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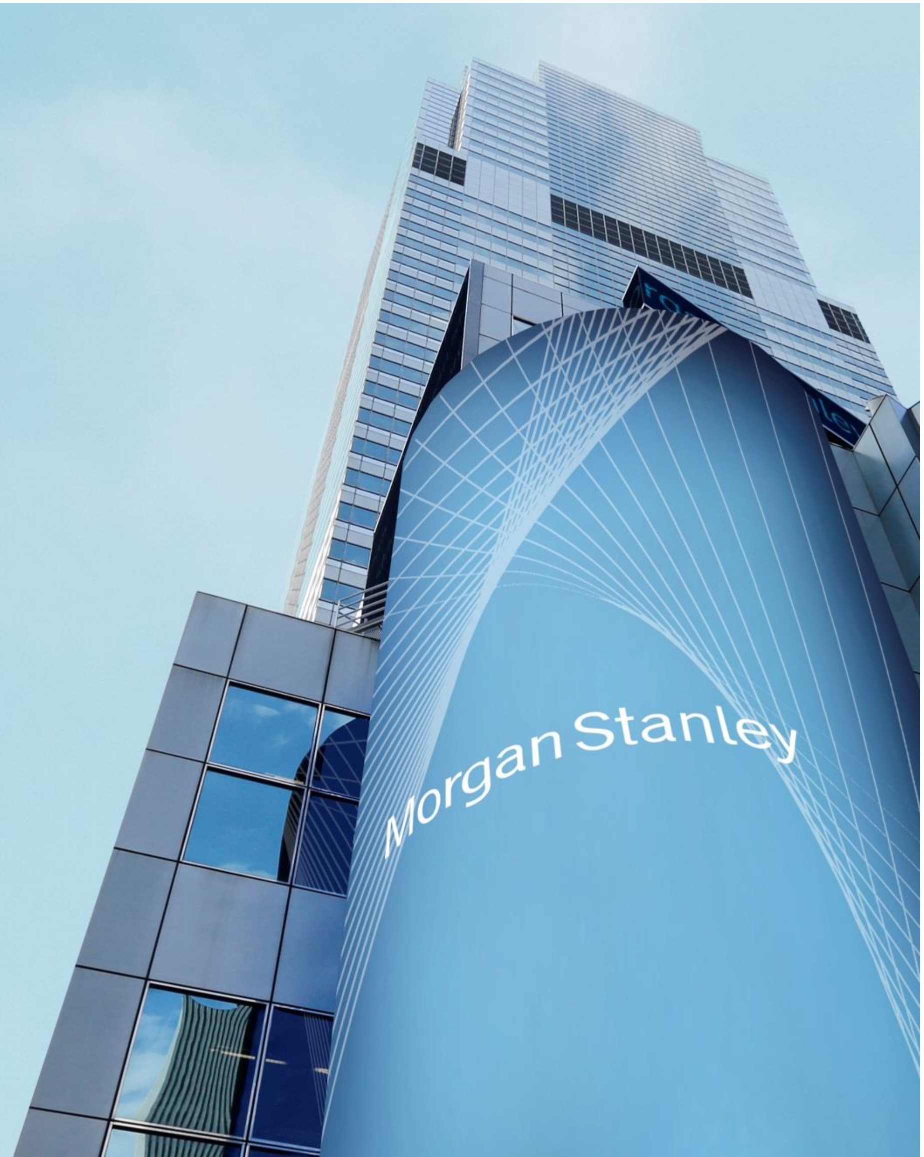

Morgan Stanley Equity Sales
Global Thoughts, Themes and Ideas

2020 Outlook

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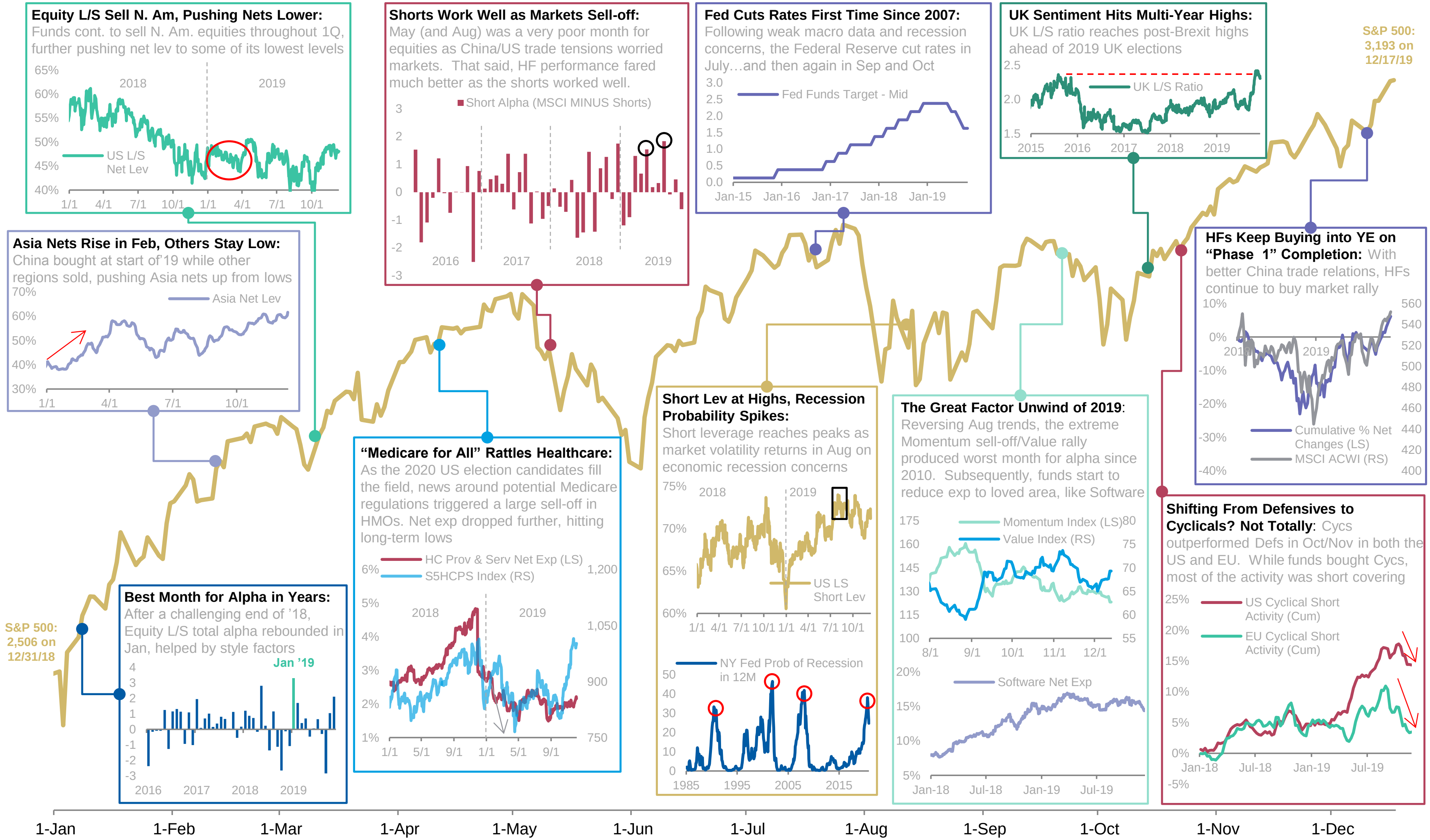
2019 Timeline: Weak Macro Data, Shaky Earnings, but Market Highs



Source: Bloomberg, Morgan Stanley Prime Brokerage, data as of Dec 2019

Information Sourced By: John Schlegel, Katy Haber, Bill Meany

2020 MS Sales & Trading Global Single Name Ideas

2020 MS Sales & Trading Global Single Name Stock Ideas

20 Longs

Company Name	Region
AKAMAI TECHNOLOGIES INC	US
CANON INC	Japan
CATL	AxJ
DELL TECHNOLOGIES	US
DISCOVER FINANCIAL SERVICES	US
ERICSSON LM-B SHS	Europe
FREEPORT-MCMORAN INC	US
GENERAL ELECTRIC CO	US
HUMANA INC	US
ITAU UNIBANCO ADR	Latam
JD.COM INC-ADR	AxJ
LG HOUSEHOLD & HEALTH	AxJ
MARUTI SUZUKI INDIA LTD	AxJ
NOVO NORDISK A/S-B	Europe
PICC PROPERTY & CASUALTY-H	AxJ
RECKITT BENCKISER GROUP PLC	Europe
ROYAL BANK OF SCOTLAND GROUP	Europe
SCHLUMBERGER LTD	US
UBER TECHNOLOGIES INC	US
VOLKSWAGEN AG	Europe

20 Shorts

Company Name	Region
ASSA ABLOY AB-B	Europe
CERNER CORP	US
CLOROX COMPANY	US
COMPASS GROUP PLC	Europe
ETSY INC	US
EXTRA SPACE STORAGE INC	US
FACTSET RESEARCH SYSTEMS	US
FRESENIUS MEDICAL CARE	Europe
HENKEL AG & CO	Europe
INDUSTRIA DE DISENO TEXTIL	Europe
KUBOTA CORP	Japan
NINTENDO CO LTD	Japan
OMNICOM GROUP	US
SUNNY OPTICAL TECH	AxJ
TEMENOS AG	Europe
TOYOTA MOTOR CORP	Japan
UNITED PARCEL SERVICE	US
WAYFAIR INC	US
WEIBO CORP-SPON ADR	AxJ
WORKDAY INC	US

2020 MS Sales & Trading Global Longs

20 Longs

Company Name	Ticker	MS Research Rating	MS Research PT Upside	Market Cap ($B)	Region	MS Research Analyst
AKAMAI TECHNOLOGIES INC	AKAM US	OW	72%*	14	US	Keith Weiss
CANON INC	7751 JP	OW	37%*	37	Japan	Masahiro Ono
CONTEMPORARY AMPEREX TECH	300750 CH	OW	60%*	33	AxJ	Jack Lu
DELL TECHNOLOGIES	DELL US	EW	26%	38	US	Kathryn Huberty
DISCOVER FINANCIAL SERVICES	DFS US	OW	45%*	27	US	Betsy Graseck
ERICSSON	ERICB SS	OW	35%	30	Europe	Dominik Olszewski
FREEPORT-MCMORAN INC	FCX US	OW	35%*	19	US	Carlos De Alba
GENERAL ELECTRIC CO	GE US	EW	29%*	98	US	Joshua Pokrzywinski
HUMANA INC	HUM US	OW	33%*	49	US	Ricky Goldwasser
ITAU UNIBANCO	ITUB US	OW	50%	84	Latam	Jorge Kuri
JD.COM INC	JD US	EW	23%*	53	AxJ	Grace Chen
LG HOUSEHOLD & HEALTH CARE	051900 KS	OW	28%	17	AxJ	Kelly Kim
MARUTI SUZUKI INDIA LTD	MSIL IN	OW	73%*	31	AxJ	Binay Singh
NOVO NORDISK	NOVOB DC	EW	32%*	139	Europe	Mark Purcell
PICC PROPERTY & CASUALTY	2328 HK	OW	36%	27	AxJ	Jenny Jiang
RECKITT BENCKISER GROUP	RB/ LN	OW	68%*	57	Europe	Richard Taylor
ROYAL BANK OF SCOTLAND	RBS LN	OW	23%	38	Europe	Alvaro Serrano
SCHLUMBERGER	SLB US	OW	24%	55	US	Connor Lynagh
UBER TECHNOLOGIES	UBER US	OW	81%	52	US	Brian Nowak
VOLKSWAGEN	VOW3 GR	EW	11%*	97	Europe	Harald Hendrikse

All Price Targets based on MS Research views as of 01/02/2019, prices in local currency
* Denotes MS Research Bull Case Upside

2020 MS Sales & Trading Global Longs

Akamai Technologies (AKAM US): ***Sources:*** Akamai Technologies, Inc.: 3Q19 Results — Finding a Way to Sustain EPS Growth (29 Oct 2019)

Thesis: After a tough '19, confidence in stabilizing revs and improving margins, coupled with an attractive valuation, supports positive stance in '20.

Description: Akamai provides services for accelerating the delivery of content and applications over the Internet. Akamai's content delivery and application acceleration network consists of more than 73,000 servers.

MS Research Highlights:

- The formula remained consistent in 2019 – strong security growth (+29% YoY), international growth in the Web Performance/Media businesses (+18% cc), and strong execution on margins (+220 bps YoY) resulting in outperformance on revenues ($710 million, +7% YoY cc and $7 million ahead of consensus) and EPS ($1.10, +17% YoY).
- Looking into FY20, MSR sees several prospects for faster top-line growth: 1) Multiple OTT services launching in the coming months for which Akamai remains well positioned; 2) 2020 being a more active year for live streaming events (U.S. elections, Olympics); and 3) The potential for better monetization from large customers as headwinds from recent contract renewals start to fade. Relative to larger peers (PANW), Akamai is seen as the only pure-play CDN provider with sufficient scale.
- Combine these ramping segments with sustained 20%+ growth in security and management's commitment to deliver 30% operation margin in 2020, the prospect of another year of mid-teens EPS growth appears increasingly probable.
- **The team is OW with ~20% upside to their base case PT of $103.**

Valuation: On a P/E basis, AKAM's P/NTM EPS of 18.7x is below its 10-Yr average of ~21x and well below large-cap and even slower growing infrastructure averages. MSR's base case price target of $103 (~21% upside from current $85 valuation, 76% to bull case of $150) applies a 21x multiple to CY20 EPS of $4.93.

Catalysts: Investment cycle shorter than currently expected, new foray into Enterprise shows strong adoption, OTT takes off as broadcast TV shifts online, and management successfully drives improvement toward 30% margins in 2020.

Canon (7751 JP): ***Sources:*** Canon: F12/19 3Q Results: Guidance Cut for 3rd Straight Quarter, but Brisk New Business & Restructuring Progress Are Positive (28 Oct 2019) ; Big Debates 2020: Key Investor Debates Likely to Drive Stocks in the Coming Year (10 Dec 2019)

Thesis: A shift to new businesses to drive growth.

Description: Canon is a professional and consumer imaging solutions company and patent-holder of digital imaging technologies.

MS Research Highlights:

- The main rev currently comes from their Office business (printers). But the main thesis of MSR's long call here is that the company is now focusing more on medical systems and surveillance cameras (higher margins). MSR expects the new businesses including medical devices to account for 50% of OP by F12/21. Currently, Medical business accounts for 12% of OP, and surveillance camera business, which goes under Industry and Other division, accounts for 20% of OP. Overall, MSR expects the company revenue & EPS growths to return to positive (revenue in 2019e -7%, '20e +1%, '21e +5%; EPS in 2019e -59%, '20e +34%, '21e +28%).
- Canon Medical Systems, which leads the medical business, targets sales of ¥500bn and OPM of 10% by F12/21. The company's strategic trajectory entails leveraging its top spot in Japan and Asia and position among the top three globally in the CT market, and expanding its shares in North America and emerging countries in the MRI market.
- Also, Canon has the No. 3 global spot in surveillance cameras following China's Hikvision, and has been seeing especially strong growth in the North American market since 2H 2018. In addition to sustained double-digit top-line growth, network cameras led by surveillance camera systems are a business capable of targeting OPM of 20%. MSR forecasts surveillance camera business sales will at least top ¥200bn in F12/20 and OPM could be as high as 15%.
- **The team is OW with 37% upside to their bull case PT of ¥4,100.**

Valuation: Base case PT Y3,500. Office printers valued at EV/EBITDA 5.3x, the average (based on F20 forecasts) for global printer companies. Imaging valued at EV/EBITDA 4.5x, the average (based on F20 forecasts) for global camera companies. Medical valued at EV/EBITDA 10.5x, the average (F20) for global companies, and industrial/other at 10.8x, the average (F20) for surveillance camera and industrial equipment peers. FX assumptions for F12/20 are ¥105/$ and ¥117/€. Bull Case Y4,100.

Catalysts: Release of F12/20 guidance at the end-Jan 2020. Canon will also hold a mgmt strategy meeting in March. Unveiling of new medical system products at ITEM2020: Apr 10-12, 2020; 2020 Tokyo Olympics: Expect growing demand for strengthening surveillance system around that time.

2020 MS Sales & Trading Global Longs

CATL (300750 CH): ***Sources:*** Contemporary Amperex Technology Co. Ltd.: Mapping Out Long-Term Prosperity (16 Dec 2019)
Thesis: Pure EV battery play; clear outlook for prosperity set by compliance mandates.
Description: CATL is the largest EV battery producer globally in volume and the only pure play.
MS Research Highlights:

- MS Global Auto Research team has a constructive view on the outlook for global EV penetration: It's driven mainly by EV targets in China (facilitated by dual-credit policy) and aggressive CO_2 targets in Europe. The team expects global EV sales penetration to grow strongly in the coming years, from 1% in 2017 to 3.3% in 2020, 23% in 2030, and 82% by 2050.
- MSR expects CATL to maintain ~45-50% domestic market share over the long term by taking share from Chinese low-tier battery makers. In addition, the company is starting to expand its business overseas. MSR expects it to attain 15% overseas market share by 2025 through long-term contracts with global car makers. CATL is also the cost leader globally, and should maintain its position as of one of the global battery majors.
- **The team is OW with 60% upside to their bull case PT of Rmb172.**

Valuation: MSR assigns 10x 2021E EV/EBITDAex to derive their base case PT of Rmb115. MSR expects (1) battery volumes to rise at a 73% CAGR in 2019-21, (2) unit gross margin to drop from Rmb0.3/Wh in 2019 to Rmb0.21/Wh in 2020 and beyond, and (3) a 35% core earnings CAGR in 2019-21.Current valuation of 8.7x 2021e EV/EBITDAex is in line with global peers' average. On P/E basis, 42x 2020e looks expensive vs global value chain peers, but MSR thinks CATL merits a premium to peers because of its leading position in market share and technology, as well as its healthier balance sheet and stronger cash flow. MSR's bull case PT is Rmb172, 15x 2021e EV/EBITDAex.
Catalysts: New contracts with OEMs, progress to achieve government EV sales penetration targets.

Dell Technologies (DELL US): ***Sources:*** Dell Technologies Inc.: Lowering FY21 EPS on Margins Peaking (27 Nov 2019)
Thesis: Cross-sell opportunities and product innovation should allow Dell to take profitable share across all major market segments.
Description: Since going private in 2013, Dell has acquired and invested in a portfolio of technologies to become a full stack technology infrastructure, software and services provider.
MS Research Highlights:

- Dell manages more data than any other IT provider, which positions the company well to capitalize on the 'Data Era'. MSR sees the company's ability to capture share of this growing spend as improving after re-investment in the portfolio and go-to-market, and tighter integration across portfolio companies accelerating innovation.
- MSR sees Dell's ability to capture share of growing corporate spend as improving after re-investment in the portfolio and go-to-market, and tighter integration across portfolio companies accelerating innovation. Going forward, MSR sees storage as the biggest opportunity to take share and improve sales productivity. Importantly, the only 20% overlap between Dell and EMC top 5,000 customers speaks to the significant cross-selling opportunity once the company's storage portfolio and sales force are re-established.
- Additionally, given Dell's majority ownership of VMWare, Dell will continue to partake in the rapid growth of on-premises data center investment and spend. Given VMWare's broadening portfolio, the company appears capable of sustaining >10% topline growth. Given the conglomerate discount that Dell has been given due to it's stake in VMWare, a bull case scenario would involve the spin of VMWare in 2021, when Dell could do so at a tax-advantageous rate, unlocking ~30% value for shareholders.
- **The team is EW but sees ~26% upside to their base case PT of $66.**

Valuation: With a price target of $66, MSR applies a 7.5x EV/EBITDA multiple to its FY21 forecasted Core EBITDA, in-line with an average of peers, along with FY21 net debt, 30% discount to share of equity value in publicly traded subsidiaries and 10% discount on total DELL to reflect risk on significantly higher leverage and complex share structure.
Catalysts: 1) Continued share gains; 2) Execution on cross-selling and leverage opportunities; 3) De-Leveraging.

2020 MS Sales & Trading Global Longs

Discover Financial Services (DFS US): ***Sources:*** 2020 Global Banks & Diversified Financials Outlook: Europe Rising (19 Nov 2019)
Thesis: Efficient and strong loan growth, rising wallet share, and benefits from improving credit quality trends with its prime customer focus.
Description: Discover offers credit card loans, specifically Discover-branded credit cards issued to individuals and small businesses, as well as private student loans, personal loans, home equity loans and deposit products.
MS Research Highlights:

- Discover ultimately provides exposure to higher quality credit in the US and in a late cycle environment. Importantly, credit quality has outperformed in 2019, with the company now having 8 consecutive quarters of slower credit losses. Over this same time period (through 3Q19), DFS has grown its total revenues and earnings by 2% and 5% on average, respectively.
- Looking ahead, expect the continuously healthy US consumer to support credit quality at Discover given the company's high-quality prime borrower book, with 80%+ of card loans for prime borrowers. In a bull-case scenario, consumer credit improvements alongside higher wage growth, solid loan growth, lower net charge-offs, and moderating CECL impacts could drive $12.27 in EPS and a 10x multiple.
- An important driver for Discover has been the company's offering of tailored products to younger customers and seamless customer service overall. Specifically in customer service, Discover are winning with a highly-rated app and a best-in-class JD Power ranking for customer service in credit cards.
- **The team is OW with 45% upside to their bull case PT of $123.**

Valuation: Shares of DFS trade at just 8x MSR's 2021e EPS compared to MSR's 9.5x target multiple ($101 price target), which offers ~19% upside.
Catalysts: Going forward, the penetration of international card volumes along with high-quality prime borrowers should drive better than peer credit quality at DFS. Additionally, look for higher wallet share and continually higher-than-peer loan growth.

Ericsson (ERICB SS): ***Sources:*** 5G: Ericsson ready to play; Nokia still buffering (7 Nov 2019)
Thesis: See scope for a revitalized Ericsson to press home its current advantages and deliver ahead of 2020 targets. Valuation is undemanding given favorable competitive dynamics and strong 5G portfolio.
Description: Ericsson develops and manufacturers network equipment and software as well as services for network and business operations.
MS Research Highlights:

- Strategic reorientation continues to bear fruit: Ericsson has undergone significant restructuring (slimmed down services business from 3 divisions into one unit) under a new CEO and activist investor who has delivered with FCF improvements, a leaner business, and technology leadership via R&D investment.
- Company could benefit from challenges at peers: Whilst Nokia grapples with its tech issues and Huawei potentially faces geopolitical headwinds – Ericsson can press home the advantage and take market share. Additionally, issues with Huawei's supply chain could prove favorable for European vendors.
- FCF generation continues to improve at an impressive rate (after a period of historic restructuring) and product enhancements like the software upgradeability of hardware to 5G as a potential boon to margins.
- Ericsson should be better placed to win market share from Nokia in China's 5G RAN build out (the biggest market globally split circa 80/20 between Huawei and Ericsson/Nokia), where the announcements on 5G contracts and vendor market shares are expected sometime in Q12020.
- **The team is OW with ~35% upside to their base case of 110 SEK.**

Valuation: Undemanding at 9.5x EV/EBIT and 7.5% FCF yield (on 2020) vs historical averages at 10.6x and 6% respectively. The MS EU Tech Research team believes the stock can re-rate towards their 11x EV/EBIT target given they forecast higher ROCE over 2020-22 than it has seen since 2007 and best FCF/sales performance since 2010 on their numbers.
Catalysts: 1) Earnings are always the biggest volatility day for the stock, 2) China 5G RAN market share awards announcements (anticipated 1Q-2020), 3) Resolution of US merger situation (TMO/S).

Morgan Stanley

Please Note: The following is a summary of Morgan Stanley Research by Morgan Stanley Sales & Trading:

2020 MS Sales & Trading Global Longs

Freeport-McMoRan Inc (FCX US): ***Sources:*** North America Metals & Mining: We Remain Constructive (11 Dec 2019)

Thesis: With an improving global backdrop and potential for an inflection in global capex by 1Q20, copper appears best positioned to benefit from any recovery in demand given low supply and low global inventories.

Description: Freeport-McMoRan Inc. is a mining company and one of the world's largest copper producers.

MS Research Highlights:

- 2020 is a transition year for Freeport and MSR expects the company's revenues and EBITDA to increase 12% and 50% YoY respectively in 2021. With a positive global growth backdrop, this growth is highly dependent on the successful ramp up of two of Indonesia's underground mines, Grasberg Block Cave and Deep MLZ, which would take Indonesian production from an estimated 0.7B lbs of copper in 2020 to 1.3B lbs in 2021 and further to 1.6B lbs in 2022.
- Additionally, FCX is a play on global industrial production. When US PMIs have fallen below 48, the 12-month forward returns of the S&P M&M index have outperformed the S&P 500 by 40 pct. pts, on average. MSR still sees copper as best positioned to benefit from any demand recovery, forecasting 10% Y/Y upside, on anemic supply growth and low global inventories. With inventory so low, any good macro news would likely drive price sharply higher.
- Ultimately, another year of constrained supply will likely push the market into deficit in 2020, with the potential for a major squeeze if this is met by restocking activity as capex potentially inflects higher.
- With the expected improvement in EBITDA and FCF, MSR thinks that the company will return capital to shareholders through additional dividends and/or buybacks. The stock yields ~150bps.
- **The team is OW with 35% upside to their bull case PT of $18.**

Valuation: Base case PT of $13.60, 2021e Copper price: $2.88/lb. Bull case PT $18, 2021e Copper price: $3.02/lb.

Catalysts: 1) The global economy continues to improve, easing concerns about copper demand; 2) FCX delivers on operational results at Indonesian mines (Grasberg) ahead of guidance during the '19 – '20 transition years.

General Electric (GE US): ***Sources:*** General Electric Co.: Trimming the Tails (5 Nov 2019)

Thesis: As an execution story still in transition, GE shows both substantial tail-risk and opportunity at an undemanding valuation.

Description: GE is an American conglomerate operating within aviation, healthcare, power, renewable energy, manufacturing, venture capital, lighting, and O&G.

MS Research Highlights:

- The overhang on shares to date has been a combination of excess leverage, concerns over a capital raise, limited visibility over LTC liabilities, strategic vision for the company and Power market malaise. Looking towards 2020, investors will likely see progress on the selling of GE's biopharma business to Danaher which should help lower leverage and improve GE's ratings profile while at the same time providing more visibility on LTC following 1Q tests, enabling the company to go back on the growth offensive.
- The bull cases for Power/Aviation thought to be beyond 2021, with Aviation entering a period of strong growth and few margin headwinds. With this said, it's these two segments that could drive roughly half of the upside in a bull case scenario. Additionally, Power has opportunity with globalized LNG but also risk from renewables and localized power suppliers. However, risks from a broader macro slowdown, interest rates, and potential EIS delays on GE9x are more imminent near-term.
- Fundamentally, MSR sees room for upside on Aviation, but largely beyond 2021 and tempered by near-term risks on macro slowness and few signs of the cash flow upside to 2019 building momentum into 2020. In short, management realized some of the "low hanging fruit" early, but it doesn't change the longer-term timeline of cash generation and margin expansion.
- **The team is EW but sees 29% upside to their bull case PT of $15.**

Valuation: Shares trade at 16x FY20 consensus estimates, a 2-3x discount to over MI/EE peers which is arguably more pronounced if the view is taken that Power revenue generation has troughed. MSR's bull case price target of $15 offers ~36% upside from shares' current $11 valuation.

Catalysts: Stabilization and growth in global gas power markets and GE's market share could support higher cash generation and accelerate restructuring benefits. Watch GE's quarter-to-quarter execution. Improved FCF generation and stabilized margin performance in the lagging segments, particularly Power and Renewables.

2020 MS Sales & Trading Global Longs

Humana (HUM US): ***Sources:*** HUM: Correction: Takeaways from Meeting with Management Support Our Bullish View (19 Nov 2019)

Thesis: Humana's strategy to expand its Medicare Advantage book and deliver on operating efficiencies should translate into an accelerated earnings profile beyond 2020 (17% forecasted 2021 EPS growth).

Description: Humana is a managed care organization operating in both Medicare Advantage and Medicare Part D.

MS Research Highlights:

- Given favorable demographic trends for the company over the coming years (rapid rate of Baby Boomers becoming eligible for Medicare benefits) should drive continued growth. While Humana competes in many of the same markets as UnitedHealth (namely Medicare and Medicare Advantage), Humana delivers a much more concentrated focus relative to the industry giant (UNH is nearly 6x the size of HUM on a market cap basis).
- Additionally, with ownership of its PBM and growth in its services offerings, Humana is well-aligned with the move towards value-based care. As of 3Q19, Humana's MLR ranged between 84.5%-86%, in-line with its peer group.
- Humana's strong balance sheet and continued cash generation lay a foundation for expanding services offerings via potential M&A. Said another way, Humana is still seen as an asset to potential acquirers.
- **The team is OW with ~33% upside to their bull case PT of $482.**

Valuation: MSR's base case PT of $360 is based on a 19.6x P/E multiple applied to a FY20E base case EPS of $18.35. MSR's expected multiple reflects a 1.0x turn premium to current S&P500 multiple of 18.6x.

Catalysts: M&A or strategic ventures leverage footprint to further enhance Humana's value-based offerings. Additionally, look for Medicaid RFP wins and 4Q19 earnings to drive expansion of Humana's multiple.

Itau Unibanco (ITUB US): ***Sources:*** Brazil Equity Strategy: The Year of Retail Banks (19 Nov 2019)

Thesis: Itau is MS LatAm Financials Analyst Jorge Kuri's top pick amongst Brazil large cap banks. Itaú should be able to seize more growth than its peers during the banking Super Cycle over the next 3 to 5 years, supported by its best in class franchise, strategic foresight and operational capabilities. Also, the bank's capitalization is second to none, allowing for high growth and dividends at the same time.

Description: Itau Unibanco is one of the largest banks in Brazil.

MS Research Highlights:

- MS LatAm Financials Analyst Jorge Kuri sees potential for strong EPS growth & ROE expansion driven by fast credit growth, balance sheet mix improvement, lengthening of loan maturity, and efficiency gains against a back-drop of sustainable economic growth and low interest rates in Brazil. Growth at the bank is already accelerating at a faster pace, with SME loans up 25% y/y in 3Q19, vs. ~10% at the peers, and credit card loans up 21%, vs. ~15% at the peers.
- Market overly concerned about competition: Consensus expects little to no earnings growth, modeling NIMs flat or contracting, which Jorge thinks is a mistake. When you break down credit, consumer (highest NIM) is growing at 20%, whereas corporates are basically flat (and issuing debentures with longer duration instead of bank loans). On top of that, there is scope for cost cutting as banks close branches and invest in IT (Itau way ahead of competition in this front). So all in all, Jorge sees 20% 2020e EPS growth in USD (vs. consensus at 3.5% in BRL).
- Attractive entry point: Itau has underperformed peers and the market, up just 10% YTD vs. IBOV +30% YTD.
- **The team is OW with 50% upside to their base case PT of $14.**

Valuation: Jorge expects the gap between ROE and risk-free rate to expand 2-3x vs. historical levels, justifying a large valuation premium relative to history. In Jorge's base case, he uses a long-term ROE of 23%. Itau is currently trading at 2.7x P/BV, slightly above 10-yr average of 2.3x P/BV and PT US$14 implies 2020e P/BV of 3.6.

Catalysts: 1) Further structural reforms, 2) 4Q19 print, 1Q20 print to drive earnings revisions, 3) Better than expected efficiency gains.

2020 MS Sales & Trading Global Longs

JD.com (JD US): ***Sources:*** China Internet and Other Services: 2020 Outlook – Branching Out (1 Dec 2019) ; JD.com, Inc.: Focus on Low-tier Cities (17 Nov 2019)

Thesis: Stable customer base growth and margin expansion.

Description: JD is a leading B2C e-commerce player in China. The company is a dominant online vertical for consumer electronics products but offers wide selection of products (from appliances and computers to household items) through its website and mobile applications.

MS Research Highlights:

- MSR believes JD offers a distinctive value proposition to merchants with end-to-end supply chain expertise. JD has demonstrated strong execution with both category and margin expansion from scale benefits. It has been broadening categories from electronics to general merchandise and, more recently, to FMCG. Faster growth (net revenue CAGR of 21% during 2018-21e) to come from successful execution of product category expansion and penetration into low-tier cities.
- Additionally, JD is the largest retailer/channel for smartphones in China, and 5G smartphone cycle should be a tailwind.
- Net revenue CAGR of 20% during 2018-21e, with GMV CAGR of 20%. Operating margin improves from 0.4% in 2018 to 2% in 2020e, driven by favorable revenue mix, continuous growth of scale, and cost control.
- **The team is EW but sees 23% upside to their bull case PT of $46.**

Valuation: MSR's base case PT of $35 implies a P/E of 32x on their 2020 non-GAAP EPS forecast, which implies 1.2x PEG on 3-yr earnings CAGR (excluding Rmb1.8bn in one-off items in 2019). Expect net revenue CAGR of 20% during 2018-21e. MSR's bull-case PT is US$46, 37x 2020e bull case non-GAAP P/E, as MSR has factored in a stronger margin expansion trajectory.

Catalysts: 1) 5G smartphone cycle; 2) value realization from their subsidiary assets (JD health is the largest online pharmacy in China).

LG Household & Health Care (051900 KS): ***Sources:*** Household & Personal Care: China Beauty - Skin in the Game (19 Aug 2019)

Thesis: MSR's most preferred way globally to play the growth / premiumization trend in the beauty market in China.

Description: LG Household & Health Care produces cosmetics and household and personal care (HPC) products headquartered in Korea. Its main brand is called Whoo, and LGHH's portfolio is skewed to the premium segment.

MS Research Highlights:

- Almost 90% of HPC sales currently come from domestic business. China is the key growth story from here.
- MSR estimates China beauty revenues could grow by ~66% in the next 5 years, adding ~$38bn of sales, or almost half of global beauty growth. The team's analysis of the China beauty market points to a 13% China onshore (in-country) demand CAGR from 2018-21 (vs. 11% 2015-18), mainly driven by the premium segment at 23% (vs. the mass segment at a 7% CAGR). For reference, in 2018, beauty consumption in China inbound was US$28 per capita, lower than other Asian countries (Korea at US$172 and Japan at US$193).
- MSR believes LGHH is one of key beneficiaries of the premiumization in the China Beauty market on the back of its portfolio skew to the premium segment. Its high end brands' sales could reach 94% of China sales mix in 2019. MSR expects the company's prestige brand sales to show a 3% CAGR 2019-21e, and its share in that segment to increase from its current 3.4% to 4.3% in 2021e. Additionally, online sales have significantly increased as a proportion of total beauty sales in China (69% in 2016 to 89% in 2019, based on MS Alphawise Survey), which should benefit LGHH, which has relatively high exposure to online (25% of its China sales in 2018 was online).
- **The team is OW with ~28% upside to their base case PT of W1,620,000.**

Valuation: Base case PT W1,620,000, 30x Base Case NTM EPS. China sales continue fast growth via distribution expansion and brand addition, while travel retail growth moderated. 11% earnings CAGR over 2018-21e. Payout at 31% on average. Bull case PT W1,970,000, 35x Bull Case NTM EPS, assumes faster recovery in China-related sales including travel retail; more successful expansion.

Catalysts: Sales increase from fast overseas penetration. Successful enhancement of brand portfolio in cosmetics improves long-term growth. Any expansion/investment plan to support long-term growth, including M&A possibilities (reflected in bull case).

2020 MS Sales & Trading Global Longs

Maruti Suzuki India (MSIL IN): ***Sources:*** Maruti Suzuki India Limited: August SAAR at Trough; MSIL Best Positioned for Upcycle (26 Sep 2019) ; Maruti Suzuki India Limited: F2Q20 Beat in a tough quarter; Remain OW (24 Oct 2019)

Thesis: Best positioned for auto demand upcycle in India.

Description: Maruti Suzuki is the leader in India's passenger vehicle market with a strong product line-up, an extensive network of dealers and ~50% share in terms of domestic volume. The company is a subsidiary of Suzuki Motor Japan.

MS Research Highlights:

- The industry has been through a long downcycle and is showing signs of a turn in growth. MSR believes that the government's move to cut corporate tax rates will see the capex outlook improve and GDP growth pick up, benefitting consumption. With its strong market share and large distribution presence MSIL could be a key beneficiary of the upturn in demand. And should continue to gain share into the BSVI (Bharat Stage 6 emission standards) transition and do well into the CAFE (Corporate Average Fuel efficiency) norms transition in 2022.
- Suzuki-Toyota alliance to help set Maruti up for Autos 2.0. Overall, the alliance could help Suzuki launch a high-localization India EV by 2020. High localization could help ensure better profitability and strong market share for Maruti in Autos 2.0 as well.
- MSR builds in a 3.5% volume CAGR and 8.7% top-line CAGR over F2019-22e.
- **The team is OW with 73% upside to their bull case PT of Rs12,675.**

Valuation: Base case PT Rs8,205, target P/E multiple of 23x MSR's Sept-21 EPS estimate. The team projects EBIT margin of 10.2% in F2022e. Bull case PT Rs12,675, 30x bull case Sept '21 EPS, assuming a stronger-than-expected pent-up demand in the industry.

Catalysts: New launches do well (S Presso, Brezza Petrol). Concrete steps towards EV launch.

Novo Nordisk (NOVOB DC): ***Sources:*** Novo Nordisk: The Curious Tale of the Leopard Tortoise (19 Nov 2019)

Thesis: Proprietary technologies, an increasing focus on innovation in rare diseases and blue-sky pipeline optionality from the use of GLP-1s in Alzheimer's, Parkinson's disease and chronic kidney disease, could support above-sector returns long term.

Description: Novo Nordisk is a global pharmaceuticals company headquartered in Denmark, focused on diabetes and obesity treatment with their key franchise in GLP-1 (23% of sales).

MS Research Highlights:

- Opportunity in oral diabetes treatment: Oral diabetes treatment market represents 70% of US prescriptions, approximately 10x the size of the current GLP-1 category, which generated sales of $8.4bn in 2018. Novo has been focused on investing in this market, setting it up for success down the line.
- Blue-Sky Opportunity: Most impactful could be proof-of-concept data for Victoza in Alzheimer's Disease expected 1Q 2020. Alzheimer's ELAD trial (announcement 5 Feb with FY19 results) could be a $3.8bn opportunity and add c 11% to long-term sales
- Focus on Innovation: Novo has shied away from large-scale M&A, thereby achieving superior returns from early-stage pipeline and platform technology deals. Novo has announced over 14 deals in rare diseases (stem cell-based therapy, sickle-cell), obesity, NASH, dyslipidemia and digital technologies.
- **The team is EW the name but sees ~32% upside to the bull case scenario of 513 DKK.**

Valuation: MS EU Pharma Research Analyst Mark Purcell forecasts Novo will deliver 9% annual sales growth and 11% annual operating profit growth 2019-23. His sales and earnings estimates are 7% and 12% above consensus in 2023E. Novo trades at 24x P/E, a 28% premium to its EU pharma large-cap peers on consensus 2020 earnings but the blue-sky pipeline optionality should support positive multiple expansion.

Catalysts: 1) Liraglutide Alzheimer's disease proof-of-concept data (1Q20), 2) Ozempic and oral semaglutide US label update for the CV protection claim (1Q20), 3) Semaglutide pivotal data in obesity (STEP trials; 2H20).

2020 MS Sales & Trading Global Longs

PICC P&C (2328 HK): ***Sources:*** Hong Kong/China Insurance: 2020: A Year of Supply-side Reforms (4 Dec 2019)

Thesis: Favorable trends in 2019 to extend into 2020: 1) accelerated non-auto development to offset weakness in auto; 2) a hard auto insurance market likely to last at least in 1H20; and 3) additional cost reduction.

Description: PICC is China's largest property & casualty insurer, with a market share of around 33%, offering personal and commercial lines of insurance.

MS Research Highlights:

- MSR sees opportunity for PICC P&C to continue to outperform peers, given what MSR views as its higher-quality earnings and more resilient balance sheet. The tax rate reform in 2019 also removed a major overhang on the concerns over its earnings growth.
- Additionally, MSR continues to hold the view that auto deregulation, even if it resumes in 2020, will be implemented carefully and gradually to prevent negative shocks; the regulator has spent the past 18 months restoring industry profitability and is unlikely to rush to destroy it. Non-auto segments have been running on lower CoR (Combined Operating Ratio) globally due to higher entry barriers and riskier business nature, and, as such, a continued mix shift toward non-auto could drive sustainable margin upside over the next few years.
- **The team is OW with 36% upside to their base case PT of HK$13.**

Valuation: Base case PT HK$13, 1.4x base case 2020E BV. Volatile A-share market and stable growth over short term: MSR applies a higher cost of capital (13%) to reflect increased market volatility. MSR values PICC P&C using a three-stage DDM model assuming 38%, 63% and 80% dividend payouts in the three stages (2019-21, 2022-27, >2027), respectively, and corresponding dividend growth rates of 26%, 22% and 2%. The implied P/B ratio for PICC P&C is 1.4x. Bull case PT HK$16, 1.8x bull case 2020E BV. PICC P&C's valuation remains low at 1.0x 2020E P/BV – attractive relative to its >14% ROE and ~40% dividend payout ratio.

Catalysts: Further gain in market share amid potential industry consolidation. Improvements in CoR thanks to reduced catastrophe losses and improving quality in auto business. Further raise of payout ratio.

Reckitt Benckiser (RB/ LN): ***Sources:*** Reckitt Benckiser: Snapshot - Flu Season (18 Dec 2019)

Thesis: RB 2020 is the reason to own Reckitt. MS Research believes RB's long term strategic path is towards becoming a Consumer Health pure play, and that by 2020, RB will be one of the fastest growth names in Global Staples with superior returns, cash generation and strategic optionality

Description: Reckitt Benckiser is HPC company based out of UK operating in health, hygiene and home care products. It's major brands include Dettol, Vanish, Mucinex, Gaviscol, Air Wick, Durex and Scholl among others. Major markets include the US, Europe including UK and France and India (45% developed markets, 55% developing).

MS Research Highlights:

- RB 2020 as a health pure play should be one of the fastest growing names in Global FMCG, with superior returns and cash generation. Post the creation of RB 2.0, MSR believes RB offers strategic optionality and expect it to continue on the path to becoming a health pure play.
- MSR expects a higher level of investment in the business to help drive stronger topline growth and create additional flexibility to deliver on its earnings algorithm. MSR now forecasts 3-4% topline growth 150bps margin investment in 2020 (+10bps in 2021) and in the medium term to drive 3% earnings growth at RB (2019-22).
- MSR now factors a margin reset in their numbers for Reckitt in order to drive faster topline growth beyond 2020 and provide a path to value creation longer term.
- **The team is OW with ~68% upside to their bull case PT of £10,400.**

Valuation: Updating for spot FX at the current share price, the stock is trading at 19.6x '20e EPS. By the end of 2020 the team forecast Reckitt to have ~£4bn of EBITDA with £13.5bn of sales.

Catalysts: Details around the new CEO's strategy for returning Reckitt to performance + FY19 Earnings - 27th Feb 2020. In their bull case scenario, the team assume ~6% LFL sales growth and margin expansion of ~300bps in Mead and ~50bps in the core business 2020-22e.

Please Note: The following is a summary of Morgan Stanley Research by Morgan Stanley Sales & Trading:

2020 MS Sales & Trading Global Longs

Royal Bank of Scotland (RBS LN): ***Sources:*** RBS: New Business Plan to Provide Further Upside (16 Dec 2019)

Thesis: After four consecutive quarters of earnings misses and 2020E consensus down c. 25% since the peak, earnings momentum for RBS should turn the corner in 2020.

Description: RBS is a diversified banking group and the most levered play on the UK.

MS Research Highlights:

- New company targets to show accelerating earnings growth. New CEO appointed in September is set to unveil new medium term targets for RBS at FY results on Feb. 14th. Focus will be on restructuring of Natwest Market (shrink by 25% to allow group to reach 12% ROTE by 2022).
- NII growth turning the corner. Expect RBS to show improving NII growth of 1.5% in 2020 vs peers contracting at 2%.
- Lower capital target to be announced. Lower its "go-to" CET1 from 14% to at least 13%. Will allow £2bn of capital distribution to free up, approx. 7% of its market cap.
- **The team is OW with 23% upside to their base case PT of £300.**

Valuation: The stock trades on 8.4x P/E 2020e or 1x 2019e TBV for a c.11% RoNAV 2021e, with total shareholder return of c.12% for 2020e. The team's numbers for 2020 are ahead of consensus for the first time this year after they have come down 25% YTD.

Catalysts: 1) Government placing allows share buybacks, 2) Agreement on Brexit steepens yield curves.

Schlumberger (SLB US): ***Sources:*** Schlumberger NV: Starting on the Path to Higher Returns; Upgrade to OW (10 Sep 2019)

Thesis: New mgmt's focus on shareholder returns, irrespective of higher oil or service prices, can drive EPS, CF, and market share improvements in 2020.

Description: Schlumberger provides technology for reservoir characterization, drilling, production and processing to the oil and gas industry.

MS Research Highlights:

- Currently MSR's top oilfield services (OFS) play, MSR thinks that if Schlumberger's plans to improve profitability, decrease capital intensity, and enhance FCF come to fruition, SLB can recapture its premium valuation vs. peers.
- SLB's recently-disadvantaged portfolio skew (overweight offshore, underweight NAm) has cost it some of the growth peers (HAL) have enjoyed since the trough of the cycle. However, MSR now thinks that offshore is taking the reins on growth, putting SLB in an advantaged position relative to on-shore focused peers. Even if oil prices surprise to the upside or downside, SLB should benefit from positive capex revisions (relative to onshore) being similar or even favoring offshore markets. MS' Oilfield Services team forecasts 6% and 12% Y/Y growth in global offshore capex in 2020 and 2021, respectively.
- Additionally, SLB currently yields ~6% and its dividend is sustainable in all but the worst oilfield market scenarios. This provides downside support and drives a "paid to wait" story while new management works on the fundamentals.
- **The team is OW with 14% upside to their base case PT of $50.**

Valuation: MSR's base case valuation of $50 is based off of a ~12x EV/ EBITDA ('20 est.), with the company's 4% yield also being taken into consideration. In the 3rd quarter, SLB's EV/EBITDA multiple vs. the S&P 500 is at a 20-year low, even though SLB offers a meaningfully higher FCF yield than the market (~7%). On an earnings multiple basis, SLB trades at 25x 2020 earnings and 2.2x Net Debt to EBITDA.

Catalysts: 1) Further clarification on SLB's plans to cut costs; 2) Evidence of total shareholder return improvements advancing; and 3) Increased rationalization of more capital intensive businesses and the selling off of segments with higher capital intensity and lower margins (which have yet to be revealed).

2020 MS Sales & Trading Global Longs

Uber Technologies (UBER): ***Sources:*** Big Debates 2020: Key Investor Debates Likely to Drive Stocks in the Coming Year (11 Dec 2019)

Thesis: The adoption runway for rideshare remains long as profitability is likely coming sooner and faster than expected.

Description: Uber provides a ride-sharing platform along with applications for road transportation, navigation, and payment processing solutions.

MS Research Highlights:

- While Uber continues to invest in growth, it's positive that the company has committed to a consolidated EBITDA breakeven target (FY21). Specifically, MSR is expecting standalone rides EBITDA margin of 19% for FY19 improving to 27% in FY21. Additionally, MSR sees solid top-line rideshare growth coupled with cost optimization efforts across the board (insurance, payments, sales & marketing, operations & support, etc.) driving EBITDA beats in the coming quarters. This improving profitability and free cash flow can be expected to be a key area in turning investor sentiment.
- While the large TAM for food delivery has thus far meant Uber Eats has been losing money, Uber Eats is shifting from a "growth at all costs" mode into a more focused approach on its key markets, and MSR expects consolidation will occur, which should significantly improve unit economics.
- Shares have been pressured YTD but MSR believes that ridesharing alone is worth $32/share, above the current price of $30/share for the company as a whole today. In all, expect Uber to grow adjusted net revenue at a 27% '19-'22 CAGR and to go from losing $2.8bn in EBITDA in 2019 to generating positive $1.1bn in 2022.
- **The team is OW with ~81% upside to their base case PT of $55.**

Valuation: MSR's price target of $55 is based on a SotP, in which value ridesharing is valued at at ~$61bn and Eats at ~$18bn. MSR's SoTP-based PT implies 4.6x EV/'21 ANR.

Catalysts: 1) Greater focus on profitability by rideshare competitors in the US and Internationally; 2) Rationalization and / or consolidation in the online food delivery industry; and 3) Faster than expected growth in rideshare bookings.

Volkswagen (VOW3 GR): ***Sources:*** Volkswagen: Are we sure about 2020? (13 Nov 2019)

Thesis: VW looks cheap and will likely be the winner in a consolidated BEV world. This is a prize worth winning – even if earnings are diluted for some years along the way.

Description: Volkswagen's principal activities are the design, manufacture and distribution of cars and other vehicles worldwide. The Group's main products include the Volkswagen, Audi, Seat, Skoda, Lamborghini, Bugatti, and Bentley ranges of vehicles. Other activities include vehicle finance, rental and fleet management.

MS Research Highlights:

- Strong position in BEV: VW has made the most aggressive move towards BEVs to address global CO_2 concerns. This business could by then drive annual revenues of €75bn to €90bn at an ASP of €30k. The team would expect VW to win competitively in a BEV world.
- Good management decisions: VW has made a lot of good decisions in recent years. The focus on costs and cash flow has improved, despite continually higher investment spending. The product move to SUVs has also improved mix and ASP, and sustained EPS.
- VW still has strong revenue generation: YTD FY19 revenues are up €12bn – on just over 200k higher unit sales (with China down). ASPs are up an impressive 8% year on year due to improved product mix, improved regional mix and to positive pricing.
- Global autos continue to be valued at a level that reflects structural as well as cyclical recession concerns. If these recession fears recede, or if policy intervention builds any confidence at all, then current auto valuations are simply too low.
- **The team is EW but sees ~11% upside to their bull case PT of €200.**

Valuation: Value VW on 7.2x FY19e EPS near the midpoint of the historical P/E range VW shares have traded in (6.0x-9.0x since 2009). This equates to ~0.3x EV/sales and a P/B ratio of ~0.6x. The low valuation is in line with the sector. VW currently trades at a 6.5x P/E.

Catalysts: 1) Next earnings release date on March 13, 2020.

2020 MS Sales & Trading Global Shorts

20 Shorts

Company Name	Ticker	MS Research Rating	MS Research PT Upside	Market Cap ($B)	Region	MS Research Analyst
ASSA ABLOY	ASSAB SS	UW	-14%	27	Europe	Lucie Carrier
CERNER CORP	CERN US	UW	-15%	23	US	Ricky Goldwasser
CLOROX COMPANY	CLX US	UW	-32%*	19	US	Dara Mohsenian
COMPASS GROUP	CPG LN	EW	-24%*	40	Europe	Jamie Rollo
ETSY INC	ETSY US	UW	-16%	5	US	Lauren Cassel
EXTRA SPACE STORAGE INC	EXR US	UW	-33%*	14	US	Ronald Kamdem
FACTSET RESEARCH SYSTEMS INC	FDS US	UW	-19%	10	US	Toni Kaplan
FRESENIUS MEDICAL CARE	FME GR	UW	-36%*	22	Europe	Michael Jungling
HENKEL AG & CO	HEN3 GY	UW	-21%	42	Europe	Richard Taylor
INDUSTRIA DE DISENO TEXTILES	ITX SM	UW	-37%	110	Europe	Geoff Ruddell
KUBOTA CORP	6326 JP	EW	-25%*	19	AxJ	Yoshinao Ibara
NINTENDO CO LTD	7974 JP	EW	-25%*	52	Japan	Masahiro Ono
OMNICOM GROUP	OMC US	UW	-23%*	18	US	Benjamin Swinburne
SUNNY OPTICAL TECH	2382 HK	UW	-29%	19	AxJ	Yunchen Tsai
TEMENOS AG - REG	TEMN SW	UW	-38%*	11	Europe	Adam Wood
TOYOTA MOTOR CORP	7203 JP	UW	-25%	230	Japan	Kota Mineshima
UNITED PARCEL SERVICE	UPS US	UW	-33%	102	US	Ravi Shanker
WAYFAIR INC	W US	EW	-20%	9	US	Simeon Gutman
WEIBO CORP	WB US	EW	-49%*	11	AxJ	Grace Chen
WORKDAY INC	WDAY US	EW	-39%*	38	US	Keith Weiss

All Price Targets based on MS Research views as of 01/02/2019, prices in local currency
* Represents MS Research Bear Case Downside

2020 MS Sales & Trading Global Shorts

Assa Abloy (ASSAB SS): ***Sources:*** Assa Abloy: A More Cautious Ending to 2019? (9 Dec 2019)

Thesis: See growth deceleration from construction end-markets and softer pricing, with dilutive M&A impact and a full multiple.

Description: Assa Abloy AB is a Sweden-based company that is engaged in the manufacturing and marketing of security solutions. The company has approx. 30-40% US revenue exposure, 30-40% Europe ex. UK revenue exposure, and the remaining 20% exposure to APAC, MEA, LatAm, India, Mainland China, and UK.

MS Research Highlights:

- Decelerating construction end-markets: while many cyclical end markets such as semis or autos have already experienced significant downturn, the MS EU Cap Goods Research team sees the construction end markets only starting their deceleration since mid 2019, suggesting a few more quarters of weaker order growth. Assa Abloy has the highest exposure to US construction vs peers at 35% and this market according to MS Alphawise data peaked in March 2019 at a 15 yr high and has been deteriorating sharply since (could be down 30% in 1Q20).
- Story excessively reliant on M&A strategy: main source of earnings outperformance (and valuation premium) vs the group has come from its strategy of M&A bolt-ons. This is slowly and gradually proving more costly and margin dilutive - while organic growth is likely to come up short both in absolute terms and in a sector context.
- Misperceptions around the underlying organic performance by investors: in fact, Assa Abloy's organic growth has undershot EU Cap Goods and global GDP over the last decade.
- **The team is UW with ~14% downside to their base case PT of 188 SEK.**

Valuation: Assa Abloy trades at a 16.6x EV/EBIT for 2020 vs the average for peers at 13.2x. The MS EU Cap Goods Research team's base case PT of SEK 188 uses a mid-cycle 2019 EV/EBIT multiple of 13.0x. In the bear case the team forecast a decline in organic growth of 1.7% and margin just below the low end of long-term target range. The team dislike paying high multiples for Assa Abloy given organic numbers and margin are being put under pressure.

