Nicaragua: www.bcn.gob.ni/en/index.php
- St. Kitts and Nevis: www.eccb-centralbank.org/
- St. Lucia: www.stats.gov.lc
- Trinidad and Tobago: www.cso.gov.tt/
- South America
 - Argentina: www.indec.mecon.ar/
 - Brazil: www.investebrasil.org
www.ipeadata.gov.br/
www.ibge.gov.br/english/
www.bcb.gov.br/?INDICATORS
 - Chile: www.bcentral.cl/eng/index.asp
 - Colombia: www.banrep.gov.co/index_eng.html
 - Guyana: www.bankofguyana.org.gy/bog/
 - Peru: www.mef.gob.pe/English/indexen.php
 - Suriname: www.cbvs.sr/english/over-de-cbvs.htm?lang=en
 - Venezuela: www.bcv.org.ve/EnglishVersion/Index.asp
- Oceania
 - Cook Islands: www.mfem.gov.ck/
 - Marshall Islands: www.rmiembassyus.org/Economy.htm
 - New Zealand: www.treasury.govt.nz/
www.rbnz.govt.nz/
www.stats.govt.nz/
 - Samoa: www.cbs.gov.ws/
 - Vanuatu: www.vnsso.gov.vu/

- Africa
 - Algeria: www.ons.dz/index-en.php
 - Botswana: www.cso.gov.bw/
 - Egypt: www.capmas.gov.eg
 - Ethiopia: www.nbe.gov.et/
 - Ghana: www.finance.gov.gh/
 - Kenya: www.knbs.or.ke/
www.centralbank.go.ke/
 - Lesotho: www.bos.gov.ls/
 - Liberia: www.cbl.org.lr/index.php
 - Libya: www.cbl.gov.ly/en/
 - Malawi: www.nso.malawi.net/
www.rbm.mw/
 - Mauritius: www.gov.mu/portal/site/cso
www.bom.mu/
 - Morocco: www.bkam.ma/wps/portal/net/
 - Mozambique: www.bancomoc.mz/Default_en.aspx
 - Namibia: www.npc.gov.na/cbs/
 - Nigeria: www.cenbank.org/
 - Rwanda: www.minecofin.gov.rw/
 - Seychelles: www.nbs.gov.sc/
 - Somalia: www.somalbanca.org/
 - South Africa: www.statssa.gov.za/
 - Swaziland: www.centralbank.org.sz/statistics.html
 - Tanzania: www.tanzania.go.tz/statistics.html
 - Tunisia: www.ins.nat.tn/indexen.php
 - Uganda: www.ubos.org/
 - Zambia: www.boz.zm/
 - Zimbabwe: www.rbz.co.zw/
- Australia
 - www.rba.gov.au
 - www.abs.gov.au/

BEST MEGASITES FOR INTERNATIONAL ECONOMIC STATISTICS

www.principalglobalindicators.org

www.tradingeconomics.com

www.oecd.org

www.oecd.org/std/cli

www.ecb.int

www.ntc-research.com

http://ec.europa.eu/index_en.htm

<http://unstats.un.org/unsd/>

<http://datacentre.chass.utoronto.ca/pwt/>

www.latin-focus.com/news

www.worldbank.org/data/countrydata/countrydata.html

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