Catalysts: Q4 2019 Earnings Release on February 6th.

Cerner Corporation (CERN US): ***Sources:*** Cerner Corporation: Focus on margin expansion, but revenue in flux (25 Oct 2019)

Thesis: Operates in a highly saturated market, limiting upside potential as cost cutting becomes the main driver of margin upside.

Description: Cerner is a market leader in the global electronic health record (HER) market, accounting for 25% share in the US market.

MS Research Highlights:

- As 95% of this market is already penetrated, MSR believes that greenfield opportunities are limited. As hospitals continue to shift their spending to other areas outside the core EHR, new revenue streams are key for management to deliver on long-term topline growth targets, despite Cerner still successfully tracking Y/Y revenue growth of 6% in 2019 and expanding net income by 4.7% Y/Y.
- Margin expansion and share have been offset by lower level of revenue growth of 6.4% in 2020 (down from 7.4% prior) and additional debt.
- Revenue Cycle and Population Health are near-term opportunities for Cerner, but these markets are highly competitive, which can translate to slower than forecasted growth.
- Strategic growth initiatives (such as consumer, employer, and Medicaid) can provide upside optionality, but require incremental investment outside of Cerner's core business. Additionally, Cerner and Adventist Health agreed to terminate their RevWorks contract (outsourcing of revenue cycle management services), resulting in nearly 1,700 Cerner employees transitioning over to Adventist Health. The impact of this contract termination will be a ~$25 million topline drag in 4Q19, and a $170 million (or 3%) topline drag in 2020.
- **The team is UW with ~15% downside to their base case PT of $62.**

Valuation: In its base case, MSR applied a P/E multiple of 19.5x to its 2020 EPS estimate of $3.16.

Catalysts: 4Q earnings and February Analyst Day.

2020 MS Sales & Trading Global Shorts

Clorox Co (CLX US): ***Sources:*** Consumer Staples: 2020 Staples Outlook: Stay Selective (16 Dec 2019)

Thesis: Weak organic sales growth with lower GM expansion on the horizon as pricing dissipates amid commoditized product suite.

Description: Clorox is a $9 billion market cap consumer products company with fiscal 2010 sales of $5.2 billion. Its largest brands are Clorox bleach/cleaners and Glad bags/wraps/containers.

MS Research Highlights:

- Expect topline woes to linger, supported by continued scanner data weakness to-date in fiscal Q2. Bulls are optimistic that CLX will return to LT topline growth of 2-4% in fiscal H2 and beyond by recapturing distribution and given sequentially easier comparisons, but MSR is concerned that weaker than expected FY guidance is still too high (MSR FY20 organic sales forecast is currently +0.9%, relative to management's guidance of +1-3%). '20 sales growth is currently tracking -0.3% as gross profit margins have contracted 60bps to 43.8% (EBITDA margins were 21%, in-line with prior years).
- US scanner sales remain weak, with a CLX 2-year average scanner data sales decline of -0.8% in 4Q19TD , close to -0.4% in C3Q19 and -0.7% in 2019TD, as market share losses remain widespread (>2/3 of CLX's categories), price gaps remain elevated, and competition has intensified in categories such as cat litter, bleach, and wipes.
- Consequently, Clorox began increasing promotional activity YoY in C3Q19 for the first time in 7 quarters, and MSR is concerned that this will not translate to a full 1-to-1 volume recovery and further deflate sales growth in CY20. Furthermore, dissipating pricing should lead to relative gross margin pressure in the coming quarters, complicating CLX's reinvestment efforts to revitalize growth.
- **The team is UW with 32% downside to their bear case PT of $103.**

Valuation: With all of this in mind, Clorox's in-line valuation with household products peers (~24x CY20 P/E, roughly in line with PG at ~25x in spite of PG's superior topline trajectory) remains unwarranted.

Catalysts: Higher commodity pricing, greater industry promotion, weaker-than-expected cost-cutting, lower market share, and weaker macros.

Compass Group (CPG): ***Sources:*** Compass Group: Cutting EPS Forecasts 4-6% (27 Nov 2019)

Thesis: Stock has rallied significantly YTD and restructuring of EU business raises questions over relative sales performance, earnings quality, and FCF. CPG's 7% EPS CAGR comes at a demanding multiple, with stock trading at 21x 2020e P/E / 32x FCF.

Description: Compass Group PLC is a leading foodservice company. The group provides catering and facilities management services to a variety of public, commercial and industrial institutions throughout the world. Geographical split as follows: North America 42%, Continental Europe 24%, UK 18% and Rest of World 16%.

MS Research Highlights:

- Europe business anchor for short thesis: Plan to restructure EU business and aim is to hold EU margins flat in the face of mid-single digit volume declines in the B&I segment (~50% of EU sales). Assuming a 30% conversion margin, then a 5% sales drop would be a ~£50m EBIT hit. This implies a profit drop in Europe, given the weaker top-line, and is a reminder of the high operational gearing that can be seen in contract catering, and the cash costs will impact FY20 FCF conversion.
- Industry getting more competitive: Most main operators have either warned or missed targets, and there are some structural risks such as rising capex needs, digital disruption, changing working practices. Competitors include Aramark, Sodexo, AND Elior etc.
- Unexciting growth: Margins are at all-time highs, labor and food costs are growing and further growth looks limited. Jamie sees c. 5% organic sales growth and c. 5bps margin expansion in a normal year, giving c. 6% EBIT growth, though buybacks could boost EPS growth to 8-9%.
- **The team is EW but sees 24% downside to their bear case PT of £1,440.**

Valuation: On 21x 2020e P/E and a 3% FCF yield, it trades at a premium to peers as well as its own long run average.

Catalysts: Q1 update on 6th of February, FY20 EPS forecasts likely to fall ~5%.

2020 MS Sales & Trading Global Shorts

Etsy Inc (ETSY US): ***Sources:*** Etsy Inc: Bear Case Becoming Our Base Case; Downgrade to Underweight, $38 PT (5 Dec 2019)

Thesis: Slowing core growth along with tax and ad headwinds should more than offset uptick from free shipping.

Description: Etsy is an ecommerce provider offering a variety of products (both specialized and traditional) to customers in the United States.

MS Research Highlights:

- Given recent success amid continuous threat from larger e-commerce players (Amazon, Shopify), the myriad of simultaneous business changes, and the acquisition of Reverb, MSR questions if the "low hanging fruit" has been picked and high-teens to 20%+ core gross merchandise sales (GMS) growth may be more difficult to achieve going forward, especially given ETSY's potential TAM limits. MSR now anticipates slowing core GMS growth to result in negative top-line and EBITDA revisions.
- MSR estimates -4%/-2% 4Q19/2020 core GMS headwinds from new state sales tax legislation, respectively. Management guided to an additional ~100bps estimated sales tax headwind to 2019 GMS growth, due to greater cart abandonment, but MSR estimates the absolute headwind to be roughly ~2% (~3% to core US GMS growth).
- Additionally, Etsy is pulling back on its investment in Product Listing Ads (PLAs) in order to drive sellers to invest more marketing dollars. Given 4Q18's significant investment in Google PLAs, MSR believes that this could be a meaningful headwind to 4Q19 growth.
- **The team is UW with ~16% downside to their base case PT of $38.**

Valuation: MSR's price target of $38 implies 22x 2020e revenue. MSR's base case assumes that Etsy grows revenue by ~19% from '18-'23, driven by increasing buyers, improved paid search/discovery, and expansion from Reverb, but medium-term difficulties slow GMS growth. Bear case PT $23, 14x Bear Case 2020e EV/EBITDA., assuming Etsy experiences a slowdown in revenue growth (15% CAGR) from '18-23, as marketing efforts do not up frequency, sellers don't pass shipping costs on from free shipping cost, and promoted listing revenue slows due to Etsy Ads.

Catalysts: Adoption of Etsy Ads, Reverb growth .

Extra Space Storage (EXR): ***Sources:*** Why Do We Remain Cautious? (17 December 2019)

Thesis: Growth to decelerate, driven by supply headwinds and tougher compares for EXR as the portfolio gets larger.

Description: Extra Space Storage owns and/or operates 1,797 self-storage stores in 40 states, Washington, D.C. and Puerto Rico.

MS Research Highlights:

- EXR has benefited from years of low supply levels and strong demand allowing it to achieve record topline growth, however the current environment is not what it used to be with continued supply pressures and decelerating job growth. More broadly, MSR is cautious storage REITs which have underperformed but still do not reflect potential downside risk to growth in 2020 - EXR is the most expensive.
- Given a smaller portfolio base and stronger operating results, EXR has consistently grown FCF at multiples of PSA. However, for the first time this cycle EXR growth will decelerate, driven by supply headwinds and tougher compares for EXR as the portfolio gets larger.
- Absolute and relative valuation look expensive and investor positioning is crowded.
- **The team is UW with 33% downside to their bear case PT of $70.**

Valuation: MSR has a Bear PT of $91 on 14.4x Bear Case $4.86 FFO, Same-store NOI growth turns negative. The company is unable to maintain pricing growth as it turns negative and occupancy declines. Same-store revenue growth comes in flat in '20-21 with expense growth 3.8%. The team assume no acquisitions for 2020.

Catalysts: Revenue growth fails to stabilize at historical levels or expense growth comes in lower than expected. Next key date to watch is the earnings release on February 20th.

2020 MS Sales & Trading Global Shorts

FactSet Research Systems (FDS US): ***Sources:*** Theme Trades: Secularly Challenged Stocks (20 Nov 2019)

Thesis: With end-markets structurally challenged on cost, FDS' premium multiple is undeserving as revenues and margins stall.

Description: FactSet provides financial analytics and services to asset managers and owners.

MS Research Highlights:

- Expect secular headwinds within the asset management industry to limit FDS' revenue/earnings growth opportunities, putting pressure on FDS' shares. MSR believes that the shift towards passive investing and fee pressure within asset managers will continue to be a significant headwind to the industry over the foreseeable future.
- MSR believes that the Research segment (43% of revenue), which provides terminals to finance professionals, is a secularly challenged industry where seats are flat/declining and competition is fierce among three largest providers.
- MSR expects FDS to generate only 4.4% organic revenue growth NTM, lower than peers of 6.5% on average, which does not justify its 20x 2020e EV/EBITDA multiple.
- **The team is UW with ~19% downside to their base case PT of $215.**

Valuation: At a 20.8x EV / EBITDA multiple, FDS currently trades at 1 standard deviation above its historical EV/EBITDA average, despite a below-average revenue growth rate, flat earnings growth, and continued secular pressure within the asset management industry limiting its future growth outlook. Leverage is less of an issue for Clorox, however, as the company currently trades at 2.1x Net Debt / LTM EBITDA.

Catalysts: BX's purchase of 55% of Refinitiv could be disruptive, leading to increased competition, unbundling driving pricing pressure, and continued pressure within the asset management industry.

Fresenius Medical Care (FME): ***Sources:*** Fresenius Medical Care: Pressure Points For 2020 (6 Dec 2019)

Thesis: Stock should de-rate, reflecting lower visibility and structural changes in the market that present more challenges than opportunities. MS EU Medtech Research Analyst Michael Jungling is 7-8% below cons on 2020e net income and the only UW on the street.

Description: Fresenius Medical Care (Germany) is the world's largest integrated provider of products and services for individuals undergoing dialysis treatment because of chronic kidney failure.

MS Research Highlights:

- High probability of profit warning in 2020: Michael estimates net income growth headwind of €90-100mm (aprox. 6%). Cons net income of ~€1,379mm is +1% ahead of company guidance while Michael is 7-8% below consensus.
- Market missing two key factors: 1) large earnings tailwind from calcimimetics in FY19e on an estimated €200m which may largely evaporate as CMS brings down the reimbursement closer to the acquisition costs of dialysis service providers (~€50m). 2) Earnings growth in FY19 were affected by one-offs unlikely to be repeated (including €40m reduction of liability related to Xenios & €87m write-back of previously booked profits on ESRD project).
- Competition in hemodialysis-dependent (HHD) space rising rapidly: FMC taken lead on HDD via acquiring NXStage, but number of competitors rising, including Quanta, AWAK, Tablo + other innovators. CVS Risk is large – they recently announced the launch of a clinical trial for FDA approval of its new HHD machine, and their retail footprint + homecare delivery network gives them significant market reach.
- **Michael is UW with ~36% downside to his bear case PT of €42.**

Valuation: Base case PT $215, 16.7x 20e Standardized Adj. EBITDA. Michael projects a FY19-21 year Net Income CAGR of +9% vs. consensus of +11% and the peer group at +14%. He has FMC trading on a CY20E EV/EBITDA (adjusted for minorities and pre IFRS 16) of ~8.5-9x vs. the peer group which is on ~9x. Should his forecast be correct, he also sees FMC witnessing multiple contraction. Bear case PT $123, 10.2x 20e Standardized Adj. EBITDA, assuming clients to resist price increases and trade down to cheaper offerings.

Catalysts: Earnings print (Q4 2019 Earnings Release on Feb 20th).

2020 MS Sales & Trading Global Shorts

Henkel (HEN3 GY): ***Sources:*** Henkel AG & Co. KGaA: More of the Same (4 Nov 2019)

Thesis: While valuation looks inexpensive, subdued top-line growth, a slowdown in margin improvement, and earlier than expected CEO transition is reflective of Henkel's re-investment plan not bearing fruit.

Description: Henkel is one of the leading household and personal care company based out of Germany. Henkel's three key business areas include Adhesive Technologies, Laundry and Home Care and Beauty Care.

MS Research Highlights:

- Structural challenges remain: Henkel to be left with challenged consumer business and slowing adhesives business once current cyclical boost for Adhesives fades and cost savings run out. The team only see earnings growing at a 2% CAGR over 2019-21.
- Competitive pressures continue as a result of the resurgence of P&G. The team see a threat across 9 out of 10 of Henkel's top consumer markets. Without significant reinvestments or acquisitions, expect the muted growth of the Consumer business to continue.
- Valuation looks cheap, but still a value trap. The team believe that an earnings cut and de-rating is warranted given the current lack of visibility. The stock will continue to look like a value trap to the team unless it goes through a material further de-rating to 12-14x, or the Consumer business stabilizes.
- **The team are UW with 21% downside to their base case PT of €72.**

Valuation: PT of €72 puts Henkel on a 2019e P/E of ~14x, a 23% discount to its 3-year absolute P/E and an ~18% discount to its 10-year average.

Catalysts: 4Q & FY 2019 Earnings Release - 5th March 2020.

Inditex (ITX): ***Sources:*** Inditex: 10 recent developments that further raise our conviction in our Underweight thesis (25 Mar 2019)

Thesis: Share price not reflecting declining earnings power. MS EU Consumer Research Analyst Geoff Ruddell thinks ITX should be viewed as a business unlikely to grow earnings by more than c.5% per annum on slowing sales growth/declining EBIT and he thinks market is overly optimistic on growth. The stock should de-rate as consensus expectations come down.

Description: The core activities of Inditex Group are design, production and retailing of textiles and shoes.

MS Research Highlights:

- Opportunities for further growth are limited: few markets left for ITX to enter that have potential to drive material sales growth. EPS growth now averages 7% and margins have fallen in each of last 5 years. Cons not yet adjusted while Geoff cuts EPS forecasts 19% over last 3 years. Moving forward he expects only 4% EPS growth and he is 12% below cons for 2020/21
- EBIT margins have fallen in each of the last 6 years (16.7% in FY 2018/19). Whilst this is partly due to FX, it also reflects price investment, intensifying competition, declining instore sales densities and online channel shift. Geoff believes that EBIT margins are still several hundred basis points higher than those of most leading competitors.
- Competition rising: ITX's edge was the speed it could bring products to the market. Geoff notes new entrants now match this ability—i.e. Boohoo ('test & repeat' model).
- Potential for accounting issues: Geoff finds four obscurities that boosted profits relative to those it reported 3 years ago by more than 450mn euros, i.e. more than 2/3 of the EUR 685mn reported profit growth in this period.
- **Geoff is UW with ~37% downside to his base case PT of €20.**

Valuation: PT of €20.00 implies -36% downside to current levels, and Geoff believes that Inditex should be trading on 16x calendar 2020 earnings instead of the 22x it is currently trading on—rich relative to outlook for growth. Peers in pan European General Retail sector trading on 20.2x Cal 2020 earnings. Forecasting EBIT margins falling to 16% in base case scenario and 12% in bear case scenario.

Catalysts: Earnings / guidance are a catalyst to UW thesis. Geoff sees downgrades continuing and expects the shares to de-rate gradually. Next earnings date is FY 3019 results on March 11th)

Please Note: The following is a summary of Morgan Stanley Research by Morgan Stanley Sales & Trading:

2020 MS Sales & Trading Global Shorts

Kubota (6326 JP): *Sources:* Kubota: Revise Estimates But Still Expect Range-bound OP; Stay EW (15 Nov 2019) ; Big Debates 2020: Key Investor Debates Likely to Drive Stocks in the Coming Year (10 Dec 2019)

Thesis: Asia demand risks; N. America demand already past historical peak levels.

Description: Kubota is a tractor and heavy equipment manufacturer headquartered in Japan. Kubota's compact utility tractors are used in domestic, agricultural, and industrial settings.

MS Research Highlights:

- Farming equipment: In N.Am, demand volumes for small tractors in the US market have been exceeding historical peak levels, so MSR expects that sales will trend down.
- Business potential in EMs like Thailand and China, but highly susceptible to government policies on subsidies, etc, in various countries.
- Rolling out 130-170hp tractors in Europe/US as part of mid/long-term efforts, but incurring upfront costs for now in the startup stages.
- The company saw OP growth decline -5% in 2018; MSR expects growth to recover +8% for 2019, and then to slow down to +3% in 2020e, and 0% in 2021e. ~30% of revenue comes from domestic business vs ~70% overseas (about half of which comes from N.Am, based on 2018a).
- Its main global peer Deere also faces headwinds including a small ag de-stock, where Kubota competes. *MSR is OW on DE given NA Large Ag outlook.
- **The team is EW but sees 25% downside to their bear case PT of $1,300.**

Valuation: PT 1,700, calculated as MSR's target P/E of 14.5x applied to their F12/20e EPS of ¥116.9. P/E was 16x in 2005-06, the last earnings recovery phase during which the yen weakened. MSR applies FV P/E of 14.5x, at a ~10% discount to the 2005-06 average, in light of the prolonged slump in Asia business, previously considered the mid/long-term driver of earnings. Bear case PT $1,300. Ongoing demand slump in Thailand; N. America demand enters a downturn; sharper than expected growth in incentive costs and fixed costs. F12/20 OP ¥150bn. FV P/B falls to 1.2x (avg. multiple during earnings slump) as expectations for ROE improvement fade.

Catalysts: Major fluctuations in farm equipment demand in Japan/abroad, agriculture policy trends (subsidies, etc) by national governments. New president Kubota's strategy.

Nintendo (7974 JP): *Sources:* Consumer Electronics: Correction: Cut Nintendo to EW, Prefer Sony (25 Nov 2019)

Thesis: Console cycle peak, competition from online gaming.

Description: For over 20 years, Nintendo has ruled as the one of the world's largest makers of home game devices and software. The most recent game console launches include the Nintendo Switch in March 2017 and Nintendo Switch Lite in September 2019.

MS Research Highlights:

- MSR now expects a lull in Switch generation growth in F3/21, while continuing to see much scope for longer-term growth in IP value once the cloud game market gets going in earnest. MSR also sees emerging risk of a falling Switch Lite tie ratio, where sell-in volume beat market expectations in 2Q but demand for a 2nd device made up a high 43%.
- Addition of Switch Lite expands the user base, feeding expectations for growth in hardware volume penetration, but the pipeline in F3/20 3Q and beyond does not impart conviction that the market's consensus profit expectation will be reached.
- Recent updates: The company announced recently that Tencent will start selling the Switch hardware (only the original Switch) with one title, *New Super Mario Bros. U Deluxe*, at the time of the launch, but also the company plans to roll out *Mario Kart 8 Deluxe* and *Super Mario Odyssey*. MSR thinks penetration will begin in earnest after 5 or more titles are released. The company explained that it is also preparing for the release of Switch Lite in China. Software currently waiting for approval include *Mario Tennis*, *Super Mario Maker*, and *Legend of Zelda*.
- **The team is EW but sees 25% downside to their bear case PT of ¥33,000.**

Valuation: Bear case PT ¥33,000, F3/20-21 avg. EV/EBITDA x 11.5. Total Switch sales volume through F3/21 at 66.0mn units: Switch shipment volumes: F3/20 17.5mn units, OP: F3/20 ¥230bn, EPS: F3/20 ¥1,325.

Catalysts: Newsflow on progress in the China market is a near-term variable for the share price. Newsflow on next-gen console development. 1st-party title announcements at F3/21 guidance in Apr. Investment in entertainment-related acquisitions or CMOS sensor capacity expansion.

2020 MS Sales & Trading Global Shorts

Omnicom Group Inc. (OMC US): ***Sources:*** Media & Internet: Bringing It All Together - 2020 Advertising Outlook (19 Dec 2019)
Thesis: Structural short as organic growth decelerates given pressures in key advertising verticals, particularly retail & CPG.
Description: Omnicom is one of the largest advertising, marketing and corporate communications companies in the world, operating in all major markets around the world through multiple agency networks.
MS Research Highlights:

- MSR continues to see Omnicom's risk/reward skewed to the downside versus the broader Media coverage group. This stems from the GDP or GDP-minus industry growth demonstrated by OMC and the industry over the last few years despite a strong ad market and macro backdrop, peak margins, and valuation levels that are full relative to growth estimates.
- Perhaps of greatest concern is the pressure many key advertising verticals are facing due to their own secular challenges (Retail, CPG, Telecom). Unfortunately, agencies are part of the supply chain to major brands under pressure from shifting consumer behavior driven by Amazon and other tech platforms. Reflective of these continual challenges, 2019 revenues are expected to fall -244bps Y/Y and revenue growth to remain slow in 2020,+1% .
- **The team is UW with 23% downside to their bear case PT of $61.**

Valuation: MSR's $61 bear case price target implies 24% downside from current valuation. Currently, OMC is trading at 12.7x 2020 earnings, relative to IPG which is trading at 11.3x forward P/E.
Catalysts: Account losses leading to market share loss.

Sunny Ops (2382 HK): ***Sources:*** Greater China Technology Hardware: Smartphones: Changing Dynamics; Move Sunny to UW (10 Nov 2019) ; Sunny Optical: Feedback on Our Downgrade (14 Nov 2019)
Thesis: Limited CCM (Compact Camera Module) GPM recovery amid intense competition.
Description: Sunny Optical is a leading optical component and module maker in China. The company currently has a 12% global market share for phone-camera modules, and about a 50% share for China-based handset OEM customers.
MS Research Highlights:

- MSR thinks Chinese OEMs' volume could be at risk in coming months because of increasing inventory in the channel and 4G de-stocking. Coupled with the return of O-Film, which would intensify competition, MSR expects Sunny's CCM GPM to decline looking into 2020.
- Further, consensus largely expects Sunny's potential entry in the iPhone supply chain in 2021, hence enlarging its current addressable market, while MSR, on the back of conversations with companies, believes it unlikely that Sunny enters the supply chain in two years. MSR sees downside risk to Sunny's consensus earnings estimates for 2020.
- **The team is UW with ~29% downside to their base case PT of HK$98.**

Valuation: Current 28.7x 2020e P/E seems rich compared to the historical average of 19x for the past three years.
Base case PT HK$98.0, 20.6x base case 2020e EPS. 1) Handset lens revenue grows 26% in 2020, thanks to further share expansion and spec migration. 2) Camera module revenue grows 12% YoY in 2020, CCM GM slightly declined to 7.9% in 2020 from 8% in 2019 due to less intense competition. Bear case PT HK$64, 15.0x bear case 2020e EPS. 1) GM for camera modules deteriorates, as competition gets stronger; 2) Chinese smartphone demand slows and is worse than expected; 3) spec migration slows down.
Catalysts: Monthly shipment data. News related to Chinese OEM order levels.

2020 MS Sales & Trading Global Shorts

Temenos (TEMN SW): ***Sources:*** Europe Technology: 2020 Outlook - Favoring Structural Growth (12 Dec 2019)

Thesis: Fully valued EU software company trading on premium P/E multiple to peers despite potentially slowing license growth vs consensus expects.

Description: Temenos is a leading provider of integrated modular core banking systems in the Retail, Corporate & Correspondent, Universal, Private, Islamic and Microfinance & Community banking markets.

MS Research Highlights:

- Strong license growth priced in: Market pricing a sustained acceleration in top-line growth to a c.15% CAGR, the MS EU Tech Research team believes that it will be hard for licenses to drive this level of acceleration near term due to the high % of revenues currently coming from maintenance and services.
- Short-term visibility lacking: Performance is going to struggle to justify the share price over the next few years, as such the team see a higher risk of new business / license volatility. This is especially concerning given Temenos missed 3Q revenues due to license and services weakness – licenses came in at $84m, 8% below street expectations and service revenues were down 6% to $42m, 12% below street expectations.
- **The team is UW with ~38% downside to their bear case PT of 95 SFr.**

Valuation: 40x 2020 MSe P/E despite growth potentially slowing on licenses, hard to justify a 2.6x PEG ratio when bottom line is growing around 12-13%. In the bear case scenario the team expect growth to stall as banks stick in-house. They assume a tougher short term macro environment with revenue growth slowing to 17% vs. 21% in FY20, with long term margins failing to rise above 32% due to increased competition and a lack of operational leverage.

Catalysts: FY19 results.

Toyota Motor (7203 JP) : ***Sources:*** Big Debates 2020: Key Investor Debates Likely to Drive Stocks in the Coming Year (10 Dec 2019) ; Toyota Motor: Reforms Come at a Price; Down to UW (4 Sep 2019)

Thesis: Transformation comes at a cost.

Description: Global leading auto company and the largest domestic corporate. The company operates passenger car brands Toyota, Lexus, and Daihatsu, and commercial vehicle brand Hino. Toyota has stakes in SUBARU, Isuzu, and Yamaha Motor, and alliances with Mazda, Suzuki, and BMW. Toyota has recently invested to expand technologies & services (including AI and shared mobility), and plans to create its mobility service platform while the Toyota group simultaneously sells ~10mn units per year globally.

MS Research Highlights:

- 3 key factors: (1) Auto 2.0-related development costs and business-building costs totaling ¥200bn. (2) Sales volume decline and margin deterioration in Japan & ASEAN (~60% of total profits) of ¥280bn. (3) A ¥40bn drop in profit growth contributions in F3/22 due to increased hurdles to input cost reduction. A warning light is also flashing for sustaining ¥1trn in profit return to shareholders in F3/22. Toyota is controlling investment costs via alliances and its 'home & away' strategy (relying on others in the areas where they excel), but MSR doesn't think it can affect the transformation into a 'mobility company' without paying a price.
- Toyota spends over ¥1trn in R&D each year, or 3.5-3.7% of revenue, which is lower than its global peers, and MSR thinks that this R&D relative to sales will rise to 4%, as the race for Auto 2.0 development heats up.
- **The team is UW with 25% downside to their base case PT of ¥5,800.**

Valuation: Base case PT ¥5,800, 8.0x PE (F3/21e), Bear case PT ¥4,500, F3/21e BPS ¥7,890 x 0.6. R&D cost bubbles up to ¥1.24tn by F3/22. Prime costs and operating costs bring down OP by ¥30-40bn each year compared to MSR's Base Case. Sales volume in high profitability areas (Japan and Asia) assumption is 3% lower than the Base Case. Trades 9x 2021e PE, VW 6x, Ford & BMW 7x.

Catalysts: Demand in key markets fluctuates. Establishment of automotive battery JV with Panasonic in Jan 2020. Planned unveiling of e-Palette in Jul-Aug 2020.

Please Note: The following is a summary of Morgan Stanley Research by Morgan Stanley Sales & Trading:

2020 MS Sales & Trading Global Shorts

United Parcel (UPS): ***Sources:*** Secularly Challenged Stock (20 Nov 2019)

Thesis: UPS operates in what is becoming a more competitive parcel environment with Amazon and E-commerce creating structural challenges.

Description: United Parcel Service, Inc. offers package delivery services and supply chain solutions.

MS Research Highlights:

- UPS has benefitted greatly from the tailwind of E-Commerce. However, as a result UPS is facing a triple threat to the parcel business; insourcing by e-commerce giants, omni channel shift enabling last-mile competition, and platformization of small-shipper volumes to receive pricing discounts.
- Together, these trends could erode returns in the B2C space, which has been a huge driver of growth for the legacy parcels in recent years. E- Commerce will continue to drive decent B2C volume growth in the near-term; however, residential delivery will still be a mix headwind for UPS.
- Despite its strong operating metrics, UPS could be more at risk of disruption given its larger B2C business (and AMZN exposure ~10% of revenue) and fewer self-help initiatives than FDX.
- Relative to FDX, UPS has a much larger AMZN / ecommerce exposure (17% vs FDX's 1%). Additionally, FDX appears better positioned given its lack of unionization, outsourced Ground operation, and potentially more self-help opportunities. With that said, UPS has grown revenues at a much faster clip than FDX (3.4% vs 0.7% Y/Y), however, UPS remains open to a multitude of structural challenges that FedEx won't be nearly as exposed to.
- **The team is UW and have ~33% downside to their base case PT of $78.**

Valuation: MSR Base PT of $78 uses a 10-year DCF assuming 7.0% WACC and terminal cash flow perpetual growth rate of 1.8%, (implying an exit EBITDA multiple of 9.0x). The team's DCF valuation implies TMF PE of 10.5x (vs FDX's forward P/E of 13.2x), which is below historical average given competitive secular threats.

Catalysts: Earnings; Amazon announcing they are going to pull all of their volumes, which MS Transports Research Analyst Ravi Shanker believes could happen as early as Q1 2020.

Wayfair Inc (W US): ***Sources:*** Wayfair Inc: Wayfinding, a Quarter at a Time; Lower PT to $75 & Stay EW (16 Dec 2019)

Thesis: Expect pressure to persist near-term. Remain bullish on sales, however, stay bearish on profits longer-term.

Description: Wayfair is an online-only retailer of furniture and home decorative items operating six websites.

MS Research Highlights: MSR sees Wayfair as a disruptive force in the home furnishings space, but ultimately believes that its impressive growth will come at a high cost. Particularly, MSR is cautious given the following:

- MSR sees Wayfair as a disruptive force in the home furnishings space, but believe sits impressive growth will come at a high cost. Reliance on customer acquisition and low retention would also prevent significant ad leverage amidst growing competition.
- In a bear case scenario, a $1 valuation has been ascribed to Wayfair to reflect the possibility that if results continue to deteriorate beyond 2020, the market may take the view that the business model will not work longer-term. If this were to occur, it may become difficult for W to raise/repay debt. Profitability has remained elusive for Wayfair, particularly given that increased competition (WSM, AMZN) has forced greater levels of ad and promotional spending.
- **The team is EW but sees ~20% downside to their base case PT of $75.**

Valuation: MSR's PT translates to a ~0.7x EV/Sales multiple against a 2021e revenue of ~$14.7b. MSR thinks it is appropriate to view W through the lens of a DCF rather than valuing it on an EV/Sales multiple because losses are worsening despite a high rate of revenue growth, and proof has not been seen that suggests W can become meaningfully profitable over time.

Catalysts: Revenue growth has continued to decelerate into Q4 and MSR thinks revenue growth in 1H'20 could fall below market expectations. In addition, W is investing at a high rate through tariff-related revenue headwinds. This is the right long-term decision for the business, but combined with MSR's view that revenue growth could disappoint over the next quarters, losses could also exceed market expectations.

2020 MS Sales & Trading Global Shorts

Weibo (WB US): ***Sources:*** China Internet and Other Services: 2020 Outlook – Branching Out (1 Dec 2019) ; Weibo Corp: 2Q19 On Track, But Rmb Depreciation to Add Pressure (12 Aug 2019)

Thesis: Structural challenges from soft ad demand and increased ad supply.

Description: China's Twitter-like microblogging platform. The company used to be the one-and-only social platform in China, although its supremacy has been challenged by competitors including WeChat and newer entrants such as Toutiao or Douyin.

- **MS Research Highlights:**
- WB is not immune to the common factors that have been pressuring other online ad platforms, including Baidu, iQIYI and Tencent Video. MSR believes structural challenges from an increase in ad inventory supply may not be easy to mitigate within a short period.
- WB's share price has fallen 39% ytd as the ad industry continues to be impacted by soft demand and increased ad supply from other online media platforms, which led to WB's revenue growth deceleration and thus share price de-rating.
- **The team is EW but sees 49% downside to their bear case PT of $26.**

Valuation: Base case PT $42, 13.1x base case non-GAAP 2020e EPADS (earnings per average diluted share). Top-line growth and operating leverage intact: Total revenue CAGR of 12% with SME ad revenue CAGR of 9% and KA ad revenue CAGR of 16% in 2018-21e. Non-GAAP operating margin softens to 37.5% in 2021e. Thus, MSR expects a 10% CAGR in 2018-21 non-GAAP net earnings. Bear case PT $26, 9x bear case non-GAAP 2020e EPADS, assuming intense competition leading to slower-than-expected monetization.

Catalysts: Ad budget shift (to social advertising). Product upgrades and penetration into lower-tier cities.

WorkDay (WDAY): ***Sources:*** Recalibrating the Glide Path; Downgrading to EW (18 Nov 2019)

Thesis: Maturity and Macro is going to challenge +20% sustainable revenue growth.

Description: Workday is a leading enterprise Software-as-a-Service provider of human capital management (HCM), payroll, financial management, time tracking, procurement and employee expense management solutions.

MS Research Highlights:

- Steady penetration into large end markets with leading SaaS solutions should support good growth longer-term. However, slowing momentum in the human capital management (HCM) segment and a more difficult spending environment bodes as a headwind. 81% of subscription revenues are generated from the HCM portfolio and management has indicated that this business will slow to ~20% YoY growth exiting FY20. Subscription revenue growth has already slowed from 39%/33%/29% in FY18/FY19/FY20e.
- Mixed channel checks and difficulty finding new customers highlight a tougher road into FY21.
- Momentum in the mid-market is not compensating for the deceleration in growth at the high-end of the market, thus less upside to estimates in the near term.
- MS CIO surveys are indicating a slower spending environment, particularly for capital intensive ERP and HR software, and mixed channel checks highlighting difficulty in sourcing net-new large customers.
- **The team is EW but sees ~39% downside to their bear case PT of $102.**

Valuation: MSR Bear PT of $102 bakes in FCF of $1.593M, subscription revenues grow 14% through CY24, to reach $6.0B. Op. margins improve from 3% in CY16 to 19.8% in CY24. WDAY trades at 24x MSR's CY24 FCF estimate of $1,593M (10.7x EV / Sales), discounted back at a ~9% discount rate, or 0.9x EV/FCF/CY24 YoY growth.

Catalysts: 3Q20 Earnings, Major new customer wins and traction with Financials offering.

Global Forecasts, Cycle Considerations, & Regional Updates

Global Equity Themes: Region by Region Outlook

Region / Index	Price Levels					Key Themes	OW / UW Sector Views	
	L5Y Low	Current(1)	L5Y High	MS PT(2)	% Vs. Current			
US S&P 500 (12m forward)	1,810	3240	3248	3000	(7.4%)	• **Positive Catalysts: Dovish Fed and US-China Trade Deal, with Presidential elections on the horizon** • The Great Rotation(s) Continue to Dominate • Growing confidence / excitement that PMIs may have bottomed, but **the rebound may already be fully priced**	• OW: – Financials – Utilities – Staples	• UW: – Technology – Cons. Disc.
EU MSCI Euro (12m forward)	1202	1705	1,1705	1720	+0.9%	• **A Conservative Majority paves the way for Brexit** • **Europe finally seeing inflows,** should allow for some P/E expansion • Another year of lackluster EPS **forecasting just 2% EPS growth in 2020** • Cyclicals look **overbought and overvalued,** Value has further room to run	• OW: – Autos – Banks/ Insur. – Const. / Mat. – Energy – Insurance – Mining – Real Estate – Transport	• UW: – Cap Goods – Chemicals – Comm & Prof Serv. – Cons Services – Fdbev & Tob – House & Pers Prod. – Luxury Goods – Retail
EEMEA MSEUEMEA (12m forward)	175	268	325	280	+4.5%	• EEMEA equities look **broadly attractive into 2020,** offering amongst the highest dividend yields globally and pockets of high EPS growth • **Relatively attractive** EEMEA outlook amidst choppy global waters • Weaker or Stronger dollar into 2020?	• OW: – Russia – South Africa – UAE – Poland – Kuwait	• UW: – Greece – Qatar
China MSCI China (12m forward)	48	86	103	85	(1.2%)	• **US-China Trade Deal, 4% upside to MSCI China** • More **optimistic view on earnings growth** in 2020 and 2021 • **China GDP upgrade** from MS economists, earlier trough, a stronger CNYUSD view , near-term trough in business inventories	• OW: – Cap Goods – Cons Services – Materials – Transport – Retail	• UW: – Cons Dur – FdBv & Tbcco – Health Care – Pharm – Utilities

Note:

1. As of 12/27/2019; 2. As per latest reported by MS Equity Strategists

Information Sourced By: Louis Dubick

Global Equity Themes: Region by Region Outlook (Cont'd)

Region / Index	Price Levels					Key Themes	OW / UW Sector Views	
	L5Y Low	Current[1]	L5Y High	MS PT[2]	% Vs. Current		OW	UW
Japan **TOPIX (12m forward)**	1,193	**1733**	1,911	**1860**	**+7.3%**	• **Weak, but improving growth outlook, below-consensus 0%Y GDP growth forecast for 2020** • Continued progress on Japan's journey of **improved corporate governance** • Productive capex cycle in the private sector driving operating margin improvement	– Comm & Trade – IT Services – Fins-ex-Banks – Const. / Mat.	– Pharma – Retail Trade – Foods – Auto & Trans Equip.
India **Sensex (Sep. 2019)**	22,495	**41575**	41,810	**45000**	**+8.2%**	• **Policy action remains necessary** to ensure both growth and stock prices sustain into 2020 • Prefer Value and Growth over quality, SMID cap over Large Cap • **Continue to back domestic cyclical mid-cap value stocks** from a portfolio perspective	– Consumer Disc. – Financials – Industrials	– Healthcare – Technology – Materials
Brazil **IBOVESPA (12M forward)**	37,046	**116534**	118,000	**125000**	**+7.3%**	• Historically low rates should improve the outlook for profitability and earnings growth • **A structural fiscal consolidation** on the back of social security reform • **Year of Retail Banks,** attractive value, steeping yield curve, start of the S.U.P.E.R cycle	– Banks – Health Care – Transport	– Beverages – Education – Miners – Shop. Malls
Mexico **MEXBOL (12m forward)**	38266	**44262**	51,772	**46000**	**+3.9%**	• **Investment limbo to continue,** Policy makers have prioritized fiscal austerity and energy investments, leaving little room for much else • **Uncertainty in prospective policies** could continue to undermine business sentiment • **Prefer dividend income, liquidity and capital preservation**	– Energy – Industrials – Infrastruct. – Mining – Real Estate	– Financials – Airports – Media – Retail – Fd & Bev

Note:
1. As of 12/27/2019
2. As per latest reported by MS Equity Strategists

US vs. RoW – Regionally, MS' Strategists Retain A RoW > US Preference

The Late-Cycle Expansion Extends: Trade tensions and monetary policy are easing concurrently for the first time in seven quarters, lifting global growth from 1Q20 on. The recovery will be driven more by emerging markets as the US is clearly in late-cycle. Risks remain skewed to the downside, with uncertainty related to macro policies likely to linger.

Position for Leadership Reversals: OW **RoW equities** vs. **US equities**, OW **Treasuries** vs. **European rates**, OW **EM fixed income** vs. **US credit**. The best risk/reward is in **EM $ fixed income**.

Key Themes for 2020 Global Macro Outlook:

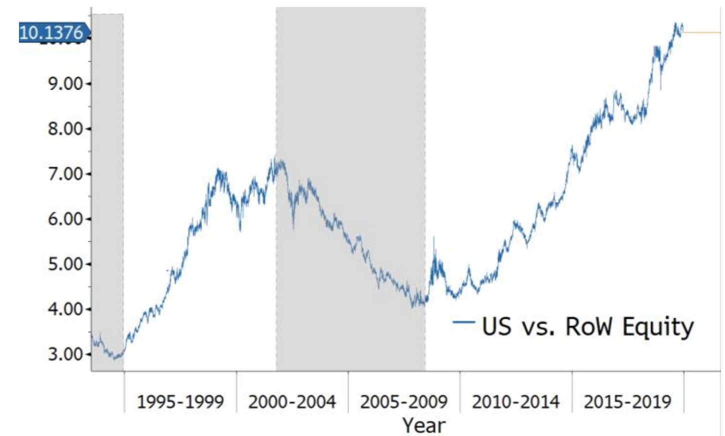
- **Global growth should recover from 1Q20,** reversing the downtrend of the past seven quarters as trade tensions and monetary policy are easing simultaneously for the first time since the downtrend began.
- Easing trade tensions (the key factor in the global downturn) will **reduce business uncertainty** and **make policy stimulus more effective**.
- An environment of reduced uncertainty and lower rates, coupled with moderate wage growth, will lift **consumer spending** and drive the initial recovery.
- The MS' Economics and Strategy teams see 2020 as a year of **mini-cycle recovery** in the context of a late-cycle expansion. However, risks to the outlook remain **skewed to the downside**.

MS Strategists' Regional Equity Sector Preferences

		S&P 500	MSCI Europe	TOPIX	MSCI EM
Sector Preferences	OW	Staples, Financials, Utilities	Autos, Financials, Construction, Energy, Mining, Transport	IT/Services, Financials ex Banks, Wholesale Trade, Construction	Info Tech (Korea), Energy (Russia), Industrials (India)
	UW	Discretionary, Information Technology	Cap Goods, Chemicals, Commercial Services, Staples, Luxury Goods, Retailing	Foods, Retail, Pharma, Autos	Financials (HK, South Africa), Utilities (Australia)
Style Preferences		1) Defensives over Secular Growth 2) Large over Small	1) OW Value over Growth & Quality 2) OW UK Small & Mid Caps 3) UW expensive Cyclicals 4) Prefer High Dividend Yield	1) Corporate governance reform & buybacks 2) Blue Paper Innovation Leaders 3) QuanTopix Bias for Value, Quality and Laggards	1) Reduce Defensives/Yield 2) Add Value Cyclicals & Achievable Growth 3) AxJ.EM Best Business Models v7

Source: Morgan Stanley Research

US vs. RoW & Various Historical "Regime Changes" In Relative Performance



Source: Bloomberg, Prices As of December 18, 2019

Global Equities Already Discounting a Turn in Global Growth

Source: Markit, national sources, IMF, Morgan Stanley Research

Sources: Cross-Asset Playbook: Top Trades for 2020 (5 Dec 2019), Cross-Asset Playbook: Battle of the Two Camps (9 Oct 2019), Cross-Asset Dispatches: What Will Markets Return? 2019 Edition (5 Nov 2019), Cross-Asset Playbook: Fresh Ideas for Back to School (19 Sep 2019), Cross-Asset Playbook: Pushing On a String (11 Jul 2019), Cross-Asset Dispatches: Downgrading Global Equities to Underweight (7 Jul 2019), Cross-Asset Playbook: Three Overlapping Problems (10 Jun 2019), Cross-Asset Playbook: Late-Cycle and Weaker Dollar (8 Apr 2019)

Information Sourced By: Justina Breen

Where We Stand On The Fed – On Hold Until 2021

After cutting the funds rate by an additional 25bp in October, MS Research believes **the Fed has set a high bar for further action, but remains flexible.** Looking to 2020, Ellen Zentner & team **continue to see the Fed remaining on hold throughout the year.**

MS Chief US Economist – Ellen Zentner

- Policymakers remain confident that the **consumer will continue to be the growth leader for the US economy, supported by job gains, low unemployment, and rising incomes.**
- Ellen & team believe the bar for further easing was made clear — **policymakers are monitoring the household sector closely for any signs of weakening**, and would likely respond to a material weakening aggressively.

MS Chief US Equity Strategist – Mike Wilson

- While some of the more interest rate sensitive areas of the economy have seen a boost to growth, this boost has **not been able to reverse the downward trajectory of corporate profits, margins, and capex.**
- Mike & team would be **careful interpreting the recent rally in asset prices as a definitively bullish signal on future growth given how much of it has been due to excess liquidity provisions from the Fed and ECB in particular.**

Risks to the next Fed rate move are asymmetric, skewed dovishly

Four Dimensions of Asymmetry

(1) Timing

- **Next hike: Earliest mid-2021**
- **Next cut: Earliest mid-2020**

The Fed needs three things to hike again: (1) core PCE inflation above 2% for 12 months, (2) survey-based measures of inflation expectations to trend higher, (3) above-trend growth. The Fed needs one thing to cut rates again: a higher unemployment rate.

(2) Size

- **Next hike: 25bp**
- **Next cut: 50bp**

The Fed should start hiking as it last began hiking: in the smallest increment possible. The Fed should continue to cut, but in a more material way to reflect the material nature of the change in its outlook – a change that would occur despite 75bp of insurance easing.

(3) Pace

- **Next hikes: Once a quarter**
- **Next cuts: Twice a quarter**

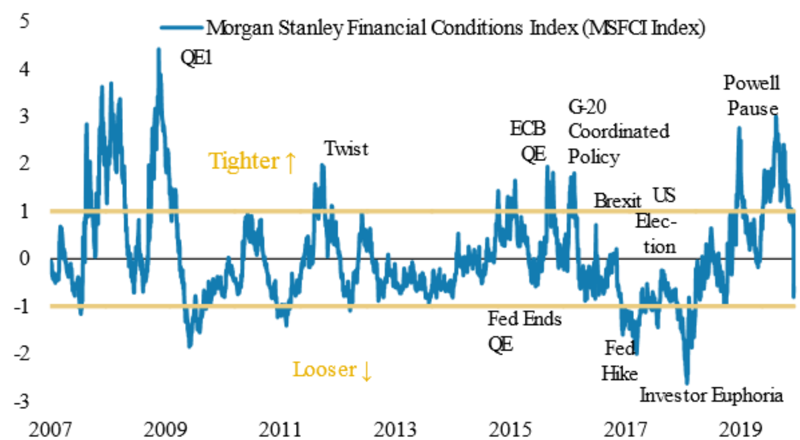
The Fed should start hiking as it last began hiking: gradually, i.e., once a quarter. The Fed should continue cutting at a pace that reflects the material nature of the change in its outlook and one that at least matches the insurance easing cycle: twice a quarter.

(4) Destination

- **Next hike: 75bp higher, 2.50-2.75%**
- **Next cut: 150bp lower, 0.00-0.25%**

The Fed should hike by taking back the 75bp of insurance easing – bringing policy into slightly restrictive territory in order to nudge inflation lower to 2%. The Fed should cut by taking rates back to the effective lower bound and then focus on crafting its forward guidance/inflation-targeting strategy.

Source: Morgan Stanley Research



Source: Morgan Stanley Research

Sources: US Equity Strategy | Weekly Warm Up: Positive Trifecta & Liquidity Keep Us Bullish Thru Year-end (16 Dec 2019) , US Economics, Rates & FX Strategy | FOMC Reaction: Year-End Focus (20 Dec 2019)

Information Sourced By: Matt Saltzman

Where We Stand On Corporate Growth – 2020 Estimates Look Too High

Don't Expect Earnings To Grow In 2020
Look For Downward Revisions to Consensus Ests.

- **US Chief Equity Strategist Michael Wilson's cautious view on US earnings is the primary limiting factor to upside for the overall market and one that he believes creates near-term risk.**

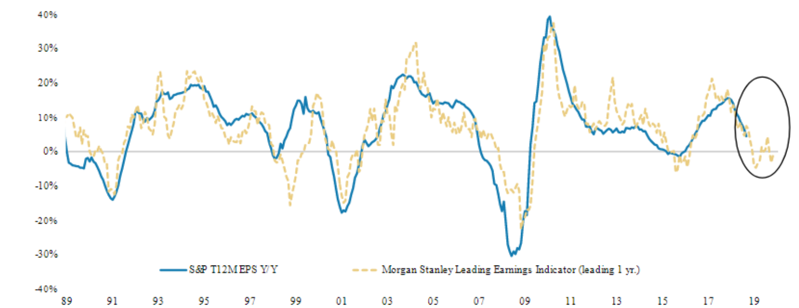
- Mike expects earnings growth will remain stagnant over the coming year as Morgan Stanley's proprietary leading earnings indicator called the lack of growth in 2019 and continues to send similar signals.

- Sales growth has been slowing for 6 quarters and Mike sees this as unlikely to improve given the forecasts from MS' Economics team for **stable but slow GDP growth.**

- Operating Leverage issues are magnified when sales growth dips below 0%. YTD sales growth has remained positive, even if it has been sequentially decelerating on tougher compares. Looking over prior periods, sales growth going below 0% has the effect of amplifying the operating leverage issues.

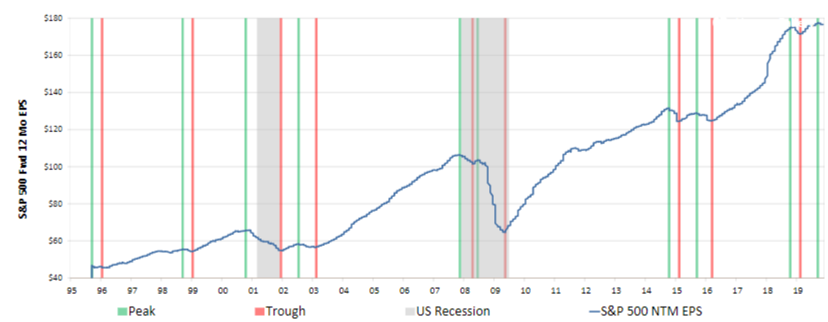
- 12-month forward earnings estimates have an upward drift as consensus is generally consistent in forecasting ~12% growth in the next calendar year. **Given the divergence between Mike's earnings model and consensus forecasts, he thinks that there are elevated near-term risks to the forward 12-month numbers.**

Earnings Models Says S&P Earnings Growth is Likely to Be Flat in 2020



Source: Bloomberg, Morgan Stanley Research. MSLEI is a macro factor based earnings model that leads actual earnings growth by one year. Note: S&P 500 fundamental data used post March 1993; Top 500 by market cap data used before 1993. LTM equity risk premium average is since 1920. ERP based on forward earnings yield and 10-year Treasury Yield. 2018 EPS growth adjusted to remove the effects of TCJA.

Forward EPS Trends to Rise Over Times, But When It Moves Lower…The Market Follows



Source: FactSet, ClariFi, Morgan Stanley Research.

Source: US Equities Year Ahead Outlook: Back to the Fundamentals (18 Nov 2019)

Information Sourced By: Will McMahon, Michael Mullen

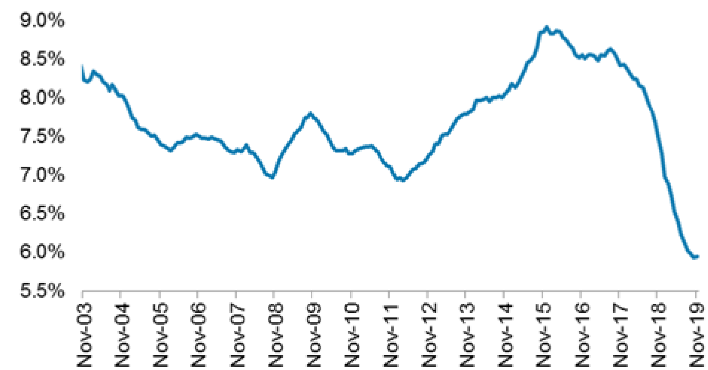
Where We Stand On Global Trade – US & China

The long awaited December 15th Deadline: 'Phase 1' Progress, But Not a Game Changer

The dynamic has shifted from *uncertain pause* to *uncertain progress*…

- 'Phase 1' is less ambitious than initial headlines, but modestly beat MS's below consensus expectations by partially reducing September tariffs.
- **Ambiguity** on key issues (i.e. agriculture) suggest **execution risk** remains for 2020; 'Phase 2' negotiations could prove to be incrementally more challenging.
- About **$380bn of imports remain** under tariff.
- **There is a high hurdle for corporate confidence.** Companies in both the US and China have plans to protect themselves from changes in the US/China dynamic. Given the execution risks going forward, we don't believe that this deal will be a catalyst to a meaningful uptick in **business confidence.**

China's Imports from the US, % of Total Imports, 12M Trailing Sum

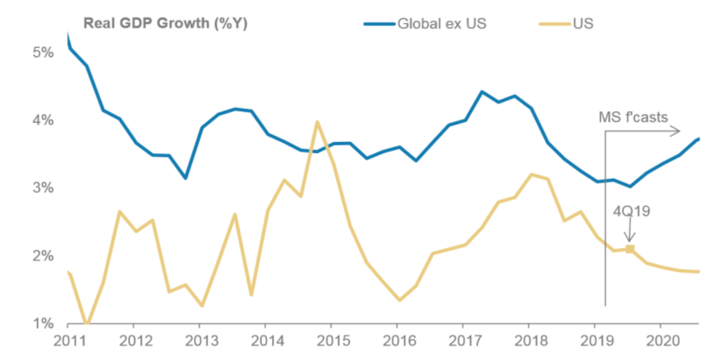


Source: Morgan Stanley Research, Haver Analytics

Economic Impact: Higher Conviction in Global Recovery in 2020

- Prior to the announcement of the 'Phase 1' trade deal, our exceptions were no further hikes in tariffs. This, coupled with the easing that has been under way, meant that we expected global growth to pick up from 2.9%Y in 4Q19 to 3.4%Y by 2020.
- As the 'Phase 1' deal now includes a reduction in the existing tariff rates, there are some upside risks to our forecasts. Trade tensions and monetary policy are the key determinants of swings in the global economy, and they are simultaneously easing for the first time in seven quarters.
- **Inflecting global growth favors ROW over US:** We are betting on global reflation by taking our cyclical exposure via international stocks, which are cheaper and have potentially better earnings growth acceleration.
- **China Economics:** Potential near-term 0.5 P/E point re-rating and up to 4% index upside for MSCI China as a result of the 'Phase 1' trade deal. Historical evidence suggests that IT and Consumer Discretionary are the sectors likely to re-rate the most among MSCI China sectors.

Growth to pick up in the rest of the world while US growth flatlines.



Source: Morgan Stanley Research

Source: US Public Policy: US & China Trade: Progress But Not a Game Changer (13 Dec 2019), China Equity Strategy: Sector Re-rating Opportunities from Phase 1 Deal – IT and Consumer Discretionary May Benefit Most (16 Dec 2019), US Equity Strategy: Weekly Warm Up: Positive Trifecta & Liquidity Keep Us Bullish Thru Year-end (16 Dec 2019), China Equity Strategy: Reported Phase 1 Deal: Could See Near-Term Upside of Up To 4% for MSCI China; Execution Enforcement Critical (13 Dec 2019)

Cross Asset Considerations: Sequencing the Cycle

Macro Views

Range-bound Markets but large Reversals in Leadership: driven by bottoming growth and high valuations

1) MS Economists expect global growth to improve from 1Q20, but valuations are richer than past PMI inflections while recovery expectations are muted

2) 2020 will be about an uneven global recovery colliding with uneven valuations

Strategic Allocation: Buy EM fixed income and favor equities in Korea, Japan, Brazil, the UK and Spain. Sell USD (broadly), gilts and US HY credit.

Allocations are clustered around neutral: Equities (-1%), Rates (0%), Credit (-2%), Commodities (-1%), and Cash (+4%)

Morgan Stanley Research Preferred Trades

Trade #1: Long ROW Equities vs. US

- US relative valuations and earnings expectations are too optimistic even as margin pressures continue to mount. Inventories, labor costs and trade uncertainty are drags on stocks. Fed cuts will be contingent on poor data, which would not be supportive of stocks.

Trade #2: Long Japan and Korea Equities

- MS Strategists are OW Japan as they continue to believe in structural ROE convergence with global peers.
- Korea is a global cyclical upturn play, with 20%+ earnings growth now expected in 2020, after having underperformed last year.

Trade #3: Short Russell 2000 vs. S&P 500

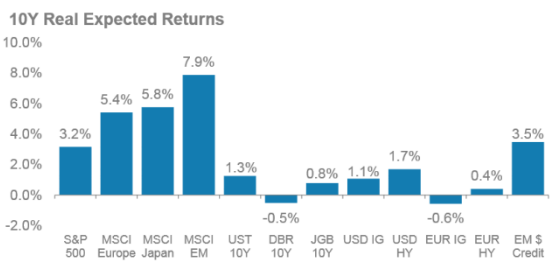
- The earnings outlook continues to deteriorate for small caps relative to large caps. Stabilization in US GDP growth below trend with accelerating wage poses further risks ahead for margins at domestically focused small caps.

Morgan Stanley 12-Month Bull/Base/Bear Forecasts

	As of Nov 27, 2019	Q4 2020 Forecast Bear	Base	Bull
Equities				
S&P 500	3,154	2,750	3,000	3,250
MSCI Europe	1,669	1,280	1,720	2,030
Topix	1,711	1,375	1,860	2,050
MSCI EM	1,053	800	1,150	1,250
FX				
USD/JPY	110	94	99	104
EUR/USD	1.10	1.10	1.16	1.22
GBP/USD	1.29	1.15	1.35	1.49
AUD/USD	0.68	0.67	0.71	0.75
USD/INR	71.4	63.0	70.5	77.0
USD/ZAR	14.8	15.2	16.0	17.6
USD/BRL	4.26	3.60	3.80	4.00
Rates (% percent)				
UST 10yr	1.77	2.25	1.75	1.30
DBR 10yr	-0.37	0.45	0.15	-0.80
UKT 10yr	0.68	1.80	1.40	0.35
JGB 10yr	-0.11	0.00	-0.20	-0.30
Credit (bps)				
US IG	109	175	125	95
US HY	409	732	492	332
EUR IG	69	115	55	40
EUR HY	378	590	355	265
Italy 10yr	158	275	100	50
EM Sovs	334	425	325	260
US CMBS AAA	93	125	95	75
Commodities				
Brent	64	45	60	75

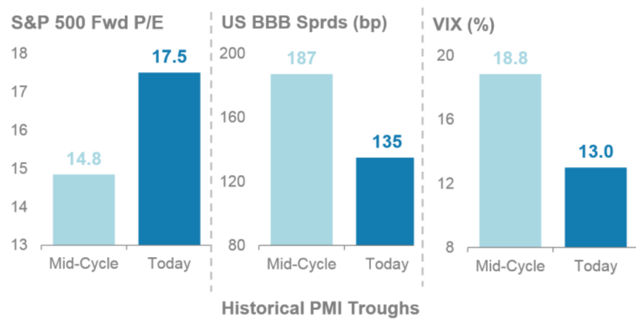
Source: Markit iBoxx, MSCI, Bloomberg, The Yield Book, Morgan Stanley Research forecasts.

Real Expected Returns Remain Low



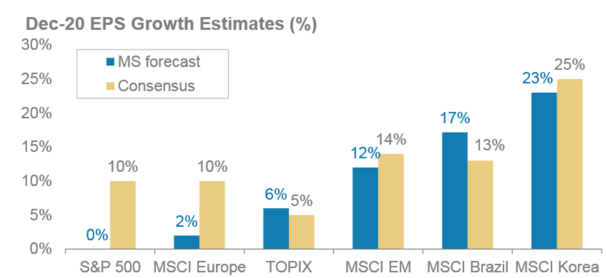
Source: Bloomberg, MSCI, RIMES, Morgan Stanley Research

Valuations are Richer Than 'Average' Mid-Cycle Slowdowns



Source: Bloomberg, Morgan Stanley Research

Remain Most Below-Consensus on Earnings for US Equities



Source: Datastream, FactSet, Morgan Stanley Research Forecasts

Sources: 2020 Global Strategy Outlook: Sequencing the Cycle, Cross-Asset Playbook – Top Trades for 2020

Information Sourced By: Madeleine Speal

Heading Into 2020 With A Backdrop of Positive Performance

Macro: Uneven Global Recovery Meets Uneven Valuations: MS Economists expect global growth to improve from 1Q20. While this should drive an important trough in PMIs, valuations are richer than past PMI inflections while expectations for the ensuing recovery are more muted. 1996 or 1999 this is not. 2020 will be about an uneven global recovery colliding with uneven valuations.

Strategy: Position for Leadership Reversals: MS stays close to EW on equities and bonds but sees a lot of alpha opportunities and relative value calls within/across assets. MS is OW RoW equities vs. US equities, OW Treasuries vs. European rates, OW EM fixed income vs. US credit. On the framework, the best risk/reward is in EM $ fixed income.

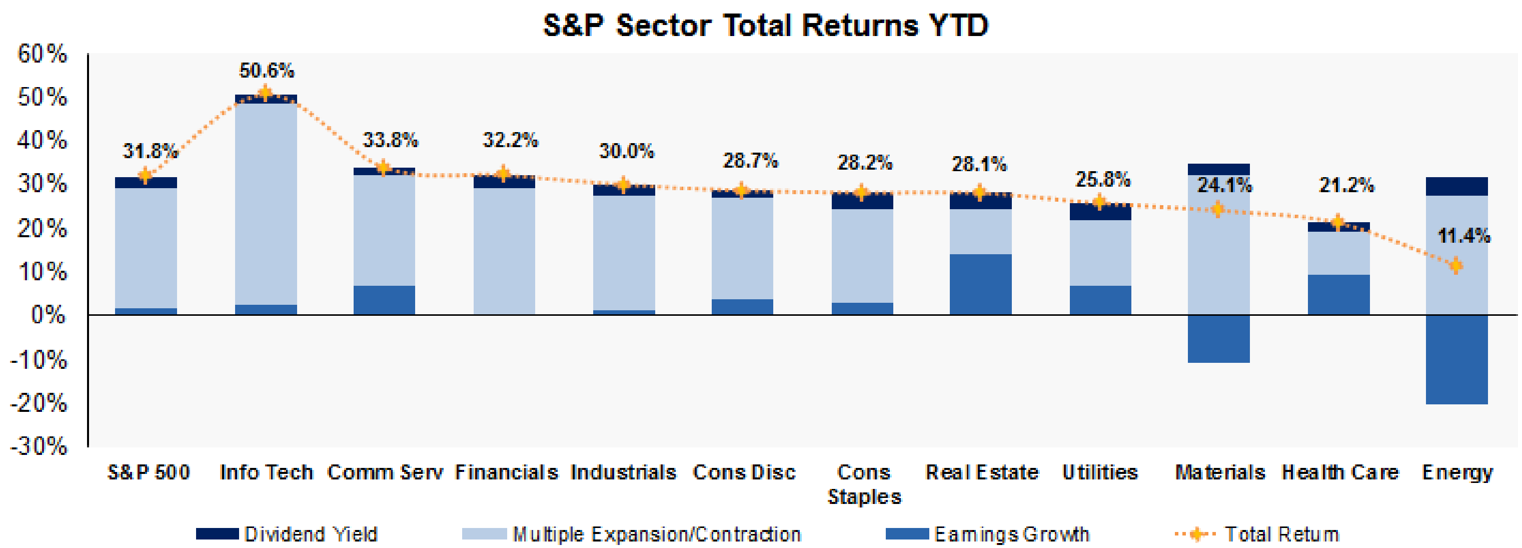
Trades: 20 for '20: Beta trades MS likes: Japan and Korea equities; long NZD, BRL and RUB; Indonesia and S. Africa local bonds (FX-hedged) and EUR CLO AAAs. Defensive trades we like: Short Russell 2000 vs. S&P 500, ROW vs. US equities; receive US 2yr vs. UK 2yr and long US Agency MBS; EUR forward vol; credit curve flatteners and CDX payer spreads. MS likes copper over Brent and sell gold calls vs. USDJPY puts. We like Kospi vs. S&P 500 variance and 2s10s curve cap.

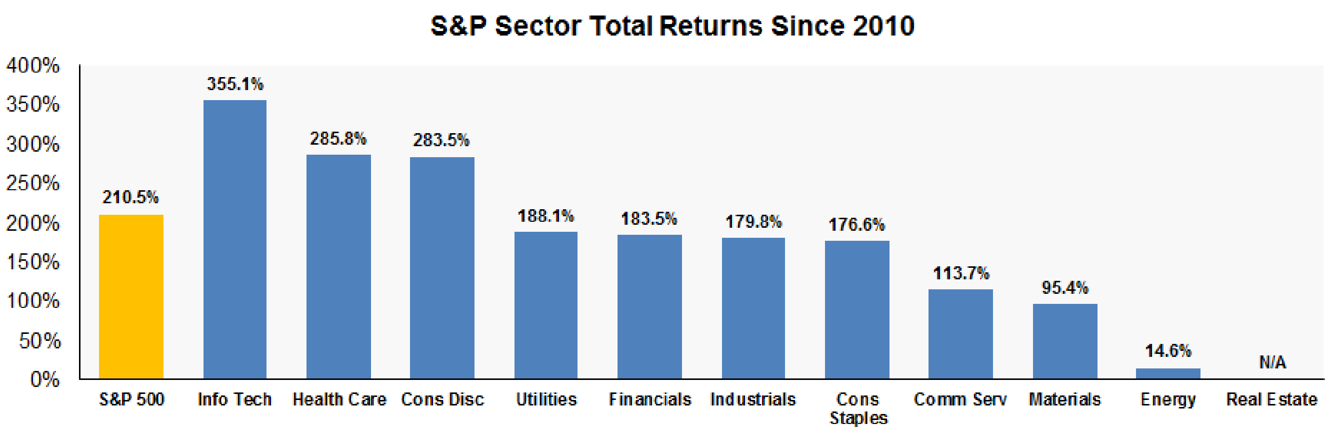
Ranking	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 YTD
1	REITS	MSCI EM	MSCI China	MSCI China	US 10yr	MSCI EM	REITS	US 10yr	MSCI China	Russell 2000	REITS	MSCI Japan	Commodities	MSCI China	US 2yr	S&P 500
2	MSCI EM	Commodities	REITS	MSCI EM	US 2yr	MSCI China	Russell 2000	Inflation Bonds	MSCI Europe	S&P 500	S&P 500	REITS	Russell 2000	MSCI EM	US 10yr	REITS
3	MSCI Europe	MSCI Japan	MSCI Europe	Commodities	US Agg. Bond	Global HY	Commodities	EM$Sov Credit	Global HY	MSCI Japan	US 10yr	US 10yr	US HY	MSCI Europe	US Agg. Bond	MSCI Europe
4	Russell 2000	MSCI China	MSCI EM	MSCI Europe	US IG	US HY	MSCI EM	US IG	REITS	MSCI Europe	MSCI China	EM$Sov Credit	Global HY	MSCI Japan	US HY	Russell 2000
5	MSCI Japan	EM$Sov Credit	Russell 2000	Inflation Bonds	Inflation Bonds	Commodities	MSCI Japan	US Agg. Bond	MSCI EM	US HY	US IG	S&P 500	S&P 500	S&P 500	US IG	MSCI China
6	Inflation Bonds	REITS	S&P 500	US 10yr	EM$Sov Credit	MSCI Europe	US HY	REITS	EM$Sov Credit	Global HY	EM$Sov Credit	US 2yr	MSCI EM	Russell 2000	EM Local Debt	MSCI Japan
7	Global HY	MSCI Europe	Commodities	US 2yr	US HY	EM$Sov Credit	S&P 500	US HY	Russell 2000	MSCI China	US Agg. Bond	US Agg. Bond	EM$Sov Credit	EM Local Debt	Global HY	MSCI EM
8	Commodities	S&P 500	Global HY	US Agg. Bond	Global HY	REITS	Global HY	Global HY	S&P 500	REITS	Russell 2000	US IG	REITS	Global HY	REITS	US IG
9	EM$Sov Credit	Russell 2000	US HY	EM$Sov Credit	Commodities	Russell 2000	EM Local Debt	S&P 500	US HY	US 2yr	Inflation Bonds	MSCI Europe	US IG	EM$Sov Credit	Inflation Bonds	US HY
10	US HY	Global HY	EM$Sov Credit	S&P 500	MSCI Japan	S&P 500	EM$Sov Credit	US 2yr	EM Local Debt	US IG	US HY	Global HY	EM Local Debt	REITS	EM$Sov Credit	EM$Sov Credit
11	S&P 500	US HY	Inflation Bonds	US IG	Russell 2000	US IG	US 10yr	EM Local Debt	US IG	US Agg. Bond	US 2yr	Russell 2000	Inflation Bonds	Inflation Bonds	S&P 500	Global HY
12	US IG	US Agg. Bond	MSCI Japan	Global HY	S&P 500	EM Local Debt	US IG	Russell 2000	Inflation Bonds	MSCI EM	Global HY	US HY	MSCI Japan	Commodities	Commodities	Commodities
13	US Agg. Bond	US 10yr	US Agg. Bond	US HY	REITS	Inflation Bonds	US Agg. Bond	Commodities	MSCI Japan	Inflation Bonds	MSCI EM	Inflation Bonds	US Agg. Bond	US HY	Russell 2000	US Agg. Bond
14	US 10yr	US IG	US IG	Russell 2000	MSCI Europe	MSCI Japan	MSCI China	MSCI Europe	US Agg. Bond	EM Local Debt	EM Local Debt	MSCI China	MSCI China	US IG	MSCI Japan	US 10yr
15	MSCI China	US 2yr	US 2yr	MSCI Japan	MSCI China	US Agg. Bond	MSCI Europe	MSCI Japan	US 10yr	US 10yr	MSCI Japan	EM Local Debt	US 2yr	US Agg. Bond	MSCI EM	EM Local Debt
16	US 2yr	Inflation Bonds	US 10yr	REITS	MSCI EM	US 2yr	Inflation Bonds	MSCI EM	Commodities	EM$Sov Credit	MSCI Europe	MSCI EM	US 10yr	US 10yr	MSCI Europe	Inflation Bonds
17						US 10yr	US 2yr	MSCI China	US 2yr	Commodities	Commodities	Commodities	MSCI Europe	US 2yr	MSCI China	US 2yr

Source: Morgan Stanley Research, Bloomberg; Note We compute annual returns minus US headline inflation. Green means returns (in USD) beat inflation, and red means returns trailed inflation.. Data as of 23rd Sep'19 Close.

Source*:* Cross-Asset Playbook: Top Trades for 2020 (5 Dec 2019)

Charting The Markets: S&P 500 Sector Returns





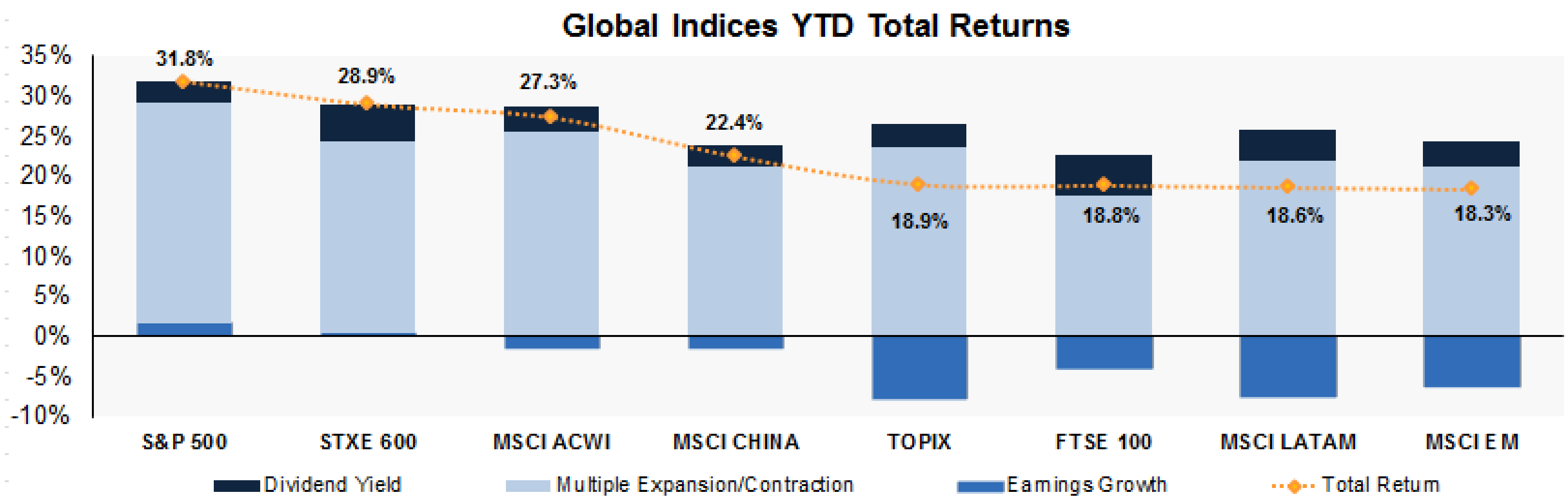
- Since 2010, **Financials** has seen the least multiple expansion and the largest earnings growth, relatively.
- **Comm Services** is the sector with the largest dividends yield contribution over that period.
- **Energy** has been the only sector to have negative earnings growth since 2010

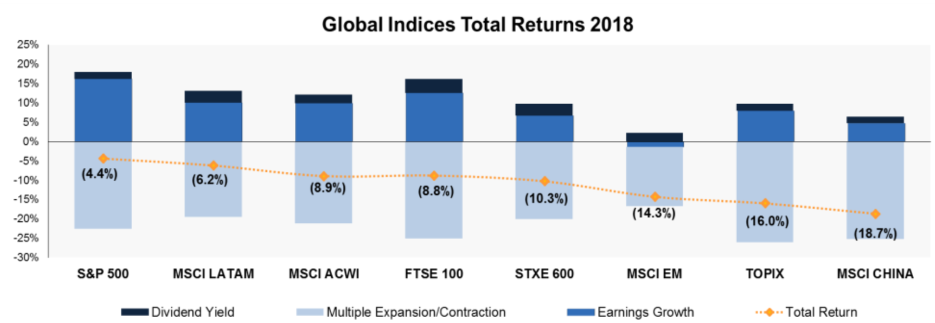
Source: Bloomberg, Top Chart Dates: Dec 31st, 2018 – Dec 27th, 2019; Bottom Chart Dates: Dec 31st, 2010 – Dec 27th, 2019.
Note that total return calculations assume that dividends are reinvested.

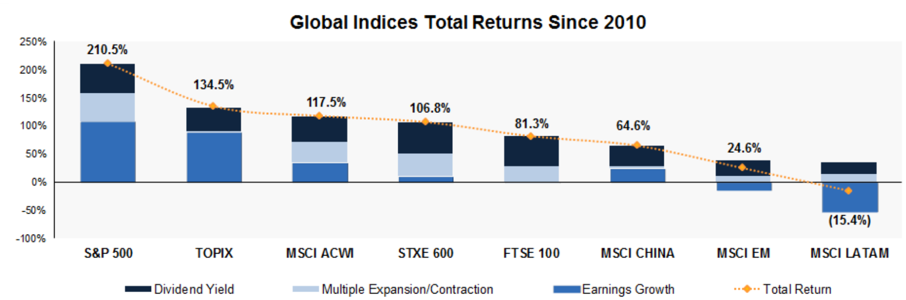
Past performance is not indicative of future performance.

Information Sourced By: Lesley Zhang

Charting the Markets: Decomposing Global Index Returns







Source: Bloomberg, YTD Chart Dates: Dec 31st, 2018 – Dec 27th, 2019; 2018 Chart Dates: Dec 31st, 2017 – Dec 31st, 2018; Since 2010 Chart Dates: Dec 31st, 2010 – Dec 27th, 2019
Note that total return calculations assume that dividends are reinvested.

*: Returns are calculated in local currency

Past performance is not indicative of future performance.

Information Sourced By: Lesley Zhang

Global Equities, Sector Preferences, & Single Stock Calls

Key Views For 2020: United States – Back to the Fundamentals

US Economic Backdrop

- In 2020, **lower interest rates** should continue to support the economy
- The state of the **US Consumer is healthy**
- Key downside risks are **trade and economic policy uncertainty**

Fundamentals will ultimately dictate market outcomes in 2020

- Higher **fundamental uncertainty** means **more alpha below the index** level
  - **Rotations should continue** and their durability will depend on whether growth is accelerating or decelerating
  - Market to **vacillate between a pro-cyclical and defensive** outcome
  - Our **earnings forecast** remains **at zero percent growth** for 2020

The Fed

- MS Economists continue to see **the Fed on hold through 2020**
  - On our year-ahead forecasts for inflation, **the bar for hiking rates will not be met prior to mid-2021**
- The Fed continues **expanding its balance sheet** by $60B/month
  - We expect that **by April, the liquidity tailwind will fade** and the market will **focus more on fundamentals**
  - We argue much of the 2019 rally is due to the almost **unprecedented rate of change in balance sheet,** rather than bottoming growth
- We remain bullish on the liquidity support being produced by the Fed and confident that it is **suppressing volatility**
  - Low volatility is attracting new flows and driving prices higher

MS Research Recommendations

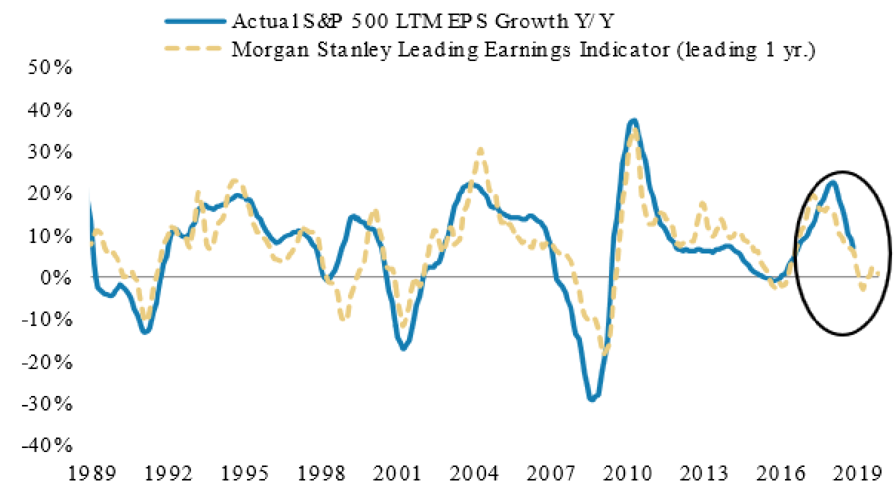
S&P 500 bull/base/bear: 3,250/3,000/2,750

Value > Growth

Overweight-Rated Sectors: Consumer Staples, Financials, Utilities

Underweight-Rated Sectors: Discretionary, Technology

Morgan Stanley Leading Earnings Indicator



Source: Morgan Stanley Research

Is the Reversal in the Fed's Balance Sheet the Primary Driver of Rally in Risk Assets?

Sources: US Equity Strategy: Weekly Warm Up: Positive Trifecta & Liquidity Keep Us Bullish Thru Year-end (16 Dec 2019), 2020 US Economic Outlook – Insurance Pays Out, US Equities Year Ahead Outlook – Back to the Fundamentals, 2020 Global Strategy Outlook – Sequencing the Cycle, US Economics, Rates & FX Strategy: FOMC Reaction: Year-End Focus (12 Dec 2019)

Big Debates: North America

The following 8 debates highlight select key themes that Morgan Stanley's North American Equity Research division thinks will shape industries and drive stocks in 2020:

Sector:	***Autos And Shared Mobility: Can Climate Change Drive $25tn In Replacement Demand?***
MS View:	MS Auto Analyst Adam Jonas argues that investors should buy Auto OEMs. He notes that there are over 1 billion passenger vehicles on earth emitting nearly 130 tons of CO_2 per second and suggests EVs can be profitable and government support will be pervasive. The $25 trillion (1 billion x $25,000) of new car sales may represent the largest replacement story in history.
Sector:	***Healthcare: What Will Happen To US Drug Prices In 2020?***
MS View:	MS Healthcare Analysts David Risinger, Ricky Goldwasser and Matthew Harrison expect most pharma manufacturers to increase US retail drug list prices in 2020 in mid-high single digit percentage range and experience zero net price inflation (due to rebates & discounts); some may avoid a second mid-year price hike because it would be closer to the election.
Sector:	***Internet: Can Rideshare Deliver?***
MS View:	MS Internet Analyst Brian Nowak believes the market is potentially underappreciating the growth in rideshare user penetration from demographic tailwinds and innovation, coupled with the US market becoming more rational. He acknowledges some of the new rideshare risks, but see them as manageable given both top- and bottom-line levers **Uber**/**Lyft** can pull. SInce both companies have provided consolidated EBITDA breakeven targets, Brian sees EBITDA beats and improving free cash flow as key areas for turning investor sentiment.
Sector:	***Media And Cable/Satellite: Who Wins The Great Streaming Race?***
MS View:	MS Media Analyst Ben Swinburne believes that there will be a small number of direct to consumer (DTC) streaming platforms that generate attractive returns and build large global businesses. In 2020, he believes the scale advantages of **Netflix** as the market leader will become more clear to the market, as new streaming launches face perhaps overly optimistic expectations. That said, with the rise of streaming clearly cannibalizing linear TV seen with ratings erosion, cord-cutting, and traditional media consolidation, Ben notes that both **NFLX** and **DIS** as well positioned in the transition to streaming.
Sector:	***Retail Hardlines: What Does Amazon One Day Delivery Mean For Retailers?***
MS View:	**Amazon** One Day delivery is a threat that makes MS Hardlines/Broadlines Analyst Simeon Gutman incrementally cautious on his Retail coverage. While **AMZN's** near-term costs are rising, its share gains are accelerating. Investments & margin pressure may increase for retailers wishing to remain competitive.
Sector:	***Software: Unified Communications: Will 'Big Software' Take Over The Unified Comm Opportunity?***
MS View:	MS Software Analysts Meta Marshall and Keith Weiss see unavoidable competition from larger software vendors in 2020. Cloud communications is finally moving up market (~21% CAGR), causing legacy incumbents (**Avaya, Cisco**) and enterprise software vendors (**Amazon**, **Google**, **Microsoft**) to take notice and develop new products. They see the most downside risk to **RNG**, **ZM** and **FIVN** if Big Software gets more aggressive, but the greatest upside opportunity in **EGHT** if they don't.
Sector:	***Telecom Services: Could 5G Adoption Drive Wireless Market Share Shifts?***
MS View:	MS Telecom Services Analyst Simon Flannery believes 2020 could see a major 5G smartphone upgrade cycle, and argues that this could shake up wireless market shares. He notes that **AT&T** has nationwide 5G deployments underway, while **Verizon's** coverage plans are less clear. Simon could see Cable companies taking incremental share particularly if they cut a new 5G MVNO deal with **AT&T**, while Dish could also be a disruptive player over time with a standalone virtualized 5G network.
Sector:	***Tobacco: Will US Cigarette Volume Declines Moderate In 2020?***
MS View:	MS Tobacco Analyst Pamela Kaufman expects US cigarette industry volumes to continue to fall faster than their historical average of 3-4% annual declines in 2020 driven by a moderating headwind from e-cigs due to recent health concerns around vaping and JUUL's decision to pull mint pods from the market. That said, she continues to see cigarette volumes falling due to increasing e-cig cannibalization of cigarette volumes (despite slowing overall category growth), shifting smoker demographics, and Tobacco 21 legislation.

Source: Key Investor Debates Likely to Drive Stocks in the Coming Year (11 December 2019)

Key Views For 2020: Europe – UK, Europe and Value Outperformance

Macro Views

A limited recovery for GDP and EPS.

- The MS EU Economics team expects a mild economic rebound from 1Q20, but this is unlikely to boost profits much, and the Equity Strategy team sees just 2% EPS growth for MSCI Europe in 2020 versus consensus at 9%.

Overweight European equities within a global context – scope for a relative re-rating.

- Due to reduced Brexit risk, a possible policy shift from monetary to fiscal, tighter peripheral and credit spreads and a resumption of European equity inflows.

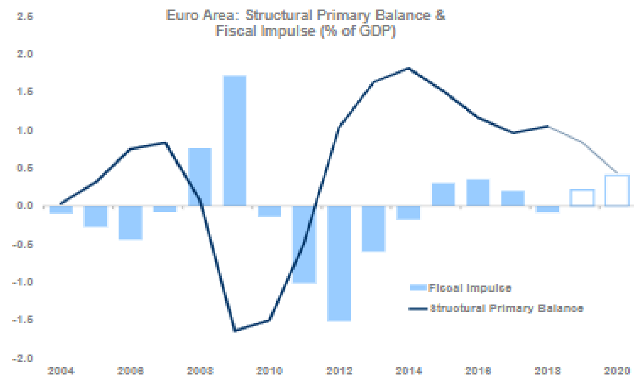
Value has further to run, including Financials.

- This should also encourage a further rotation into Value which typically outperform post a trough in European PMIs. The team are **OW European Banks** - relative valuations are 15% below 'fair value' at current bond yields.

UK equity market becoming investable again.

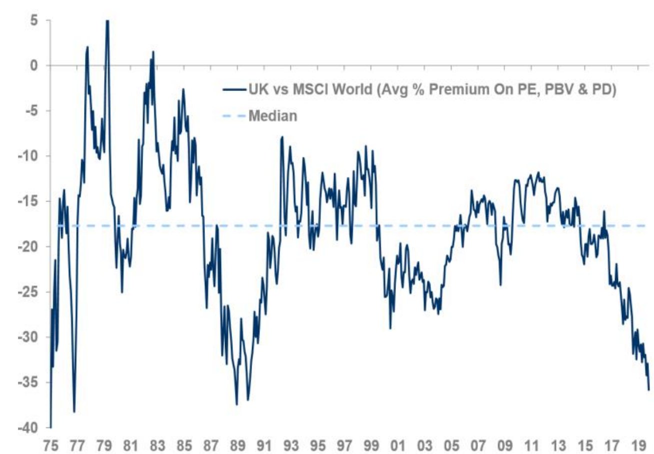
- A reduction in Brexit uncertainty should lead to renewed interest (and a re-rating) in UK equities. **10%+ upside for UK Mid and Small caps** – prefer the latter most.

2020 Likely to See the Largest Fiscal Stimulus in the Euro Area Since 2009



Source: Eurostat, Morgan Stanley Research. Note: e = Our economists' estimates.

MSCI UK Trades at 34% Discount to MSCI World



MS Research Trading Recommendations

Sector Preferences

OWs: Real Estate, Autos, Insurance, Mining, Telecoms, Transport, Construction & Materials, Energy, Banks
UWs: Cap Goods, Chemicals, Consumer Services, Lux Goods, Retailing, Tech & Hardware/Semis, Div Fins

Single Name Ways to Play

Buy Cheap Defensives : **Bayer (BAYN GR), Tesco (TSCO LN), National Grid (NG/ LN)** and **ABI (ABI BB).**
Sell Expensive Cyclicals : **Atlas Copco (ATCOA SS), Adidas (ADS GR),** and **Assa Abloy (ASSAB SS)**
Peripheral Stocks to Buy: **Unicredit (UCG IM), Prysmian (PRY IM), Grifols (GRF SM)** and **ENEL(ENEL IM).**
Buy Eurozone Stocks With High Domestic Exposure: **Eiffage (FGR FP)** and **KPN (KPN NA).**

Baskets To Go Long:

MS High & Secure Div Yield Basket (**MSREDIVS Index**); *Key Basket Inclusion:* **Siemens (SIE GR)**
Eurozone Exposure Basket **(MSREREEUL Index):** *Key Basket Inclusion:* **Iliad IIND FP)**

Source: 2020 European Equity Outlook: Relative Merits (17 Nov 2019), 2020 European Economic Outlook: Taking It Easy (17 Nov 2019),

Information Sourced By: Esha Tripathi

Big Debates: Europe

The following 8 debates highlight select key themes that Morgan Stanley's European Equity Research division thinks will shape industries and drive stocks in 2020:

Sector:	*Autos & Shared Mobility: Are Legacy Auto OEMs More Sustainable Than Broadly Believed? What Would That Mean For Valuations?*
MS View:	European OEMs have woken up. They are finally starting to conserve resources, are sharing technology, and have started to reduce incremental legacy investments. At the same time, OEMs, led by **VW (VOW3 GR)**, will launch their own first-generation electric vehicles in 2020, to help them meet European CO_2 legislation. The MS EU Autos team believe legacy OEMs led by VW will start to prove that they will retain their competitive strength in the automotive / mobility markets for a little while yet.
Sector:	*Chemicals: Are We Discounting Decarbonisation?*
MS View:	The MS EU Chems team expect the 'decarbonisation' agenda to gain further traction in 2020, both in terms of the growth opportunities it presents, and increasingly as a rising cost to do business as we near phase 4 of the carbon ETS in 2021 reducing allowances. They expect it to play a greater role in companies' strategic and investment decisions. **Yara International (YAR NO)**, **K+S (SDF GR)**, **Evonik (EVK GR)** and **BASF (BAS GR)** have greatest implied exposure to carbon prices.
Sector:	*Leisure & Hotels: Is The Recent RevPAR Slowdown The Beginning Of The Next Downturn?*
MS View:	The MS EU Travel & Leisure team are elatively cautious on the hotel cycle and prefer to invest only in hotel stocks that have internal levers to drive performance e.g. **Accor (AC FP)**, and see net unit growth as becoming more important in this environment.
Sector:	*Retail Property: Catalysts For A Correction (And Will We See Material Capital Value Declines?)*
MS View:	Retail REITs such as **Unibail-Rodamco-Westfield (URW NA)** and **Klepierre (LI FP)** are vulnerable to share correction in 2020. The MS Property team see three potential catalysts: (1) asset sales at material discounts, (2) independent valuers recognising the new rental reality, and (3) peers starting to make efforts to re-equitise through ways other than asset sales, including scrip dividends, dividend cuts and/or equity raises.
Sector:	*Technology: How Defensive Is Payments Market Into 2020?*
MS View:	The MS EU Tech team believe there is a misunderstanding in the payments market around the potential for disintermediation. While they agree that there is an increasing trend of diversification of payment methods, they believe that this should accelerate the market share gains of tech-enabled players due to increased complexity that merchants will be solving for. This should actually fuel growth for names under their coverage. **Adyen (ADYEN NA)** is the team's favorite way to play the payments sector.
Sector:	*General Retailing: Will Management Be Able To Turn The Performance Of Superdry?*
MS View:	The team believe **Superdry's (SDRY LN)** issues have been largely self-inflicted. Encouragingly, their AlphaWise analysis suggests that brand perception, at least in the UK, has remained relatively stable. They are optimistic that new management with its strategy can put Superdry back on track within a couple of seasons.
Sector:	*Telecommunications: Will 2020 Prove To Be The Year Telcos Truly Deliver On Cost Cuts?*
MS View:	With ongoing top-line struggles, opex cuts are of increased importance. The MS EU Telcos team see **Vodafone (VOD LN), Tele2 (TEL2B SS)** and **KPN (KPN NA)** generating accelerated EBITDA growth from becoming more digitalized, lowering headcount, network simplification and easing subsidies/retention.
Sector:	*Utilities: Tailwind Building In European Power Markets?*
MS View:	The MS EU Utilities team expect German coal and nuclear closures in 2021-22 to trigger tighter power markets across Northern Europe. Localised supply/demand dynamics will likely spread to neighbouring countries and coincide with the higher carbon prices we expect to deliver stronger power prices.

Source: Big Debates: Europe 2020 (17 Dec 2019)

Information Sourced By: Amir Amerian

Key Views For 2020: Japan – Cyclical Recovery, Structural Improvement

Macro Views

Economy Sluggish but Not Derailed: MS Chief Japan Economist Takeshi Yamaguchi maintains out of consensus 0% GDP growth, but mainly because of entry point from post c-tax weakness in Oct-Dec Q. His sequential growth forecasts are positive in all four quarters of 2020.

- Japan is still benefiting from structural labor shortages leading to healthy productivity-improving capex, monetary and fiscal easing, and stronger Olympics-related inbound demand.

MS Research Trading Recommendations

Jonathan Garner and Daniel Blake raise their **Topix Dec 2020 Target to 1860 (+7%).**

2Q F3/20 results were quite healthy in magnitude and balanced in breadth:

- As of Nov 15st, companies beat on net income (+2.8%) and neutral on breadth (-1-2%)
- Standout results have come from Healthcare/Financials, also helped by IT
- 11 of 18 names in latest analyst buyback survey have outperformed TOPIX (+3.7%)

For 2020, MS expects TOPIX earnings growth of 6% in 2020 and 7% in 2021

- ROE should reach a new 37-year high of ~11%, with a TOPIX yield of ~3.5%
- Upgraded Financials-ex-Banks to OW, Cyclicals to EW, and downgraded Defensives to UW.

OWs: IT Services, Financials-Ex-Banks, Construction & Materials

UWs: Pharmaceuticals, Autos.

<u>Single Name Ways to Play</u>

Growth: Murata (6981 JP), Recruit (6098 JP), Nintendo (7974 JP), Unicharm (8113 JP), Tokyo Electron (8035 JP)

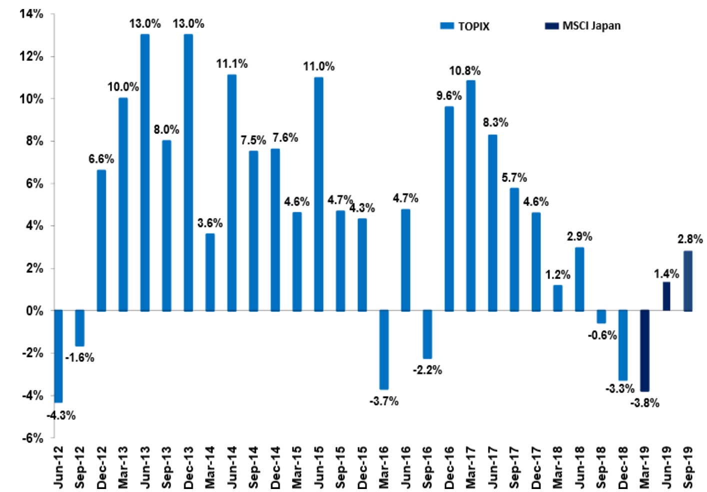
Domestic Capex: Fujitsu (6702 JP), SMFG (8316 JP)

Buyback/Corporate Reform: Olympus (7733 JP), Mitsubishi Estate (8802 JP), Mitsui Chemicals (4183 JP), Aisin Seiki (7259 JP)

<u>Baskets To Go Long:</u>

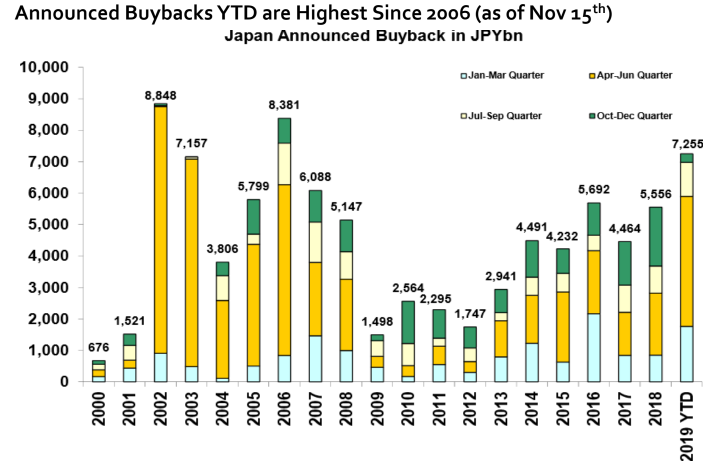
MS Japan Corporate Governance (MSJNICH1 Index): *Key Basket Inclusion:* **Unicharm (8113 JP)**

MSCI Japan Earnings Weighted Beat of 2.8%, Creating Momentum



Source: Morgan Stanley Research

Announced Buybacks YTD are Highest Since 2006 (as of Nov 15th)



Source: Morgan Stanley Research

Source: 2020 Japan Equity Strategy Outlook: Adding a Cyclical Recovery to Structural Improvement Theme (2 Dec 2019);

Big Debates: Japan

The following 8 debates highlight select key themes that Morgan Stanley's Japan Equity Research division thinks will shape industries and stocks in 2020:

Strategy:	*Is the Japan corporate governance improvement theme tradeable?*
MS View:	MS Japan/Asia Equity Strategist Daniel Blake believes investors are increasingly aware of corporate Japan's progress and rewarding areas of reform and improving profitability. The three baskets published in 2019 based on capital management and buyback predictions have on average delivered 435bp of TOPIX outperformance over an average holding period of 75 days. Daniel sees possible tax reforms from April 2020 onward to incentivize use of retained earnings as a key catalyst to promote more bottoms-up improvement.
Strategy:	*Can Japan outperform EM again next year?*
MS View:	MS Chief Asia/EM Equity Strategist Jonathan Garner continue to believe in Japan's journey towards ROE convergence with global equities and EM, with our Blue Paper projection of a 12% ROE for Japan by 2025. He thinks these structural trends should be even more evident with the expected cyclical recovery in Japan and EM earnings over 2020 and 2021. Given the team's ROE convergence thesis, they think Japan valuations are structurally too cheap vs EM (Japan is on a 19% P/B discount to EM currently).
Sector:	*Auto Parts: Is electrification technology a challenge or opportunity for existing auto parts makers?*
MS View:	Japanese auto parts companies started out with limited resources in batteries, motors, and inverters, the key areaas for EV penetration. However, MS Japan Auto Parts Analyst Shinji Kakiuchi highlights there are parts makers that are seizing the opportunities from electrification by leveraging their expertise to bolster capabilities in EV technologies and promoting industry restructuring by strengthening ties with other firms where they lack resources. These include Denso, Aisin Seiki, and Toyota Industries.
Sector:	*Transportation: Will supply/demand for hotel-related names continue to erode, or improve?*
MS View:	MS Japan Transportation Analyst Takuya Osaka expect RevPAR growth to flatten at the trough from -0.2% in F3/19 to +0.2% in F3/20, then recover to +2.8% in F3/21 and +6.4% in F3/22 from F3/21 2Q. This is because he expects new supply volume to peak on a quarterly basis in F3/21 1Q and then drop off sharply. Based on the more positive outlook, he highlights OW-rated Seibu Holdings as his key play on this debate.
Sector:	*HPC: Can cosmetics stocks outperform further?*
MS View:	Cosmetics valuations are at historical peak levels for domestic as well as major overseas names, and since further re-rating seems a stretch, MS Japan Staples Analyst Haruka Miyake believes changes in earnings expectations will likely play a key role in share prices in 2020. She is constructive on early 2020 given likely resumption of industry sales growth, but is concerned about underperformance in 2H.
Sector:	*Pharmaceuticals: Challenging the bull case for new drugs in 2020?*
MS View:	MS Japan Pharmaceuticals Analyst Shinichiro Muraoka believes industry P/E could re-rate further based on company-specific events: (1) the FDA filing and approval/non-approval of Eisai's Alzheimer's drug; (2) full flowering of Daiichi Sankyo, Nippon Shinyaku and JCR as 3 platform technology companies; (3) domestic approval for SanBio's traumatic brain injury treatment which could trigger a sharp rise in expectations and interest in regenerative therapies overall.
Sector:	*Machinery & Capital Goods: Which 2019 laggards are poised for re-rating in 2020?*
MS View:	MS Japan Machinery & Capital Goods Analyst Yoshinao Ibara sees potential for re-rating of Kubota if the planned change at the top in Jan 2020 leads to a shift in management stance: He expects Kubota's OPM to improve by 0.7ppt YoY to 10.9% in F12/19, supported by improved incentive rates accompanying lower interest rates in the US. He looks for similar OPM level (10.8%) in F12/20.
Sector:	*Telecomunications: Initial 5G launch small, but deploying nationwide in Jun; Will ARPU trend up with 5G plan penetration?*
MS View:	MS Japan Internet/Telcos Analyst Tetsuro Tsusaka belives after 5G service starts, carriers will compete on service coverage areas and speed/reliability of communication. The carrier with most aggressive plan on base station setup will become the benchmark. He looks for an increase in the number of 5G subscriber plans to lift ARPU and improve margins. If ARPU rises by 10%, he estimates OP to increase by 17-27% (Softbank +17%, KDDI +24%, Docomo +27%)

Source: Big Debates 2020: Key Investor Debates Likely to Drive Stocks in the Coming Year (10 Dec 2019)

Key Views For 2020: Asia / EM – Upgrade EM to EW, Stay OW Japan

Macro Views: The MS Asia Economics Team expect earnings recovery and upgrade EM to equal-weight, staying overweight Japan. Within EM/APxJ, MS retains Brazil as its top pick; upgrades Korea and Russia to overweight; and downgrades Australia to underweight. MS continues its recent move away from Defensives towards Value Cyclicals and GARP.

10 Key 2020 Asia / EM Equity Investment Ideas

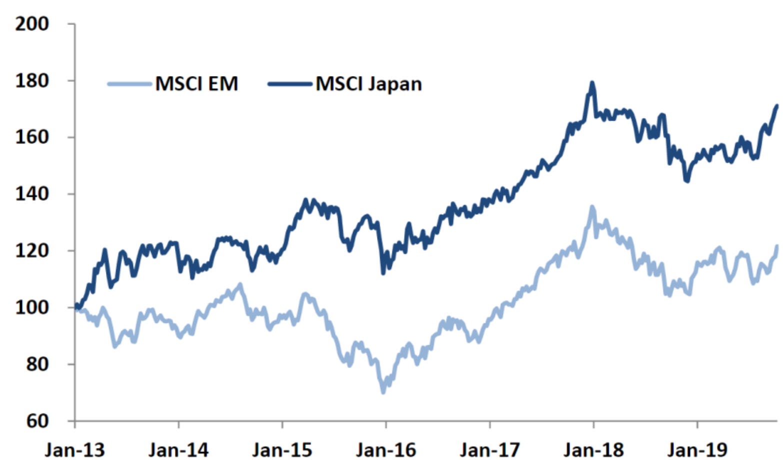
1. **Upgrade EM to equal-weight** from underweight as a cyclical trade but…
2. Japan remains the **through-the-cycle overweight** in the team's coverage.
3. **Upgrade Korea to overweight** from equal-weight as classic Value cyclical play on cyclical upturn in global growth. **Downgrading Australia back to underweight.**
4. **Upgrade Russia to overweight** from equal-weight on **ROE improvement** and **rising dividend payout.**
5. **Downgrade Utilities to equal-weight** from overweight as part of an overall shift away from Defensive/Sustainable Yield.
6. **Upgrade Information Technology across Asia/EM** with Samsung Electronics added to MS' APxJ and GEM Focus Lists as part of an Achievable Growth at Reasonable Price style bias, alongside Tokyo Electron and Murata Manufacturing in Japan.
7. **Continue overweight Singapore Banks and REITs** versus **Hong Kong Banks and REITs.**
8. **AxJ/EM Best Business Model v7** to continue over the cycle outperformance versus **EM benchmark.**
9. In Japan continue to focus on **Buy back and Corporate governance catalyst names.**
10. **Downgrade A shares** versus **offshore China equity indices. Equal-weight MSCI China** versus **EM.**

Asia / EM Equity Base Case Targets For June 2020

Index	Current price	MS Target Price Dec-20	MS Target Price Jun-20 (Old)	MS Top-Down EPS YoY %		Consensus EPS YoY %		MS Target Fwd P/E Dec-20	MS Target Fwd P/E Jun-20 (Old)	Consensus 12m Fwd P/E Current
				Dec-20	Dec-21	Dec-20	Dec-21			
TOPIX	1,700	**1,860** *9%*	*1550* *-9%*	124.0 *6%*	133.0 *7%*	123.7 *5%*	132.8 *7%*	14.0x	12.5x	13.9x
MSCI EM	1,044	**1,150** *10%*	*940* *-10%*	86.0 *12%*	96.0 *12%*	87.3 *14%*	98.5 *13%*	12.0x	10.5x	12.0x
MSCI APxJ	524	**560** *7%*	*470* *-10%*	38.0 *9%*	41.5 *9%*	39.2 *13%*	43.8 *12%*	13.5x	11.8x	13.4x
Hang Seng	26,571	**27,500** *3%*	*24,400* *-8%*	2460 *5%*	2590 *5%*	2609 *7%*	2845 *9%*	10.6x	9.8x	10.1x
HSCEI*	10,519	**11,500** *9%*	*9,700* *-8%*	1298 *8%*	1395 *8%*	1345 *6%*	1469 *9%*	8.3x	7.5x	8.3x
MSCI China	78	**85** *9%*	*68* *-13%*	6.7 *10%*	7.4 *10%*	7.1 *13%*	8.1 *14%*	11.5x	10.0x	10.9x
CSI300	3,900	**4,180** *7%*	*3,560* *-9%*	328 *9%*	355 *8%*	347 *13%*	392 *13%*	11.7x	11.0x	12.6x

Source: MSCI, IBES, RIMES, Morgan Stanley Research. Data as of November 13, 2019.

MSCI Japan vs MSCI EM US$ Total Returns



Source: Datastream, Morgan Stanley Research. Data as of October 31, 2019.

Source: 2020 Asia EM Equity Strategy Outlook: Best of Times, Worst of Times (17 Nov 2019), Asia EM Equity Strategy: Surging cost of shipping oil to Asia: how big a deal is it? (20 Oct 2019), Asia EM Equity Strategy – Weekly Fund Flows: Inflows continue in EM driven by ETF funds (8 Nov 2019), Asia EM Equity Strategy: GEM Focus List Change (3 Oct 2019), Asia EM Equity Strategy: Investor Presentation: Play Defense as Global Recession Risks Loom (27 Aug 2019), Asia EM Equity Strategy: AxJ/EM Market Allocation – Maintain Our Larger Market Calls But Changes Elsewhere (26 Jun 2019), Asia EM Equity Strategy: A structurally weaker US dollar – impact on EM markets and sectors (3 Jul 2019), Asia EM Equity Mid-Year Outlook: Japan to outperform in 2H; cut China to equal-weight vs. EM (12 May 2019)

Information Sourced By: Justina Breen

Key Views For 2020: China – Cautiously More Optimistic

Macro Views

Robin Xing expects the economy to bottom in 4Q19 and recover modestly from 1Q20, as reduced external uncertainty coupled with stable policy support should stabilize private corporate confidence, leading to a modest recovery in exports and inventory restocking.

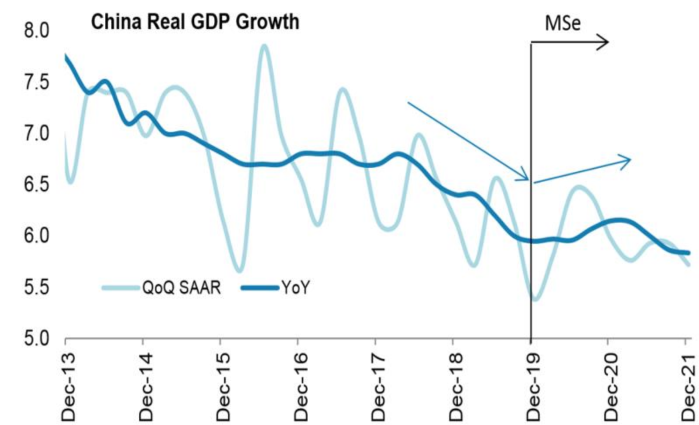
Modest Mini Cycle Recovery

- Assuming the phase 1 trade deal gets signed (base case) to prevent further escalation, Robin expects GDP growth to bottom at 5.9%Y in 4Q19 and improve to 6.0%Y in 1H20 and 6.1%Y in 2H20, slightly above consensus.

Easing Measures

- Meanwhile, MS Global Economics team expects global GDP growth to rebound to 3.2% in 2020 (vs. 3.0% in 2019), with recovery starting from 1Q20 and gradually gaining momentum over the course of the year. It would be the first time in seven quarters that trade tensions and global monetary policy are easing simultaneously.
- In this context, Robin expects China's real goods and service export growth to rebound to 3.5% next year (vs. 2% in 2019), and growth of goods exports (in nominal USD terms) could rebound to 5% in 2020 (vs. 0% in 2019)

China's GDP Growth Trajectory – Expect a Modest Growth Recovery from 1Q20



Equity Strategy: Turn Cautiously More Optimistic and raise targets across the borad

- Asia Equity Strategist Jonathan Garner's base case suggests modest upside to Hang Seng, HSCEI, MSCI China, and CSI 300 indexes.
- Jonathan remains EW MSCI China versus EM and downgrades A-shares to equal-weight versus offshore China indices. He raises his China 2020 target prices modestly on the expectation of earnings growth recovery due to a macro cyclical recovery, a stabilized FX trend and low domestic inventory levels.

MS Top Down Base Case Target Prices for Dec 2020

Index	Current price	MS Target Price Dec-20	MS Target Price Jun-20 (Old)	MS Top-Down EPS YoY %		Consensus EPS YoY %		MS Target Fwd P/E Dec-20	MS Target Fwd P/E Jun-20 (Old)	Consensus 12m Fwd P/E Current
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Source: Morgan Stanley Research

Single Names: (MS HK/China Focus List) - AIA Group (1299 HK), Alibaba (BABA), Anhul Conch Cement (0914 HK), Beijing Thunisoft (300271 SZ), China Railway Construction (1186 HK), China Resources Land (1109 HK), Gold Mantis Construction (002081 SZ), Guangzhou Auto Group (2238 HK), Jiangsu Hengrui (600276 SS), NARI Tech (600606 SS), Postal Savings Bank of China (1658 HK), Tencent (0700 HK), Zhaojin Mining (1818 HK)

Source: China Equity Strategy: China 2020: Green Shoots In Sight, But Still Modest (18 Nov 2019) / 2020 China Economic Outlook: Lower Uncertainty and Policy Support Help (17 Nov 2019) / 2020 Asia EM Equity Strategy Outlook: Best of Times, Worst of Times (17 Nov 2019)

Big Debates: AxJ

The following 8 debates highlight select key themes that Morgan Stanley's AxJ Equity Research division thinks will shape industries and drive stocks in 2020:

Sector:	*Asia Technology: What are the key risks to consider in the transition to 5G?*
MS View:	MS Head of Asia Tech Research Shawn Kim and team see risk for Chinese OEMs to skew to the downside in 1H20. Chinese OEMs appear more reluctant to build 4G inventory and 5G volume should remain small in 1H20. Since 5G smartphones are more about content growth than volume, the team thinks the best case for the supply chain is that handset OEMs absorb most of the additional bill of materials (BOM) cost to maintain 5G smartphone retail prices, hence also leaving certain volume upside to incentivize replacement.
Sector:	*China Property: Will lower-tier cities' property market rebound in 2020?*
MS View:	MS China Property Analyst Elly Chen believes It will take time for lower-tier cities to recover, but downside risks are contained: The team thinks the recovery in lower-tier cities will take longer than the market anticipates, but the risk of significant declines in price and volume is contained in the near term, supported by relatively healthy inventory.
Sector:	*Greater China Technology Semiconductors: Will the new China players commoditize the global memory sector anytime soon?*
MS View:	MS Greater China Semis Analyst Charlie Chan believes investors may underestimate China's capability in memory production. China has further developed DRAM/NAND technology acquired from foreign partners. CXMT has sourced its DRAM technology from Qimonda. According to CXMT, it could improve its 19nm DRAM production yield to 60% in 1H20, and plans to add more capacity. Specialty DRAM players like Nanya Tech will feel the early impact.
Sector:	*Macau Gaming: How important is the Macau VIP recovery and when can we expect it?*
MS View:	MS Hong Kong Property and Asia Gaming Analyst Praveen Choudhary argues to look at mass despite investors' focus on VIP. VIP contributes less than 40% of Macau's gross gaming revenue (GGR) and less than 20% of EBITDA. Thus, the market should focus on mass revenue growth, which has been accelerating through 2019.
Sector:	*Hong Kong/China Insurance: Is China's demand for life insurance slowing down?*
MS View:	MS China Insurance Analyst Jenny Jiang argues overall demand remains healthy and attributes slower growth at listed players to a supply-side issue. Industry new sales growth remained strong at 15%, and smaller insurers who offer cheaper unbundled products (at Rmb2k-6k) were able to deliver over 30% new sales growth, vs. flat sales at listed names who offer more comprehensive coverage (at Rmb7k-10k). This suggests a shift in customer preference instead of slowing demand.
Sector:	*South Korea Consumer: Will China beauty demand continue to drive sales growth in 2020?*
MS View:	MS Korea Consumer Analyst Kelly Kim argues premiumization is continuing in China. She believes rising demand from Chinese consumers for luxury cosmetics will continue to be a key earnings driver for Korean companies. In this context, and she expects LGH&H to generate 27% YoY sales growth from luxury brands to Chinese customers in 2020.
Sector:	*India Financials: Real estate lenders – Is it time to take a leap of faith?*
MS View:	MS India NBFCs Analyst Subramanian Iyer believes the current stock of stressed loans is only part of the problem and the key issue is that business models are in transition: The math on implicit loan losses works with the assumption that sustainable P/B multiples are much higher than current multiples – which the team thinks is unclear if not flawed for most real estate lenders.Real estate lenders will see a long period of adjustment as they will have to de-lever, de-bulk, recognize bad loans, and make provisions.
Sector:	*Australia Energy: How will the next wave of LNG developments impact Australia's expansion opportunities?*
MS View:	MS Australia Energy Analyst Adam Martin argues cost considerations will become more important. He thinks there will still be further LNG expansion in Australasia but investors will increasingly focus on cost structure over time and favour lower cost operators, particularly where there has been underperformance, hence his recent upgrade of Oil Search.

Source: Big Debates: Pan-Asia 2020 – Key Investor Debates Likely to Drive Stocks in the Coming Year (10 Dec 2019)

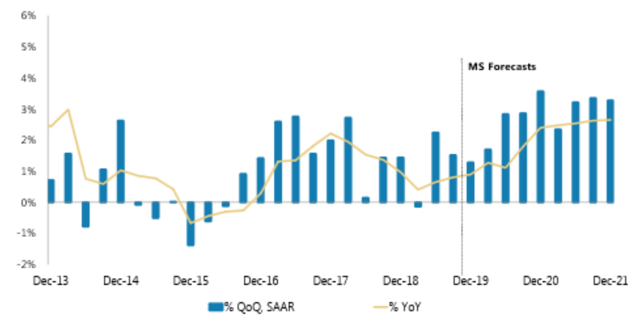
Key Views For 2020: Latin America – Global Cyclical Rebound

Macro Views:

MS Head of LatAm Economics Arthur Carvalho forecasts average regional growth to move from 0.7% in 2019 to 1.6% in 2020 and 2.5% in 2021, mostly driven by strength in Brazil.

- A better external backdrop has intensified idiosyncratic factors in the region and Arthur thinks end result will be a material acceleration in growth. The region's fundamentals (e.g., low inflation and a healthy debt levels in most countries) have allowed for the implementation of an easing monetary policy, rather than a countercyclical policy.
- Brazil is the biggest contributor to this more benign path, but the sustained strong growth in the Andeans and even the pickup in Mexico (albeit subpar) are positives as well.

LatAm : Real GDP Growth* (% change)



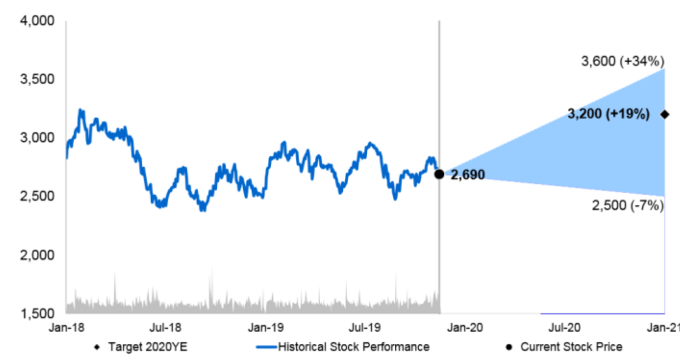
Source: Morgan Stanley LatAm Economics. *Excludes Venezuela

Equity Strategy Outlook

MS Head of LatAm Strategy Gui Paiva sees +19% USD (MSCI Latam index 3,200 points) upside for LatAm equities in his base case. Key drivers of MS' regional price target are: a) bottom-up USD earnings growth of +14% in 2020 and +16% in 2021, and b) a stable forward P/E multiple (+2%; from 12.8x now to 13.1x).

- Gui's new 12-month target for the local Brazilian **Bovespa is 125,000 points (+29% upside)**, for the **Mexican Bolsa it is 46,000 points (+5% upside).**
- Recommend a small OW in Chilean equities (base case +11% USD returns) despite the ongoing political uncertainty because 10-year low valuations provide an important cushion.

MSCI Latin America (MXLA, PT 3,200)



Source: Morgan Stanley Research, Bloomberg

MS Research Trading Ideas

- Gui in **Brazil like sectors leveraged to economic recovery** & dislikes some domestic defensive sectors. In **Mexico, he likes dividend plays and names with clear capex deployment plans** & dislikes sectors leveraged to economic cycle.
- **Country preference: OW Brazil**, **Colombia**, **Chile**, **UW Mexico**, **Peru**, **Argentina**
- **Sector preference: OW Banks**, **Transportation**, **& Health Care** (Brazil), **OW Real Estate, Energy and Industrials** (Mexico), **UW Beverages**, **Education**, **Miners** (Brazil) **UW Airports**, **Financials**, **Media** (Mexico)
- **Top picks**: **ITUB, BBDC4, BPAC11, PAGS, IRBR3, PBR, GNDI3, CPFE3, FIBRAMQ MM, GLOB**.

Sources: 2020 Latin America Equity Outlook: A Global Cyclical Rebound / 2020 Latin America Macro Outlook: External Relief, Diverging Paths

Key Views For 2020: Brazil – 29% Upside to Bovespa Target

Macro Views

- Several **green shoots point towards an acceleration** in the pace of domestic economic activity in 2020-21 (**MS real GDP growth @ +0.8% in 2019, +2.2% in 2020 and +3.1% in 2021**), which should lend support to both corporate earnings and equity prices
- The prospects for **additional structural reforms** that should help boost both business and consumer confidence. For instance, the country approved Social Security reform last October, and there are **several others pieces of legislation such as Fiscal reform, Administrative reform, and Central Bank independency on the docket.**

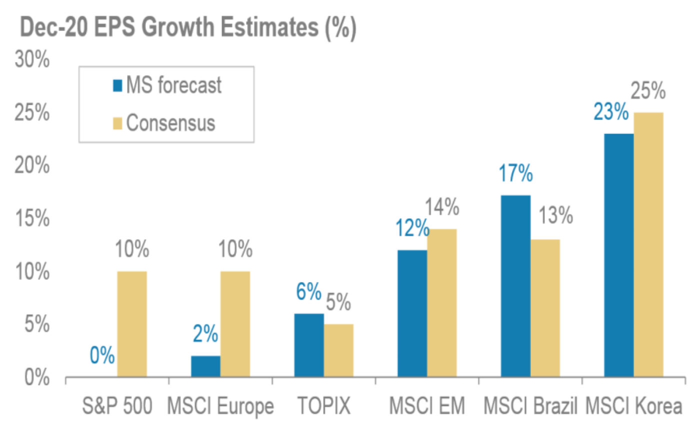
Pension Bill was recently passed in Lower House and the Senate, and MS LatAm Economist Arthur Carvalho expects **R$800bn in estimated savings**.

Dovish Central Bank: The **central bank cut rates by 50 bps to 4.5%.** Arthur Carvalho believes policymakers' inflation forecasts create **downside risks to his 4.25% call in early 2020.**

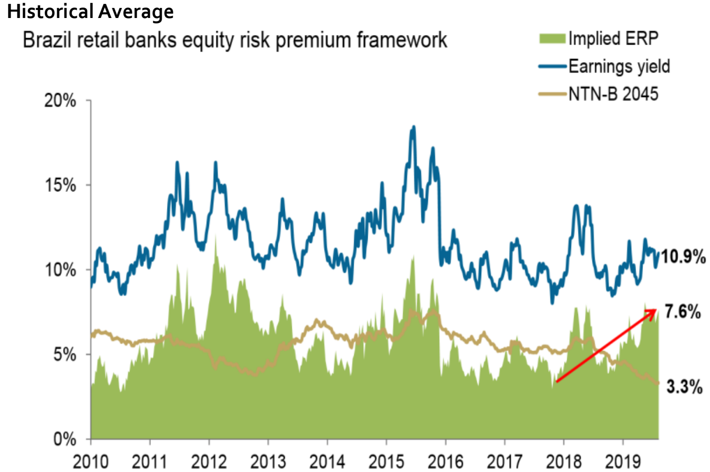
MS Research Trading Ideas

- Gui Paiva likes sectors **leveraged to an economic recovery in 2020**. Key OW's are Banks, Transportation, and Health Care. He **dislikes domestic defensive sectors** and some selective exporters which should be negatively impacted by a weaker USD. Key UWs are in Beverages, Miners, Education, and Shopping Malls.
- **How to play?** His Top picks for 2020 are: ITUB, BBDC4, BPAC11, PAGS, IRBR3, PBR, GNDI3, CPFE3
- For 2020, Gui believes **retail banks should perform well both in absolute and relative terms** (to domestics) supported by a) a pick up in the pace of domestic economic activity, b) the end of the ongoing monetary easing cycle, and c) the valuation gap that it has opened vs the domestic oriented group of stocks
- Gui still recommends MSBZCLSC (MS Brazil Class C basket) featuring **21 stocks with the greatest exposure to class C…including BBAS3, PAGS, LREN3, RENT3, CRFB3, GNDI3.**

Brazil: Expect 17% EPS Growth in 2020



Brazil: Retail Banks Implied ERP – Attractive 1 S.D. Premium to 9 Year Historical Average



Sources: 2020 Latin America Equity Outlook: A Global Cyclical Rebound (19 Nov 2019) / Brazil Model Portfolio: Long Class C investment theme; Retail, Transportation & Healthcare (2 Oct 2019) / Brazil: Monetary Policy Meeting: No Rush To Get Rates Lower (30 Oct 2019)

Key Views For 2020: Mexico – Challenges Ahead

Macro Views

Macro Policy Risks: MS LatAm Equity Strategy team **downgraded Mexico in 4Q18 to UW,** and MS Mexico Strategist Nikolaj Lippmann remains UW Mexico equities due to a) a challenging growth outlook and b) uncertain political and economic environment.

- Some investors think equities may have troughed, and while Nik thinks there is **less downside risks today (historically low valuations)**, he prefers to wait for clearer signs before he grows more constructive on the equity story for the longer term.

Cautious Growth Outlook: Expect Mexico to keep dragging down the region, with **forecast for growth to slow to 1.1%** in face of heightened policy uncertainty.

The Mexican "trilemma": Advancing the current state-led energy strategy will add to the difficult set of trade-offs faced by the administration. These involve balancing 3 clashing objectives: a) to keep a prudent fiscal stance, b) to boost social and infrastructure spending, and c) to advance a state-driven energy model.

Less downside risks: (1.1x bull/bear ratio) on the back of historically low valuation multiples.

MS Research Trading Ideas

Nikolaj is **not ready to turn bullish Mexico** and **remains UW Mexican equities from top-down perspective**, pointing to continued macro policy risk.

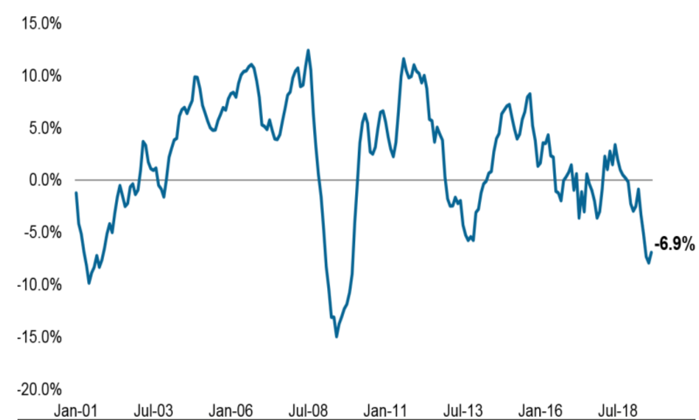
- Nik prefers dividend plays and/or names with a clear capex deployment plan that could break the investment limbo pattern in the country.
- Nik dislikes sectors leveraged to the economic cycle.

Nikolaj is **OW** Real Estate, Energy, and Industrials, and **UW** Financials, Airports, and Media.

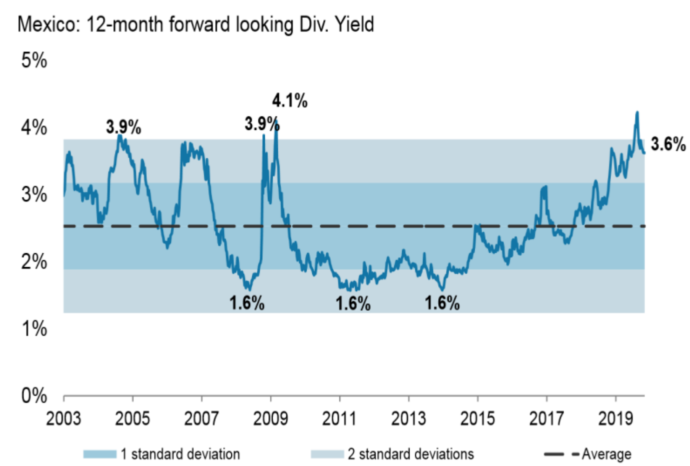
Longs: IENOVA (IENOVA MM), Fibra Macquarie (FIBRAMQ MM), America Movil (AMX), Orbia (ORBIA MM), Femsa (FMX), and Fibra Prologis (FIBRAPL MM).

Shorts: Coca Cola Femsa (KOFUBL MM), ASUR (ASR), & Grupo Televisa (TV)

Fixed Investment Spending Remains the Weakest Link in Mexico's Sluggish Growth Story



Mexico Equities Currently Trade with a Dividend Yield Almost 2 S.D Above Historical Mean



Source: 2020 Latin America Equity Outlook: A Global Cyclical Rebound (19 Nov 2019)

Information Sourced By: Tomas Garcia-Morillo

Big Debates: Latin America

The following 8 debates highlight select key themes that Morgan Stanley's Latin America Equity Research division thinks will shape industries and drive stocks in 2020:

Sector:	***Brazil Equity Strategy: Is It Time to Rotate from Consumer Stocks to Retail Banks?***
MS View:	The time to go long the retail banks is now. Weeks away from what Latam Chief Economist Arthur Carvalho expects to be the last rate cut in the current easing cycle (February 2020). If you overlay the recent performance of retail banks and then compare it to the average historical pattern around similar periods (i.e., end of monetary easing cycles), it appears the retail banks have already bottomed out.
Sector:	***Mexico Equity Strategy: An End to the Investment Limbo? We Don't Think So***
MS View:	Expect the investment limbo to continue into 2020 - private and public. Policy makers in Mexico have prioritized fiscal austerity and energy investments, leaving little room for anything else. This includes infrastructure and social spending. The energy plan provides a hint of why. Mexican policy makers expect to produce 2.7 mbpd of oil by 2024, up from 1.7 mbpd today. On the same level of E&P capex, Pemex can stabilize oil production around the 1.7mbpd level. The difference in PMX revenue by 2024, on the current oil price, is close to 2% of GDP and more than 1% of GDP in terms of fiscal net revenue pa. Thus, policy makers could overestimating the PMX cash cow.
Sector:	***Argentina Equity Strategy: Will the Rally Continue? We Don't Think So***
MS View:	Maintain UW in a LatAm context. Earnings in Argentina should face headwinds due to the ongoing recession. Meanwhile, on the valuation front, a sustained re-rating seems unlikely in the near term due to increased uncertainty on three fronts: 1) Sovereign debt renegotiation, 2) Policy uncertainty for industry and 3) A potential downgrade from MSCI (decision expected by YE2019).
Sector:	***Basic Materials: Vale: When Will Vale Pay Dividends Again - in 4Q19?***
MS View:	Carlos de Alba believes Vale would resume dividends in 2Q20, at the earliest, when it would pay the minimum dividend required by the Brazilian law. Only in 4Q20 he expects the company to reestablish its previous dividend policy (30% of adjusted EBITDA minus sustaining capex).
Sector:	***Energy: Petrobras: Could the Market Start to Price in Higher Dividend Yield in 2020?***
MS View:	Improved visibility on PBR's recurring FCF stream could make valuation shift to DDM within 2020. Bruno Montanari estimates a potential 6–9% dividend yield for PBR in 2021e, at a conservative $50-60/bbl oil price range, on the back of competitive core pre-salt reserves. And yield compression could begin as soon as two triggers start to unfold next year: 1) refineries sales; and 2) more confidence in capital allocation with a more flexible balance sheet.
Sector:	***TMT: Revenue acceleration Is VIV a Growth Story Now?***
MS View:	VIV revenues will accelerate, driving +17% share price upside with a 7% DY. We think the stock benefits from 1) Beta to consumer upturn due to its broadband exposure, 2) Positive industry trends, 3) Attractive ~7% DY and 4) Defensive trading behavior. Our YE2020 price target USD16/ADR suggests a 17% upside potential. Remain OW
Sector:	***Brazil Financial Institutions: Earnings Growth at the Brazilian Banks***
MS View:	Consensus is underestimating S.U.P.E.R. Cycle and cost cutting opportunities, while overestimating "fee"ntech disruption. Expect Brazilian banks to deliver strong earnings growth – in the 16-17% range – in 2020, well above single-digit growth expected by consensus. The market is not fully appreciating upside potential from: i) A S.U.P.E.R. Cycle of sustainable economic growth and low interest rates, which should drive balance sheet and efficiency improvements at the banks, unleashing ROA expansion; and ii) Accelerated rationalization/transformation of the branch network, a fast and low-impact pathway to cost savings. Also, market participants are over-estimating the velocity of fintech disruption. See room for the big banks to keep growing fee income over the next years on the back of a positive macro backdrop, rising penetration, and sophistication / digitalization of banking products.
Sector:	***Mexico Financial Institutions: Mexico Earnings Recession***
MS View:	Market participants are underestimating the velocity and magnitude of the upcoming slowdown in the banking cycle. Banks in Mexico will face a tough combination of low balance sheet growth (or contraction, as we are already seeing at some banks), rising delinquency, and falling margins during the course of next year. Specifically for Banorte, we see a difficult 2020, with 0% EPS growth and a 140 bp contraction in ROE (to 16.4%), reflecting pessimistic view of the banking cycle relative to management and consensus.

Source: Big Debates — 2020: Key Investor Debates Likely to Drive Stocks in the Coming Year (17 Dec 2019)

Information Sourced By: Tomas Garcia-Morillo

Key Views For 2020: EEMEA – Stand Out in a Global Context

Macro Views

EEMEA equities look broadly attractive into 2020, offering a combination of high dividend yields, pockets of earnings growth recovery potential, and broadly low investor positioning.

- While Russia leads the pack on dividends, every EEMEA country ex Greece now offers a forward dividend yield above the EM and global average.

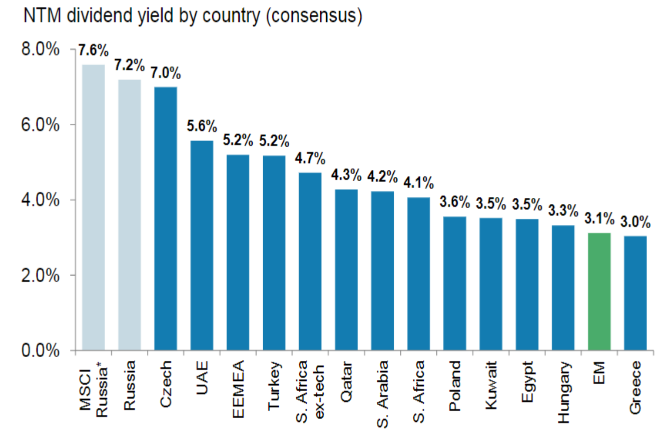
Upgrade Russia to overweight – late to the party but see plenty more scope for structural upside.

- Russian equities are up 33% YTD – one of the best performing countries in EM & globally.
- Despite this impressive performance, the country's NTM consensus dividend yield remains near all-time highs at 7.2%.
- MS Russia O&G Analyst forecasts MSCI Russia's DY rises to 8.4% in 2020 & 9.2% in 2021 – unprecedented vs history & well above any other major country globally.

Positioning: For 53 GEM funds ($152bn aggregate AUM), Middle East exposure is creeping up but still well below benchmark & over-owned stocks continue to broadly outperform.

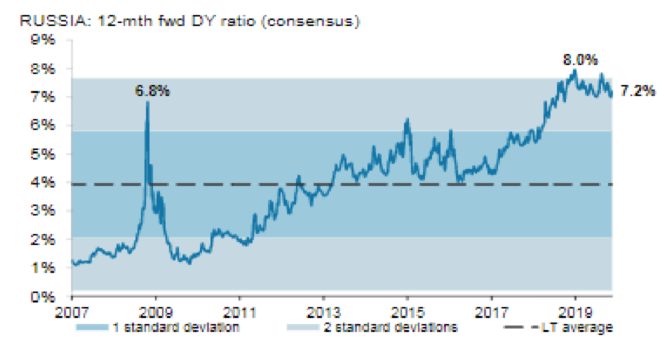
- 79% of the GEM funds in MS' sample group still had zero exposure to Saudi Arabia
- Gazprom remains the second largest GEM fund underweight in EEMEA

Every EEMEA Country Now Offers a Forward Div Yield Above EM Average



*for 2020; Source: Datastream, Eikon and Morgan Stanley Research

Russia's NTM DY Remains Near Historical Highs at 7.2%



**Our database of Russian stocks includes those not currently in the MSCI Russia index like Yandex, Mail.ru, Qiwi, Headhunter, VEON, and Evraz; Source: Eikon and Morgan Stanley Research*

MS Research Trading Ideas

Post-trough Marina **favors domestics, beaten-up cyclicals, and quality growth**. She recommends reducing EEMEA gold and defensive exposure, and shifting to more cyclical and growth oriented names.

Country Preferences

OW: Kuwait, South Africa, UAE, Russia and Poland
EW: Saudi Arabia, Egypt, Turkey, Czech Republic, and Hungary
UW: Qatar and Greece

Single Name Ways to Play

Long: Pepkor (PPH), Massmart (MSM), Pick 'n Pay (PIK SJ), Barloworld (BAW SJ), Emaar Prop. (EMAAR UH), CD Projekt (CDR PW), BUPA (BUPA), KAZ (KAZ)

Short: Riyad Bank (RIBL AB), Anglo Platinum (AMSJ), Truworths (TRUJ), Mr. Price Group (MRPJ)

Sources: 2020 EEMEA Equity Outlook: A Sea of High Dividend Yields, Russia to OW (17 Nov 2019), EEMEA Equity Strategy: GEM Funds' Stock Positioning Guide (11 Nov 2019)

Information Sourced By: Esha Tripathi

Big Debates: EEMEA

The following 8 debates highlight select key themes that Morgan Stanley's EEMEA Equity Research division thinks will shape industries and drive stocks in 2020:

Sector:	***EEMEA Equities - Who Benefits From USD Weakness?***
MS View:	The MS global FX strategy team expects the USD to weaken in 1H20 relative to DM and EM currencies. In this scenario, in the EEMEA region, based on past correlations, the MS EEMEA Equity Strategy team expect **South Africa, Poland** and **Turkey** equities to benefit the most at the country level, and Consumer Discretionary and Financials at the sector level. Within Materials, they would expect PGM's and Gold stocks to perform better.
Sector:	***Russia: Can Sberbank Transform The Russian Internet Sector?***
MS View:	The MS EEMEA Banks & Internet team calculate that **Sberbank (SBER RX)** generates ~$3bn/yr that could be invested in non-financial services. This compares to $2bn spent on capex by the two largest Russian internet companies since 2010. Thus they feel Sberbank's contribution could be transformative to the Russia Internet sector as it becomes increasingly hybrid (online/offline).
Sector:	***Turkey: Is A Goldilocks Scenario Likely In 2020?***
MS View:	In economics, the team expect an atypical slowdown of 2019 likely to be followed by an atypical recovery, with growth remaining below its potential at 2.3%Y in 2020 and 3.5%Y in 2021. In equities, they see the recent tactical recovery continuing near-term with strong earnings growth (the highest in EEMEA), stable macro, and still cheap valuations likely to drive a continued valuation mean-reversion trade.
Sector:	***South Africa Platinum Group Metals: Is There Further Upside Post The Run In 2019?***
MS View:	On balance the team think there is a reasonable likelihood that prices and sector profitability remains elevated and/ or moves higher in 2020. Despite the run, current valuation multiples are undemanding. They highlight a number of factors that could possibly derail the story - however, none of these sit within their base case.
Sector:	***Russian Oil & Gas: Gazprom - Will More Upside Levers Be Pulled In 2020?***
MS View:	**Gazprom (OGZD LI)** is undergoing a major strategic shift. We explored potential upside levers and see plenty of low hanging fruit. The MS Russia Oil & Gas team's assumptions imply its dividend yield should almost double to 12% in 3Y, covered by FCF. Gazprom is now one of their most preferred names in the sector.
Sector:	***Saudi Arabia - Will GEM Funds Reduce The Size Of Their Underweights?***
MS View:	With Saudi Arabia now in the MSCI EM index and 79% of GEM funds still at zero exposure, the strategy team anticipate that the level of positioning (27bp vs current benchmark weight of 2.5%) is likely to gradually rise over time.
Sector:	***CEE Banks - Is The Market Positioned For Slower Growth And Higher Cost Of Risk?***
MS View:	The de-rating at Austrian banks appears to overly discount the pressure on ROE from declining revenue generation and higher impairment charges. At OTP valuation appears fuller: however, the stock has still de-rated relative to expected ROE generation and does not appear expensive in an historical context.
Sector:	***UAE - What Impact Can We Expect From Expo 2020?***
MS View:	While Expo 2020 is likely to provide a boost to business confidence, increase employment, and improve overall sentiment, the team believe the impact on Dubai's property market is unlikely to be material. We see Dubai's tourism and hospitality businesses benefiting most from Expo 2020. Prefer Emaar Properties (EMAAR UH) and **Emaar Malls (EMMARMLS UH)..**

Source: EEMEA Equity Strategy: EEMEA 2020 Big Debates (13 Dec 2019)

Cross-Asset Forecasts, Credit & Liquidity Assessment, Sector & Regional Positioning

The Recession Playbook

While a US recession over the next 12 months is not the base case, MS economists see it is a credible bear case..

Recession Signals within Economic Data

- **Employment**: Once job growth goes negative and the unemployment rate rises
- **Consumers**: Stagnating consumer earnings growth
- **Corporates:** Falling durable goods orders and ISM manufacturing PMIs
- **Aggregate Indicators:** Sustained y/y growth in the **Conference Board Coincident Indicators Index** below 2% and its Leading Indicators Index going below 0% y/y

Recession on the Horizon?

1. MS economists **downgraded growth forecasts** across the board.
2. Current **trends are just outside the danger zone** but it could be headed there.
3. **"Mid-cycle argument" not a sure thing** with tightening in the system already due to recent hikes and quantitative tightening, manifest decelerations, and lingering uncertainty over trade policy.
4. Risk from **trade tension has increased**, along with **flattening of the yield curve, stock market volatility**, and plun**ging metal prices reflect economic weakness** (stemming from Europe and China).

Learning From Past Recessions

- There is a large overlap between recessions and equity bear markets.
- Equities and credit are most vulnerable, while bonds outperform.
- Ex-US risk assets tend to see bigger drawdowns than US markets.
- Credit spreads have reliably widened and the yield curve dependably steepened going into and out of the start of the last five recessions.
- National Bureau of Economic Research (NBER) recession declaration is a good buy signal.

Avg. Series Values Before/After Start of Prior 5* Recessions

	T-12	T-6	T-3	T-1	T-0	T+1	T+3	T+6	T+12
Consumer									
Avg. Hourly Earnings Growth (Prod, Non-Supervisory) - 1 Yr. Chg. (bps)	63	-10	-23	-10	-35	-30	5	-18	3
Consumer Confidence	106.5	102.0	101.8	94.6	95.7	90.6	76.7	66.7	72.9
Consumer Confidence Y/Y (%)	1.7%	-6.2%	-9.6%	-15.8%	-15.4%	-20.9%	-34.1%	-37.9%	-24.9%
Real PCE Y/Y (%)	4.2%	3.1%	2.6%	2.2%	2.1%	1.5%	0.9%	-0.1%	0.1%
Employment									
Init. Jobless Claims, 4W MA, Y/Y (%)	-0.6%	9.7%	15.9%	15.1%	18.9%	21.4%	25.3%	34.6%	21.0%
Jobs Plentiful - Hard to Get (Conf. Board, %)	5.9%	4.6%	4.1%	0.6%	0.6%	-2.0%	-8.1%	-20.1%	-28.9%
NFP Payrolls, 3 MMA	90	175	93	89	74	23	-80	-216	-156
U-3 Unemployment 1 Yr. Chg. (bps)	-35	-20	13	5	40	48	73	130	155
Corporate									
Credit Spreads (Baa OAS, bps)	141.7	165.8	174.4	196.9	194.5	190.5	219.2	236.3	286.1
Durable Goods Orders ex-Transport. Y/Y (%)	8.8%	3.3%	1.7%	1.7%	3.2%	2.1%	-2.3%	-3.7%	-7.8%
ISM Manufacturing	49.1	50.3	49.7	47.7	46.5	47.6	42.7	41.7	45.0
Aggregate									
Conf. Board Coincident Indicators Y/Y (%)	3.4%	2.3%	1.8%	1.5%	1.4%	0.9%	0.0%	-1.2%	-1.9%
Conf. Board Leading Indicators Y/Y (%)	1.6%	-0.8%	-3.0%	-3.9%	-4.7%	-5.7%	-7.8%	-9.3%	-7.9%

Source: Bloomberg, Morgan Stanley Research.

Waiting for Confirmation Means Investors Miss Out

- The worst performance for most industry groups has tended to come in the ~3-month period after the start of recession, with widening dispersion of returns thereafter.
- Investors do not have the luxury of recognizing a recession long after it starts, so understanding which fundamental data points give relatively reliable signals is critical.

Equities Market Already Pricing in Recession Risks

- The S&P 500 is pricing in a relatively low probability of recession.
- **Persistent Outperformance** – Staples & Health Care
- **Persistent Underperformance** – Autos, Media, TMT
- Watching for a rebound – Consumer Discretionary
- Size & Styles – Avoid Junk And Lean Defensive

Source: The Recession Playbook, Recession Probability: Defining the Debate

Information Sourced By: Lesley Zhang

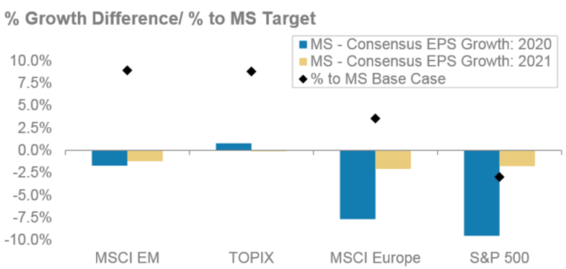
Global Equities: Move to the Cautious Side of Equal-Weight

Global Equities allocation increased from **-4** to **-1** (on a scale of **-10** to **+10**), continue to prefer value over growth

Inflecting Growth is in the Price

Global Equities have discounted an inflection higher in global growth: Trailing 12-month equity returns have inflected higher.

Upside Drivers: MS Research sees greater upside for markets with a clearer path to achievable earnings growth (Japan and EM) and scope for multiple rerating on falling political risks (Europe).

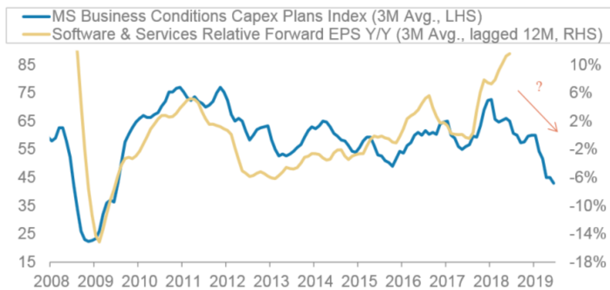


Source: Factset, Morgan Stanley Research Forecasts

Prefer Value to Growth

Outside the US: Preference for value has a cyclical tilt, given the relative improvement in global growth and trade in MS Research forecasts.

In the US: Forecasting the smallest cyclical inflection. Looking for continued underperformance of growth stocks rather than outperformance of value.



Source: Bloomberg, FactSet, Morgan Stanley Research Forecasts

Earnings

Favor RoW over US: Earnings growth is the principal driver behind MS Research's regional price targets and relative up/downside. US forward 12-month earnings have begun to stagnate while EM, Europe, and Japan all look to be bottoming.

Multiples : Multiple expansion has driven total returns across global equities, but on a relative basis, the US has the least room for multiple expansion and may even fall.

Source: FactSet, Morgan Stanley Research Forecasts

Regional Equity Preferences

Japan: **(+1)**

Europe: **(+1)**

EM: **(+0)**

US: **(-3)**

Where To Put The Money?

Prefer Rest of World > US
Value > Growth
Defensives > Secular Growth
Large Caps > Small Caps

Sources: 2020 Global Strategy Outlook – Sequencing the Cycle

FX Forecast

2020 Outlook

- **Flood of liquidity looks set to reverse:** Combination of considerable fiscal/monetary stimulus already in the pipeline and a lack of further trade escalation suggest that global growth will bottom in 1Q20.
- **Short-term risk correction:** See the chances of a (purely tactical) risk pullback as rising; the risk rally is losing steam, offering a chance for a tradeable albeit tactical pullback as positioning squares.
- **Don't fight liquidity trends**: As macro outlook becomes more apparent to investors, capital is likely to flow into places where asset valuations are more attractive and offered returns higher.
- **MS Research trades:** MS FX Strategists position accordingly for trade-sensitive AxJ outperformance, funding long KRW, NZD, CNH and AUD positions with THB, CAD, USD and JPY respectively.

Key Investment Ideas:

- **USD should weaken in 1H20** as the global economy recovers, but US election uncertainty and late-cycle risks may drive **a rebound in 2H20.**
- **JPY and CHF may underperform in 1H20** as global reflation weakens low-yielding currencies, but should **outperform in 2H20** as uncertainty rises.
- Cyclical currencies like **AUD, NZD, NOK and SEK should gain in 1H20**, supported by global reflation, before **reversing some of the gains in 2H20** as the risk environment becomes more difficult.
- **Top trades**: Long NZDUSD, short CADNOK, long (BRL and COP) 12m NDF versus MXN 12m forward and short USDINR.

MS' Detailed FX Forecasts

	1Q20	2Q20	3Q20	4Q20
EUR/USD	1.16	1.18	1.17	1.16
USD/JPY	108	107	104	99
GBP/USD	1.40	1.38	1.37	1.35
USD/CAD	1.29	1.27	1.28	1.30
AUD/USD	0.73	0.74	0.73	0.71
EUR/SEK	10.40	10.30	10.50	10.70
USD/ZAR	15.0	15.3	15.5	16.0
USD/TRY	5.70	5.85	6.10	6.40
USD/RUB	62.0	61.0	62.0	63.0
EUR/PLN	4.22	4.20	4.20	4.21
USD/CNY	6.85	6.80	6.83	6.85
USD/INR	69.0	68.5	69.5	70.5
USD/KRW	1135	1130	1150	1170
USD/MYR	4.14	4.13	4.16	4.20
USD/BRL	3.85	3.80	3.85	3.80
USD/MXN	19.10	18.90	19.30	19.45

Source: Morgan Stanley Research

Current Trades

Active Trades	Entry	Stop	Target
Short USD/INR 3m NDF	72.18	73.30	69.70
Short USD/CNH	7.1000	7.1000	6.9000
Short EUR/RUB	70.16	72.00	67.00
Long NZD/CAD	0.8442	***0.8500***	0.8800
Short USD/NOK	9.1290	9.3100	8.5800
Short THB/KRW	38.55	39.70	37.00
Long GBP/USD	1.2953	1.2740	1.3500

Source: Morgan Stanley Research

Source: 2020 Global FX Outlook: Top 10 FX Trades (17 Nov 2019), FX Pulse: Let's Get Fiscal (5 Dec 2019)

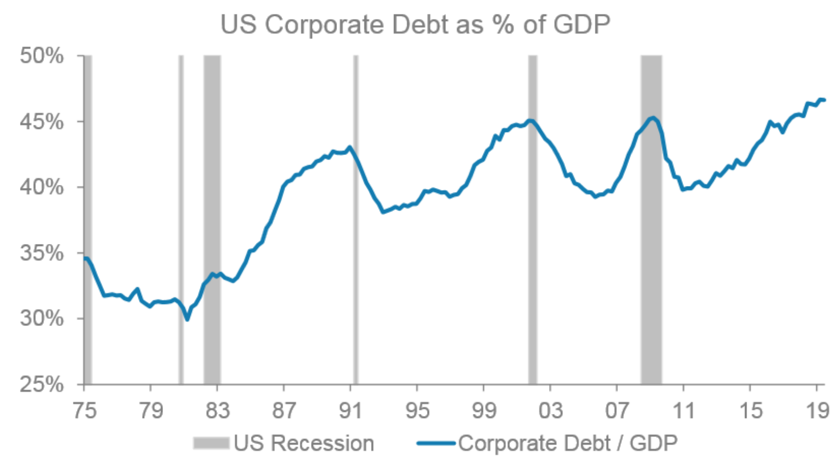
Broadly Cautious on Credit

Macro backdrop is incrementally supportive: MS Economists expect a global growth recovery from 1Q20, one that is uneven and driven by emerging markets. The return of "lower for longer" rates extends the cycle, but risks remain skewed to the downside, keeping the MS Credit Strategy team cautious in US credit.

Remain up in quality: US corporate balance sheets are a key vulnerability in this cycle – despite all the talk of debt diets earlier in the year, leverage remains high, and a majority of other cycle indicators are in the "red zone". Credit-negative corporate actions could pick up as companies turn to inorganic methods to drive growth.

Decompression and dispersion will remain important themes in 2020: Credit markets have shown a remarkable ability to compartmentalize stresses. Low yields globally have extended the runway for better-quality issuers even as weaker pockets lose sponsorship. The team expects the divide to increase and quality definition to tighten in 2020.

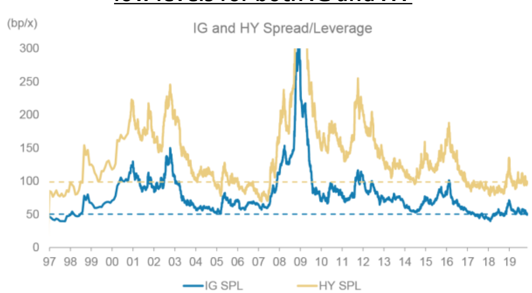
Year-ahead forecasts: In their base case, the team forecasts excess returns of 0.1%, -0.8%, and -1.8% in IG, HY and loans, respectively. They expect nearly $1.2 trillion of issuance in IG and $272 billion in HY. Institutional loan issuance is likely to track a little over $300 billion as investors become more selective and refinancing shifts further to HY. Lastly, they project a 4.5% HY default rate.



Source: Morgan Stanley Research, Board of Governors of the Federal Reserve System

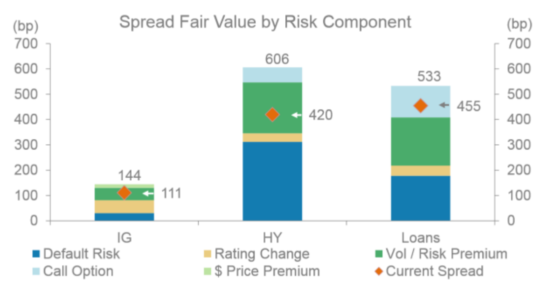
Top Credit Ideas from the Desk: The team recommends funding Loan TRS shorts with HY TRS and positioning for higher IG dispersion by shorting the 0-3% tranche vs. index.

Spread per turn of leverage remains at cyclically low levels for both IG and HY



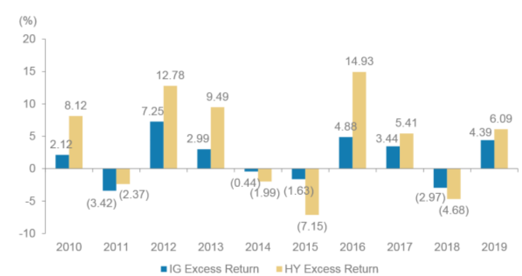
Source: Morgan Stanley Research, FTSE Fixed Income LLC

Credit markets appear rich relative to long-term model of fair value



Source: Morgan Stanley Research, Moody's, FTSE Fixed Income LLC, Bloomberg

2019 performance has been good, but returns reflect a defensive bias



Source: Morgan Stanley Research, Bloomberg, FTSE Fixed Income LLC

Source: 2020 US Credit Strategy Outlook – Quality Time

Investment Grade Credit: Neutral into 2020

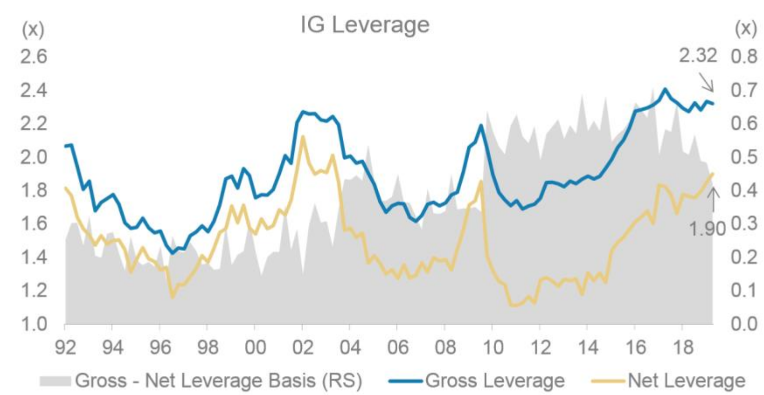
Projecting roughly flat excess returns: Modestly weaker demand dynamics, rich valuations, and a tough earnings backdrop provide an offset to a healthier macro tone. Neutral stance is predicated on weak returns at the broad index level, but pockets of the market still offering value , such as intermediate tenors and high-quality cohorts.

Gross and Net Leverage: Gross leverage has ticked higher since hitting a local trough in mid-2018 and net leverage has risen even more rapidly. More importantly, IG leverage has been a debt-growth story for much of this cycle, with earnings growth lagging, but still in positive territory.

Sector Analysis: Within sectors, the MS IG Credit team prefers to remain underweight beta, avoid too much cyclical exposure, and to reduce long-term fundamental risks where possible, while balancing relative value in the process. Prefer Financials over non-Financials, see Utilities offering defensive positioning and Consumer Staples offering some value if balance sheet improvement continues.

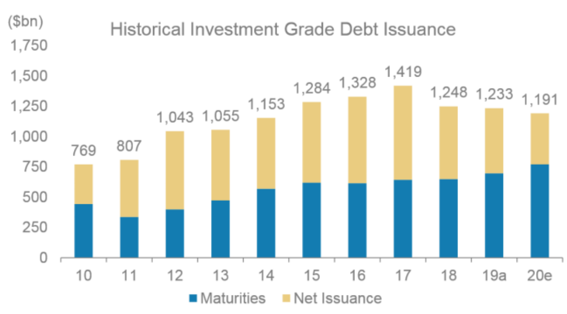
Year-ahead forecasts: Remain most cautious on high beta/long duration, projecting negative excess returns for the non-Fin 10Y+ sector and for BBBs in aggregate. With a very flat Treasury curve, absolute return investors get limited benefit from a roll-down – total return forecast is just 2.4% in the base case.

IG gross leverage has resumed a rising trend while net leverage has increased sharply



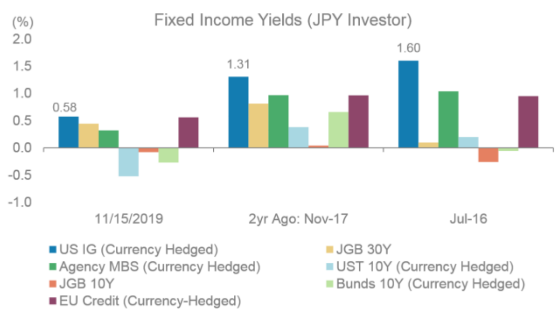
Source: Morgan Stanley Research, Bloomberg, FTSE Fixed Income

Expecting another year of lower IG supply in 2020



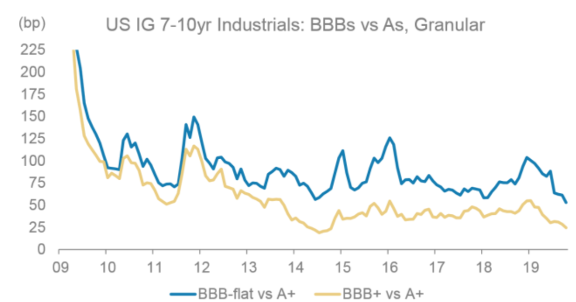
Source: Morgan Stanley Research, Dealogic, Bloomberg

US IG compelling from a relative standpoint, but absolute value remains poor



Source: Morgan Stanley Research, Bloomberg, FTSE Russell

Basis between high and mid BBB spreads vs. high quality A spreads is at cycle tights



Source: Morgan Stanley Research, ICE

Source: 2020 US Credit Strategy Outlook – Quality Time

High Yield Credit: Stay Up in Quality

BB > B > CCC in HY: A durable pause in trade tensions and a tariff rollback could help sentiment over the short run, but the MS HY Credit team believes it is too early to make a strategic shift down in quality. The HY market's definition of low quality is mainly confined to CCCs and energy, and as this definition broadens, there is room for further decompression. The stresses in the loan market are not just about poor technicals – the team sees some evidence that the growing wedge between projected and realized earnings is prompting downgrade actions.

- B-BB Basis in HY is distorted by energy
- CCCs and tails reflect secular challenges more than cyclical risks. CCCs have been far *less* skewed by energy and have underperformed BBs more broadly. A case can therefore be made that if MS' economic outlook is for a modest improvement in growth, defaults can remain low and higher beta credits can outperform.
  - Note, however, that CCCs rarely outperform this late in a cycle. In the second half of the last three cycles, CCCs underperformed HY in 73% of all years.

Fund Flows: Fund flows have been weak through most of the year, but loan underperformance versus HY has been particularly pronounced only in recent months, which coincides with a substantial increase in ratings-downgrade actions. Part of the explanation is that the change in the Fed's path since the beginning of the year has weighed on the technicals of the loan market. While under-performance of loans in the risk-on environment is expected, the divergence in spread trajectories is rather unprecedented. Loan underperformance has intensified since summer, coinciding with a sharp uptick in downgrade actions. The team expects more of the same in first half of 2020.

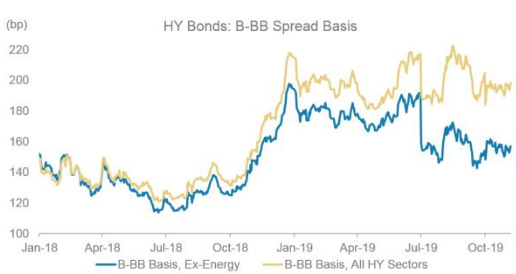
Sector Analysis: Sectors with high exposure to the most leveraged companies typically drive defaults as the cycle turns.

- Healthcare and Consumer Non-Cyclicals score poorly on quality deterioration and recent migration trends
- Basic Materials and Media screen poorly in terms of their overall growth as a share of the index
- Telecom is included in the list of "at-risk" sectors given the secular challenges faced by some of the larger names

Credit Derivatives – Dispersion and Decompression:

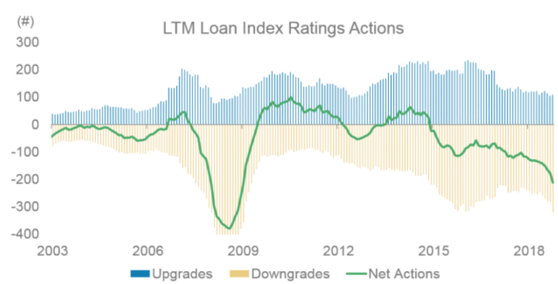
- Short CDX HY (ex-tail names) vs. CDX IG.
- Short BB in CDS form vs. CDX IG.
- Short HY33 15-100%

HY B-BB basis widening largely an artifact of energy



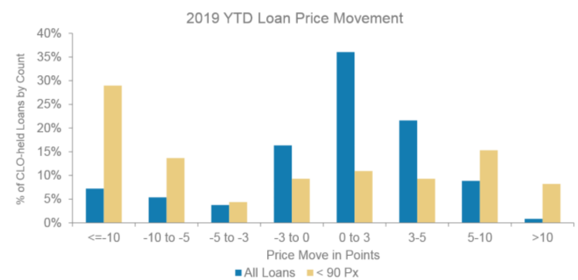
Source: ICE, Morgan Stanley Research

Net downgrades in loans are at cycle extremes



Source: Morgan Stanley Research

Stressed names' poor performance reflects a negative fundamental-technical loop



Source: Morgan Stanley Research, Intex, Markit

Source: 2020 US Credit Strategy Outlook – Quality Time

Information Sourced By: Madeleine Speal

Framing the Credit Cycle: Key Recurring Themes & Indicators

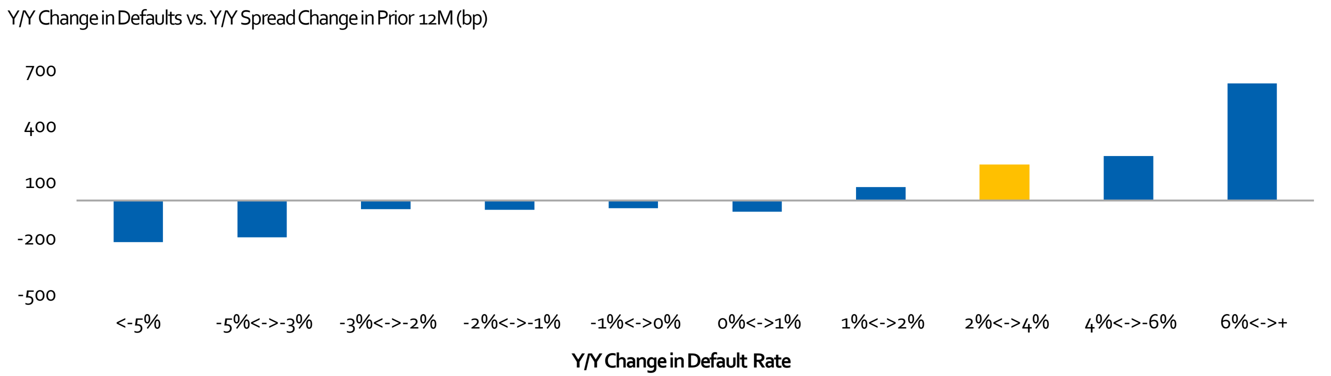
Contextualizing 2018's **Credit Spread Trough** vs Previous Recessions

	Theme / Indicator	2001 Recession	2008 Recession	Current Level
Macro	**Real 3Q GDP Y-o-Y % Growth @ BBB Trough / Peak**	4.3% / 2.3%	2.4% / (0.3%)	2.9% (2018)
Macro	**Consumer Confidence Peak Lag Spread Troughs by:**	33 months	16 months	TBD
Macro	**Jobless Claims Troughs Lag Spread Troughs by:**	31 months	34 months	TBD
Technical	**HY Interest Coverage Troughs in Cycle**	2.8x	3.4x	*4.41x
Technical	**HY Gross Leverage Peak in Cycle**	4.6x	4,2x	*4.25x
Technical	**Credit Spread Troughs Led Recession Starts by:**	45 months	10 months	TBD
Technical	**Timing Between Credit Spread Troughs and S&P Peaks (~7 months on average in prior cycles)**	32 months	8 months	Current SPX 3194 IG OAS 101bp
Technical	**Sectors with Biggest Share of Debt Growth in Bull Market & Therefore Highest Risk in Downturn**	Tech / Telco / Media	Financials / Telco / Consumer Discretionary	Tech / Retail / Healthcare / Telco
Technical	**Trailing 6Q VIX Levels in Trough / Peak**	19 / 26	16 / 27	**11 / 36

*As of 6/30/2019
** VIX Trough/Peak Last 6Q

Timing the **Credit Spread Peak** vs Other Credit Cycles

In Past Credit Cycles, Spreads Peak when Anticipating Highest Growth in Default Rates the Following Year



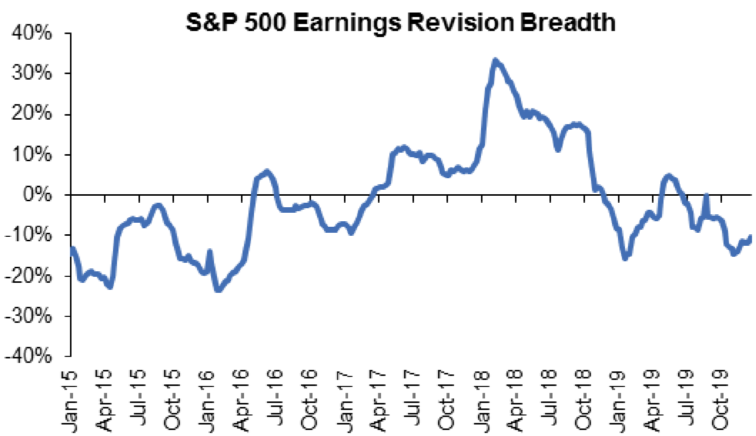
Source: Morgan Stanley Research, FTSE Fixed Income LLC, Moody's Investors Service

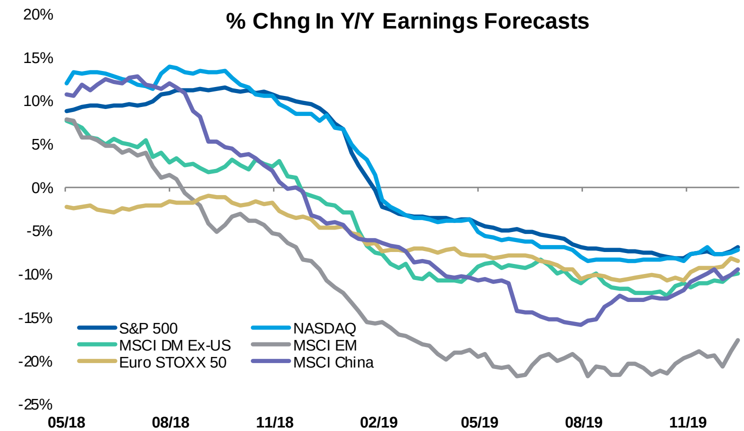
- MS Research has counted ~359 downgrades in Moody's sub IG cohort so far in 2019. That is incrementally more than the 192 total last year during the same time period
- Decompression has been a dominant theme in both leveraged loans and HY, with the B-BB

Global Earnings Revisions: Hitting A Trough Point

US: S&P earnings estimates for 2019 were revised down at a fast pace over the course of the year, currently at -7% Y/Y.

RoW: Emerging markets are still trailing RoW, as Y/Y forward projections have come down nearly 20%.





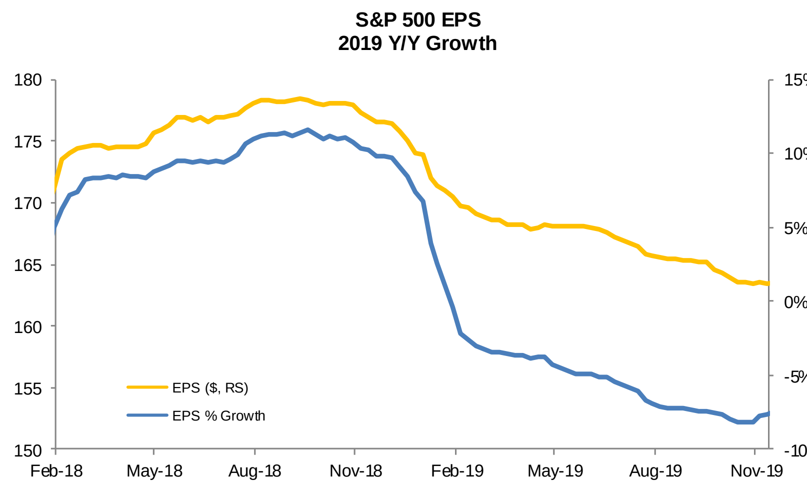
Source: MS Custom Baskets, FactSet

Index	Dec. 2020 Base case Index Target (% upside)	MS Top-down Base Case EPS forecast (YoY growth) 2019	2020	2021	Consensus EPS forecast (YoY growth) 2019	2020	2021	MS Base Case N12M PE Dec. 2020	Consensus N12M PE	Consensus N12M PE 5Y Avg	10Y Avg
S&P 500	3,000 -3%	162 0%	162 0%	177 9%	163 1%	179 10%	198 11%	17.0x	17.5x	16.6x	14.9x
MSCI Europe	1,720 4%	106 -1%	108 2%	114 6%	107 0%	117 10%	126 8%	15.0x	14.4x	14.5x	12.9x
TOPIX	1,860 9%	117 -1%	124 6%	133 7%	118 0%	124 5%	133 7%	14.0x	13.9x	13.7x	13.7x
MSCI EM	1,150 9%	77 1%	86 12%	96 12%	77 1%	87 14%	99 13%	12.0x	12.4x	11.7x	11.1x

Source: Morgan Stanley Research, as of November 18th, 2019

Information Sourced By: Joanie Kim, John Storey, Michael Mullen

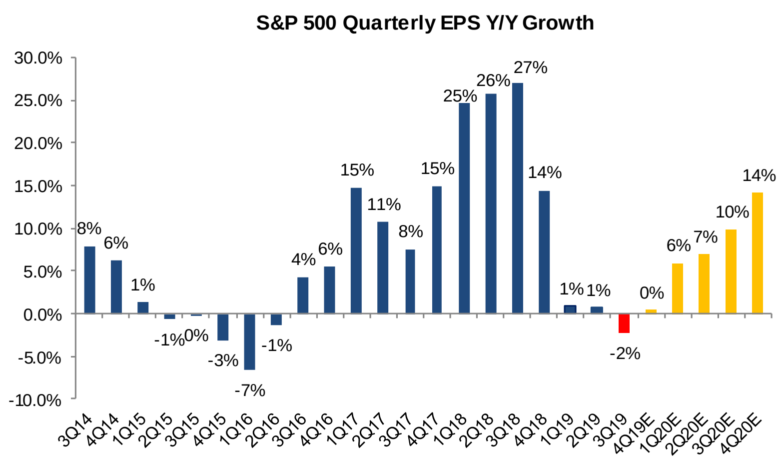
US Earnings: 3Q19 Delivers On Long-Awaited Capitulation



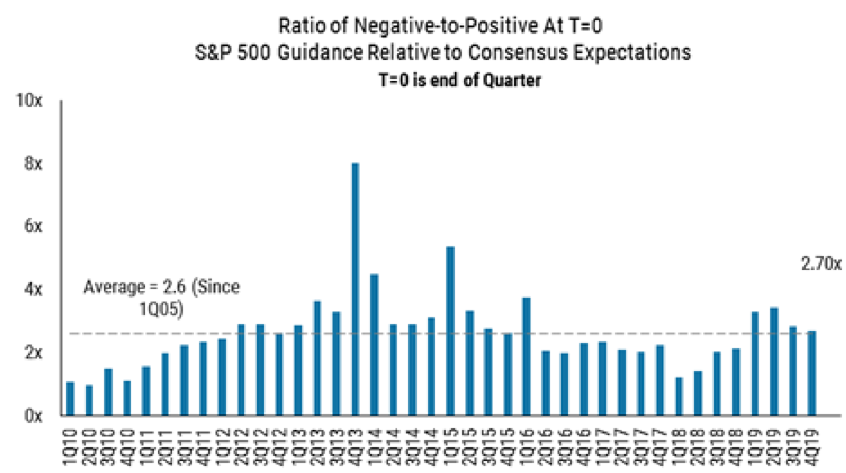
Source: MS Custom Baskets, FactSet

S&P 500 EPS Growth Sector	3Q19 Reported Growth	Cons. FY20 Est. Growth
Energy	-39.4%	21.3%
Industrials	1.9%	16.1%
Materials	-9.6%	13.7%
Consumer Discretionary	-2.0%	12.4%
Communication Services	0.3%	12.1%
Information Technology	-5.6%	9.5%
Health Care	8.9%	9.0%
Consumer Staples	2.2%	6.0%
Real Estate	6.3%	5.5%
Utilities	10.1%	5.0%
Financials	-3.2%	4.8%
S&P 500	**-2.3%**	**9.7%**

Source: Factset, Morgan Stanley Sales & Trading



Source: Refinitiv, S&P, Morgan Stanley Research, MS Custom Baskets



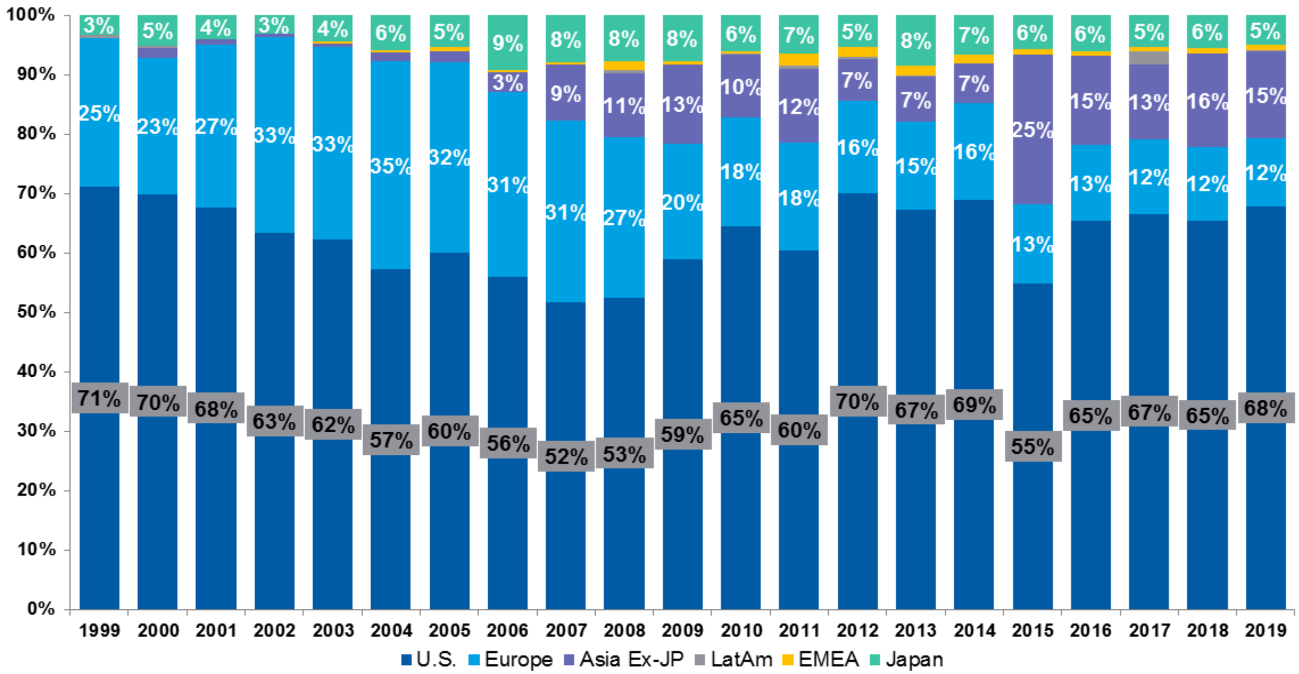
Source: Morgan Stanley Research

Information Sourced By: Joanie Kim, John Storey, Michael Mullen

Please Note: The following is Bloomberg data summarized by Morgan Stanley Sales & Trading:

Liquidity

- **US Notional Dominates on a Global Scale:**
  - Over the last 10 years, ADVT on US exchanges has exceeded the sum of total notional traded globally, on average by ~2x
  - On average, the US has represented ~63% of total notional traded globally
- **Notable Global Share Gainers/Losers:**
  - **1999 – 2006:** US Share Peaks At 71%; Europe Commands Another 25%
  - **2008 – 2010:** US Share Mean Reverts Back To 65% Post GFC
  - **2015:** China Stock Connect Takes Considerable Share From Europe & US
  - **2016:** Macro Concerns, Political Risk, & Disappointing China Stock Connect Performance Push Flows Back Into The US
  - **2017 – 2019:** US Gains Marginal Share As Flows Into Exchange-Traded Vehicles Accelerates



Screen Criteria:

Trading Status: Active

Common Stock

Exchange: Region

Current Mkt Cap >$5B (USD)

ADVT over 3Mo > $100M (USD)

Source: Bloomberg

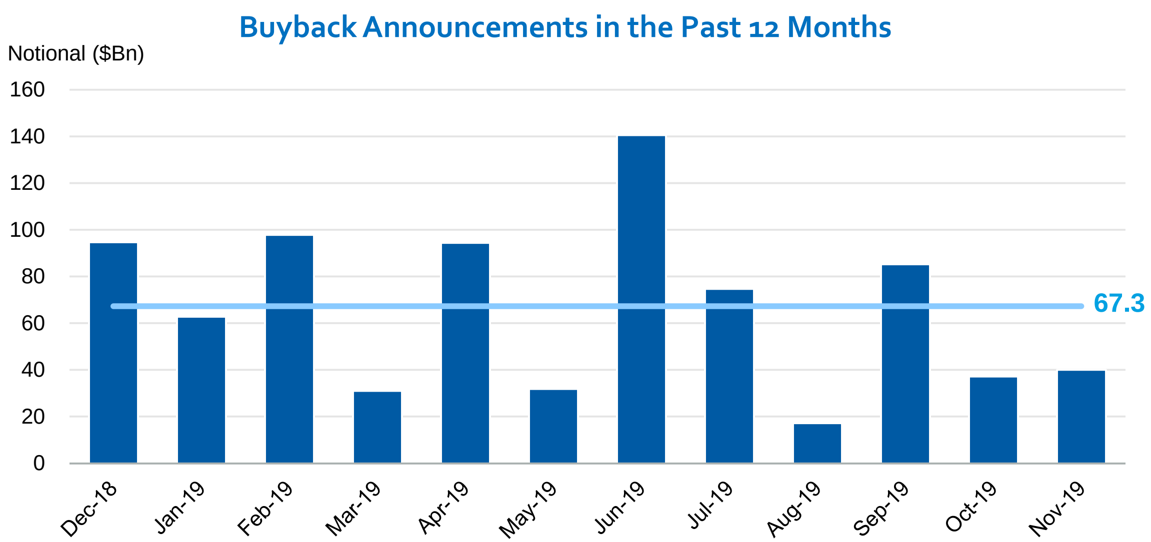
Information Sourced By: Michael Mullen

Exploring Market Breadth

The investable universe continue to shrink as Large/Mega caps dominate market share, acquire competitors, and buyback shares.

<u>**Stats**</u>

- **Breadth Shrinking:** In 1997, there were 7,355 U.S. stocks; Today, there are fewer than 3,600
- **The Big Getting Bigger:** Mega/Large Cap stocks comprise ~ 91% of total US stock market value today
- **Sector Skew:** Tech's (21%) weighting in the Wilshire 5000 Total Market Index is greater than that of Energy (5%) + Consumer Staples (7%) + Materials (3%) + Real Estate (4%)



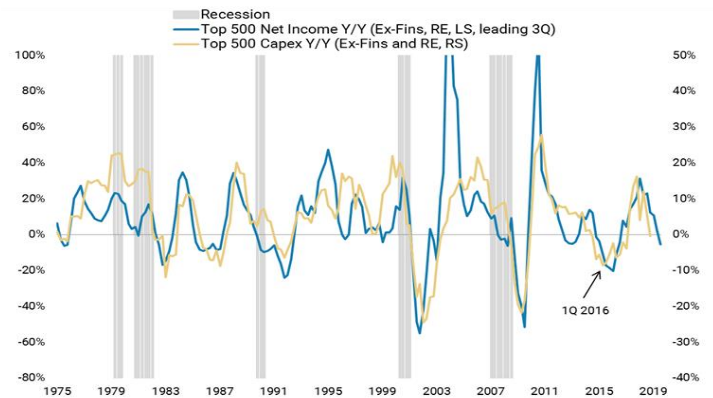
Source: Morgan Stanley GCM

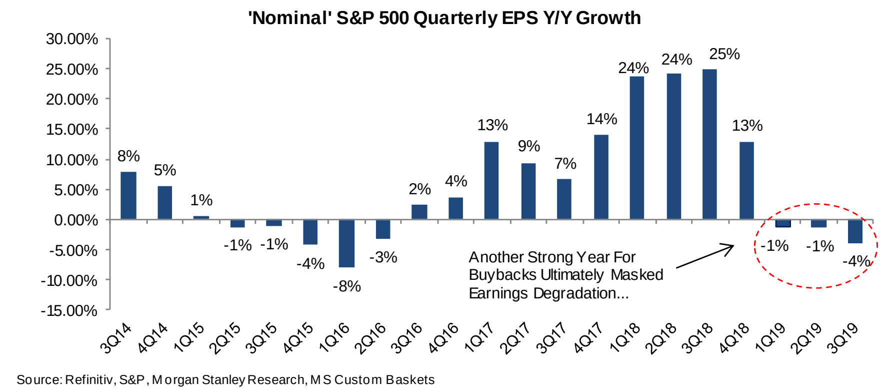
Figures Shown Are In $Bn Notional

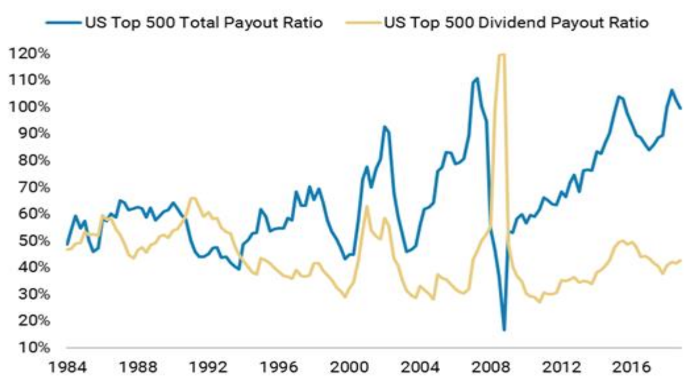
Capital Spending Growth At Risk

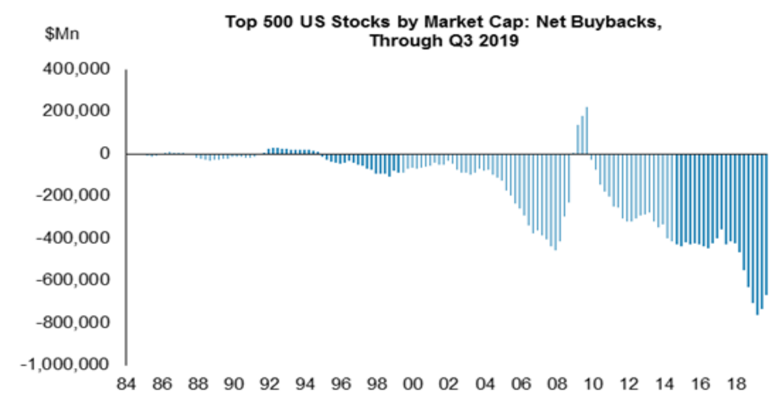
Capex spend has been historically tied to Net Income, which MS Research predicts will remain relatively flat in the coming year. MS Research believes consensus estimates for Net Income to be too unrealistic due to continuing margin pressures that have been driven by rising wages and input costs. Capex spend should fall as a result.

Thanks to a boost from repatriation, companies were returning a near record amount of capital to shareholders as a percent of net income, but MS' Strategists think that **pressures on earnings and a lapping of the boost from repatriation are likely to lead to a reduction in capital return**.









Source: US Equity Strategy: Strategy Data Pack - December 2019 (6 Dec 2019)

Global Equity Positioning: PB Positioning & Performance

US Equity L/S Funds Up ~13-14% Through the End of Nov, Representing a ~50% Capture Ratio Relative to the S&P 500

YTD Historical Performance Dispersion

North America Based Equity L/S Funds

Year	Median	Average	Percentiles 5%	25%	50%	75%	95%	95%-5%	# Funds
Dec-09	20.32	24.59	(3.01)	10.30	20.32	34.50	69.08	72.09	333
Dec-10	7.96	9.00	(5.86)	2.64	7.96	14.33	27.96	33.82	344
Dec-11	(1.95)	(2.49)	(20.42)	(8.22)	(1.95)	3.15	14.81	35.23	364
Dec-12	8.00	8.28	(6.29)	2.28	8.00	13.67	26.44	32.73	353
Dec-13	16.34	17.50	(0.50)	9.15	16.34	23.47	42.66	43.16	345
Dec-14	3.93	5.55	(9.27)	(0.91)	3.93	10.32	24.47	33.75	288
Dec-15	3.22	2.31	(16.37)	(2.68)	3.22	8.52	17.24	33.61	262
Dec-16	1.24	3.87	(14.07)	(3.46)	1.24	8.10	20.52	34.60	215
Dec-17	10.65	12.35	(3.57)	4.71	10.65	19.15	33.92	37.49	174
Dec-18	(4.67)	(3.95)	(21.43)	(12.09)	(4.67)	3.13	16.36	37.79	166
Nov-19	13.54	14.22	(4.58)	7.30	13.54	20.80	30.55	35.13	129

Source: Morgan Stanley Prime Brokerage, Investor letters collected by Morgan Stanley

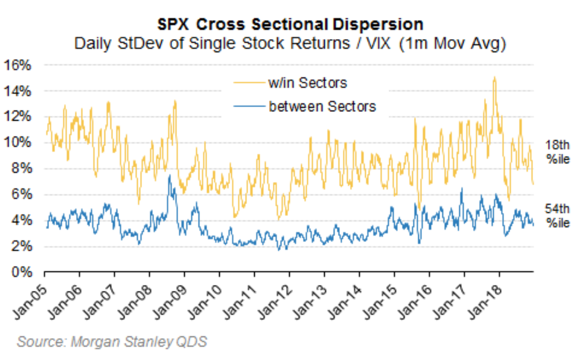
Historical Leverage Levels & Percentile Rankings

	Gross Leverage Weighted (Non-Beta)	Gross Leverage Median (Non-Beta)	Net Leverage Weighted (Non-Beta)	Net Leverage Median (Non-Beta)
Current Level	**192%**	**162%**	**50%**	**47%**
Lowest 4Q18 Level (12/24)	170%	145%	42%	41%
Change Since 12/24/18	**21.8%**	**17.4%**	**8.1%**	**6.2%**
Percentile vs. Past				
1-Year % Rank	96%	88%	97%	95%
3-Year % Rank	92%	62%	57%	52%
5-Year % Rank	95%	76%	58%	45%
Since Jan '10 % Rank	96%	88%	44%	31%
Since Jan '05 % Rank	98%	90%	40%	29%

Source: Morgan Stanley Prime Brokerage, Data as of Dec 26, 2019
Note: Historical Percentile Rankings use the most recent weighted gross and net leverage levels relative to each historical period

Cross Sector Dispersion off the highs

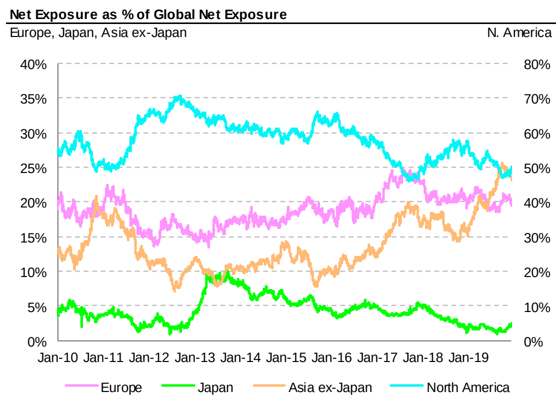
- Dispersion within sectors is relatively low on a historical basis and dispersion between sectors is around median levels on a historical basis



(Past performance is not indicative of future performance)

Exposures Across Regions Starting to Shift

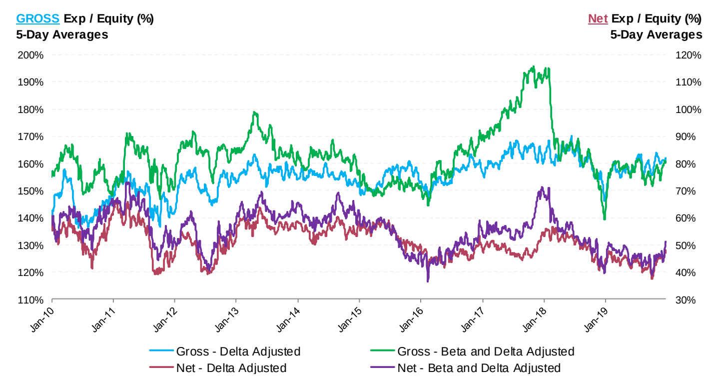
- After declining much of the year, N. Am exp stable
- Funds start to buy Japan, shifting net exp off lows
- AxJ exp rolls off highs



Source: Morgan Stanley Prime Brokerage, data as of Dec 20, 2019
Notes: Data is aggregated across global Morgan Stanley Prime Brokerage client base and is based on global cash and swap equity exposure.

US Eq L/S Weighted Net Leverage at YTD Highs

- US Eq L/S weighted net lev has reached YTD highs in recent months, mainly from short covering
- Gross lev started to decline in early Nov (in-line with seasonal trends), but is back near LT highs



Source: Morgan Stanley Prime Brokerage, Data as of Dec 26, 2019

Information Sourced By: John Schlegel, Katy Haber, Bill Meany

N. America Equity Positioning: Breaking Down Sector Exposures

December 30, 2016

N. Am Sector Exposures

	Gross Exp as % of Gross			Net Exp as % of Gross			Net as a % of Net ex. ETFs		
Sector	Current Level (%)	1-Year % Rank	% Rank Since Jan '10	Current Level (%)	1-Year % Rank	% Rank Since Jan '10	Current Level (%)	1-Year % Rank	% Rank Since Jan '10
Comm Serv	8.6	11%	84%	4.4	55%	93%	19.4	70%	96%
Cons Disc	14.2	2%	53%	2.7	0%	22%	11.9	0%	28%
Cons Stap	4.7	17%	58%	1.1	72%	57%	4.6	72%	76%
Energy	8.5	94%	34%	2.3	100%	36%	10.3	100%	56%
Financials	11.3	96%	36%	3.0	83%	12%	13.3	81%	21%
Health Care	11.4	4%	52%	2.9	2%	14%	12.9	2%	45%
Industrials	9.2	81%	90%	1.5	94%	42%	6.6	94%	55%
Info Tech	13.6	57%	19%	3.7	0%	20%	16.2	4%	38%
Materials	4.1	36%	8%	1.4	79%	26%	6.1	79%	56%
Real Estate	3.8	55%	44%	(0.5)	0%	2%	(2.2)	0%	0%
Utilities	1.6	9%	4%	0.2	43%	50%	0.8	43%	56%
ETF	8.7	74%	71%	(3.7)	51%	73%	-	-	-

December 29, 2017

N. Am Sector Exposures

	Gross Exp as % of Gross			Net Exp as % of Gross			Net as a % of Net ex. ETFs		
Sector	Current Level (%)	1-Year % Rank	% Rank Since Jan '10	Current Level (%)	1-Year % Rank	% Rank Since Jan '10	Current Level (%)	1-Year % Rank	% Rank Since Jan '10
Comm Serv	9.2	58%	94%	4.2	12%	78%	18.0	4%	77%
Cons Disc	14.4	27%	61%	3.2	98%	41%	13.8	98%	51%
Cons Stap	4.4	2%	22%	0.1	23%	3%	0.5	23%	3%
Energy	6.2	12%	2%	1.5	42%	15%	6.6	35%	16%
Financials	9.9	23%	8%	2.9	63%	18%	12.4	58%	18%
Health Care	11.8	85%	66%	3.5	100%	60%	14.8	98%	76%
Industrials	9.8	100%	100%	2.0	100%	70%	8.3	98%	87%
Info Tech	14.8	40%	49%	4.6	83%	56%	19.4	69%	58%
Materials	4.0	23%	7%	1.3	6%	11%	5.5	2%	23%
Real Estate	4.1	31%	65%	(0.1)	60%	28%	(0.5)	63%	28%
Utilities	2.1	100%	59%	0.3	58%	67%	1.2	56%	77%
ETF	8.9	100%	79%	(2.7)	98%	98%	-	-	-

December 28, 2018

N. Am Sector Exposures

	Gross Exp as % of Gross			Net Exp as % of Gross			Net as a % of Net ex. ETFs		
Sector	Current Level (%)	1-Year % Rank	% Rank Since Jan '10	Current Level (%)	1-Year % Rank	% Rank Since Jan '10	Current Level (%)	1-Year % Rank	% Rank Since Jan '10
Comm Serv	9.0	17%	80%	4.0	19%	68%	16.4	19%	68%
Cons Disc	13.9	6%	35%	3.6	62%	55%	14.9	67%	69%
Cons Stap	4.1	33%	11%	(0.2)	27%	3%	(0.7)	27%	3%
Energy	4.8	2%	0%	1.0	40%	6%	4.1	48%	6%
Financials	9.4	25%	3%	2.4	2%	5%	9.8	2%	4%
Health Care	12.3	63%	76%	4.1	67%	83%	17.0	71%	85%
Industrials	9.4	8%	87%	2.2	60%	84%	9.2	60%	90%
Info Tech	17.4	96%	100%	6.0	90%	81%	24.7	96%	88%
Materials	3.4	2%	0%	1.1	52%	7%	4.6	50%	9%
Real Estate	3.3	0%	21%	(0.2)	21%	24%	(0.8)	23%	24%
Utilities	2.3	96%	76%	0.2	12%	41%	0.7	12%	42%
ETF	10.1	98%	98%	(2.0)	100%	100%	-	-	-

December 26, 2019

N. Am Sector Exposures

	Gross Exp as % of Gross			Net Exp as % of Gross			Net as a % of Net ex. ETFs		
Sector	Current Level (%)	1-Year % Rank	% Rank Since Jan '10	Current Level (%)	1-Year % Rank	% Rank Since Jan '10	Current Level (%)	1-Year % Rank	% Rank Since Jan '10
Comm Serv	9.2	15%	80%	3.8	17%	58%	14.8	2%	58%
Cons Disc	13.2	12%	23%	3.1	23%	33%	12.1	2%	27%
Cons Stap	3.8	19%	5%	0.1	100%	19%	0.2	100%	19%
Energy	3.7	13%	2%	0.5	23%	2%	2.1	13%	2%
Financials	8.9	0%	0%	2.2	40%	7%	8.8	29%	3%
Health Care	14.0	98%	95%	4.9	100%	94%	19.5	100%	97%
Industrials	10.5	73%	97%	3.0	100%	99%	11.7	88%	99%
Info Tech	18.8	81%	98%	7.2	100%	99%	28.3	81%	97%
Materials	3.1	33%	3%	0.6	54%	6%	2.4	40%	4%
Real Estate	3.3	35%	22%	(0.2)	38%	24%	(0.8)	46%	25%
Utilities	2.3	65%	76%	0.3	52%	58%	1.0	37%	55%
ETF	8.7	71%	71%	(2.9)	75%	93%	-	-	-

Source: MS Prime Brokerage Data

Information Sourced By: John Schlegel, Katy Haber, Bill Meany

Morgan Stanley

Please Note: The following is a summary of Morgan Stanley Prime Brokerage Info By Morgan Stanley Sales & Trading:

Global Equity Positioning: Breaking Down Sector Exposures

December 30, 2016

Global Sector Exposures

	Gross Exp as % of Gross			Net Exp as % of Gross			Net as a % of Net ex. ETFs		
Sector	Current Level (%)	1-Year % Rank	% Rank Since Jan '10	Current Level (%)	1-Year % Rank	% Rank Since Jan '10	Current Level (%)	1-Year % Rank	% Rank Since Jan '10
Comm Serv	12.2	11%	84%	7.8	45%	92%	22.3	15%	87%
Cons Disc	17.1	2%	84%	5.2	47%	31%	14.8	19%	38%
Cons Stap	5.2	8%	47%	0.8	23%	18%	2.2	15%	17%
Energy	6.7	87%	46%	2.6	100%	41%	7.3	100%	52%
Financials	12.9	51%	8%	5.6	79%	18%	15.8	53%	9%
Health Care	8.8	13%	50%	3.4	9%	34%	9.6	0%	33%
Industrials	10.3	77%	85%	3.6	98%	41%	10.1	100%	51%
Info Tech	12.4	62%	11%	4.4	74%	46%	12.5	72%	51%
Materials	3.5	30%	6%	1.5	92%	67%	4.3	94%	68%
Real Estate	3.1	28%	31%	0.2	0%	14%	0.4	0%	14%
Utilities	1.5	81%	89%	0.2	2%	4%	0.5	4%	5%
ETF	6.2	83%	67%	(3.0)	87%	85%	-	-	-

December 29, 2017

Global Sector Exposures

	Gross Exp as % of Gross			Net Exp as % of Gross			Net as a % of Net ex. ETFs		
Sector	Current Level (%)	1-Year % Rank	% Rank Since Jan '10	Current Level (%)	1-Year % Rank	% Rank Since Jan '10	Current Level (%)	1-Year % Rank	% Rank Since Jan '10
Comm Serv	12.7	37%	92%	7.2	6%	73%	18.2	2%	72%
Cons Disc	16.8	13%	74%	5.3	79%	41%	13.4	58%	24%
Cons Stap	5.2	21%	44%	0.2	29%	5%	0.5	29%	5%
Energy	4.4	38%	5%	1.9	58%	23%	4.8	54%	19%
Financials	11.4	0%	0%	6.5	90%	45%	16.4	33%	16%
Health Care	9.8	100%	84%	4.4	98%	71%	11.2	96%	62%
Industrials	10.8	100%	99%	5.2	100%	99%	13.2	100%	98%
Info Tech	13.5	42%	29%	5.7	83%	76%	14.5	65%	69%
Materials	3.6	88%	19%	2.1	98%	77%	5.4	85%	74%
Real Estate	3.7	81%	72%	0.5	98%	42%	1.2	98%	42%
Utilities	2.0	94%	99%	0.5	92%	89%	1.3	73%	80%
ETF	5.9	83%	60%	(3.5)	25%	56%	-	-	-

December 28, 2018

Global Sector Exposures

	Gross Exp as % of Gross			Net Exp as % of Gross			Net as a % of Net ex. ETFs		
Sector	Current Level (%)	1-Year % Rank	% Rank Since Jan '10	Current Level (%)	1-Year % Rank	% Rank Since Jan '10	Current Level (%)	1-Year % Rank	% Rank Since Jan '10
Comm Serv	12.3	6%	71%	7.0	15%	66%	18.9	48%	71%
Cons Disc	16.9	37%	70%	6.1	92%	84%	16.4	98%	84%
Cons Stap	4.7	44%	19%	(0.3)	33%	4%	(0.9)	33%	4%
Energy	3.3	2%	0%	1.4	12%	9%	3.6	19%	10%
Financials	10.6	40%	5%	5.6	21%	16%	14.9	54%	11%
Health Care	10.4	46%	85%	4.4	6%	67%	12.0	38%	70%
Industrials	10.4	4%	77%	5.1	19%	89%	13.7	90%	99%
Info Tech	15.6	100%	79%	5.9	33%	74%	15.9	71%	77%
Materials	3.5	35%	16%	1.7	0%	59%	4.5	12%	58%
Real Estate	2.6	2%	0%	0.1	27%	13%	0.3	29%	13%
Utilities	2.2	98%	100%	0.3	0%	29%	0.7	2%	26%
ETF	7.1	100%	90%	(1.7)	100%	100%	-	-	-

December 26, 2019

Global Sector Exposures

	Gross Exp as % of Gross			Net Exp as % of Gross			Net as a % of Net ex. ETFs		
Sector	Current Level (%)	1-Year % Rank	% Rank Since Jan '10	Current Level (%)	1-Year % Rank	% Rank Since Jan '10	Current Level (%)	1-Year % Rank	% Rank Since Jan '10
Comm Serv	11.9	17%	60%	6.6	15%	58%	16.9	2%	55%
Cons Disc	16.6	31%	64%	6.5	71%	91%	16.9	52%	88%
Cons Stap	4.1	0%	3%	0.4	98%	29%	1.0	98%	29%
Energy	2.4	6%	1%	0.5	10%	2%	1.4	6%	1%
Financials	9.8	4%	1%	4.8	46%	8%	12.4	27%	3%
Health Care	12.0	100%	100%	5.5	100%	93%	14.1	100%	91%
Industrials	10.6	17%	78%	4.9	31%	74%	12.5	2%	75%
Info Tech	18.5	94%	99%	7.7	96%	100%	19.8	96%	99%
Materials	3.1	15%	2%	1.3	54%	43%	3.3	48%	38%
Real Estate	2.8	81%	15%	0.3	100%	39%	0.8	100%	36%
Utilities	1.9	4%	77%	0.3	81%	52%	0.9	73%	46%
ETF	5.9	88%	61%	(3.7)	29%	50%	-	-	-

Source: MS Prime Brokerage Data

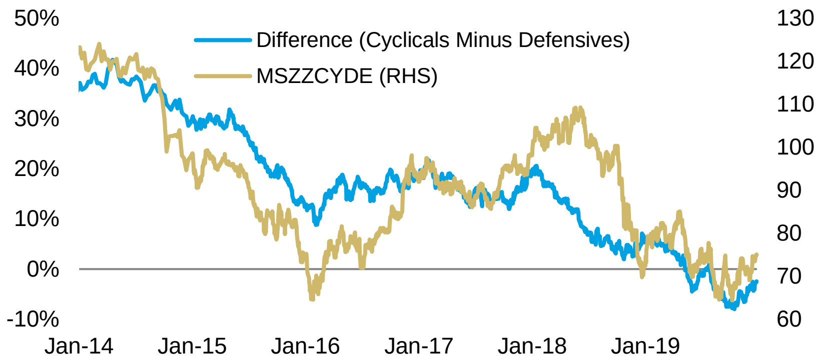
Information Sourced By: John Schlegel, Katy Haber, Bill Meany

North America Equity Positioning: Tracking Exposures

Cyclicals and Financials Positioning Still Remains Low

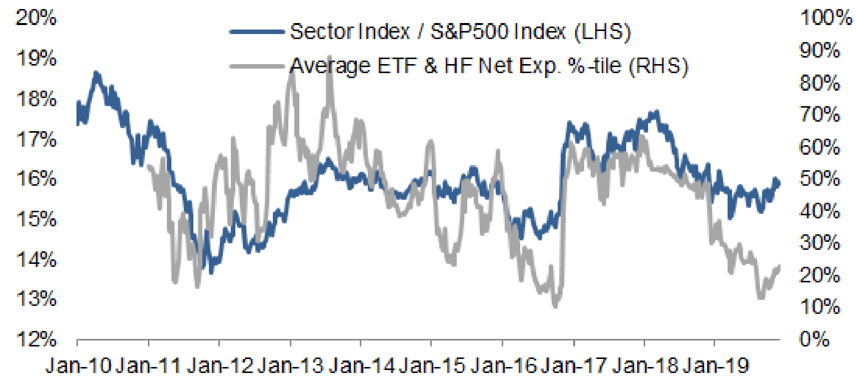
HFs Still Heavily Biased Away from Cyclicals

N. America Cyclicals MINUS Defensives Net Exp. — MSZZCYDE



...and Away from Financials (as are ETFs)

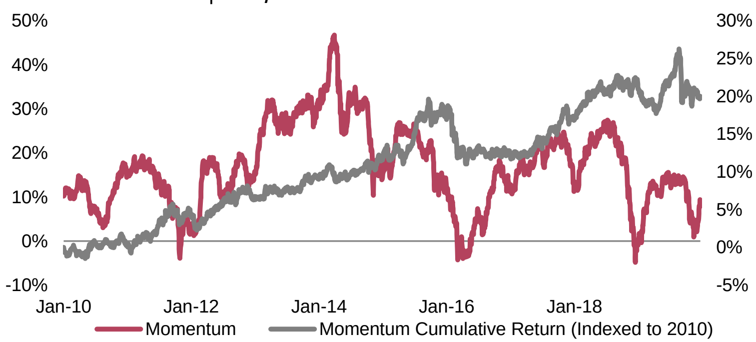
Financials Relative Return — Average Net Exp. %-tile



Exposure to Momentum Remains Low into YE with Negative Sentiment Growing on the Long Side

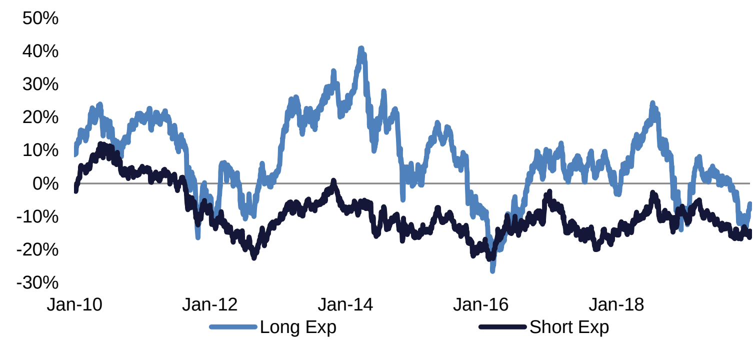
HF Net Exposure to Momentum Quite Low Again...

Current Level Net Exp: 8%, %-tile Rank Since '10: 18% — Factor Rtn



...as Long Exposure has a Negative Momentum Skew

Long Exp: -6% (%-tile: 14%); Short Exp: -14% (%-tile: 23%)



Source: Morgan Stanley Prime Brokerage, data as of Dec 26, 2019

Information Sourced By: John Schlegel, Katy Haber, Bill Meany

Global Equity Themes & Quantamental Offering

Global Equity Themes: US Special Situations (Sales & Trading) – Ingredients For Further M&A Activity Remain

As of the end of 3Q, the volume of announced M&A announced was down ~19% year over year. Corporates were cautious of moving forward with potential deals given the volatility in the markets and economic uncertainty. As economic tensions partially eased, the floodgates were opened. 2019 will now be the sixth consecutive year of $3 trillion in Global M&A volume punctuated by megadeals in healthcare, technology, and industrials.

There's ample capital for M&A (given strong liquidity across debt and equity markets), M&A remains strategically important given the difficulty of getting growth organically, and for the first time in a while, in 4Q – acquirer's stocks have outperformed the S&P by close to 3%, which should provide corporates with confidence moving forward. And with CELG and other deals closed, event driven money is plentiful and ready to put to work. The combination of the two should suggest an eventful future in event driven land.

Key Themes

- Megadeals continue – consolidation in mature markets where topline and/or profitability is stagnating (AMTD/SCHW, DuPont N&B/IFF, IR Industrial/GDI) and separations in complex portfolios (MSG, DD, MPC)
- Activism has returned to record levels and have been focusing on more long term plays in addition to its classic playbook

Announced Separations: TEN, NLSN, MSG, UTX, ETN, GPS, FTV, CNHI

POTENTIAL "Events"

- M&A Targets / Exploring Strategic Alternatives: AXTA, WBA, FSCT, ELF, BLMN
- Asset Sales / Restructuring / Portfolio Optimization / Turnaround: DD, CE, DELL, EBAY

Activist Situations: T, BOX, CBL, CLDR, BBBY, LOW, VAL, EBAY, BLMN, ELF

Stubs/Trackers: DELL/VMW, LSXMK/SIRI, LTRPA/TRIP, TDS/USM, OXY/WES, IAC/MTCH

Definitive Deal Spreads

Target	Acquirer	Announce Date	Equity PP $mm	Arb Spd $mm	Type	Structure	Expected close
AGN	ABBV	6/25/19	66,630	2,594	C&S	Merger	3/6/20
RTN	UTX	6/10/19	61,390	1,283	Stock	Merger	4/9/20
S	TMUS	4/30/18	32,664	16,004	Stock	Merger	1/20/20
AMTD	SCHW	11/25/19	28,529	1,168	Stock	Merger	6/24/20
WCG	CNC	3/27/19	16,983	105	C&S	Merger	3/13/20
TIF	MC FP	11/25/19	16,200	203	Cash	LBO	9/22/20
CZR	ERI	6/24/19	11,704	110	C&S	Merger	3/5/20
MDCO	NVS	11/25/19	9,665	21	Cash	Tender	2/23/20
LPT	PLD	10/28/19	9,405	(38)	Stock	Merger	2/22/20
CY	IFX GR	6/3/19	8,728	156	Cash	Merger	2/13/20
ZAYO	Dig Colony	5/8/19	8,389	134	Cash	LBO	3/6/20
TSG	FLTR LN	10/2/19	7,857	520	Stock	Merger	6/11/20
MLNX	NVDA	3/11/19	7,367	450	Cash	Merger	2/1/20
WBC	ZF	3/28/19	7,026	64	Cash	Merger	2/19/20
GWR	Brookfield	7/1/19	6,476	44	Cash	LBO	1/22/20
INXN	DLR	10/29/19	6,327	19	Stock	Tender	3/2/20
TECD	Apollo	11/13/19	5,140	53	Cash	LBO	2/28/20
DGC	KL CN	11/25/19	4,215	(87)	Stock	Merger	2/2/20
LOGM	Francisco	12/17/19	4,180	(2)	Cash	LBO	3/29/20
TGE	BX	12/17/19	4,023	58	Cash	LBO	3/29/20
IBKC	FHN	11/4/19	3,994	24	Stock	Merger	2/22/20
WMGI	SYK	11/4/19	3,902	131	Cash	Tender	10/22/20
ACIA	CSCO	7/9/19	3,387	126	Cash	Merger	2/23/20
BOLD	4503 JP	12/3/19	3,321	27	Cash	Tender	1/19/20
ADSW	WM	4/15/19	3,130	26	Cash	Merger	2/13/20
TCBI	IBTX	12/9/19	3,019	(10)	Stock	Merger	3/23/20
AXE	CD&R	10/30/19	2,905	(200)	Cash	Merger	2/20/20
ETO	HAS	8/22/19	2,898	10	Cash	Merger	1/26/20
ARQL	MRK	12/9/19	2,876	(19)	Cash	Tender	1/25/20
EE	JPM IIF	6/3/19	2,780	18	Cash	LBO	2/15/20
PEGI	CPPIB	11/4/19	2,628	(42)	Cash	Merger	4/6/20
AVP	NTCO3 BZ	5/23/19	2,608	44	Stock	Merger	1/17/20
THOR	SNY	12/9/19	2,510	7	Cash	Tender	1/25/20
AYR	MARUB	11/6/19	2,388	(7)	Cash	Merger	3/12/20
RARX	UCB BB	10/10/19	2,270	43	Cash	Merger	2/11/20
FIT	GOOGL	11/1/19	2,159	245	Cash	Merger	4/4/20
CGX	CINE LN	12/16/19	2,153	(16)	Cash	LBO	3/19/20
INST	Thoma	12/4/19	2,025	(52)	Cash	LBO	2/22/20
HBC	HBC SHs	10/21/19	1,899	397	Cash	Merger	2/25/20
JAG	PE	10/14/19	1,764	(8)	Stock	Merger	1/14/20
KEM	2327 TT	11/12/19	1,580	30	Cash	Merger	9/9/20
CISN	Platinum Eq	10/22/19	1,485	4	Cash	LBO	1/19/20
CBPX	SGO FP	11/12/19	1,283	21	Cash	LBO	7/23/20
PACB	ILMN	11/1/18	1,224	563	Cash	Merger	3/31/20
CNL	601899 CH	12/2/19	1,117	23	Cash	Merger	4/5/20
WAIR	Platinum Eq	8/9/19	1,102	3	Cash	LBO	1/12/20
AKS	CLF	12/3/19	1,092	4	Stock	Merger	3/4/20
TIVO	XPER	12/19/19	1,088	19	Stock	Merger	4/4/20
ACI	PSPIB	10/21/19	1,005	2	Cash	Merger	2/22/20

Source: MS Special Situation Desk. *Please ask if you would like to receive this monitor*

Information Sourced By: Eram Zaghi

Global Equity Themes: US Special Situations (Sales & Trading) Ideas

Idea / Theme	Pitch	Source
• **Long Expedia (EXPE)**	• Although Expedia's stock has slightly recovered since the November dip, it is still down ~20% since its earnings call. With all of the events causing the decline baked into their projections, an LBO analysis still yields substantial upside even at a sizeable premium • With Barry Diller owning 48% of the voting rights, we view the probability of a transaction happening as favorable despite Barry's inability to gain majority of voting power • This view is further supported when looking at the multiple longer term investments required that would necessitate shareholder patience. A transaction would provide longer term shareholders with an immediate return at / above their investment given the fact that the stock has yet to surpass $140/share over L2Y and would free the company from near term public scrutiny • The opportunity provides asymmetric upside as even without a transaction, the company not only looks undervalued (Brian Nowak PT at $130 – lowest Broker PT, outside of Mizuhou, at $125), but has also promised substantial capital returns to shareholders via share repurchases (29MM authorized / 145MM) and further dividends	Change Brings 4 Key Questions (4 Dec 2019) A Handful of New Headwinds for '20; Lower PT to $130 (7 Nov 2019) Publishing Updated Model and What Matters Here (30 Jul 2019)
• **Long MSG (MSG)**	• In early November, MSG provided a revised spin plan and is now targeting the spin-off of its Entertainment segment targeted for 1Q20. Concurrently, there have been rumors regarding Silver Lake's interest in acquiring a larger stake in the Rangers and Knicks before the transaction • The probability of Silver Lake following through with either a larger stake or minority buyout seems probable not only because of their penchant for getting involved in sports franchises, but also because of the value proposition that exists with having more control over the poorly run franchise that has hurt the value of the company substantially (often referred to as the "Dolan" discount) • Even without a transaction, we see substantial upside as the company continues to tread substantially below street consensus PT of $357 (90%/10% BUY/HOLD). If Silver Lake does not go forward with a larger or majority stake, the spin should at the very least unlock substantial value as seen in our SOTP analysis	F1Q20 - A Cleaner Spin (8 Nov 2019) Viva Las Vegas (21 Aug 2019) Spinning or Winning? (6 Aug 2019)

Information Sourced By: Eram Zaghi

Global Equity Themes: US Special Situations (Sales & Trading) Ideas

Attractive Arb Spreads:

Deal	**AMTD/SCHW**	**MLNX/NVDA**
Terms	1 AMTD = 1.0837*SCHW Shares	1 MLNX = $125 Cash
Spread	4.8% gross / 7.4% ann'd to an est 8/15/20 close	6.3% gross / 65.4% annualized to an estimated 1/31/20 close
Down / Up	2.2 down / 1 up (69.1% probability of close)	3.8 down / 1 up (79% probability of close using $90 as break price)
Timing	3Q 2020	1Q 2020
Key Remaining Conditions	SCHW to file with Dept. of Justice (DOJ) requesting approval and SCHW to file proxy S-4 publicly and with the SEC	Foreign regulatory reviews most notably China SAMR and other outstanding reviews include Germany, Hungary and the Czech Republic
Commentary	We think the ultimate probability is higher than what the market is implying, and the 6-10 month time frame for regulatory approval could lead to volatility in the stock and present buying opportunities. Although regulators are likely to take a narrow view of the RIA market and regulators will most likely prefer structural to behavioral remedies, a key consideration in implementing a structural remedy is whether a buyer exists that could replicate lost competition and compete post merger. We think such an environment exists with existing competitors that are capable of serving the spectrum of RIA sizes. As such, even if regulators see an issue, we believe there is a remedy that both sides would be able to agree to.	China SAMR review is very likely the key gating item. Long dated closing guidance of by year end 2019 is likely baking in conservatism related to the China review. Large downside if deal breaks since unlikely other buyers like INTC or XLNX can buy them if China doesn't allow NVDA to buy them. We've seen slow progress with China SAMR regulatory approvals as recent deals like FNSR/IIVI, OAK/BAM, and VSM/Merck KGaA have closed after receiving SAMR approval. Other deals that need China approval include ACIA/CSCO, AGN/ABBV, CY/IFNNY, MLNX/NVDA, WBC/ZF

Global Equity Themes: China's "Double Dip" Risk

- **MS China Economist Robin Xing now thinks** 3Q YoY GDP growth could soften to 6.0% (vs. 6.2% in 2Q), reaching the low end of government's growth target of 6-6.5% this year. **Base case:** 1) policy easing remains incremental and defensive in nature 2) continue to expect 0.75-1.0ppt of GDP local government bond front-loading and modest LPR cuts in the coming quarter. 3) China's economic growth could continue to soften. **Risks to a growth double-dip would increase if tariffs on the remaining US$300 billion of imports from China go into effect.**

- **Robin maintains his view that USDCNY could reach 6.85 by year-end, as an 'uncertain pause' G20 outcome and dovish Fed stance at the June FOMC have helped to reduce pressure on CNY in the near term.**

- That said, should trade tensions escalate again in the coming months, *the PBOC may allow some market-warranted CNY depreciation*, while adopting **FX tools** (such as countercyclical factors in CNY fixing, **window guidance, tightening in offshore CNH liquidity** and/or **direct intervention with FX** reserves) to manage CNY volatility

China/US Post G-20 Outcome

- Morgan Stanley's US public policy analyst, Michael Zezas, thinks the outcome of the G20 summit represents an **"uncertain pause".**

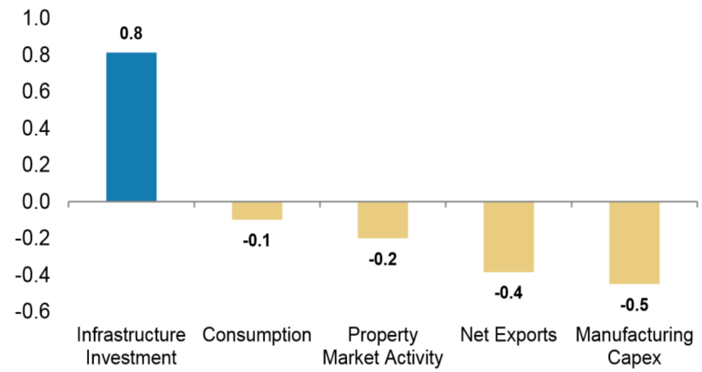
- There is no immediate escalation as tariffs on the remaining US$300bn are put on hold, but there is **still no clear path towards a comprehensive deal either**.

- **Looking forward,** the team is watching three signposts:
  - 1) Whether meetings and calls resume;
  - 2) Revelation of details that show key issue gaps are closing
  - 3) Domestic pushback in both countries, to gauge how the trade situation pans out
  - .

The March National People's Congress released a fiscal stimulus package as the market expected: It contains;

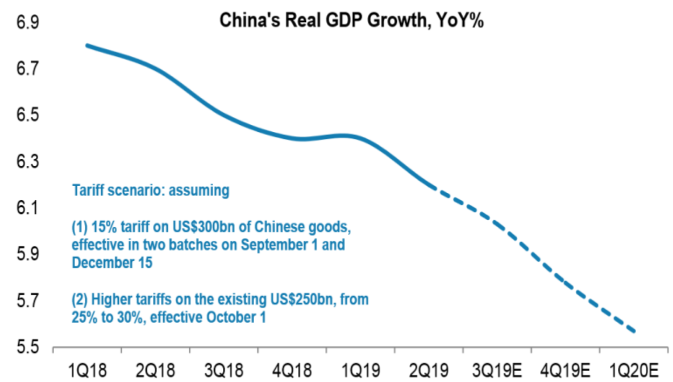
1. Rmb 2 trillion tax and fee cuts (including Rmb 700-800 billion VAT cuts, 2-4pp lower social pension contribution rate, and corporate income tax cut for SMEs
2. Rmb 800 billion more local government special bond (LGSB) issuance (Rmb 2.15 trillion in 2019)

Key Drivers/Drags On 2019 GDP Growth Change (vs 2018)



Source: Morgan Stanley Research

China GDP Growth Trajectory



Source: Bloomberg, CEIC, Wind, Morgan Stanley Research forecasts

Source: Asia Economics: G20 offers no reprieve from double dip (1 Jul 2019) / China Economics: Weaker Growth Calls for More Defensive Easing (16 Sep 2019)

China A-Shares: Index Inclusions and Structural Growth Stories

Thesis (Morgan Stanley China Equity Strategist Laura Wang)

China's A-share market has become the second largest and the second most liquid equity market in the world, with its US$8.2 trillion market cap and US$95.7bn average daily turnover during 2019 (as of end April 2019).

Investors concerned A-share market driven by retail: Retail investors account for over 80% of the trading volume, and hold 50% of the free-float market cap. The common perception is that retail investors tend to rely on price momentum, speculation, and headlines rather than fundamentals when making investment decisions.

However, China's A-share market is well on track to become more integrated into the global market. By the end of 2019, MSCI EM will increase its inclusion factor from 5% to 20%. FTSE Russell has also scheduled to include A-shares into its indices starting from June 2019. Laura expects such index rebalancing events to drive ~US$20-28bn passive fund inflows while total foreign inflow into A-shares should be around US$70-125bn for the entire 2019

MS Research Trading Recommendations

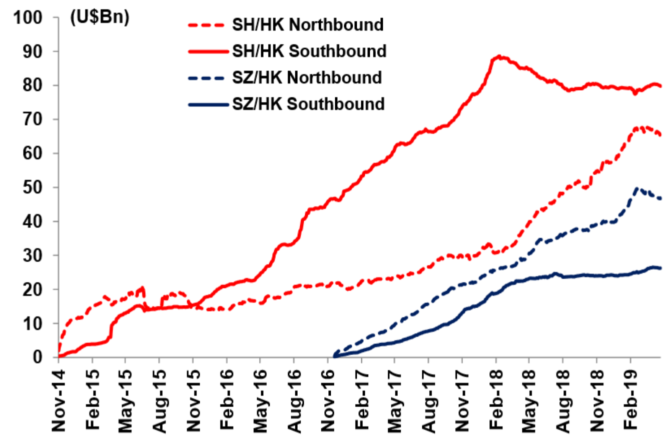
Hong Kong Exchange (388 HK) captures the growth in Northbound flow: Rising equity and bond portfolio flows will lead to greater activity on the HKEX platform and rising revenues.

China Software represents undiscovered growth: Increasing focus on internal efficiency amid slowing corporate top-line growth and rising labor costs boosts demand for software and outsourced IT services. Prefer Glodon (2410 CH) on successful SaaS transition for core construction cost estimation product, and Thunisoft (300271 CH) on long-term IT demand growth from court system.

China Consumer benefiting from premiumization: While there is increased focus on lower tier cities for catch-up growth, all consumers will shift to more expensive products. Channel checks indicate strong demand for premium liquor, and Moutai (600519 CH) remains the top pick due to rising ASP and tight supply, which supports the prices for other premium brands.

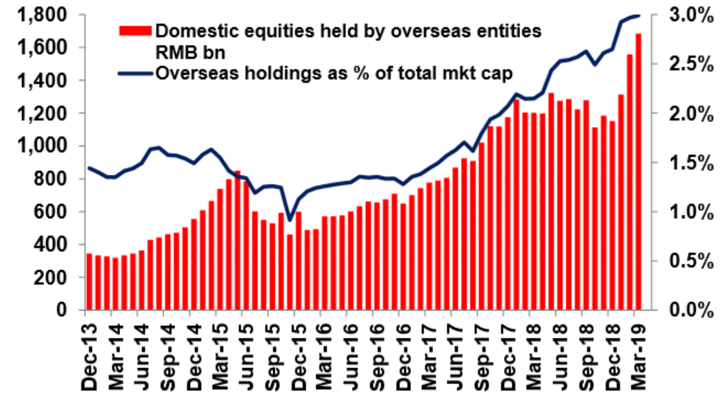
<u>Baskets To Go Long:</u>
MS China A-Share Inclusion (MSAPMSCI Index): *Key Basket Inclusion:* Jiangsu Hengrei (600276 CH)

Northbound Flow Growing Despite Market Volatility



Source: Morgan Stanley Research

Overseas investors hold 3% of Total A-share equities Market Cap



Source: Morgan Stanley Research

Source: Asia Primer: China Capital Markets Access Guide (16 May 2019), EM Strategy and Economics: The Transformation of China's Capital Flows (11 Feb 2019), China IT Services and Software: Coding For Alpha (18 Jun 2019), Chinese Liquor: 1H19 preview: Strong Pricing Momentum Continues (8 Jul 2019)

Driving Alpha in Europe: Key Themes & Single Name Ideas

Buyer's Compendia

The MS EU Equity Strategy team updated some of their preferred stock screens to identify Value ideas that may offer an interesting entry point. Besides their regular screens, they screened for ideas related to: 1) Private Equity Returns to Europe; and 2) Overweight-rated stocks with low Momentum.

There are 110 stocks that appear multiple times on their regular screens, including 30 stocks rated Overweight by Morgan Stanley research analysts. In the order of highest upside to analysts' price targets a few of them are: **Eutelsat (ETL FP), Michelin (ML FP), Anglo American (AAL LN), Arcelormittal (MT NA), Lafargeholcim (LHN SW), Glencore (GLEN LN), etc.**

- **Guest Screen #1– Private Equity Returns to Europe: FLSmidth (FLS DC), Dixons Carphone (DC/ LN), Glanbia (GLB ID), Saipem (SPM IM), Saras (SRS IM) and SSAB (SSABA SS).**
- **Guest Screen #2 – Overweight-rated stocks with low Momentum: Ipsen (IPN FP), Wood Group (WG/ LN), Caixabank (CABK SM), Arcelormittal (MT NA) , etc.**

Seller's Compendia

The MS EU Equity Strategy's Sellers' Compendium produces 57 stocks that appear 2 or more times in their regular quantitative screens looking for sell ideas. Six are Underweight rated, namely **Basic Fit (BFIT NA), Adidas (ADS GR), Deutsche Boerse (DB1 GR), Eurofins (ERF FP), Fabege (FABG SS), and Tecnicas Reunidas (TRE SM)**

- **Guest Screen #1 – Underweight-rated stocks with high Momentum: Atlas Copco (ATCOA SS), Casino (CO FP), Suez (SEV FP), Kone (KNEBV FH), Intertek (ITRK LN)**
- **Guest Screen #2 – Expensive Cyclicals: Givaudan (GIVN SW), Assa Abloy AB (ASSAB SS), etc.**

Event-Driven Ideas

- **Long Iliad (ILD FP):** Top-line trends in core business to improve and company could evaluate options for Italian business if losses do not moderate. Share buyback signals management confidence.
- **Long Lonza (LONN SW):** LSI division is being carved out and a sale of the business would leave a Biologics pure-play, with attractive characteristics and scarcity value.
- **Long OCI (OCI NA):** Volume ramp-up and improved utilization rate could lead to FCF doubling in 2020. Disposal of methanol assets and M&A interest for the rump could unlock significant value.
- **Short Eurofins (ERF FP):** Valuation captures growth and return attractions. Business could start underperforming its larger TIC peers on organic growth, with limited scope for upgrades.

Source: European Equity Strategy: Buyer's Compendium (20 Sept 2019), European Equity Strategy: Sellers' Compendium (20 Sept 2019)

Brexit: What Happens Next?

The Conservatives have won a majority, paving the way for UK exit from the EU early 2020. Political clarity and fiscal expansion should drive a growth pick-up and MPC hikes, unless derailed by the EU trade talks.

- **Exit in 1Q20, extension to trade talks:** Short term, the way forward is now clear, with the UK set to leave the EU in early 2020, by approving the Irish Sea border deal which the previous Johnson government had negotiated with the EU. However, the trade relationship with the EU depends on the outcome of the trade talks, which remains uncertain. The MS European Economics team's **base case is that transition is extended, to allow time to negotiate the new trading relationship, and avoid a hard Brexit at the end of 2020.**
- **Investment-led growth recovery, MPC hike**: Expect an investment-led recovery, partly as a result of an orderly resolution of the exit talks supporting a modest recovery in business investment, and partly as a result of the planned sharp increase in public investment. The team also see a major fiscal easing, of around 1.4% of GDP from April 2020.
- **Strategy Implications:** With Brexit uncertainty receding further, the team believe that investors will start to rotate back into the UK and see c.12% outperformance for the Mid250 versus the FTSE100. Eurozone equities are set to benefit too, with a 5% re-rating likely.

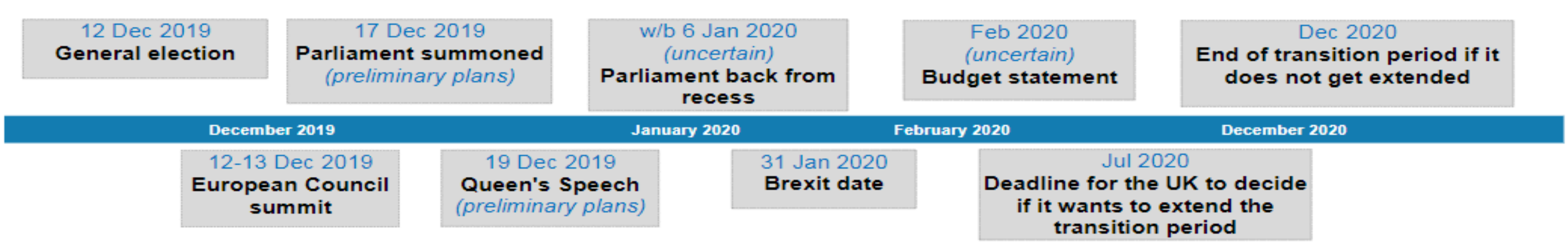
UK Equities Offer Compelling Risk-Reward

- The relative performance of **MSCI UK versus MSCI World is at its lowest level in nearly 50 years** when measured in USD terms
- There remains a **large disconnect** between relative price and EPS trends between UK and World
- MSCI UK trades at a **34% discount to MSCI World, which is the lowest level in 30 years**
- On the same basis the **UK's relative undervaluation to Europe-ex-UK is a 20% discount,** close to a 20Y low
- The **UK and Japan** are the only countries/regions that are cheap at market and median levels
- **UK Exposure Basket (MSREUKDO**) with single names **Spire, Lloyds, Taylor Wimpey, Autotrader, Ashmore etc.**

Baskets to play:

- **MS Brexit Basket (MSBREXIT):** 40 UK names previous impacted by Brexit related events…single names include **PRU LN, LLOY LN, NXT LN** etc.
- **UK Consumer Revenues (MSTUKCN):** 23 UK names with significant UK Consumer Revenue Exposure…single names include **WTB LN, KGF LN, MKS LN** etc.
- **UK Domestics (MSSTUKDO):** 30 UK names with significant UK Domestic Revenue…single names include **DLG LN, RBS LN, TW/ LN** etc.

Brexit Timeline



Sources: UK Election 2019: Conservative Majority (13 Dec 2019)

Information Sourced By: Esha Tripathi

Japan Blue Paper: Journey From Laggard To Leader

Thesis

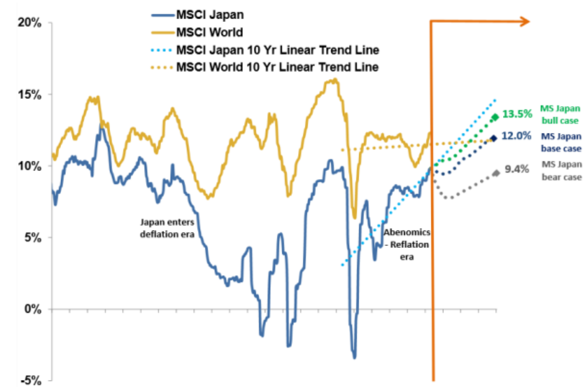
Chief Asia & EM Equity Strategist Jonathan Garner and Chief Japan Economist Takeshi Yamaguchi-san argue Japan, a structural UW for many investors, is changing after three decades of weak GDP growth and average ROE of 5%. They expect gains in macro productivity growth and micro corporate performance to propel ROE to 12% – parity with MSCI World – by 2025, driving a valuation re-rating.

Private Capex will Drive Productivity Growth: Macro private-sector capital investment on a real basis grew at an average rate of 3.2% in 2013-17 and is likely to sustain a healthy pace of 2.5% to 3.5% p.a. during 2021-24. Their proprietary Morgan Stanley AlphaWise survey suggests large-cap firms will further accelerate capex at a 7% CAGR through 2020 with a focus on productivity-enhancing investments like AI, big data, and robotics.

Demographics as more Catalyst than Headwind: As labor costs rise, the team thinks cutbacks in excessive business hours by restaurant and retail sector is rational behavior taken from the standpoint of maximizing profits. Importantly, academic studies show no strong relationship between an ageing workforce and declining labor productivity.

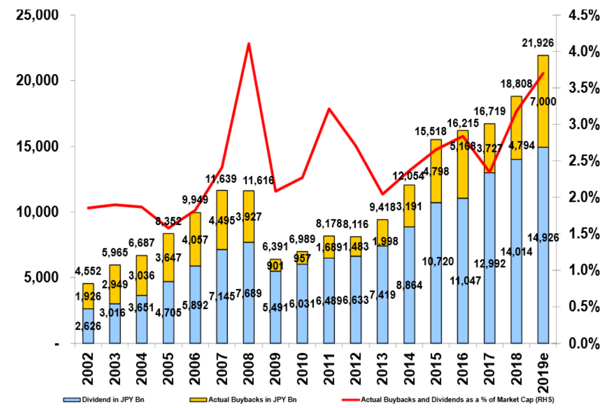
- A key reason for this lack of is progress in using robots, an area where Japan excels and associates less stigma. As Japanese pension funds start to liquidate foreign assets to fund withdrawals, Japan will switch from saver to spender and drive the JPY higher.

MSCI Japan ROE versus MSCI World 1975 – 2025e



Source: IBES Consensus, Datastream, Morgan Stanley Research

Buybacks and Dividends 2002 – 2019e



Source: Bloomberg Factset, Morgan Stanley Research

MS Research Trading Recommendations

Sector Preferences

Jonathan Garner like companies that are poised to building next-generation technology (AI, robotics) and that will use big data to drive efficiency. **He is bullish on Japan's megabanks,** projecting ROE to rise from 6% to 8% and P/B to go from .6x to almost 1.0x.

- **Leaders:** Tech Hardware, Pharma, Capital Goods, Materials, and Banks.
- **Laggards:** Autos, Telecoms.

Companies that Lead Productivity and Innovation

Recruit (6098 JP), ZOZO (3092 JP), Denso (6902 JP), Komatsu (6301 JP), Murata (6981 JP), LINE (3938 JP), SMFG (8316 JP), M3 (2413 JP), Fast Retailing (9983 JP) Hitachi (6501 JP), HOYA (7741 JP), Sony (6758 JP).

Baskets To Go Long:

MS Japan Corporate Restructuring Winners (MSAPMYJP Index): *Key Basket Inclusion:* **Olympus (7733 JP)**
MS Japan Buyback Winners Basket (MSAPBB1Q Index): *Key Basket Inclusion:* **NTT (9432 JP)**
MS Japan Corporate Reform Beneficiaries Basket (MSAPCRBJ Index): *Key Basket Inclusion:* **Fujitsu (6702 JP)**

Source: Japan's Journey from Laggard to Leader (11 Sep 2018)

Information Sourced By: Amir Amerian

Quantitative Investment Strategies ("QIS"): Rules-Based Trading Strategies

Overview of Quantitative Investment Strategies Research

Morgan Stanley has launched a dedicated Quantitative Investment Strategies ("QIS") Research effort to explore systematic / quant investing across asset classes. QIS Research combines practical investing experience with cutting-edge ideas from academia and the broader Morgan Stanley Research franchise to deliver implementable rules-based strategies across asset classes. These strategies, built on a sound economic foundation, are designed to harvest persistent and uncorrelated risk premia.

Actionable Ideas Across Asset Classes

	Rates		FX		Muni	Credit	Equity	Cross Assets
	G10	EM	G10	EM				
Trend Momentum	Trend	Local Ccy Risk Premia	G 20 Trend			Single name Cash Bond Momentum; Index Trend	Momentum	Global Trend@ (with Prof. Michael Kearns)
Value	Value	Real rate Risk Premia	Value	Value		Single name Cash Bond Value	Low Risk; Value; Quality	
Carry	Carry	Carry	Carry	Carry	Forward premium	Single name Cash Bond Carry; Index Carry	Index Carry	
Sentiment							Alpha Capturing	Sector/Asset Allocations
Volatility	Relative Value	Relative Value	Relative Value	Relative Value	Relative Value	Relative Value	Relative Value	Cross Asset Volatility
Event Driven			Month End				Month End Reversals	
Others							New Frontier in Portfolio Construction	Factor Timing; Hedge Fund Replications

The QIS Liquid Macro strategy invests in an equally weighted basket which comprises 3 QIS strategies: **Rates Value**, **Rates Trend** and **FX Value**.

Rates Value forecasts excess returns of 10 year sovereign bond futures across the US, Canada, Germany, Japan, the UK, Australia, South Korea, Spain and Italy.

Rates Trend exploits trends in four front contracts of Eurodollar and Euribor futures to capitalize on transitioning monetary policy regimes.

FX Value forecasts excess returns in G9 FX against USD using fundamental and market variables related to currency value.

QIS also explores two **Credit Carry** strategies, one each in synthetic and cash credit, as carry is a well acknowledged contributor of returns in fixed income.

Sources: Quantitative Investment Strategies: Giving Credit to Systematic Investing, Quantitative Investment Strategies: Introduction to Quantitative Investment Strategies Research: Rule-Based Value Investing

Global Equity Offering: Systematic Advisory Sales (SAS)

What We Do

Quant Content - Bringing MS Quantitative Resources together to help you meet your investment needs

Alpha Services - MS Proprietary Datasets that can be delivered via a systematic feed

Alt Data Curation – Deliver alt data recommendations while helping clients navigate the Alt Data Ecosystem

Events – Conferences, Quantamental Superdays and Fundamental training for quants

SAS Solutions - Consulting, Talent Introduction, Data Solutions and MS Toolkit

The Systematic Advisory Sales (SAS) team is responsible for the sales and distribution of Morgan Stanley's quantitative assets – MS research, signals, strategies and related services to our institutional clients.

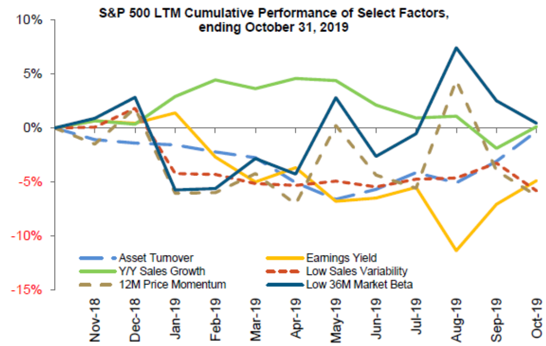
We assist our clients in understanding the evolving systematic investment landscape, including the integration of quantitative techniques and the relevant MS products into their investment process.

SAS actively covers clients ranging from pure quants to quantamental funds, providing a full suite of quant and data services.

Global Equity Strategy: Region-Specific Quantitative Research

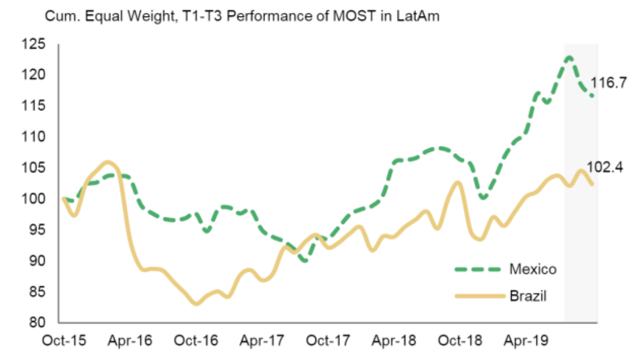
US: Equities Quantamental Research

A monthly, US Quant Data Pack. In the November edition, Research highlights how as China trade-related concerns abated during the past month, value and cyclicals rallied, while momentum and defensive equities fell. **Source:** Quantitative Equity Research: Quant Data Pack – November 2019 (13 Nov 2019)



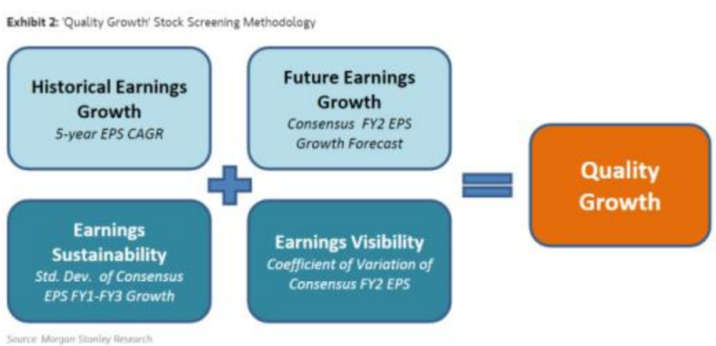
LatAm: A Quantamental Framework for Stocks

A "Quantamental" approach that combines quantitative discipline with insights of MS' fundamental analysts, and highlights LatAm Top Stock Ideas quarterly. **Source:** Quantitative Equity Research: LATamLATitudes: 4Q19 Ideas (9 Oct 2019)



Asia: EM Quantitative Equity Strategy

Provides stock screens for China A-shares that offer protected earnings growth with high earnings visibility amidst the headwind of a decelerating growth environment. **Source**: China Quantitative Strategy: Decelerating Macro Growth -> 'Quality Growth' Stocks (4 Sep 2019)



Europe: Factor Investing: An Integrated Approach

Monthly summary of key performance, evaluation, and sentiment metrics for regional factors, with additional analysis on exposure and macro effects in Europe. **Source**: European Quantitative Strategy: Market - Factor Chartbook (9 Dec 2019)

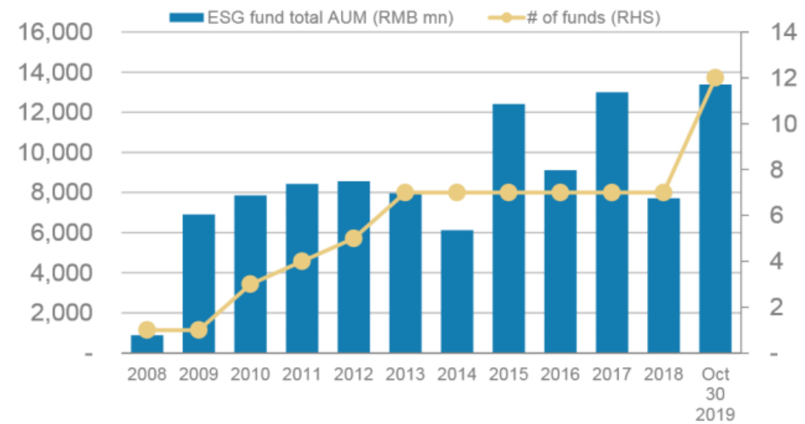
Quantamental Strategy: A Differentiated Approach to ESG

China A-Share Governance

- Launches **MS' Corporate Governance Score (MSCGS)** which ranks companies according to their governance practices relative to peers.
- 10 key governance metrics were analyzed between 2014 and 2018 to identify any key trends across companies listed at the end of each year.
- **3 Reasons for why ESG is becoming more important to China Equity Investing:**
  - The A-share market has grown rapidly resulting in a wide variation of ESG practices.
  - Foreign ownership of A-shares will accelerate and bring with it increased scrutiny on ESG policies and practices.
  - China is driving a shift in its macro growth policy from speed to quality.

Source: Sustainability & China Equity Strategy: Investor Framework for Evaluating China A-Share Governance (18 Nov 19)

Exhibit 36: AUM for China ESG Funds: Growing over time but still very small



Gender Diversity In Company Leadership Roles

- Gender diverse firms tend to outperform their less diverse peers globally.
- Morgan Stanley has developed a proprietary framework–**the Holistic Equal Representation Score (HERS)**–to help investors identify the most gender diverse companies.
- The four metrics measured, the percentage of women who are (1) board members, (2) executives, (3) managers, and (4) employees, have shown positive efficacy historically across different regions with relatively low correlation to each other.
- **Key Findings:**
  - The stocks of gender diverse companies tend to be larger, have higher yield, and skew toward low beta.
  - Gender diversity has been increasing globally.
  - There is a positive linkage between the level of gender diversity at a firm and the stock performance.

Source: Quantitative Equity Research: Introducing HERS: Employing Diversity Pays Off (12 Aug 2019)

Exhibit 8: Framework for calculating HER Score

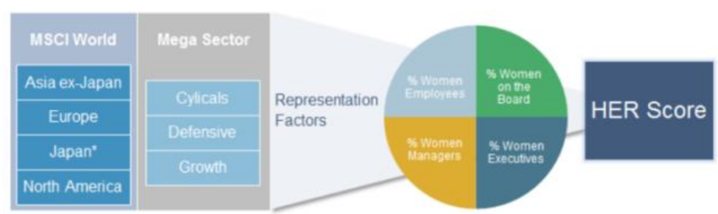
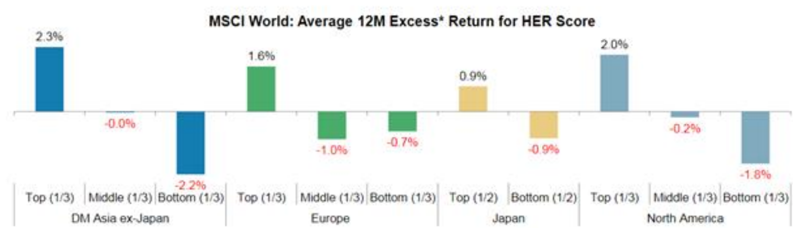


Exhibit *Mega sectors were not taken into consideration in Japan in calculating HER ScoreSource: Morgan Stanley Research



*Equal weighted average 12M forward return for each fractile of HER Score by region versus the excess equal weighted average 12M forward return for the region, 2011-5/2019Source: Refinitiv, FactSet, Morgan Stanley Research Note: Past performance is not indicative of future results.

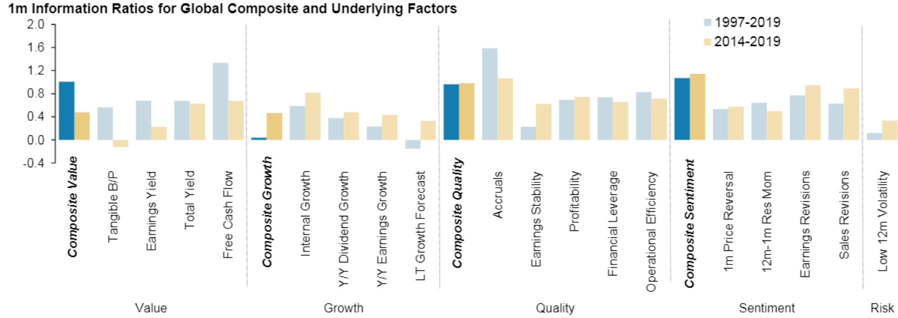
Information Sourced By: Laine Parsons

Quantitative Equity Strategy: Actionable Quantamental Content

Global Factor Guide

- MS' Quantitative Equity Research team created a guide that is ideal for both fundamental investors looking to incorporate quantitative techniques into their investment strategy, and systematic investors seeking to enhance their factor models.
- They applied their framework to 81 different fundamental and technical measures, and used data from 1997 to 2019 for 4,000 global stocks, they identify 18 unique factors that have been the most efficacious, both recently and over the long term.
- **Key Findings:**
  - The piece found that investors continue to favor high quality stocks with strong and sustainable cash flows, high income, and positive sentiment.

1m Information Ratios for Global Composite and Underlying Factors

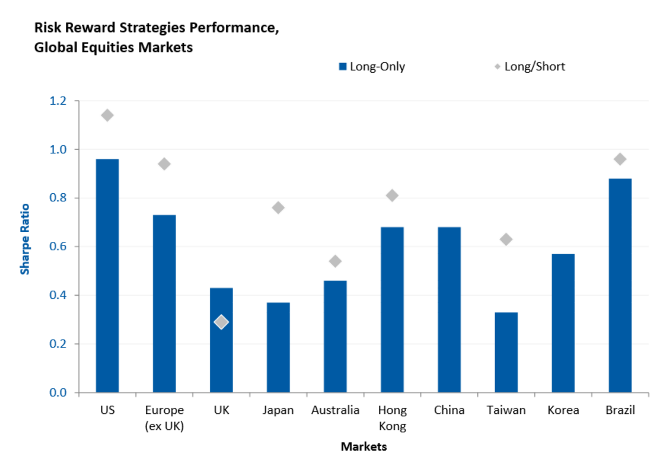


Source: Quantitative Equity Research: Global Factor Guide (5 Nov 2019)

Capturing Alpha in Risk Reward

- Since 2009, Morgan Stanley Equity Research has consistently and systematically published not just singular price targets, but also a bear and bull case target in a risk-reward framework.
- Quant Strategist Chiente Hsu and the QIS team introduce new rule based alpha generating trading strategies based on MS Analysts' forecasts.
- **Key Findings**
  - The risk reward data can be used to plot future stock volatility and downside risk.
  - Event-driven strategies can dynamically capture excess returns from Morgan Stanley price target revision events.

Exhibit 2: Risk Reward Strategies Performance around Global Equity Markets, 2009-August 2019



Source: Quantitative Equity Research: Capturing Alpha in Risk Reward (18 September 2019)

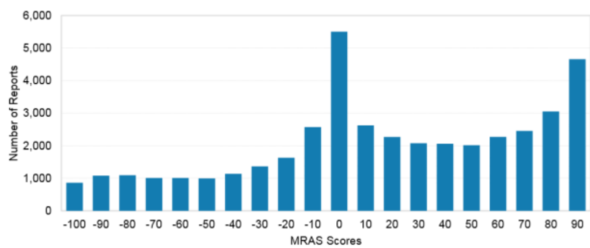
Information Sourced By: Laine Parsons

Natural Language Processing: MS' Machine-Read Analyst Sentiment Model

The Power of Words: An Additional Source of Alpha from MS Research

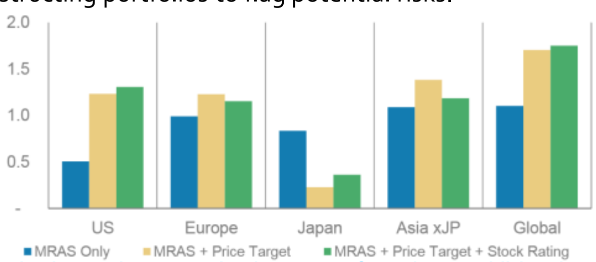
- Built a model that generated a Machine-Read Analyst Sentiment (MRAS) score for 41,758 Morgan Stanley US company-level reports published from January 2013 to May 2019
- The MRAS score measures how confident their model is in classifying a report as positive, negative, or neutral. They achieved 80% accuracy in assessing sentiment in the validation sample.

Exhibit 10: Number of US Company-level Reports by Sentiment Score Groups (January 2013- May 2019)



The Power of Words: Going Global

- **Fundamental** investors may use the scores to 'pre-screen' new research and identify reports with high levels of conviction or interesting tactical 'contrarian' opportunities.
- **Quant** investors can blend MRAS scores with other sentiment measures like price momentum and earnings revisions, or use scores in constructing portfolios to flag potential risks.

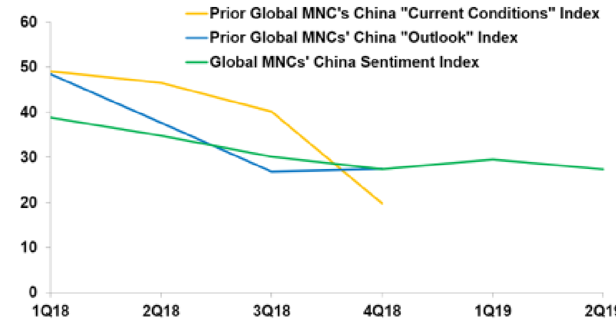


Sources: [Quantitative Equity Research: The Power of Words: An Additional Source of Alpha from Our Research (26 Jun 2019)]

[Quantitative Equity Research: The Power of Words: Going Global (14 Nov 2019)]

Launching MS' Global MNCs China Sentiment Index

The new metric, powered by machine learning, is aimed at gauging global MNCs' forward-looking views on China. This new process can analyze much larger raw data sets and scripts in an automated and therefore expedited fashion. It digests the sentiment conveyed and synthesizes it into a numerical score.



Source: [Macro Meets Micro: China : Launching our Global MNCs China Sentiment Index: Powered by Machine Learning (16 Oct 2019)]

Cross Asset Research: What Official Statements Are Really Trying to Say

MS Research believes that applying quantitative NLP techniques can provide clues about future trends in credit quality that are not already in the price, and trends in the general credit quality of new issue munis over time.

Exhibit 1: Official statements by sector: defaulted vs non-defaulted analysis

Official Statements by Sector: Defaulted vs. Non-Defaulted

Sector	Defaulted	Non-Defaulted
Continuing Care Retirement Centers (CCRCs)	17	14
Colorado Metropolitan Development Districts (MDDs)	12	12
Florida Community Development Districts (CDDs)	8	9
Total	37	35

Source: [Municipal Strategy: What Official Statements Are Really Trying to Say (10 Sep 2019)]

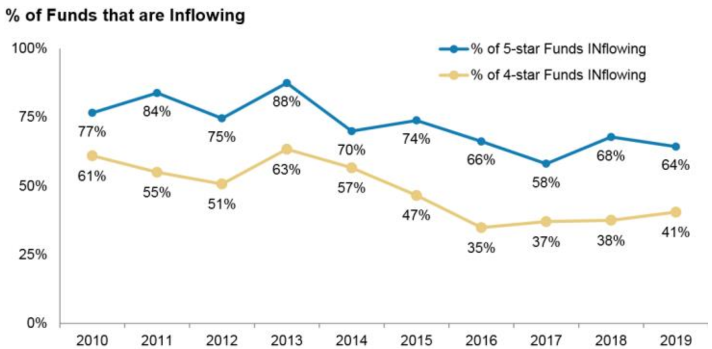
Information Sourced By: Laine Parsons

US Active Equity: Leveraging Machine Learning

MS' Asset Management Research team collaborated with MS' AlphaWise Sector Quant Team, a group of data scientists and quants who seek to integrate quantitative analysis with fundamental insights. Their analysis drew on over half a million data points from 30 years of fund-level detail for more than 2,500 domestic equity mutual funds.

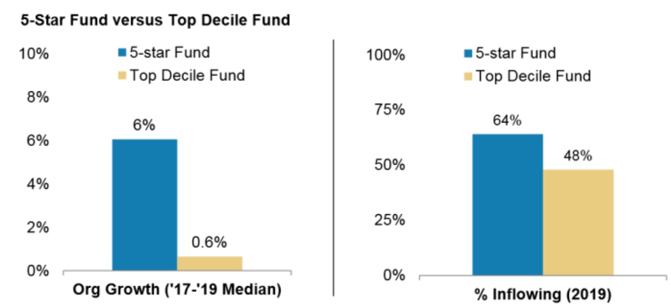
#1) How to Win in the Active Equity Shakeout? With 5-Star Funds

Shows that 5-star Morningstar fund ratings are the most important driver of fund flows, while 4-star ratings are increasingly less likely to generate inflows.



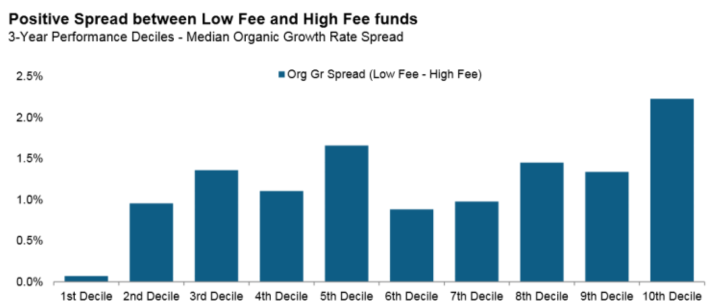
#2) For Active MFs, Performance Ain't What It Used to Be

Shows **(1)** a weakening relationship between performance and flows due to a rising performance bar, **(2)** shrinking flows to the winners, and **(3)** less differentiation in flows across the middle.



#3) Do Management Fees Impact Flows? Less Than You'd Think

Shows that **(1)** 5-star funds charge higher fees, but also attract the most flows, **(2)** funds in the lowest quartile of fees have lower outflows, but the other three quartiles show little differentiation, and **(3)** for the worst performing funds, fees do matter.



#4) What Drives Flows? Fresh Insights From Machine Learning

Shows the 2 proprietary models built and used for the series of reports that are based on bottom-up analysis, using machine-learning procedures to enhance predictability.

(1) **Predictive trends model**: company and fund specific, it projects MS' asset managers' fund flows trajectory for US Active Equities.

(2) **Inflection model:** they use to observe industry level trends, and the model indicates when a fund should inflect to positive or negative flows using scenario probability.

Sources:

#1) How to Win in the Active Equity Shakeout? With 5-Star Funds (5 Dec 19)
#2) For Active MFs, Performance Ain't What It Used to Be (9 Dec 19)
#3) Do Manager Feeds Impact Flows? Less Than You'd Think (10 Dec 19)
#4) What Drives Flows? Fresh Insights From Machine Learning (12 Dec 19)

Information Sourced By: Laine Parsons

Global Equity Offering: Upcoming Quant & Quantamental Events

Date	Event	Additional Information	City
Jan 6-8	**2nd China New Economy Summit**	Brings together prominent corporate leaders, policy makers, and investors to exchange views and share their latest insights.	Beijing
Jan 9	**Alt Data 101 – Consumer Transaction Data**	Seminar series giving a comprehensive overview of the short and long term use cases globally, vendors and pricing in the alt data space with Neudata.	New York
Jan 14	**Global Insights Day**	Join Global MS Equity Analysts, Strategists and Economists to discuss the key investment debates for 2020.	London
Jan 27	**Inside the Mind of an Analyst – NLP & Sentiment Analysis**	Series designed for Quants to understand the top-down industry structure, key drivers, information and data sources.	New York
Jan 30	**Global Insights Day**	Brings together MS' Global Economists, Cross-Asset Strategists, & Risk Takers to outline the disruptive forces shaping global markets and address key macro debates for 2020.	New York
Jan 30	**Inside the Mind of an Analyst – Airlines**	Series designed for Quants to understand the top-down industry structure, key drivers, information and data sources.	London
Feb 27	**Inside the Mind of an Analyst – Power & Utilities**	Series designed for Quants to understand the top-down industry structure, key drivers, information and data sources.	New York
Feb 27	**Neudata's 2020 SF Summit**	A range of speakers will discuss data-related themes specific to the Technology, Media and Telecom (TMT) sector	San Francisco

Information Sourced By: Laine Parsons

Idiosyncratic Global Themes, Ideas, & Screens

Global Thematic Ideas & Actionable Content

- **High Quality Compounders:** US Equity Strategy's Fresh Money Buy List; Global Best Business Models
    - **Long Ideas** *(p. 91, 93):* Best Ideas From US Equity Strategy (**DIS**, **PGR**, **KO**) and MS' Picks For The Best Business Models Globally (**LVMH**, **Roche**)
    - **Short Ideas** *(p.92):* Global Secularly Challenged List, Revealing Idiosyncratic Exposures To Weak Secular Trends (UPS, WES AU, CHRW)
- **Investing In Sustainable Solutions (ESG)**
    - Decarbonization and governance remain the key ESG themes as social issues have become increasingly relevant with names such as **NRG Energy** (NRG), **Edison International** (EIX), and **Sempra Energy** (SRE). *(p. 97)*
- **The Great Streaming Race:** DIS vs NFLX vs AAPL vs T vs CMCSA vs AMZN…
    - With new competitive offerings and entrants rapidly entering this space, the race to streaming dominance has begun. *(p. 98)*
- **The Great Software Debate**
    - In this multi-billion dollar opportunity, **SPLK**, **TEAM**, **MDB**, **NEWR**, and others will fight for incremental share in providing the resources necessary to accelerate software development. *(p. 99)*
- **To Infinity & Beyond: Investing In The Final Frontier**
    - The $350B global space economy could grow into a $1.1T global economy by 2040, with the most value linked to internet bandwidth. A viable tourism business (**SPCE**) also presents a multi-trillion airline TAM. *(p. 100)*
- **Playing Defensive, Cash-Flow-Oriented, & Generationally-Advantaged REITs**
    - With REITs providing a defensive bias and overlay, focus particularly on the single-names with secular and demographic tailwinds. Expect the highest equity returns to be generated within Residential (Single-Family, Apartments), Triple Nets, and Healthcare. *(p. 102)*
- **Assessing Idiosyncratic Trade Exposures & Positioning For Continued Austerity:**
    - China Trade Sensitivity (**AMD**, **DE**), NAFTA Exposure (**LULU**, **STZ**, **F**), International Exposure (**PG**, **AAPL**, **MCD**). *(p. 110)*

MS Research: Fresh Money Buy List

US Equity Strategy Team introduces their *best stock ideas* based on expected market outperformance in the next 3-6 months:

- **DIS** - Potential winner in shift to OTT video consumption with further growth from affiliate revs, parks, & film, at a discount to the market.
- **HUM** - Most policy proposals favor Medicare expansion, which should be favorable for MCOs with large Medicare Advantage market share.
- **IQV** - Data, therapeutics expertise, and scale position IQV to service pharma manufacturers as drug development becomes increasingly digitalized.
- **KO** - A defensive pick with strong pricing power, volm growth, and new products supporting earnings growth acceleration. Also FCF conversion to improve.
- **MSFT** - Accelerating rev growth, improving margins, and capital return drives a high-teens total return profile for MSFT over the next years.
- **NEE** - Best-in-class utility with premier renewable business offering long-term, strong EPS & div. growth.
- **PM** - Defensive yield and cash flow with solid fundamentals – specifically, solid cigarette fundamentals, continued IQOS share gains across Europe, and strong pricing power.
- **PG** - Inflections in underlying organic sales growth and margins + market share gain globally and in the US. Attractive & defensive relative return profile.

67% of the current stocks have outperformed the market with a median absolute/relative performance of 24.0/9.2%.

Company Name	Ticker	MS Analyst Rating	Sector	Market Cap ($Bn)	Price	MS PT	%to MS PT	MS Analyst	Date Added	Total Return Since Inclusion	
										Absolute	Rel. to S&P
Walt Disney Co	DIS	Overweight	Communication Services	$267.9	$146.89	$160.00	9%	Swinburne, Benjamin	3/14/2018	45.6%	26.0%
Humana Inc	HUM	Overweight	Health Care	$49.2	$366.94	$360.00	(1.9%)	Goldwasser, Ricky	7/19/2018	16.9%	0.1%
Iqvia Holdings Inc	IQV	Overweight	Health Care	$30.1	$146.24	$170.00	16%	Goldwasser, Ricky	3/14/2018	38.4%	18.8%
Coca-Cola Co.	KO	Overweight	Consumer Staples	$235.4	$54.26	$60.00	11%	Mohsenian, Dara	8/5/2019	5.2%	(4.6%)
Microsoft	MSFT	Overweight	Information Technology	$1,192.7	$155.12	$157.00	1%	Weiss, Keith	3/14/2018	68.9%	49.3%
NextEra Energy Inc	NEE	Overweight	Utilities	$115.8	$239.05	$240.00	0%	Byrd, Stephen	3/14/2018	61.4%	41.8%
Philip Morris Intl.	PM	Overweight	Consumer Staples	$133.7	$85.10	$99.00	16%	Kaufman, Pamela	7/29/2019	2.0%	(4.4%)
Procter & Gamble Co.	PG	Overweight	Consumer Staples	$331.8	$124.58	$134.00	8%	Mohsenian, Dara	3/18/2019	24.0%	9.2%
T-Mobile US, Inc.	TMUS	++	Communication Services	$65.2	$75.80	++	++	Flannery, Simon	3/14/2018	16.7%	(3.0%)
Current List Performance											
Average (Eq. Weight)				$269.1			7%			31.0%	14.8%
Median				$133.7			8%			24.0%	9.2%
% Positive Returns (Abs. / Rel.)										100%	67%
% Negative Returns (Abs. / Rel.)										0%	33%
Avg. Hold Period (Months)											15.9
All Time List Performance											
Average (Eq. Weight)										13.7%	2.6%
Median										13.8%	(3.0%)
% Positive Returns (Abs. / Rel.)										71%	41%
% Negative Returns (Abs. / Rel.)										29%	59%
Avg. Hold Period (Months)											12.4

++ Rating and other information has been removed from consideration in this report because, under applicable law and/or Morgan Stanley policy, Morgan Stanley may be precluded from issuing such information with respect to this company at this time.

Performance returns shown above represent local currency total returns, including dividends and excluding brokerage commission. Returns are calculated using the closing price on the last trading day before the date shown in the "Date Added" column through close on the last trading day prior to publication of this report for stocks currently on the list and through close on the day of removal for stocks formerly on the list. These figures are not audited. Past performance is no guarantee of future results.

Source: : US Equity Strategy: Weekly Warm Up: Positive Trifecta & Liquidity Keep Us Bullish Thru Year-end (16 Dec 2019)

MS Research: US Secular Growth & Secularly Challenged Stocks

Secular Growth Stocks

A list of companies that MS US Research believes can deliver strong growth, driven by forces such as sustainable competitive advantages, product cycles, market share gains, or pricing power.

Alphabet	GOOGL	Palo Alto Networks	PANW
Amazon.com	AMZN	PayPal Holdings	PYPL
Anaplan	PLAN	Q2 Holdings	QTWO
Coupa Software	COUP	Salesforce.com	CRM
Datadog	DDOG	SBA Communications	SBAC
DexCom	DXCM	ServiceNow	NOW
Equinix	EQIX	Splunk	SPLK
Estee Lauder	EL	Spotify Technology SA	SPOT
Facebook	FB	Tenable Holdings	TENB
Five Below	FIVE	Tesla	TSLA
Incyte Corp	INCY	The Blackstone Group	BX
Live Nation Entertainment	LYV	Twilio	TWLO
Lululemon Athletica	LULU	Uber Technologies	UBER
Lyft	LYFT	Verra Mobility Corp	VRRM
MasterCard	MA	Vertex Pharmaceuticals	VRTX
MongoDB	MDB	Visa	V
Netflix	NFLX	Workday	WDAY
Nike	NKE		

Secularly Challenged Stocks

This list features companies whose fundamentals MS US Research expects to be pressured by multi-year secular drivers that can reshape or disrupt economies, sectors, and business models.

ADT Inc	ADT
Altria Group, Inc.	MO
American Eagle Outfitters, Inc.	AEO
Avis Budget Group Inc	CAR
Bed Bath & Beyond Inc.	BBBY
Bloomin' Brands Inc	BLMN
Brinker International Inc.	EAT
C.H. Robinson Worldwide Inc.	CHRW
Citrix Systems Inc	CTXS
Edgewell Personal Care	EPC
EQT Corp.	EQT
FactSet Research Systems Inc.	FDS
Franklin Resources Inc.	BEN
Juniper Networks Inc	JNPR
Kraft Heinz Co	KHC
Macerich Co	MAC
Sally Beauty Holdings Inc	SBH
SL Green Realty Corporation	SLG
Teva Pharmaceutical Industries Ltd.	TEVA
The Michaels Companies, Inc.	MIK
United Parcel Service	UPS
Waddell & Reed Financial Inc	WDR
Western Union Co	WU
Yelp Inc	YELP

Source: Theme Trades: Secular Growth Stocks (20 Nov 2019) ; Theme Trades: Secularly Challenged Stocks (20 Nov 2019) *MS US Research updates these lists annually

Information Sourced By: Kana Manabe

MS Research: Global Best Business Models Version 2

Overview

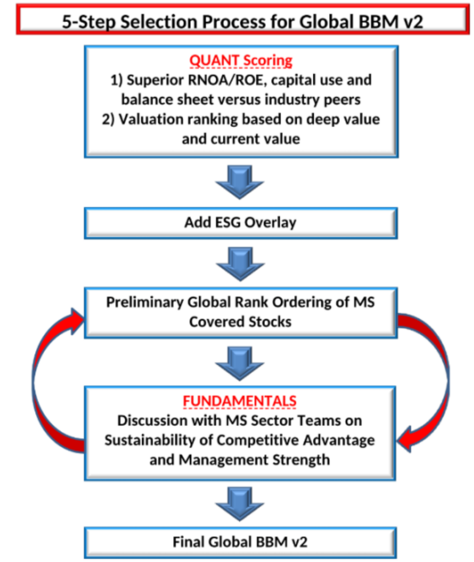
In December 2016, MS' Global Equity Strategy Research team launched the first Global Business Models list. Since then, the team has launched the **second version of the Global Best Business Models list**, identifying **37 names** from **31 GICS industry groups/industries for long-term "buy and hold" investors**. The names are selected by fully leveraging the resources of Morgan Stanley's equity research teams across Fundamental, Quant, Strategy and ESG analysts. The team believes that **these are firms that have the best business models in their global industry groups**, helping their **stocks to outperform their peers over the medium to long term**.

North America: J.P. Morgan Chase & Co. (JPM), Coca-Cola Co. (KO), Las Vegas Sands Corp (LVS), BlackRock (BLK), Costco Wholesale Corp. (COST), Abiomed (ABMD), UnitedHealth Group Inc (UNH), Honeywell International (HON), Progressive Corp (PGR), Amazon.com Inc (AMZN), Visa Inc. (V), Walt Disney Co (DIS), American Tower Corp. (AMT), Texas Instruments (TXN), Adobe Systems (ADBE), Ross Stores Inc. (ROST), Arista Networks (ANET), Suncor Energy Inc (SU CN), TELUS Corp. (T CN), Canadian National Railway Co. (CNR CN)

Europe: UBS Group AG (UBSG SW), Air Liquide (AI FP), LVMH (MC FP), Roche* (ROG SW), Hexagon (HEXAB SS)

AxJ/EM: HDFC Bank (HDB), PTT Public Company (PTT TB), Tencent (700 HK), CLP Holdings (2 HK), Vale (VALE)

Japan: Unicharm (8113 JP), Komatsu (6301 JP)



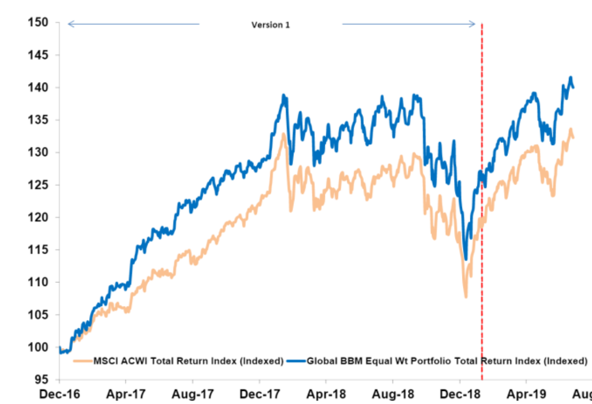
Source: Morgan Stanley Research

Global BBM v2 Regional Breakdown and Key Statistics

1.3x vs ACWI

Source: Morgan Stanley Research

Global BBM Equally Weighted Portfolio & MSCI ACWI Total Return Performance (US$)



Source: Morgan Stanley Research

Source: Global Equity Strategy: Quarterly Update #1 – Global Best Business Models v2 (9 Jul 2019), Global Equity Strategy: Launching Global Best Business Models version 2 (24 Jan 2019)

Notable Single-Name Calls From Global MS Research

Upgrades

Johnson & Johnson (JNJ US): ***Source:*** *Johnson & Johnson: Getting Back Its Defensiveness; Upgrading to Overweight (17 Dec 2019)*

MS Research Highlights: Upgraded to OW as legal liabilities appeared more than reflected in the stock and MSR thinks the pharma segment should accelerate with a more balanced business in place around it. As these factors appreciate, the significantly discounted SOTP value and relative multiple creates an attractive buying opportunity.

Royal Bank of Scotland (RBS LN): ***Source:*** *Royal Bank of Scotland: New business plan to provide further upside (16 Dec 2019)*

MS Research Highlights: Upgraded to OW as MSR thinks earnings momentum for RBS will turn the corner in 2020 after four consecutive quarters of earnings misses and with 2020E consensus down c. 25% since the peak. Focus will be on restructuring of Natwest Markets, however RBS also will show improving NII growth in 2020, and will announce a lower "go to" capital target.

Adyen (ADYEN NA): ***Source:*** *Adyen NV: Paying for growth, upgrade to Overweight (12 Dec 2019)*

MS Research Highlights: Upgraded to OW as a best-in-class payments platform and looking at FY21 valuations, MRS sees FY21 P/E at c.48x, which implies a PEG of c.1.25x, as an attractive entry point. The stock has been broadly stable since 1Q19 and there is more comfort around the duration of growth and the take rate sustainability.

Contemporary Amperex Technology (300750 CH): ***Source:*** *Contemporary Amperex Technology Co. Ltd.: Mapping Out Long-Term Prosperity (16 Dec 2019)*

MS Research Highlights: Upgraded to OW as its is squeezing out low-tier players as the EV market shifts to free market-based compliance mandates with less reliance on subsidies.

Downgrades

PepsiCo (PEP US): ***Source:*** *Consumer Staples: 2020 Staples Outlook: Stay Selective (16 Dec 2019)*

MS Research Highlights: Downgraded to EW for the first time in 7 years; mainly a valuation call with PEP approaching a five year high vs. large cap CPG peers, and the market more appropriately valuing PEP's attractive Frito-Lay North America business.

Etsy (ETSY US): ***Source:*** *Etsy Inc: Bear Case Becoming Our Base Case; Downgrade to Underweight, $38 PT (5 Dec 2019)*

MS Research Highlights: Downgraded to UW on anticipated slowing core GMS growth to result in negative top-line and EBITDA revisions, likely leading to additional multiple compression, despite the -25% QTD move. Additional analysis indicates that sales tax and Etsy ad headwinds could more than offset free shipping benefits.

Valeo (FR FP): ***Source:*** *Autos & Shared Mobility: Big 5 and Global Auto Data - key theme for 2020 - Sustainability (16 Dec 2019)*

MS Research Highlights: Downgraded to UW following a strong run and MSR growing more cautious on suppliers where MSR doesn’t think the group has fully grasped the scale of structural changes and can’t justify recent re-rating vs. the OEMs.

China Gas Holdings (384 HK): ***Source:*** *China – Gas Distribution: Coal to gas conversion slows; Northeast China's growth may disappoint (18 Dec 2019)*

MS Research Highlights: Doubled downgraded to UW as earnings are highly skewed towards connection fees, and gas demand potential in Northeast China may be substantially lower than management guidance.

Information Sourced By: Lesley Zhang

Global OW-Rated Stocks With Meaningful Upside

MS Equity Research OW-rated Equities with Meaningful Upside to the Morgan Stanley Research Base Case PT

Screen Criteria:

1. Morgan Stanley Research Global Coverage
2. Market Cap ≥ $20B; ADTV ≥ $100M
3. Upside to MS Price Target ≥ 20% *
   * targets based on closing prices. 12/19/19
   * upside to MS Price Target ≥ 15% for Japan

Japan	Ticker
Canon Inc	7751 JP Equity
Daiichi Sankyo	4568 JP Equity
East Japan Rail	9020 JP Equity
Japan Tobacco	2914 JP Equity
Komatsu Ltd	6301 JP Equity
Mitsub Elec Corp	6503 JP Equity
Mitsubishi Estat	8802 JP Equity
Murata Mfg Co	6981 JP Equity
Smfg	8316 JP Equity
Takeda Pharmaceu	4502 JP Equity

Europe/LatAm	Ticker
Anheuser-Busch I	ABI BB Equity
Assoc Brit Foods	ABF LN Equity
Bradesco-Adr	BBD US Equity
Banco Do Brasil	BBAS3 BZ Equity
Bayer Ag-Reg	BAYN GR Equity
Danone	BN FP Equity
Glencore Plc	GLEN LN Equity
Itau Unibanc-Adr	ITUB US Equity
Lloyds Banking	LLOY LN Equity
Petrobras Sa-Adr	PBR US Equity
Prudential Plc	PRU LN Equity
Banco Santander	SAN SM Equity
Sberbank	SBER RX Equity
Vodafone Group	VOD LN Equity

North America	Ticker
Alexion Pharm	ALXN US Equity
American Express	AXP US Equity
American Interna	AIG US Equity
Anthem Inc	ANTM US Equity
Ball Corp	BLL US Equity
Comcast Corp-A	CMCSA US Equity
Conocophillips	COP US Equity
Exelon Corp	EXC US Equity
Facebook Inc-A	FB US Equity
Ford Motor Co	F US Equity
General Motors C	GM US Equity
Ibm	IBM US Equity
Marathon Petrole	MPC US Equity
Netflix Inc	NFLX US Equity
Northrop Grumman	NOC US Equity
Paypal Holdings	PYPL US Equity
Pioneer Natural	PXD US Equity
Restaurant Brand	QSR US Equity
Schlumberger Ltd	SLB US Equity
Spotify Technolo	SPOT US Equity
Xilinx Inc	XLNX US Equity

AxJP	Ticker
Axis Bank Ltd	AXSB IN Equity
Citic Bank-H	998 HK Equity
Ccb-H	939 HK Equity
China Internat-A	601888 CH Equity
Cm Bank-H	3968 HK Equity
China Merch Bk-A	600036 CH Equity
China Overseas	688 HK Equity
China Pacific-H	2601 HK Equity
China Shenhua-H	1088 HK Equity
China State -A	601668 CH Equity
China Telecom-H	728 HK Equity
China Tower Co-H	788 HK Equity
China Unicom	762 HK Equity
Citic Sec-H	6030 HK Equity
Cnooc	883 HK Equity
Cp All Pcl	CPALL TB Equity
Crrc Corp Ltd-A	601766 CH Equity
Housing Dev Fin	HDFC IN Equity
Hdfc Bank Ltd	HDFCB IN Equity
Huatai Securit-H	6886 HK Equity
Icici Bank Ltd	ICICIBC IN Equity
Icbc-H	1398 HK Equity
Industrial Ban-A	601166 CH Equity
Itc Ltd	ITC IN Equity
Jiangsu Hengru-A	600276 CH Equity
Larsen & Toubro	LT IN Equity
Luxshare Preci-A	002475 CH Equity
Petrochina-H	857 HK Equity
Picc P&C-H	2328 HK Equity
Ping An Bank-A	000001 CH Equity
Ping An	2318 HK Equity
Postal Savings-H	1658 HK Equity
Ptt Pcl	PTT TB Equity
Saic Motor-A	600104 CH Equity
Shang Intl Air-A	600009 CH Equity
Shenzhou Intl Gp	2313 HK Equity
Sunac	1918 HK Equity
Tal Educatio-Adr	TAL US Equity
Tencent	700 HK Equity
Xiaomi Corp-B	1810 HK Equity
Inner Mong Yil-A	600887 CH Equity

Source: Morgan Stanley Research, Bloomberg

Global Trade Protectionism – Exposures Guide

Geographical Revenue Exposure

- **US:** the highest domestic revenue exposure within DM countries (69%)
- **EU:** the lowest domestic exposure (47%). EM exposure is high at 32%
- **Japan**: 55% domestic exposure, the remaining evenly split between EM and DM
- **EM:** High domestic exposure (72% of revenues from each home country), only 14% of revenue exposure from DM.

End Demand Exposure

- **Government:** Limited differential between US, EU and EM
- **Domestic Corporates:** EU corporates most exposed (58%) vs US least exposed (36%)
- **Domestic Consumers:** US corporates most exposed (58%) vs EU least exposed (36%)

Geographic Cost Exposure

- **US:** >50% of cost bases are domestic. Asia 2nd largest cost center of US companies
- **EU:** 60% of cost bases are within EU. US the 2nd largest cost center of EU companies (15%), followed by Asia (10%)

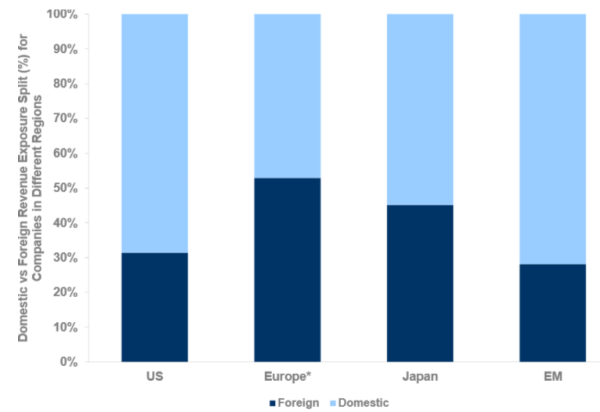
Sector Exposure

- **EU**
  - Most domestic exposed: Financials & Defensives
  - Most US exposed: Healthcare
  - Most EM exposed: Commodities, F & B, HPC
  - Most China exposed: Materials & luxury Goods
- **US**
  - Most foreign exposed: Tech (semis 68% in EM, hardware 58%, software & services 44%)
  - Most EU exposed: Tech, Materials, Industrials, Discretionary and Staples
  - Most China exposed: Semis, Tech Hardware
  - Most Latam exposed: Consumer Staples, Materials, Industrials
- **EM**
  - Most foreign exposed: IT
  - Most DM exposed: IT, Consumer Discretionary (mainly Auto)

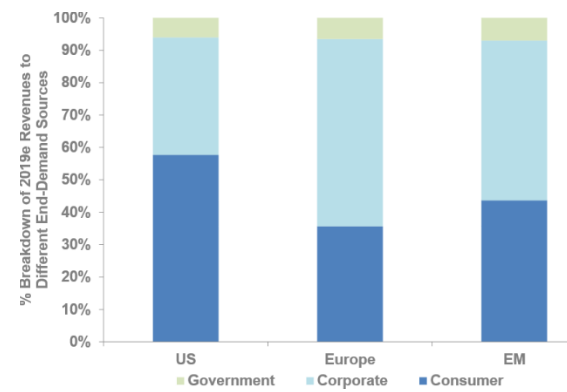
Global Stock Screens – top 20 Companies in EU, Japan and EM with the highest revenue exposure to each specific region

- **Global US Exposure Basket (MSREGLUS): Ashtead, Subaru, Luxshare**
- **Global Developed Europe Exposure Basket (MSREGLEU): Booking, Sony, KGHM Polska Miedz**
- **Global UK Exposure Basket (MSREUKGL): Orsted, ZBRA, Wipro, Recruit**
- **Global EM Exposure Basket (MSREGLEM): Micron, Intel, Yandex**

Domestic vs Foreign revenue split of companies in different regions



% of revenues from end-demand sources



Overall Cost Exposure by Region

	0	1-25%	26-50%	51-75%	76-100%
Europe ex UK	51%	45%	3%	0%	0%
UK	55%	45%	1%	0%	0%
US	6%	7%	13%	24%	50%
Asia Pacific	46%	41%	5%	5%	3%
Rest of World	46%	47%	4%	1%	2%

Source: Global Strategy: Global Exposure Guide 2019 (30 May 2019)

Information Sourced By: Michelle Cheng

Global Sector Themes: The 2020 US Presidential Election Cycle

In Assessing What Is Again A Polarizing Election Cycle, Consider The Following:

1. **Elections Have Consequences:**
   - MS' proprietary survey results show that **9 out of 10** investors expect the 2020 Election to have a **moderate-to-significant impact** on their market outlook.
   - **Fiscal policy & tax changes** are the top two concerns amongst investors.
2. **Candidates Move Markets, But React With A View On Total Government Outcomes And Fundamental Impacts:**
   - React to election outcomes with a view on **total government outcomes** and resulting implications for the economic cycle and individual sectors.
   - A **"plausible policy path"** view is needed to react appropriately.
3. **Expect Policy Ambitions To Fall Short In Practice:**
   - Presidents typically deliver on **50%** of their campaign promises, even when their party controls Congress.
   - Total government makeup is therefore more important than the presidential candidate's platform.
4. **Macro Impact Is More About Unified Vs. Divided Than Republican Vs. Democrat:**
   - Divided government is unlikely to deliver policy that counteracts the current late-cycle economic condition.
5. **Sector Impacts Vary More In Magnitude And Direction Across Scenarios:**
   - Healthcare is a good example here: Concerns around **Medicare-for-All** could pressure **insurer stocks** even though this policy is unlikely even in a Democratic "sweep".

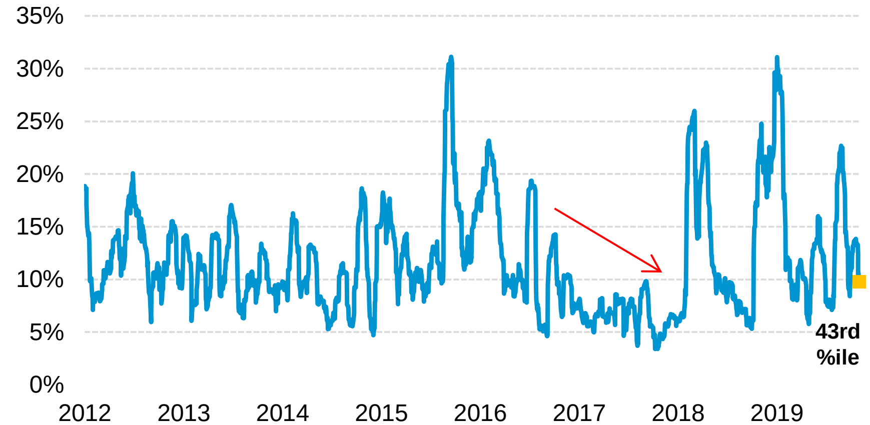
How To Trade The 2020 Election: *The 2020 Regulatory Change Basket (MSXXRC20 Index)*

This basket has exposure to **Alternative Asset Managers, Money Center Banks, Managed Care, Pharmaceuticals, Defense, Tech,** and other industries that have been areas of increased focus as the election nears.

For additional details and single-names, please see slide 114.

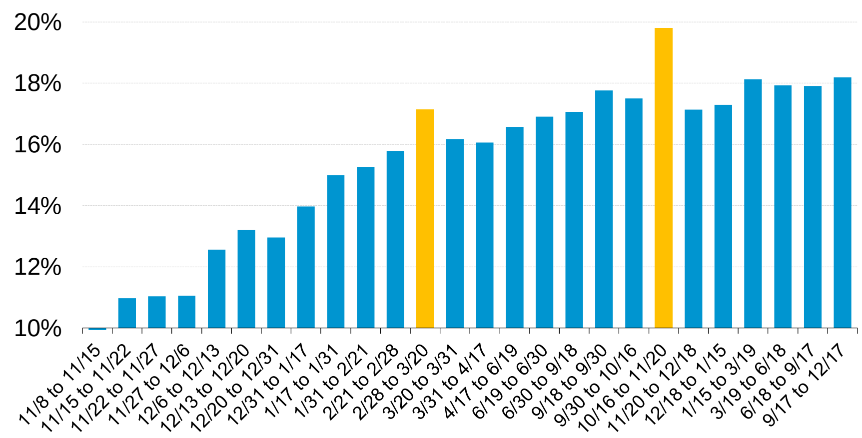
Source: US Public Policy: 2020 Vision: An Early Guide to the US Election (4 Nov 2019)

The 2016 Election Drove a High Dispersion Between Stocks



Source:: MS QDS

Forward Implied Volatility Slightly Elevated Over 2020 Election



Source:: MS QDS

Information Sourced By: Michael Mullen

ESG/SRI: The Race to Net Zero

Climate change has arrived. CO2 emissions stand at the highest levels in human history, reaching 53.5 Gigatonnes of CO2 equivalent (GtCo2e) p.a. in 2017.

Global greenhouse gas emissions need to be at or around net zero by 2050 in order to halt climate change and achieve the goals outlined in the Paris Agreement.

What is net zero? To reach net zero, any greenhouse gas emissions produced must be offset by taking emissions out of the atmosphere. It is more realistic than a gross zero target but still extremely ambitious.

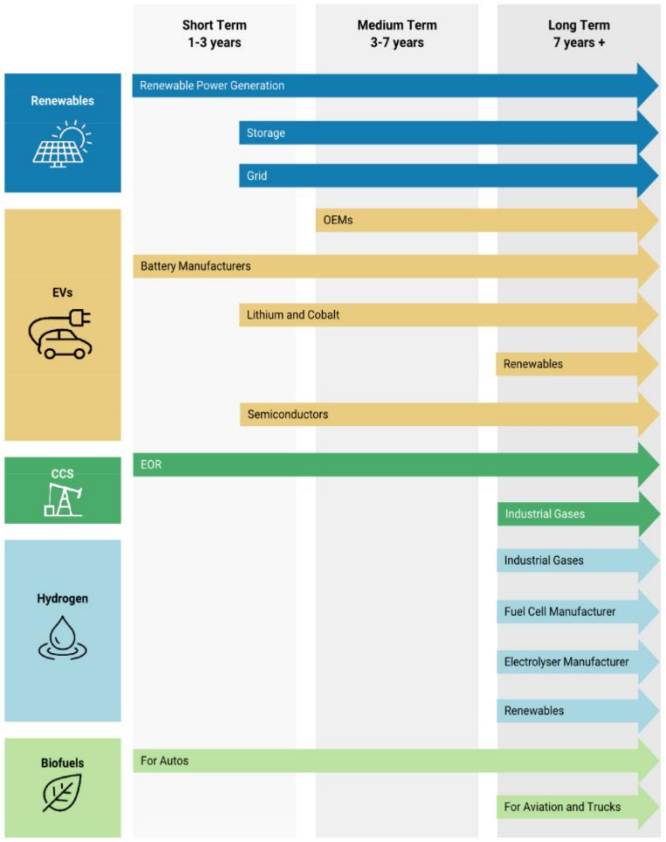
Five key decarbonization technologies to help us get there: 1) Renewables, 2) EVs, 3) hydrogen, 4) carbon capture/storage (CCS), and 5) biofuels.

- These **5 technologies can help to reduce energy-related carbon emissions, which account for ~62% of total global emissions.**
  - **Renewables:** need to deliver ~80% of global power generation in 2050, which will require over 11,000 GW of additional renewable capacity over the next 30 years.
  - **EVs:** To fully build out the required global infrastructure to support electric vehicles, MS forecasts $11 trillion of total expenditure through 2050, or $350bn p.a.
  - **Hydrogen:** The Hydrogen Council aims for hydrogen to account for 18% of final energy demand by 2050. To reach the 2050 target, ~$5.4 trillion would need to be invested in electrolysers.
  - **CCS:** Fulfilling the potential of CCS under a 2 degree scenario would require upfront capital investment of ~$2.5 trillion by 2050.
  - **Biofuels:** MS estimates that ~4% of global transportation fuels will come from biofuels in 2030.

Estimate that **$50 trillion will need to be invested in these technologies over the next 30 years.**

- This implies an annual investment of $1.6 trillion, which is roughly the same as the amount of capital invested in the US during 2017 across all sectors of the economy.
- **Potentially $3-10 trillion of EBIT up for grabs,** decarbonization could present a material economic opportunity for companies and investors that choose to allocate capital to these key areas of growth.

Investment Opportunities Over the Short, Medium and Long Term



Source: Morgan Stanley Research

How to play? The team identifies **33 OW-rated stocks that all offer ways to play the de-carbonization theme**...including **Air Liquide (AI FP), Exelon (EXC US), NXP (NXPI US), SSE (SSE LN), Iberdrola (IBE SM), NextEra (NEE US), Neste (NESTE FH), Prysmian (PRY IM), Siemens (SIE GR)** and **Sao Martinho (SMTO3 BZ)** to name a few.

Sources: Decarbonization: The Race to Net Zero (21 Oct 2019)

Global Sector Themes: The Great Streaming Race

As Awards season approaches, **The Great Streaming Race** winner begins to come into focus. **NFLX** receiving 37 nominations for Golden Globe awards including 3 of the 5 nominations for Best Picture confirms MS Research Analyst Ben Swinburne view that with its scale advantage, NFLX market leadership will become more clear to the market.

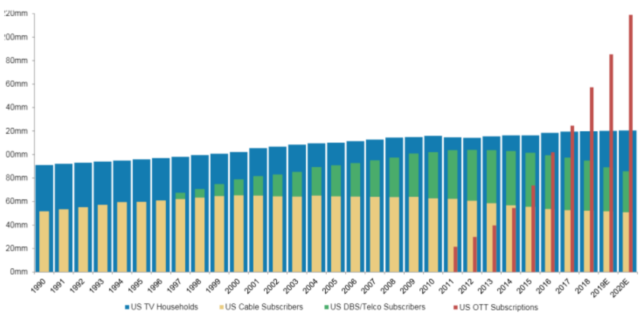
Why NFLX vs Streaming Competitors?

1. **NFLX's** $25bn of content and 2-hr / day user engagement drives Ben's OW rating on NFLX and better positions NFLX than its streaming competitors
2. **Disney's** Disney+ is focused on a smaller market opportunity than Netflix and is operating at a significantly lower volume of programming
3. **Amazon** Prime Video, which has incurred over $20bn of content spend since inception Ben estimates, has not kept Netflix from adding over 100mm paying subs despite competing for share
4. **Comcast** is making Xfinity Flex FREE included with an Xfinity Internet-only subscription, providing millions of new and existing customers with the ability to easily access their favorite streaming services and manage their connected home devices right on the TV, a clear risk/negative for ROKU
5. **Roku** is offering over 7,000 video and music apps. However, its potential is at its peak with every major media and tech company either in the streaming space or about to launch. Turning to '20, expectations embedded in current valuation will be challenging to achieve as gross margins fall and gross profit growth moderates

Within music streaming, music growth remains healthy (15% in 2020E) with Spotify as the global leader

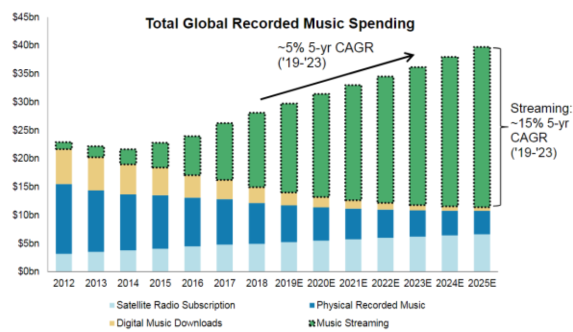
- Continue to see **SPOT** innovating and in most markets gaining share, and that its podcast strategy and marketplace opportunity are underappreciated by the market

Streaming Adoption Is On The Rise In The US



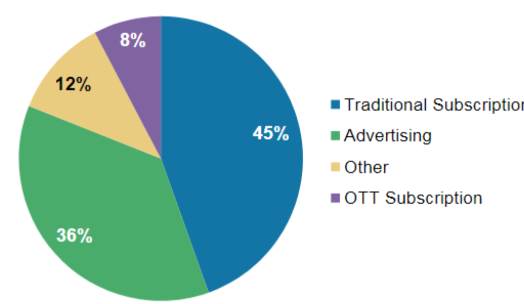
Source: SNL Kagan, Morgan Stanley Research

Led By Streaming, Global Music Spending Levels Rising



Source: Company data, PwC, RIAA, Morgan Stanley Research

2019E Global TV Market ~$500bn



Source: PwC, Morgan Stanley Research

Sources: Key Investor Debates Likely to Drive Stocks in the Coming Year (11 December 2019); Roku Inc.: It's All Priced In - Moving to UW (2 Dec 2019)

Information Sourced By: Lesley Zhang

Global Sector Themes: The Great Software Debate

Software Gut Check – Assessing Valuations

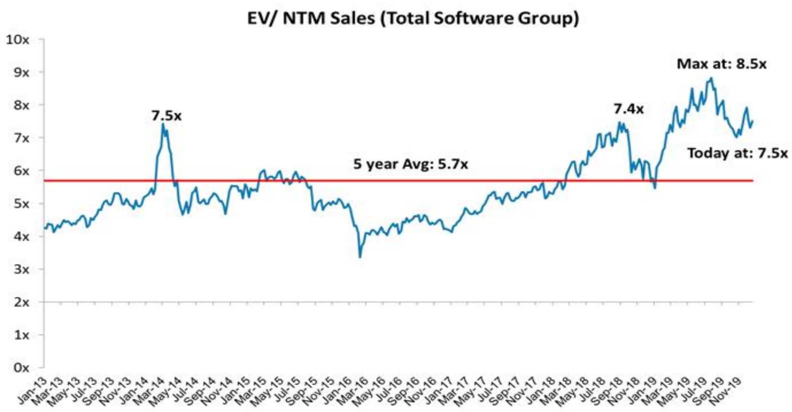
With Software at **elevated valuation levels relative to historical averages and uncertainty looming around 2020 IT budgets**, the debate around what the right multiple is for high-growth software stocks is growing.

Keith Weiss continues to see **Software focused projects dominating CIO priority & defensibility lists**, so the bull case of software sustaining relatively more attractive growth through a weaker spending environment still exists.

That said, Keith and the MS Software team continue to **favor GARP names well-positioned for key secular trends with good valuation support**, including:

- Microsoft (Cloud Computing)
- Adobe & Salesforce.com (Digital Transformation)

Conversely, the team has grown **more cautious on legacy players at risk of losing share** as organizations become increasingly cloud oriented (i.e. **Symantec** & **VMware**)

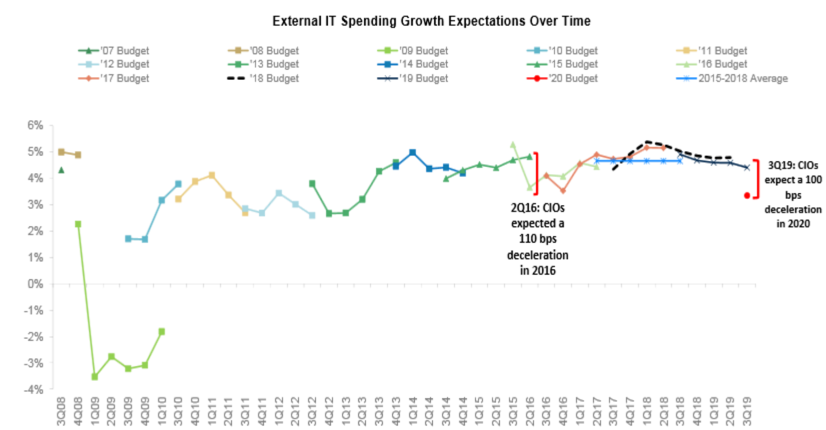


Source: Morgan Stanley Research

Equity Strategy on Growth & Software

As economic growth has slowed, the price investors are willing to pay for durable growth has risen, making it harder to find value within Growth.

Mike Wilson & the US Equity Strategy team continue to favor Value names over growth, but note that within Software, **Adobe**, **Akamai Technologies**, and **Palo Alto Networks**, screen favorably given quality of business and respective LT growth estimates relative to their PEG ratios.



Source: AlphaWise, Morgan Stanley Research. n=100 (US and EU data)

Sources: Software: A New Software Stack for the Digital Era (23 May 2019), Key Investor Debates Likely to Drive Stocks in the Coming Year (11 December 2019), US Equity Strategy | Weekly Warm Up: Positive Trifecta & Liquidity Keep Us Bullish Thru Year-end (16 Dec 2019), US Tech | 3Q19 CIO Survey: Uncertainty Hits 2020 IT Spending Outlook (9 Oct 2019)

Global Equity Themes: Investing In The Final Frontier

Space has become a highly relevant **domain for disruption** with **rising demand for bandwidth** and **falling launch costs; national security concerns** and **high levels of private funding** accelerate the conversation.

- Public investors may find it difficult to invest in *space* exploration, due significant risk and uncertainty. **The private side is a different story**, with the likes of Elon Musk and Jeff Bezos allocating significant capital to the effort.
- We see a range of industries that are **ripe for disruption** with improvements in technology lowering the cost of access and creating affordable real estate in *space*. The elevator changed real estate. Fracking changed energy. **Will the reusable rocket change *space*?**
- We estimate that the **~$350b Global *space* industry will grow into a $1.1+ Tr global *space* economy by 2040;** in the short to medium term, most of the **value of the industry is linked to internet bandwidth.**

2019 significant developments for *space*:

- **SPCE:** Virgin Galactic starting to trade on the NYSE – the company reached *space* in December 2018 & February 2019, with plans to start commercial flights by mid 2020
- **Fundraising:** Blue Origin, One Web, and SpaceX each raised > $1 billion in capital
- **Broadband:** OneWeb and SpaceX successfully launched satellites and demonstrated innovative broadband speeds

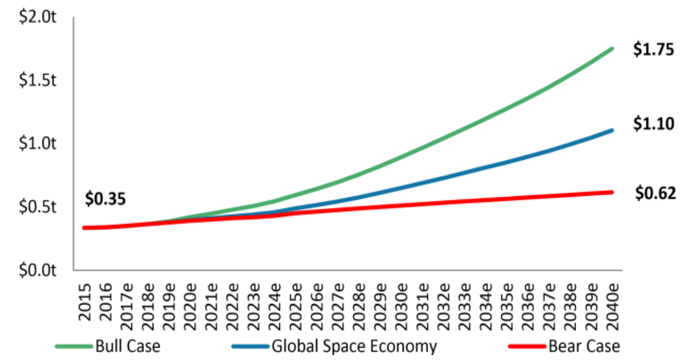
Top players:

- **SPCE (OW, $22 PT):** A viable *space* tourism business is what you pay for today, but a chance to disrupt the multi-trillion-dollar airline TAM will drive the upside ($800bn hypersonic TAM by 2040) . The shares feature biotech-type risk/reward, where today's *space* tourism business serves as a funding strategy and innovation catalyst to incubate tech for the hypersonic P2P opportunity.

- **SpaceX (Private):** Our base case valuation is $52bn+ assuming that expanding access to the internet drives broadband penetration from 50% to 75% of the global population, with SpaceX able to capture ~10% of the incremental broadband subscribers. We believe investors may be underappreciating the strategic relationship and synergy potential between SpaceX and Tesla. We see SpaceX as effectively 3 companies in 1: Launch, Starlink and Mars/deep *space* exploration.

- **Others:** OneWeb, Blue Origin, Boeing, Airbus

Global Space Economy ($Tr)



Source: Satellite Industry Association, Morgan Stanley Research, Thomson Reuters.

Breaking Down the $1.1 Tr Global Space Economy by Industry

Source: Shutterstock, Satellite Industry Association, Morgan Stanley Research. Aerospace & Defense includes Government + Satellite Manufacturing. IT Hardware includes Consumer Navigation. Telecom Services includes Consumer Broadband + Fixed Satellite Services + Mobile Satellite Services, excluding Government. Media includes Consumer TV + Consumer Radio. Other includes Research + Satellite Launch. Communications Systems includes Ground Equipment.

Sources: Space: Investment Implications of the Final Frontier (1 Nov 2017) ,Virgin Galactic Holdings Inc: An Option on the $800bn Hypersonic TAM: Initiate at Overweight (9 Dec 2019), Space: The Theme is Starting to Come into Season (9 Dec 2019), Space: SpaceX, Starlink and Tesla: Moving into Orbit? (17 Sep 2019)

Global Sector Themes: eCommerce Disruption & Insulation

Amazon and the emergence of eCommerce's disruptive effects have spread rapidly through the consumer space. Below, the MS US Research team assesses who is ahead of the curve and who remains at risk as eCommerce adoption continues to transform industry.

Cross Sector Implications & Expectations from MS Research:

- **Hardline/Broadline** – *MS Equity Research Analyst: Simeon Gutman* – Online competition and price competition have been eroding margins for the grocers, while Broadline business are being forced to increasingly invest in their eCommerce offerings given the rise of AMZN.
  - **WMT** is most insulated, given investments in its eCommerce platform, competitive value-based offering, and exposure to grocery / 1-day shipping
  - **TGT** most vulnerable (due to less exposure to grocery & 1-day shipping); however, has executed well on eCommerce adoption in 2019
  - **COST** is overly punished, given its value proposition & membership model which continue to drive solid comps and membership growth
  - **HD** & **AAP** continuing to build out eCommerce offerings, while defensible product mix (bulkier / difficult to ship items) insulates them relatively well from external eCommerce threats like AMZN
- **Consumer Retail** – *MS Equity Research Analyst: Kimberly Greenberger* – AMZN now 2nd largest apparel retailer in the US, but the overall market remains highly fragmented.
  - Favor Brands (**LULU**, **NKE**) that have capitalized on combining DTC, eCommerce, and wholesale retail effectively
  - US Off-Price (**TJX, ROST, BURL**) and EU luxury (**LVMH**) are most protected, given value proposition of the off-pricers and differentiated product mix from EU luxury retailers
  - US Department Stores (**KSS**, and **M**) most vulnerable given still high-brick and mortar presence and decreasing foot traffic not only from eCommerce, but also off-pricers taking share

MS Research See Amazon Attacking a Core $2.7tn Bucket of Consumer Expenditure

in $ millions (U.S. Only) US Retail Product Categories	2016 Spend ($ mn)	% of Total
Grocery	836,092	13%
Personal care & household products	313,293	5%
Clothing	306,998	5%
Home furnishings & accessories	251,787	4%
Consumer electronics	225,923	4%
Jewelry & Watches	80,886	1%
Shoes	76,558	1%
Sporting goods	74,865	1%
Auto parts & accessories	68,369	1%
Eye Glasses/Contacts/Orthopedic Appliances	72,161	1%
Children's Toys and Children's Durables	67,026	1%
Pet food & pet supplies	63,727	1%
Home improvement items & tools	52,453	1%
Office & school supplies for home use	48,367	1%
Large home appliances	41,735	1%
Books	44,220	1%
Luggage	36,167	1%
Other	13,358	0%
Adj. Retail Spend (Core Categories)*	**2,673,985**	**42%**

...and Expanding Into New Categories Outside of Traditional Retail and Consumer

in $ millions (U.S. Only) US New/Emerging Categories	2016 Spend ($ mn)	% of Total
New/Used Motor Vehicles (Autos)	1,200,000	19%
Logistics	900,000	14%
Cloud Computing Market	620,000	10%
Total Advertising (Traditional and Online)	419,421	7%
Pharmacy/Prescription Drugs	203,656	3%
Online Restaurant Delivery	221,606	3%
Industrial Supply/B2B	150,000	2%
Total New/Emerging Categories	3,714,683	58%

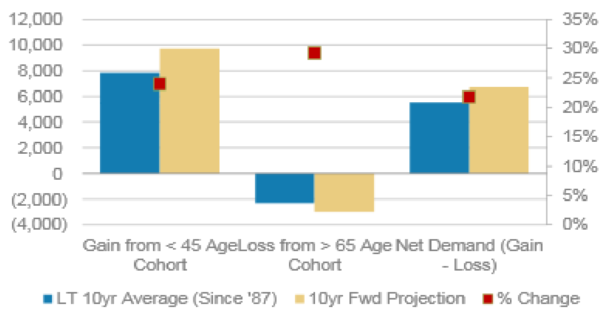
Sources: Big Debates 2020 | Key Investor Debates Likely to Drive Stocks in the Coming Year (11 Dec 2019), Theme Trade | Pricing Power - Who Has It? (19 Oct 2019), US Equity Strategy | Consumer Conference: Strategy Sector Views + Analyst Stock Picks (2 Dec 2019), Retail & Internet | 2019 Holiday Outlook: Fright Before Christmas (8 Nov 2019), Specialty Retail, Dept Stores & Footwear | 2019 Outlook: A False Spring (22 Jan 2019), Amazon & Retail | Apparel Market Deep Dive: Few Winners (19 April 2019)

Information Sourced By: Matt Saltzman

Global Sector Themes: Play Defensive REITS with Secular Tailwinds

- **Given US Equity Strategy's views into 2020, REITs Research team maintains a defensive bias.**
- Recommend focusing on names with secular tailwinds, including demographic shifts, population migrations, and e-commerce growth.
- By sub-sector, expect **the highest equity returns to be in Residential (Single Family, Apartments) of 12% followed by Triple Nets at 9% and Healthcare 5%.**
  - **SFR:** Gens Z + Y are more likely to rent than own, boosting net rentership demand to a level 22% above the long-term average. Additionally, SFR REITs can increase their scale ~10x, aided by iBuyers. **INVH** owns homes in higher quality markets (83% in Tier 1 or n2 markets) and has a strong operating leverage, with 4.9% GRPH (Growth in Rental Revenue Per Home, 3Q19).

Net aggr. rentership demand is 20% higher driven by rising Gen Y/Z demand

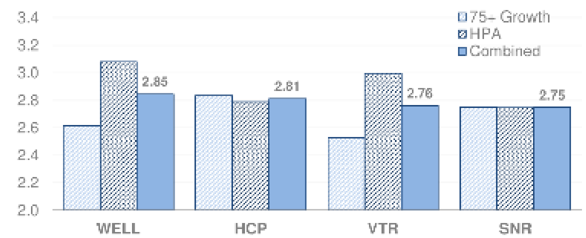


Source: US Census, Morgan Stanley Research

  - **Apartments**: A heavily debated group, where MS Analyst Richard Hill sees relative premium (22.7x FFO) as warranted. Richard is OW **ESS** given their best-in-class portfolio and high quality SS revenue growth & balance sheet.
  - **Healthcare:** Healthcare REITs benefit as senior population growth accelerates. The Census Bureau projects that the 75+year-old cohort will grow at a 3.9% CAGR through 2027, up from 2.1% between 2010 and 2018. **WELL**'s markets have the most ratio of seniors looking to sell to millennials looking to buy (favorable supply/demand dynamics).

WELL stands out as most likely to benefit from potential HPA and seniors growth

Combined Potential HPA and 75+ Population Growth

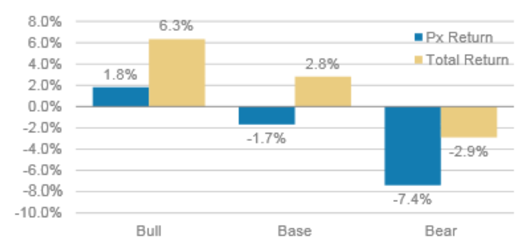


Source: US Census, Morgan Stanley Research.

- On the other hand, expect **the lowest equity returns to be in Storage (down 4%) and Malls (down 2%).**
  - **Storage:** Rental rate growth YTD (2019) has averaged -3%, which is lower than the average during the 2012-2016 comparable period of +4% yoy. **EXR** is MS Analyst Ronald Kamdem's preferred play on continued storage pricing pressure, as it screens the most expensive in the group.
  - **Malls:** Class-A Mall REITs have de-rated ~8x on average since 2017, but store rationalization remains a headwind. Remain cautious on **MAC** - absent an M&A catalyst, there is meaningful downside risk to shares given a FCF payout ratio above 100% and increasing leverage.

Risk reward skew for REITs in 2020

Forecasted Px and Total Returns



Source: Morgan Stanley Research Estimates

Sources: REIT Outlook: Cheat Sheet - Fewer Words & More Pictures (18 Dec 2019)

Global Equity Themes: Rise of the SHEconomy

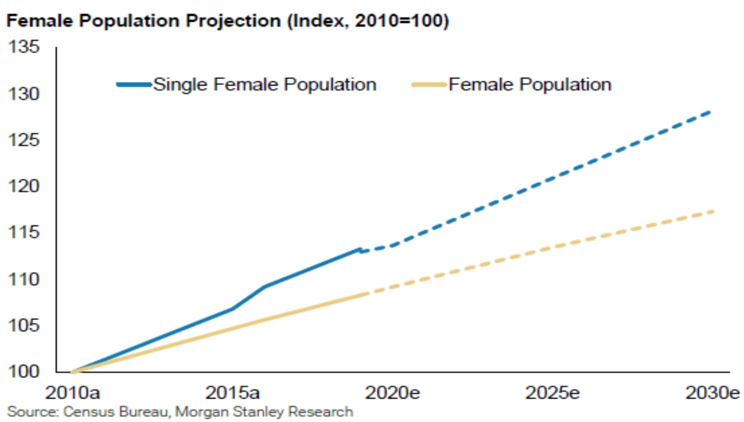
By 2030, 45% of prime working age women in the US will be single. The number of **single women in the US is estimated to grow at an annual +1.2%** rate in 2018-30, compared with 0.8% for the overall US population.

Multiple factors are driving this growth:

1) The **percentage of married people is declining** 30-40 bps annually, while **women's average marriage age is increasing** 1.5 months per year, and divorce rates for people over 55 are rising.

2) Women are having fewer children, with the total US fertility rate dropping from 2 births per woman in 2009 to 1.73 in 2018.

3) Women now obtain more bachelor's degrees than men. These shifting lifestyle norms are **enabling more women with or without children to work full time**, which should continue **to raise the labor force participation rate among single females and lift total spending.**



As we face an **increased focus on diversity, gender wage gaps, and the role of women in the economy,** we analyze the potential **impacts on consumer discretionary spending** over the next 10 years.

We find that **single women outspend the average household.** Categories most poised to **benefit by 2030 from growth in single women with rising incomes** include:

- **Apparel & Footwear:**
  - Expected +25 to +100 bps tailwind with pockets of strength in activewear and off-price to partially offset the -150 bp drag from an aging population over the next 10 years.
  - **Best-positioned: Nike (NKE), Ross Stores (ROST), TJX Companies (TJX), Lululemon Athletica (LULU)**
- **Personal Care:**
  - Expected +35 to +110 bps tailwind with beauty outperforming; single people outspend their married counterparts in this segment, with an outsized gap among single women.
  - **Best-positioned: Sephora (division of LVMH.PA), Ulta Beauty (ULTA)**
- **Food Away From Home:**
  - Expected +80 bps tailwind to spending on food away from home based on shifts in marital status distribution.
  - **Best-positioned: Chipotle Mexican Grill (CMG), Starbucks (SBUX)**
- **Luxury & Electric Vehicles:**
  - Single women currently spend less than single men and the average US household on vehicle purchases, but MS Research forecasts the male-to-female buyer split will equalize as the income gap narrows.
  - **Best positioned: Tesla (TSLA)**

Sources: US Economics & Consumer Discretionary: Rise of the SHEconomy (22 Aug 2019)

Information Sourced By: Andie Silverstein

Global Sector Themes: Global Banks & Diversified Fins – Europe Rising

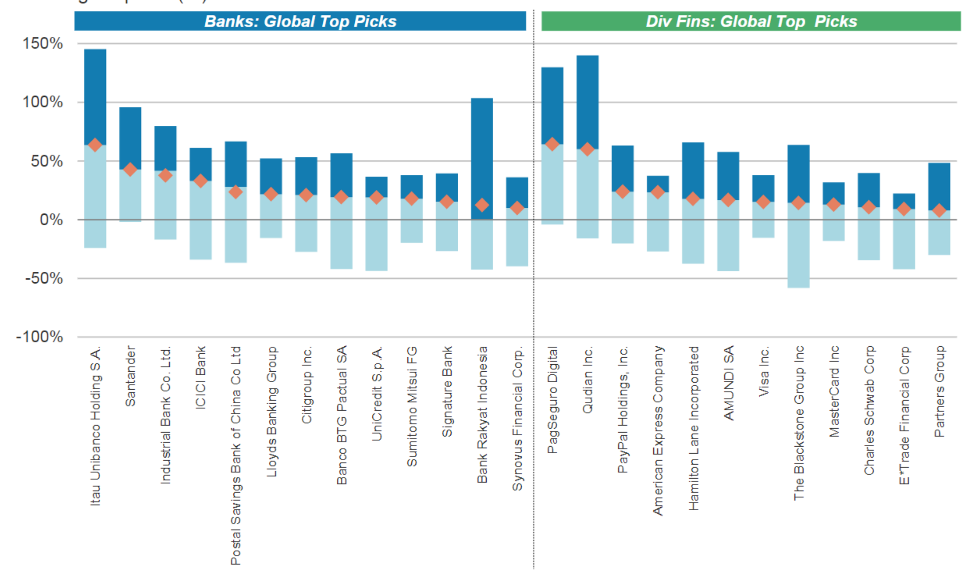
2020 Global Banks & Diversified Financials Outlook:
With global growth recovering, bank investors should be laser focused on PMIs and other signs of inflection. Upgrade European Banks to Attractive. For EM Banks, we most prefer India, Brazil & Indonesia. Div Fins skew to US Payments as digital pulverizes paper and global consumer spend ramps up.

6 Key Themes:

1. **Upgrading Europe Banks From In-Line To Attractive** – No more deposit rate cuts, steeper European curves, sequential macro stabilization across the continent are all positives for the bank stocks.
2. **Where China Goes, So Goes The World** – Mainland China delivered 59% of the world's loan growth in 2019 and is critical for supplying global credit growth going forward.
3. **Focus on Where Loan Growth is Inflecting** – The MS Global Economics team expects global growth to lift from 1Q20 onward; for banks, this puts the spotlight on loan growth inflection points.
4. **Consumer Is King; Own The Payment Networks** – Personal consumption expenditure is resilient through most recessions, with growth every year except during the Great Recession in the US and Global (ex-Mainland China).
5. **Banks In ⅓ Of Markets Pricing In Fear Of The Next Recession** – Banks pricing in less recession fear than last year. In the team's 2019 Outlook, median bank PE was trading below recession/slowdown levels for 13 financial markets.
6. **All About Idiosyncratic Growth In Asset Managers & Brokers** – The team sees structural growth in Alts with significant growth runway in private markets as it is still early days.

Global Top Picks, across banks and diversified financials

Price Target Upside (%)



Note: Priced as of November 15, 2019
Source: Company Data, Thomson Reuters, Morgan Stanley Research estimates

Global Top Picks, List Changes

Banks: Global Top Picks, Changes to List

Additions:		**Removals:**	
Bank Rakyat Indonesia	BBRI.JK	J.P.Morgan Chase & Co.	JPM.N
Citigroup Inc.	C.N		
Industrial Bank Co. Ltd.	601166.SS		
Itau Unibanco Holding S.A.	ITUB.N		
Lloyds Banking Group	LLOY.L		

Diversified Financials: Global Top Picks, Changes to List

Additions:	
Partners Group	PGHN.S

Source: Morgan Stanley Research

Source: 2020 Global Banks & Diversified Financials Outlook: Europe Rising (19 Nov 2019)

Information Sourced By: Justina Breen

Sector Themes: Global Asset Mgmt – Searching for a Winning Strategy

Searching for a Winning Strategy: 1H19 trends underpin structural growth support for private markets and passives. Pressures in core active exacerbated by dominance of fixed income flows and concentration to scale players. Trends highlight the need to focus on growth pockets, enhanced offerings (ESG/Quant) and efficiencies.

Rebound in net new money obscures tough challenges for traditional players.

- Global NNM growth rate recovered to ~3% in 1H19 from <1% in 2018, but pressures on core active persist. Private market growth appears to be accelerating at ~15% NNM rate, outpacing passives/ETF which, though strong, have moderated to <10%.

Dominance of fixed income accelerates fee margin compression.

- Global mutual fund data point to solid double-digit NNM growth for fixed income, with US and global fixed income categories among the best sellers, whereas equities see outflows, with US and Equity large-cap among the weakest categories.

Scale players with ETF/passive capability dominating industry flows.

- In terms of $bn, the top 3 Global asset managers by AuM have attracted ~2/3 of industry net flows based on the 90 listed, captive and unlisted players tracked (representing ~$44tn of aggregate AuM), with slim pickings for the remainder and median growth little better than flat.

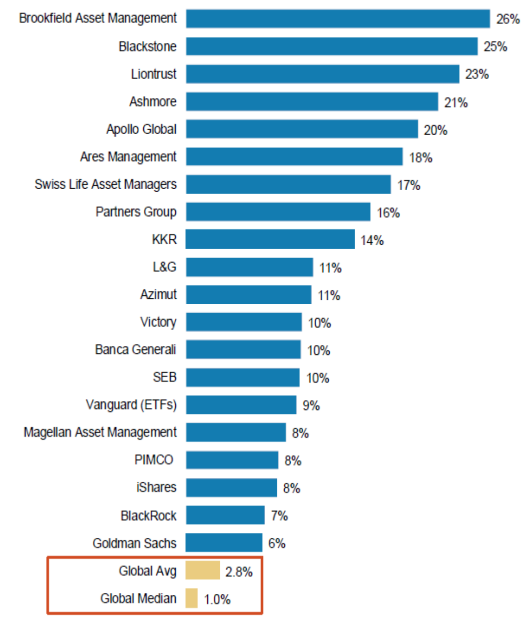
Weakening relationship between performance and flows across $4.2tr US active equity mutual funds.

- **The bar is rising, with only top-decile funds generating inflows.** The out-of-favor US active equity MF industry struggles with an average outflow rate of -5% annualized over the last 5 years.
- **Top-decile funds are winning net new assets at a sharply slower pace with a narrower growth spread vs. the rest.** Top-decile funds are growing net new money at ~0.2% (on average since 2017), a fraction of the pace in the 2000s at 2%, and nearly 6% pace in the 1990s.

Alternatives to become largest revenue pool in the industry driven by Private Markets growth.

- Asset allocation to private markets could rise by ~100bps over the next five years, from ~5% to ~6%. This will drive above-average growth of ~10% CAGR in assets from $6tn to ~$10tn by 2023.

Global Traditional Asset Managers 1H19 NNM% – Top 20



Global average: +2.8% (Trads: +2.3%); median 1%

US average: +3.6% (Trads: +3.0%, Alts: +16.9%); median 1.2%

EU average: +1.7% (Trads: +1.6%, Alts: +5.8%); median 0%

Source: Company Data, Morgan Stanley Research, data as of June 30, 2019

Across global coverage: prefer private market players, cautious on traditional players.

- MS Research sees private market players as better positioned for growth: Blackstone (BX.N), Hamilton Lane (HLNE.O), and Partners Group (PGHN.S), all key Overweights.
- The team is generally cautious on traditional players given structural headwinds:
  - **Best positioned:** BlackRock (BLK), Amundi (AMUN FP), Ashmore (ASHM LN) -- (all Overweight)
  - **Worst positioned:** Schroders (SDR LN), Legg Mason (LM) , Waddell & Reed (WDR), and Franklin Resources (BEN) -- (all Underweight)

Source: Global Asset Management: Searching for a Winning Strategy (Extended Version) (28 Oct 2019), Asset Management: For Active MFs, Performance Ain't What It Used to Be (9 Dec 2019)

Global Sector Themes: Oil & Gas: 5 Key Themes for 2020

MS Research is focused on 5 key themes as we enter 2020:

(1) **Range-bound oil prices, sustained low gas prices.** Following deeper cuts from OPEC, Morgan Stanley oil strategist Martijn Rats still sees 2020 as modestly oversupplied. Martijn sees Brent prices range-bound and anchored to $60/bbl and natural gas prices cut to $2.25/MMBtu, though long term estimates held to $2.50/MMBtu.

(2) **Valuation: multiples are low vs. history, but it is hard to make the case for expansion.** While select energy companies offer attractive cash flow and returns, the sector in aggregate is not competitive on these metrics. Our coverage reflects long-term WTI oil price of ~$50/bbl, a slight discount to 2021+. Furthermore, intensifying ESG concerns and a potentially regulatory shift provides further risks.

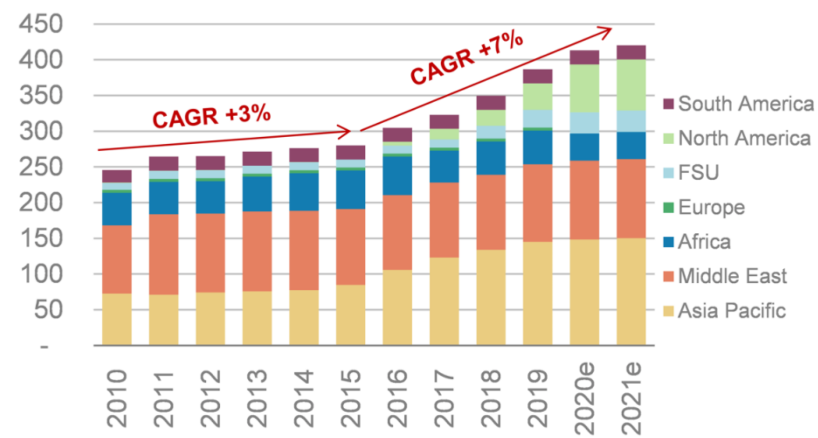
(3) **Free cash flow and returns in 2020 budgets.** During 3Q earnings, many companies highlighted a disciplined approach for preliminary 2020 spending plans. With the sector fairly valued absent a change in commodity prices, investors should focus on rate of change and cash flow estimate revisions.

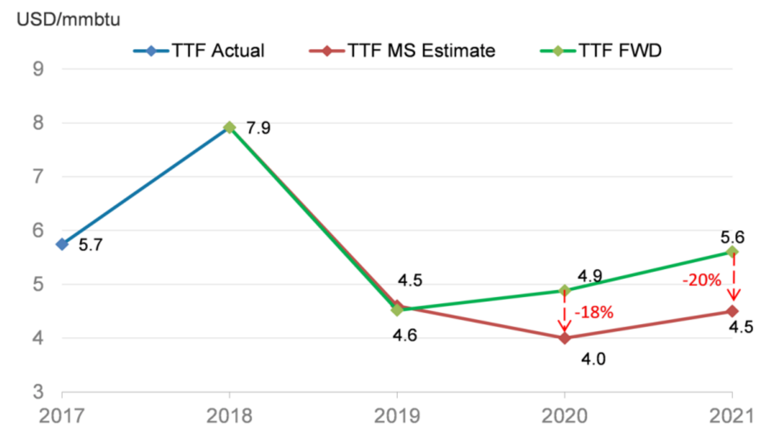
(4) **Political uncertainty with the US presidential election.** Prospects for more restrictive energy policy could be an overhang through election day. The wide range of policy outcomes with varying impacts on E&P equities and commodity prices will be of major importance.

(5) **Continued M&A:** While traditional M&A with large premiums has been poorly received, the market appears receptive to low or no-premium mergers of equals and smaller bolt-ons for E&Ps

Positioning for 2020: With the fundamental backdrop of moderate, range-bound oil prices, a company's place on the cost curve is critical. This makes ongoing focus on returns, cost and capital efficiency key drivers of stock performance. **For E&P:** preference for globally diversified large caps: Conoco Phillips (COP), Noble Energy (NBL) – over gassy E&Ps: Range Resources (RRC). **Integrated Oil:** Chevron (CVX) and Exxon (XOM).

Global LNG Supply by Region (mtpa)





Source: Oil & Gas: 5 Key Themes for 2020 (11 Dec 2019)

Information Sourced By: Eram Zaghi

Thematic Ideas & Baskets

Thematic Baskets Content

Cyclicals vs Defensives – MSZZCYDE Index

The **Cyclicals vs Defensives Custom Basket** (MSZZCYDE) represents an equal notional pair trade of going long the **High Beta Cyclicals Basket (MSXXHBC)** and short the **Defensives Basket (MSMSDEFS)**. Performance reflects each side rebalanced back to equal notional at the close of each trading day.

While valuations have been a sticking point for much of the US market, **relative Cyclical valuations remain off their highs and in-line with the 5-year average.** Positioning in Cyclicals vs Defensives is **AT HISTORIC LOWS** as investors appear to be shifting exposures ahead of two potentially positive catalysts (Global Growth, Trade).

- To play this theme globally, view the **EM Cyclicals vs Defensives** (MSAPEMHC vs. MSAPEMDF) pair.

Source: Bloomberg, MS Custom Baskets

Catalyst For Cyclicals: Global growth uplift, USD weakness

Stocks Within The High Beta Cyclicals Basket (MSXXHBC) Include: **United Rentals** (URI), **Carvana** (CVNA), **Etsy** (ETSY), **Huntsman** (HUN), and **Halliburton** (HAL).

Stocks Within The Defensives Basket (MSMSDEFS) Include: **Johnson & Johnson** (JNJ), **Duke Energy** (DUK), **Coca-Cola** (KO).

Trade-Related Baskets

China Trade Sensitive Basket (MSXXCHTS Index): Consists of US companies with exposure to the China-US trade relationship, whether through manufacturing or sales exposure. *Stocks Within This Basket Include*; **Advanced Micro Devices** (AMD), **Abbott Laboratories** (ABT), and **Dollar General** (DG).

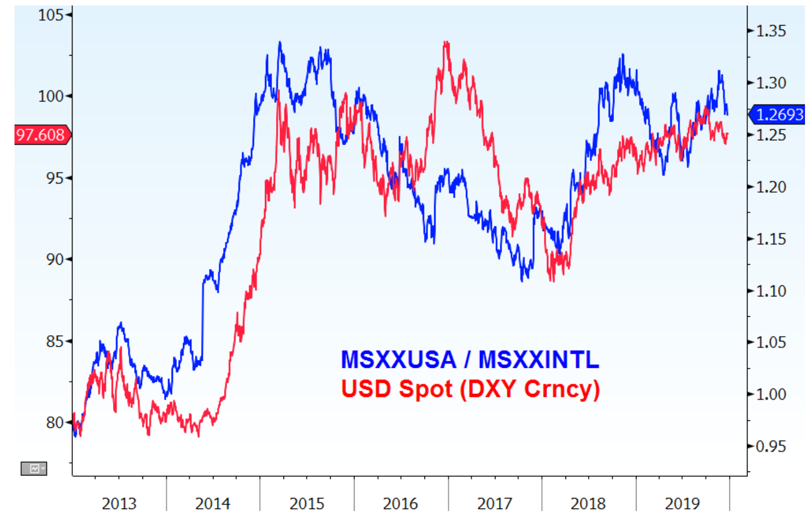
NAFTA Exposure (MSXXNFTA Index): The NAFTA basket will help capture headline risk and should underperform in the event of NAFTA withdrawal. This basket has exposure to autos, ag, beverages, and lumber – all key trade industries across NA. *Stocks Within This Basket Include*; **Tractor Supply Co** (TSCO), **Kansas City Southern** (KSU), and **Canadian Pacific Railway** (CP).

Aluminum / Steel Input Cost (MSXXINP2 Index): This basket consists of companies that may be negatively impacted by rising raw materials input costs, specifically aluminum and steel prices. *Stocks Within This Basket Include*; **Ingersoll-Rand** (IR), **Johnson Controls International** (JCI), and **Lennox International** (LII).

China Exposure (MSXXCHNA Index): This basket is diversified across US companies who not only have high current and future sales exposure to China, but also whose stocks exhibit sensitivity to the rate of change in China growth expectations. *Stocks Within This Basket Include*; **Qualcomm** (QCOM), **FedEx** (FDX), and **Estee Lauder** (EL).

International Exposure (MSXXINTL Index): This basket consists of 50 US companies who not only have high and diversified sales exposure to regions outside of the United States, but also whose stocks exhibit sensitivity to the rate of change in international growth expectations. *Stocks Within This Basket Include*; **Deere** (DE), **Cisco Systems** (CSCO), and **McDonald's Corp** (MCD).

Domestic Exposure (MSXXUSA Index): This basket consists of US companies who generate nearly all of their sales from within the United States and whose stocks are primarily sensitive to the rate of change in domestic growth expectations. *Stocks Within This Basket Include*; **Union Pacific** (UNP), **Intuit** (INTU), and **Verizon Communications** (VZ).



Source: Bloomberg, MS Custom Baskets

Source: Bloomberg, MS Custom Baskets

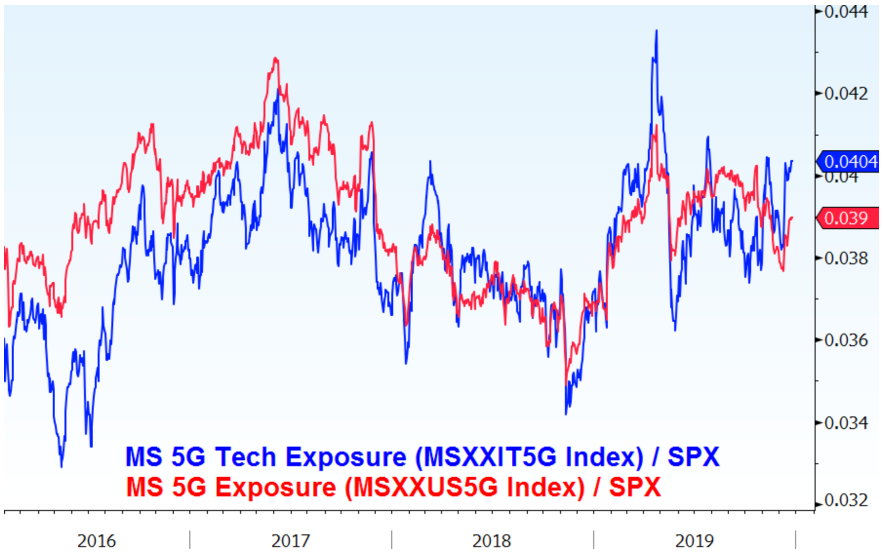
Exposure To The 5G Cycle – MSXXUS5G & MSXXIT5G

One of the key themes that loomed large this 4Q18 earnings season across Tech and Communications companies was the **continuing development of 5G**.

MS 5G Exposure (MSXXUS5G Index): This basket consists of US stocks with exposure to 5G. Basket members range from vendors to infrastructure plays (spectrum holders, towers/data centers). The basket has been optimized for liquidity. *Stocks Within This Basket Include;* **Marvell Technology Group** (MRVL), **Analog Devices** (ADI), **Skyworks Solutions** (SWKS).

MS IT 5G Exposure (MSXXIT5g Index): This basket consists of stocks in the Information Technology sector with exposure to the 5G development. This basket has been optimized for liquidity and borrow. *Stocks Within This Basket Include;* **Xilinx Inc** (XLNX), **Corning Inc** (GLW), and **Lumentum** (LITE)

To play this theme globally, consider the Asia **5G Infrastructure** basket (MSAP5GIN). These infrastructure-specific names are expected to see a boost from positive news flow related to China's semiconductor localization efforts and Huawei's progress in building 5G base stations without US suppliers. *Stocks Within This Basket Include;* **Panasonic** (6752 JP), **Murata Manufacturing** (6981 JP), and **TSMC** (2330 TT)



Source: Bloomberg, MS Custom Baskets

The Regulatory Change Basket: MSXXRC20

Investors are looking to get exposure to names that could potentially be impacted by changes and/or increased regulation based on polling or election results. The **Regulatory Change** basket (MSXXRC20) has exposure to **Alternative Asset Managers**, **Money Center Banks**, **Managed Care**, **Pharma**, **Defense**, **Tech**, and other industries that have been areas of increased focus.

The basket can be traded long or short. Please see below for a table of the industries most sensitive to proposed regulation and reform.

Source: MS Custom Baskets, Bloomberg

Industries with Regulation / Reform Exposure			
Financial Services	**Policy / Regulation Change**	**Stocks Exposed**	**Baskets Exposed**
Alternative Asset Managers	Private Equity regulation re: debt	KKR, CG, BX	MSXXALTM Index
Money Center Banks	Glass Steagall 2.0 risk	GS, C, JPM, BAC	MSXXBANK Index
Consumer Lenders	Interest rate caps	COF, DFS, SYF, OMF, FCFS	
Brokerage Firms	Reinstate the DOL Fiduciary Rule	LPLA, WDR	
Credit Rating Agencies	Changes to issuer-pay model	SPGI, MCO	
Healthcare			
Managed Care Providers	Medicare for All	MOH, CNC, ANTM	MSXXHMO Index
Pharma and Biotech	Drug pricing controls	LLY, ABBV, BMY, PFE, MRK, JAZZ, HZNP	MSXXPHRM Index
Healthcare REITs + Providers	Medicare for All	MPW, HR, HTA, OHI, SBRA, WELL, HCA	MSXXHCRE Index
Industrials			
Agriculture + Equipment	Ag subsidies + tax changes	DE, CNHI, CAT, TEX, OSK	
Defense	Defense budget scrutiny	LMT, NOC, LHX, BAH, SAIC	MSXXDEFE Index
Consumer			
Restaurants and Retail	Federal minimum wage	BJRI, CAKE, RRGB, HST, SHO	MSXXWAGE Index
Technology			
Large Cap Tech	Regulation and break-up risk	AMZN, UBER, LYFT, GOOGL, FB	MSXXFANG Index
Energy			
Select E&Ps	Fracing ban on Federal lands	CXO, DVN, XEC, EOG	

Source: MS Custom Baskets

MSXXRC20 Sector Exposure	
Financials	32.0%
Health Care	28.0%
Industrials	18.6%
Real Estate	7.8%
Communication Services	4.0%
Consumer Discretionary	3.0%
Energy	5.1%
Information Technology	1.5%

The Reflation Playbook

Growth Surprises Higher / Inflation Surprises Lower

Upside Risks: Goldilocks. Positive consumer sentiment and business spend alongside an accommodative Fed

Better PMIs = stronger equities

Downside Risks: Very few in an environment that is growth positive and not yet a tightening cycle

What Happens: **Cyclicals (MSXXHBC)** and **EEM** Rally, **Gold** and **VIX** are Lower

Growth Surprises Lower / Inflation Surprises Higher

Upside Risks: None

Downside Risks: Bear case / Stagflation. ERP is low with no confidence in risk assets

What Has Happened: **Yields** are lower, **JPY** appreciates, **Defensives** (MSMSDEFS) and **Gold** outperform

Growth Surprises Higher/ Inflation Surprises Higher

Upside Risks: Reflationary event causes a chase and equity strength despite yields climbing higher

Downside Risks: (1) Fed goes into tightening cycle = stronger USD. Eventually stronger USD weighs on cyclical rally; (2) Investors are not positioned in cyclicals and miss the initial rally.

What Has Happened: As data is improving, **Reflationary Pro Cyclicals** (MSXXREFL) and **Cyclicals** (MSXXHBC) outperform. However, sustained Cyclical outperformance is limited (chart below). Cut expectations come down, **USD** marginally stronger.

Growth Surprises Lower / Inflation Surprises Lower

Need CB policy and a belief in the policy for stocks to work. A Fed response has helped to dictate the returns earlier in this cycle.

Downside Risks: Recession and ineffective CB policy instills panic

What Has Happened: Negative Growth and Inflation surprises = Fed cuts = **SPX** still is higher.

Investors seek Growth in low growth world = **EEM** and the **Growth vs Value** pair (MSZZGRVL) are higher

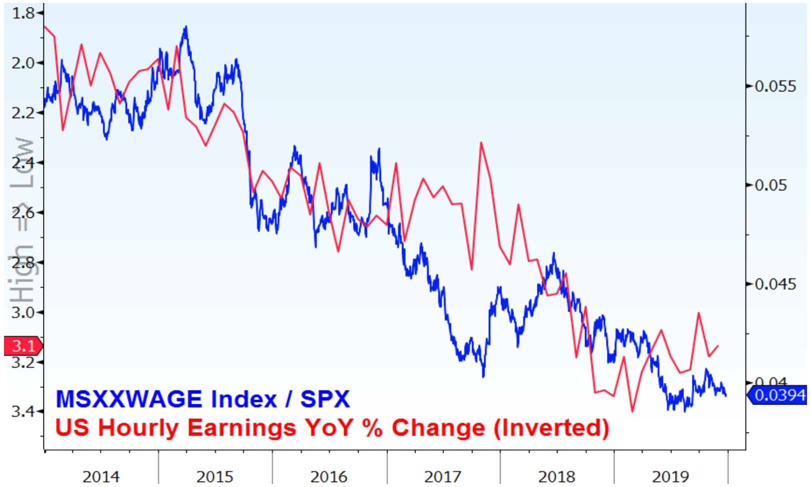
Lack of inflation weighs on **Gold**

Source: MS Custom Baskets

Rising Labor Costs: Short Wage Growth Sensitivity (MSXXWAGE)

In a late cycle environment, incremental operating margins are expected to degrade, leading ahead of an eventual turn lower in the absolute level of margins. Those industries and companies exposed to rising labor costs are especially vulnerable, given the current tighter labor market puts upward pressure on wages. Recently, wage growth has especially soared in low-wage industries, where **MSXXWAGE** has meaningful exposure.

Wage Growth Basket (MSXXWAGE Index): This basket consists of companies that would be negatively affected by rising wage inflation, diversified across sectors. Across constituents, more than 40 of the 74 members have discussed wage and employment pressures. *Stocks Within This Basket Include*; TJX Companies (TJX), **Old Dominion Freight** (ODFL), and **Darden Restaurants** (DRI).



Source: Morgan Stanley Research

Custom Baskets: Custom Baskets Launchpad

Morgan Stanley has launched the **Morgan Stanley Basket Monitor** for Bloomberg, which tracks custom baskets and top trades. This monitor will help to provide a quick snapshot of which industries and themes (Early vs. Late Cycle) are moving in the market each day.

The Monitor **automatically updates to your Launchpad** whenever changes are made, according to market developments and/or new additions to any category. Categories include Macro/Thematic, Pairs, and Sectors.

Please ask if you would like to receive the Monitor via Bloomberg.

My Security Monitor (Received from Ellen Weinstein) | The US Launchpad [7]

Monitor | View | Indicators | News | Link To

Ticker	Pct Chg on Day	Chg YTD %	Px as % ITD Rng
Market			
+ IWM	-.09%	+6.0%	94.93
+ Nasdaq 100	-.20%	+8.6%	93.00
+ S&P 500	-.64%	+1.1%	79.35
Diversified Sector Baskets			
+ Energy	-.04%	+7.7%	76.05
+ Technology	-.18%	+12.3%	97.23
+ Telco Services	-.21%	-7.4%	100.00
+ REITs	-.29%	-8.6%	76.24
+ Consumer Staples	-.29%	-9.9%	49.35
+ Consumer Discretionary	-.33%	+2.7%	77.31
+ Utilities	-.56%	-4.6%	18.53
+ Materials	-.57%	-2.7%	78.90
+ Industrials	-.90%	-2.5%	35.78
+ Healthcare	-.95%	+2.3%	9.32
+ Financials	-1.56%	--	22.99
Featured Baskets			
Momentum	+.76%	+12.4%	93.62
Ind vs Cons Cyclicals	+.14%	+8.5%	96.88
+ Wage Growth	-.34%	+2.9%	86.39
+ China Trade Sensitivity	-.41%	+4.4%	79.24
+ U.S. Capex	-.65%	+3.7%	78.87
+ Defense Spending	-.69%	+7.7%	26.80
+ NAFTA Exposure	-.96%	-3.7%	8.80
Macro/Thematic			
+ Long Momentum	+.15%	+12.9%	98.86
+ U.S. Housing	+.05%	-10.0%	74.48
+ Non-Resi Construction	-.14%	-8.4%	96.81
+ HY Debt Sensitivity	-.14%	+4.3%	93.96
+ Secular Growth	-.18%	+18.7%	93.70
+ High Short Interest	-.22%	+3.1%	91.94
+ High Beta Cyclicals	-.33%	+1.2%	94.11
+ Wage Growth	-.34%	+2.9%	86.39
+ 10-Yr Treasury Proxy	-.38%	-10.5%	61.81
+ U.S. Fiscal Austerity	-.42%	+8.0%	68.46
+ Buybacks	-.50%	+1.4%	96.69
+ Late Cycle	-.52%	-5.9%	58.77
+ Early Cycle	-.58%	+3.6%	87.74
+ Short Momentum	-.61%	+.2%	61.03
+ Defensives	-.62%	-7.1%	27.88
+ Domestic Exposure	-.63%	+2.2%	71.64
+ Inflation Levered	-.65%	+6.2%	92.24
+ U.S. Capex	-.65%	+3.7%	78.87
+ China Exposure	-.65%	+.8%	87.07
+ Low Vol High Div	-.69%	-1.1%	13.84
+ Mega Caps	-.69%	-3.1%	94.01
+ Emerging Markets Exposure	-.73%	-2.1%	100.00
+ High Yielding Blue Chips	-.75%	-5.8%	40.84
+ International Exposure	-.85%	-.2%	57.66
+ European Exposure	-.94%	+1.0%	31.03
Pairs			
Internet vs. Media	+1.17%	+29.5%	85.44
New Tech vs. Old Tech	+1.13%	+20.2%	95.94
Momentum Pair	+.76%	+12.4%	93.62
Domestic vs. Int'l Cons	+.52%	+.2%	62.36
Growth Pair	+.48%	+7.3%	90.94
Growth vs. Value	+.41%	+4.8%	92.99
High End vs. Low End Cons	+.41%	+7.5%	100.00
Cyclicals vs. Defensives	+.30%	+8.8%	87.19
Dom vs. Int'l Industrials	+.29%	+6.0%	94.01
Sec Growth vs. Cyclicals	+.15%	+17.2%	68.96
Discretionary vs. Staples	-.04%	+13.9%	66.23
Early vs. Late Cycle	-.07%	+10.3%	66.43
Capex vs Buybacks	-.15%	+2.2%	15.32
Int'l vs. US Exposure	-.22%	-2.3%	32.64
Quality Pair	-.25%	-3.6%	19.22
Inflation vs. Mrgn Sqze	-.30%	+13.1%	94.43
Software vs. Semis	-.43%	+8.7%	15.87
High vs. Low Div Staples	-.60%	-13.1%	17.72
Value Pair	-.75%	-12.4%	5.10
Consumer Discretionary			
+ Homebuilders	+.66%	-12.7%	81.37
+ High End Consumer	-.27%	+9.2%	84.65

Ticker	Pct Chg on Day	Chg YTD %	Px as % ITD Rng
+ Apparel & Footwear	-.29%	+12.2%	78.69
+ Div Consumer Disc	-.33%	+2.7%	77.31
+ Brick & Mortar	-.45%	+3.7%	60.73
+ Restaurants	-.52%	+6.0%	65.90
+ Low End Consumer	-.68%	+1.4%	29.00
+ Leisure Travel	-.77%	+1.1%	36.50
+ High Beta Discretionary	-.80%	+3.7%	57.29
Consumer Staples			
+ Household/Pers Care	+.17%	-10.4%	93.08
+ SMID Cap Staples	+.02%	-7.8%	50.84
+ Cons Staples (ex-Food)	-.18%	-11.1%	68.60
+ Div Consumer Staples	-.29%	-9.9%	49.35
+ Food	-.38%	-13.2%	25.33
+ Food, Bev & Tobacco	-.39%	-13.3%	41.44
+ Food & Stap Retailing	-.46%	-6.7%	29.82
Energy			
+ Refiners & Integrateds	+1.29%	+21.3%	96.25
+ HY Energy Debt Sensitivity	+.53%	+11.3%	76.61
+ MLP Hedge	+.20%	-1.1%	61.64
+ High Beta Energy	+.17%	+13.1%	73.91
+ Explor & Production	+.12%	+9.2%	70.12
+ Gas Levered Equities	-.02%	-.3%	68.94
+ Diversified Energy	-.04%	+7.7%	76.05
+ Crude Levered Equities	-.10%	+12.3%	71.61
+ Oil Services	-.52%	+4.1%	72.54
Financials			
+ REITs	-.29%	-8.6%	76.24
+ Credit Cards	-1.05%	+6.2%	27.00
+ P&C Insurance	-1.20%	+3.3%	18.80
+ Regional Banks	-1.23%	+6.8%	65.62
+ Capital Markets	-1.34%	+1.0%	10.08
+ Oil-Levered Banks	-1.48%	+6.8%	45.24
+ Diversified Banks	-1.48%	+2.6%	56.31
+ Diversified Financials	-1.56%	--	22.99
+ Life Insurance	-2.01%	-10.3%	12.55
Health Care			
+ Biotechnology	-.27%	+1.4%	99.61
+ Pharmaceuticals	-.74%	-.8%	76.19
+ Medical Technology	-.81%	+7.7%	39.03
+ HMOs	-.91%	+4.8%	19.09
+ Healthcare Facilities	-.93%	+6.3%	36.15
+ Diversified Health Care	-.95%	+2.3%	9.32
Industrials			
+ High Beta Industrials	-.70%	-5.8%	35.69
+ Capital Goods	-.77%	-3.7%	27.38
+ Transports (ex-Airlines)	-.89%	+4.7%	79.33
+ Diversified Industrials	-.90%	-2.5%	35.78
+ Autos & Auto-Related	-1.11%	-5.4%	.58
+ Transportation	-1.23%	-.5%	38.93
+ Airlines	-1.53%	-7.1%	33.16
Materials			
+ Steel & Steel-Related	-.38%	+6.1%	100.00
+ Metals & Mining (ex-Gold)	-.48%	+.7%	99.57
+ Chemicals	-.52%	-1.8%	43.59
+ Diversified Materials	-.57%	-2.7%	78.90
+ Agriculture	-.92%	-2.5%	10.63
Tech Media Telecom			
+ China Internet	+1.25%	+3.0%	98.52
+ PC Exposure	+.41%	+19.7%	93.52
+ New Technology	+.35%	+23.4%	97.22
+ High Beta Technology	+.16%	+11.9%	92.61
+ Semis & Semicaps	+.13%	+9.3%	95.71
+ Internet	+.10%	+17.4%	92.02
+ Software-as-a-Service	+.02%	+30.8%	96.58
+ Diversified Technology	-.18%	+12.3%	97.23
+ Telecom Services	-.21%	-7.4%	100.00
+ Software	-.31%	+20.4%	94.40
+ Comm Equipment	-.66%	+10.4%	77.58
+ Tech Hardware	-.67%	+7.4%	84.02
+ Old Technology	-.79%	+2.8%	84.48
+ Media	-1.08%	-9.8%	35.48

0 Monitor Alerts on this Monitor

Source: Bloomberg

ETF Desk: Launchpad

The ETF Product Group produces an ETF Positioning Monitor every 2 weeks highlighting the current net positioning across sectors, asset classes and regions, as well as the magnitude of change over the last 2 weeks. *Please reach out if you would like to see the latest update from the team.*

Global Macro Launchpad: The ETF desk created a Global Macro Launchpad (screenshot below). It tracks intra-day prices and returns for equites, credit, rates, FX, and commodities across ETFs, futures, and Morgan Stanley custom baskets. They also include some important metrics like Breakevens, Fed Fund Futures, Eurodollar, Euro $ White/Red/Green/Blue Packs.

My Security Monitor (Shared) — MS Global Macro Monitor [8] — Options

Monitor View Indicators News Link To

Ticker	Current Spot Price	% Change on Day	Chg YTD %	Vol / 5 D Intvl
US EQUITY				
SPY (S&P 500)	204.64	-.86%	+.4%	112%
DIA (Dow)	175.47	-.89%	+.9%	150%
MGC (Mega-Cap)	69.8501	-.94%	+.1%	56%
MDY (Mid-Cap)	258.8501	-.96%	+1.9%	98%
IWM (Small Caps)	109.06	-1.01%	-3.2%	86%
US SECTOR & INDUSTRY				
Consumer Discretionary				
ITB (Home Builders)	27.14	--	+.1%	106%
XLY (Discretionary)	78.31	-.72%	+.2%	132%
XRT (Retail)	44.60	-1.68%	+3.1%	438%
Consumer Staples				
XLP (Staples)	53.255	-.83%	+5.5%	113%
Energy				
XOP (Oil & Gas)	30.09	-.43%	-.4%	71%
XLE (Energy)	61.06	-.72%	+1.2%	88%
AMLP (MLPS)	10.46	-.85%	-13.2%	107%
Financials				
REM (Mortgage Reits)	9.5974	-.03%	+.4%	82%
IYR (Reits)	77.215	-.43%	+2.8%	81%
KIE (Insurance)	67.51	-.88%	-2.9%	155%
XLF (Financials)	22.125	-1.18%	-7.2%	95%
KRE (Regional Banks)	36.76	-1.42%	-12.3%	83%
KBWB (Banks)	32.43	-1.43%	-13.7%	9%
KBE (Banks)	29.61	-1.46%	-12.4%	71%
IAI (Broker Dealers)	35.97	-2.39%	-13.4%	260%
Health Care				
XPH (Pharma)	42.71	-.26%	-16.6%	61%
XLV (Health Care)	69.73	-.83%	-3.2%	133%
IBB (Biotech)	279.39	-2.24%	-17.4%	180%
Industrials				
ITA (Aerospace & Defense)	117.15	-.25%	-.9%	69%
XLI (Industrials)	54.64	-.71%	+3.1%	150%
IYT (Transportation)	137.86	-.77%	+2.3%	95%
Materials				
XME (Metals & Mining)	19.97	-1.24%	+33.6%	85%
XLB (Materials)	44.31	-1.27%	+2.0%	85%
Tech/Telecom				
IYZ (Telecom)	30.76	-1.00%	+6.8%	31%
SMH (Semis)	54.44	-1.04%	+2.2%	47%
QQQ (Nasdaq)	109.49	-1.07%	-2.1%	108%

Ticker	Current Spot Price	% Change on Day	Chg YTD %	Vol / 5 D Intvl
Long/Short 12m momo (MSZZMO	119.0812	+.56%	-8.9%	
Hi vs Low div Staple (MSZZCSYD	93.06	+.54%	+2.2%	
Hi vs Lo Div Hcare (MSZZHCYD)	74.83	+.49%	+6.0%	
Inflat'n vs mrgn sqz (MSZZIFMS	40.91	+.33%	+1.3%	
Discretn vs Staples (MSZZCDCS)	83.71	+.13%	-2.1%	
Capex vs Buybacks (MSZZCXBB)	88.41	+.12%	-.5%	
Dom vs Int'l Indust (MSZZDITI)	103.35	+.10%	-2.6%	
EM vs DM Staples (MSZZCSED)	59.98	+.10%	-1.5%	
Internet vs Media (MSZZIRMD)	128.75	+.06%	-9.5%	
Hi vs Lo end consumr (MSZZHLE	89.11	+.01%	-3.4%	
New Tech v Old Tech (MSZZNTOT	105.70	+.01%	-12.2%	
Sec Growth vs Cycls (MSZZGRCY	134.89	-.08%	-11.2%	
Software vs Semis (MSZZSFSE)	78.13	-.15%	-6.7%	
Int'l vs US Exposure (MSZZILUS	80.47	-.30%	-.3%	
Cyclical vs Defense (MSZZCYDE)	74.62	-.38%	--	
Late vs Early Cycle (MSZZERLA)	133.63	-.73%	-11.7%	
Dom vs Int'l Consumr (MSZZDIT	109.62	-1.00%	-5.3%	
INTERNATIONAL				
Broad				
ACWI (All Country World)	55.20	-.86%	-1.1%	84%
EFA (Developed ex US)	55.71	-.91%	-5.1%	81%
Emerging Markets				
EEM (EM)	32.96	-1.58%	+2.4%	143%
VWO (EM)	33.4365	-1.66%	+2.2%	81%
Asia/Pacific- Broad				
AAXJ (Asia ex Japan)	52.97	-1.25%	-.8%	63%
EPP (Pacific ex Japan)	37.81	-1.43%	-1.5%	544%
Asia/Pacific- Countries				
EWJ (Japan)	11.06	-.09%	-8.7%	121%
EWH (Hong Kong)	19.36	-.62%	-2.3%	67%
EPHE (Philippines)	35.72	-.83%	+5.9%	92%
VNM (Vietnam)	13.83	-.93%	-6.5%	92%
EWS (Singapore)	10.635	-.98%	+3.5%	64%
EWY (Korea)	51.07	-1.08%	+2.8%	79%
EIDO (Indonesia)	23.46	-1.10%	+12.4%	39%
MCHI (China H-Shares)	41.3935	-1.21%	-7.2%	101%
FXI (China H-Shares)	32.56	-1.42%	-7.7%	72%
EPI (India)	18.841	-1.61%	-5.1%	66%
EWA (Australia)	18.455	-1.84%	-2.7%	147%
EWT (Taiwan)	13.165	-1.90%	+3.1%	77%
DXJ (Japan Ccy Hedged)	40.14	-2.07%	-19.8%	76%

Ticker	Current Spot Price	% Change on Day	Chg YTD %	Vol / 5 D Intvl
CWB (Converts)	42.88	-.37%	-.9%	57%
Yield Curve 2s10s	99.855	-1.86%	-18.0%	
Breakevens				
US 5 Year Breakeven	1.6236	-.01%	-6.0%	
US 10 Year Breakeven	1.6046	-.39%	+1.8%	
Eurodollar & Fed Funds Futures				
Eurodollar Futures	99.195	+.03%	+.4%	
30-Day Fed Funds Futures d	99.635	+.01%	+.2%	
Euro $ White Pack (PACKWH)	2.00			
Euro $ Red Pack (PACKRE)	4.00			
Euro $ Green Pack (PACKGR)	5.25			
Euro $ Blue Pack (PACKBL)	5.75			
US Credit				
CDX US IG	80.960	+4.23%	-8.3%	
LQD (IG)	119.39	+.19%	+4.7%	99%
CIU (IG)	109.78	+.11%	+2.3%	488%
CSJ (1-3 Yr IG)	105.43	+.03%	+.8%	41%
BKLN (Loans)	22.605	-.02%	+.9%	118%
JNK (HY)	34.015	-.31%	+.3%	114%
HYG (HY)	81.2201	-.40%	+.8%	80%
CDX US HY	101.958	-.57%	+.7%	
Munis				
MUB (IG Munis)	112.0161	+.22%	+1.2%	86%
HYD (HY Munis)	31.28	+.10%	+1.3%	60%
Mortgages				
MBB (Mortgages)	109.42	+.11%	+1.6%	10%
Preferred Income				
PFF (Prefs)	38.255	-.38%	-1.5%	116%
INTERNATIONAL FIXED INCOME				
Developed Markets				
Euro-Bund Futures (RXA) d	164.32	+.26%	+5.7%	
10-Year JGB Futures (JBA) d	151.47	+.06%	+2.0%	
3-Month Sterling Future) L A) d	99.405	--	+.1%	
3-Month Euribor Future (ERA) d	100.255	--	+.1%	
Emerging Markets- USD				
EMB (EM Sov Debt)	109.98	-.15%	+4.0%	63%
PCY (EM Sov Debt)	28.2875	-.26%	+3.6%	40%
Emerging Markets- Local Currency				
ALD (Asia ex-Japan)	44.91	-.40%	+4.5%	3%
ELD (EM Local Debt)	36.23	-.55%	+5.7%	102%
EMLC (EM Debt local Currency)	18.1672	-.62%	+6.9%	91%

Source: Bloomberg

Appendix 1: MS Sales & Trading Global Single Name Ideas

Global Stock Ideas Performance Review (2019)

Jan. 1	Dec. 31	2019 Savone Longs	Ticker	Net Change
OW	OW	**Bank of America Corp**	BAC	42.94%
EW	OW	**Bayerische Motoren Werke AG**	BMW GY	3.45%
OW	OW	**Cellnex Telecom SA**	CLNX SM	94.87%
OW	OW	**ConocoPhillips**	COP	4.30%
OW	OW	**CVS Health Corp**	CVS	13.39%
OW	OW	**Dassault Systemes SE**	DSY FP	41.32%
OW	N/A	**Energy Transfer LP**	ET	-2.88%
OW	OW	**Glencore PLC**	GLEN LN	-14.42%
OW	OW	**ICICI Bank Ltd**	ICICIBC IN	49.63%
OW	OW	**Komatsu Ltd**	6301 JP	11.69%
OW	OW	**Las Vegas Sands Corp**	LVS	32.64%
OW	OW	**Lowe's Cos Inc**	LOW	29.67%
OW	OW	**Prudential PLC**	PRU LN	20.53%
OW	N/A	**Raytheon Co**	RTN	43.29%
OW	OW	**Roche Holding AG**	ROG SW	29.01%
OW	OW	**Sumitomo Mitsui Financial Group Inc**	8316 JP	10.78%
EW	UW	**Sunny Optical Technology Group Co Ltd**	2382 HK	93.82%
OW	OW	**United Rentals Inc**	URI	62.65%
OW	OW	**Yandex NV**	YNDX	59.01%
OW	OW	**Zhuzhou CRRC Times Electric Co Ltd**	3898 HK	-35.02%

Net Change **29.53%**

Jan. 1	Dec. 31	2019 Savone Shorts	Ticker	Net Change
UW	EW	**Advanced Micro Devices Inc**	AMD	-148.43%
UW	UW	**CH Robinson Worldwide Inc**	CHRW	7.00%
UW	UW	**China Mobile Ltd**	941 HK	13.07%
UW	UW	**Clorox Co/The**	CLX	0.39%
EW	EW	**Compass Group PLC**	CPG LN	-14.55%
EW	OW	**DSV PANALPINA A/S**	DSV DC	-78.89%
UW	EW	**E.ON SE**	EOAN GY	-10.40%
EW	UW	**Etsy Inc**	ETSY	6.87%
EW	EW	**Fast Retailing Co Ltd**	9983 JT	-15.31%
UW	N/A	**Henry Schein Inc**	HSIC	-8.39%
EW	EW	**Kose Corp**	4922 JT	7.30%
UW	EW	**KT&G Corp**	033780 KS	7.59%
UW	UW	**National Australia Bank Ltd**	NAB AU	-2.33%
EW	EW	**Pearson PLC**	PSON LN	32.12%
UW	EW	**Public Storage**	PSA	-5.21%
UW	EW	**Rockwell Automation Inc**	ROK	-34.68%
EW	OW	**Splunk Inc**	SPLK	-42.84%
EW	OW	**Teleperformance**	TEP FP	-55.73%
UW	UW	**Wesfarmers Ltd**	WES AU	-32.36%

Net Change **-19.73%**

Benchmarks	Ticker	Net Change
MSCI World - Local	**MSDLWI**	**26.31%**
MSCI World - USD	MSDUWI	25.79%
Nasdaq	CCMP	35.23%
S&P 500	**SPX**	**28.88%**
DOW	INDU	22.34%
Euro Stoxx 50	SX5E	24.78%
Euro Stoxx 600	SXXP	23.16%
MSCI Europe	MSDLE15	21.66%
Nikkei	**NKY**	**18.20%**
MSCI Asia	MXASJ	16.26%
MSCI LatAm	MXLA	14.05%
MSCI Emerging Markets	MXEF	16.20%

Total Portfolio Comparison	Ticker	Net Change
Longs and Shorts Weighted		**5.54%**
Market Neutral Weighted (1)		**9.81%**
L/S (150% GMV / 50% Net) (2)		**19.67%**
Spread (Long vs Short) (3)		**9.81%**
HFRX Global Hedge Fund Index	HFRXGL	9.04%
HFRX Global Equity HF Index	HFRXEH	10.72%
HFRX Equity Mkt Neutral HF Index	HFRXEMN	-1.39%

[1] *by exposure, as had 20 Longs and 19 Shorts*

[2] *Running 200% Gross and 0% Net*

[3] *Running 150% Gross and 50% Net*

All as of December 31st, 2019
Source: Bloomberg

Source: Bloomberg

(Past performance is not indicative of future performance)

2019 Global Stock Ideas Recap – What Worked…

Below is a recap of ideas that outperformed the MSCI World (ACWI Index) through December 31st, 2019. *There were some strong outliers here, and I wanted to mark-to-market whether MS Research still sees a compelling reason to either stay involved or close each of the ideas as we enter 2020.*

Stay Long Bank of America (BAC US, 2019 TRR: +42.94%, MS Research: OW, 25% Upside to Bull Case PT) – BAC can offset NII headwinds in a low rate environment by keeping expenses flat, with room to take them down if the environment deteriorates. The bank is delivering a best-in-class consumer interface with its #1 ranked mobile app, driving operating leverage. Their credit quality is strong given tighter underwriting standards post crisis, limiting the downside relative to peers in the event of a recession. Large Cap Banks: 3Q19 Review: Strong Credit Plus Trade Boosts Visibility; Raising PTs as We Roll to 2021 EPS (29 Oct 2019)

Stay Long Cellnex Telecom SA (CLNX SM, 2019 TRR: +94.87%, MS Research: OW, 14% Upside to Base Case PT) – Cellnex is a leading operator of wireless telecom and broadcasting infrastructure in Europe. The company has an excellent track record at acquiring towers, taking their footprint from two countries to seven. These acquisitions have triggered EFCF accretion and share price strength. MS Research Analyst Emmet Kelly believes there are a number of opportunities to acquire additional towers / sites, and accrete EFCF further (higher EBITDA, low maintenance capex, low cost of debt, negligible cash taxes). Cellnex should also benefit from exposure to a number of themes: low interest rates, 5G, small cells, new technologies. Cellnex Telecom SA: Resume Coverage at Overweight (26 Nov 2019)

Stay Short C.H. Robinson Worldwide Inc. (CHRW US, 2019 TRR: -7.00%, MS Research: UW, 25% Downside to Base Case PT) – C.H. Robinson Worldwide is a non-asset based, global provider of third party logistics with over 70% of net revenue coming from its North American truck brokerage business. MS Analyst Ravi Shanker has been UW throughout 2019 and remains UW as he believes CHRW faces cyclical challenges from the spot-contract rate spread in the near-term as well as shippers structurally moving away from brokers toward asset-based carriers. More significantly, he sees secular headwinds from the digitization of the brokerage function including the "uberization" of freight, blockchain and autonomous trucks, which he expects to play out over the next 2-3 years, together with the entry of well-funded new entrants in the space. Freight Transportation: 'Freight-ening Headwinds': Part 2 (13 Dec 2019)

Stay Short China Mobile Ltd (941 HK, 2019 TRR: -13.07%, MS Research: UW, 23% Downside to Bear Case PT) – China Mobile is an investment holding company with main activities in China. The group provides cellular telecom and related services. China Mobile has underperformed throughout 2019 as visibility for 5G spectrum, capex plans and application was low and competition intensified for both mobile and broadband. Gary has been UW China Mobile since 2017 and remains UW based on regulatory/competitive pressure on earnings, no dividend growth, and 5G capex risk. China Mobile Limited: Limited Downside, but Difficult to Get Excited (8 Aug 2019)

Stay Short Clorox Co. (CLX US, 2019 TRR: -0.39%, MS Research: UW) – Core name for 2020 – for more details please see slide 20.

Stay Long Dassault Systèmes SA (DSY FP, 2019 TRR: +41.32%, MS Research: OW, 9.0% Upside to Base Case PT) – DSY is the global leader in computer-aided design (CAD) software. The steady transition towards the 3D experience platform allows for cross-selling of high-growth areas into the customer base and new industries. Software business models with highly recurring revenue justify their premium to the sector / market. The stock is also exposed to major themes, such as Digital Manufacturing, which could act as top-line tailwinds moving forward. Technology: 2020 Outlook: Favouring Structural Growth (13 Dec 2019)

Stay Short Etsy Inc. (ETSY US, 2019 TRR: -6.87%, MS Research: UW) – Core name for 2020 – for more details please see slide 21.

2019 Global Stock Ideas Recap – What Worked…

Below is a recap of ideas that outperformed the MSCI World (ACWI Index) through December 31st, 2019. *There were some strong outliers here, and I wanted to mark-to-market whether MS Research still sees a compelling reason to either stay involved or close each of the ideas as we enter 2020.*

Close Short E.ON (EOAN GR, 2019 TRR: +10.40%, MS Research: EW, 30% Upside to Bull Case PT) – E.ON is a German electric utility company. Given its premium valuation versus peers and increasing leverage, MS Research Analyst and Commodity Strategist Robert Pulleyn expected downside to EPS and near-term margin issues. He now sees attractiveness centered on Northern European networks given the high quality nature of predictable cash flows and new scale benefits. Balance sheet will likely remain an investor focus as the geared capital structure makes earnings and equity value highly sensitive to modest changes at the operational level. E.ON: Improvement Evident, But Too Early to Turn Buyers (29 Nov 2019)

Stay Short Fast Retailing (9983 JP, 2019 TRR: +15.31%, MS Research: EW, 56% Downside to Bear Case PT) – Fast Retailing is an apparel specialist operating the casual clothing brand UNIQLO. Although the premium valuation seemed unjustified heading into 2019, August domestic SSS were up +9.9%, which was above consensus. Hot weather in August fueled brisker activity in high-summer apparel. Matsuoka Corp, a major apparel OEM that partners with Fast Retailing, claims that 2H orders are on a recovery track. Fast Retailing: Aug Domestic SSS +9.9%, Stronger than Consensus (3 Sep 2019)

Stay Long ICICI Bank (ICICIBC IN, 2019 TRR: +49.63%, MS Research: OW, 43% Upside to Base Case PT) – ICICI is well positioned to benefit from the profit cycle for large lenders. The stock has performed well over the past 18 months, but valuation is still at a deep discount to private peers and foreign investor interest is still low. ICICI should continue to outperform given loan growth and NIM expansion that can drive ROE normalization. ICICI Bank: Why We Still See 50-100% Upside in One to Two Years (26 Nov 2019)

Stay Short Kose Corp (4922 JP, 2019 TRR: -7.30%, MS Research: UW, 25% Downside to Bear Case PT) – Into 2020, Kose's valuation should continue to come under pressure given: 1) Domestic sales recovery slows, making the market skeptical of mid/long-term growth; 2) Market competition heats up by more than foreseen as rivals go on the offensive, thus KOSE's profits struggle to grow under pressure from rising promotional costs; 3) Overseas (Chinese) sales increasingly bleak; and 4) Earnings start to decline at Tarte. Household & Personal Care: China Beauty - Skin in the Game (26 Aug 2019); KOSE: EW: Appealing Growth Potential in China, But Upfront Investment to Continue Near Term (19 Aug 2019)

Close Short KT&G Corp (033780 KS, 2019 TRR: -7.59% , MS Research: EW, 17% Upside to Base Case PT) – KT&G manufactures tobacco products, specifically filter cigarettes, and has ~60% of the Korean tobacco market share. KT&G's ROIC has declined in 2019 due to the fast-falling combustible cigarette volumes both in the domestic market (from Heat-Not-Burn (HNB) penetration) and the overseas market (shipment delayed in the Middle East). MS Analyst Kelly Kim thinks there will be some recovery in 2020 from rising earnings contribution from its HNB products and some recovery in the Middle East. Kelly is EW as she believes KT&G's defensiveness in its tobacco earnings and dividend yield support could be well appreciated in the equity market but regulatory risk could be an overhang concern to limit valuation expansion. Global Consumer Staples: What Are Cash Conversion and ROIC Trends Telling Us? (2 Dec 2019) / KT&G: Solid 2Q19 Earnings; Upgrade to EW (7 Aug 2019)

Stay Long Las Vegas Sands (LVS US, 2019 TRR: +32.64%, MS Research: OW, 34% Upside to Bull Case PT) – LVS is seen as the best positioned for the longer-term Macau "China penetration" / mass market story. LVS should also benefit from its significant premium room supply coming onboard next year (~$2.2B being spent on 660 new luxury suites). In Singapore, LVS is adding 30-40 premium tables by Chinese New Year. Within Macau, the mass market (>90% of LVS's Macau EBITDA) continues to grow (up ~15% the past few months vs. VIP falling >20%), especially below the highest-end, which supports LVS outperforming in this market. US Large Cap Gaming: Lowering Macau Estimates/PTs, Prefer US-Focused Stocks (16 Sep 2019)

2019 Global Stock Ideas Recap – What Worked…

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Stay Long Lowe's Companies Inc. (LOW US, 2019 TRR: +29.67%, MS Research: OW, 9% Upside to Base Case PT) – Lowe's should continue to benefit from an improving housing backdrop. This housing backdrop was a headwind in 2019, however, expect this to become a tailwind in 2020 as Lowe's continues to deliver healthy results given success in its transformational efforts. Relative to Home Depot (HD), Lowe's appears to have greater momentum heading into 2020 and the 'flight to quality' within retail appears set to continue. US Equity Strategy: Consumer Conference: Strategy Sector Views + Analyst Stock Picks (2 Dec 2019)

Stay Short National Australia Bank Ltd. (NAB AU, 2019 TRR: +2.33%, MS Research: UW, 28% Downside to Bear Case PT) – National Australia Bank (NAB) is one of the four major Australian banks. Following flat performance leading to the federal elections, MS Analyst Richard Wiles upgraded NAT AU to OW as the federal election reduced tail risk in relation to credit quality, the mortgage market and the regulatory environment. Following the election, the share price rose 20% and Richard downgraded back to UW given the size of the P/E re-rating and earnings headwinds. Richard remains UW NAB AU given housing loan growth is negative, the outlook for margins and fees is deteriorating, further "transformation" re-investment is under-estimated by investors, loan losses are drifting up, the AUSTRAC contingent liability creates uncertainty, a capital raising and further dividend cut appear likely, and trading multiples are full. Nat Aust Bank: Beyond 2020 (9 Dec 2019)

Close Short Pearson PLC (PSON LN, 2019 TRR: -32.12%, MS Research: EW, 1% Upside to Base Case PT) – Pearson is an international media and education company with businesses in education, business information and consumer publishing. Pearson has been our best performing short this year as 41% of the business was still in print, which faced structural challenges, competition in book rental, limited proprietary content, and pricing was at risk. MS Analyst Patrick Wellington upgraded to EW following this underperformance as he sees limited downside from here. However, he forecasts a tough outlook into 2020, following downbeat reports from McGraw Hill & Cengage, a profit warning in September, and market share losses. Pearson: What happens next…? (5 Dec 2019)

Stay Long Prudential PLC (PRU LN, 2019 TRR: +20.53%, MS Research: OW, 57% Upside to Bull Case PT) – Prudential is a major UK life insurer with operations in the UK, US and Asia. Following a sell-off in 2018, Prudential was one of MS Analyst Jon Hocking's top picks in 2019 as he saw significant upside to blue sky SoTP valuation, conservative guidance, favorable exposure to high return regions, and an attractive valuation. PRU remains one of Jon's most preferred European insurance names as he sees substantial valuation upside, underpinned by the multiple gap to key Asia peer AIA. PRU's broad franchise in Asia gives it the opportunity to participate in rapid GDP growth as well as in the saving of the emerging middle class, which are growing at a structural rate faster than GDP. Insurance: 2020 Outlook: Supportive macro backdrop likely to underpin performance (6 Dec 2019)

Stay Short Public Storage (PSA US, 2019 TRR: +5.21%, MS Research: EW, 30% Downside to Bear Case PT) – The Public Storage Organization (PSA) acquires, develops, owns, and operates self-storage facilities. PSA outperformed in 2019 due to better than feared earnings and the momentum rally. However, MS Analyst Ronald Kamdem is EW and remains cautious on storage REIT's as same-store NOI growth turned negative for the first time this cycle due to headwinds from supply deliveries. Storage REITs: Why Do We Remain Cautious? (17 Dec 2019)

Close Long Raytheon Co (RTN US, 2019 TRR: +43.29%, MS Research dropped coverage)

2019 Global Stock Ideas Recap – What Worked…

Below is a recap of ideas that outperformed the MSCI World (ACWI Index) through December 31st, 2019. *There were some strong outliers here, and I wanted to mark-to-market whether MS Research still sees a compelling reason to either stay involved or close each of the ideas as we enter 2020.*

Stay Long Roche Holding (ROG SW, 2019 TRR: +29.01%, MS Research: OW, 3% Upside to Base Case PT) – Roche is a global healthcare company headquartered in Switzerland. Roche has outperformed in 2019 as the best-placed European biopharma company to thrive in an "innovate to survive" operating environment. Roche remains MS Analyst Mark Purcell's top pick but recent stock outperformance limits upside to his base case. Risk reward skewed heavily (+44%/-22%) on Roche's emerging innovative R&D pipeline. Roche Holding AG: Confidence growing into the transition year (17 Oct 2019)

Close Long Sunny Optical Technology Group (2382 HK, 2019 TRR: +93.82%, MS Research: UW, 54% Downside to Bear Case PT) – Sunny Optical is a leading optical component and module maker in China. Continued market share gains within Chinese OEMs / Samsung and upside from Android's migration towards the triple camera drove the stock in 2019. Into 1H20, MS Analyst Yunchen Tsai sees downside risk for Chinese OEMs from 4G de-stocking and limited 5G volume ramp; iPhone strength should be sustained. Contrary to consensus, Yunchen thinks Sunny is unlikely to enter iPhone supply chain in two years and are cautious of margin risk as O-Film returns. Flipping to core short name for 2020 – for more details please see slide 25. Greater China Technology Hardware: Smartphones: Changing Dynamics; Move Sunny to UW (10 Nov 2019)

Stay Long United Rentals Inc. (URI US, 2019 TRR: +62.65%, MS Research: OW, 18% Upside to Base Case PT) – URI continues to gain market share within the fragmented construction equipment industry. Their Specialty portfolio and consultative/engineering services build customer loyalty, create significant cross sell opportunities, and offer counter cyclical growth. The Specialty business has grown at a ~33% CAGR since 2012, driven by the comprehensive suit of equipment, engineering, and digital solutions for its consumers' increasingly complex project. MS Research Analyst Courtney Yakavonis believes growth in the Specialty business should reduce the cyclicality of URI's earnings profile and drive a continued multiple re-rating. United Rentals Inc.: Letter from New Jersey (11 Dec 2019)

Stay Long Yandex NV (YNDX US, 2019 TRR: +59.01%, MS Research: OW, 61% Upside to Bull Case PT) – YNDX operates the leading search engine in Russia. The stock has rallied as new services unlock value and execution improves in its two key business units (core + taxi). The governance/shareholder overhang that has persisted for the last year has subsided, as shareholders approved changes to implement a new corporate structure in efforts to limit foreign ownership. YNDX seeks to be the first profitable ridesharing company globally in 2020; Uber and Lyft's IPOs provide a benchmark for this goal. The strength in the company's various vertices is evident from their proposed increase in buy-backs to $300M in 2020 (from $100M previously). Yandex NV: Yandex Board Recommends Corporate Governance Structure Amendments (18 Nov 2019)

2019 Global Stock Ideas Recap – What Didn't Work…

Below is a recap of ideas that outperformed the MSCI World (ACWI Index) through December 31st, 2019. *There were some strong outliers here, and I wanted to mark-to-market whether MS Research still sees a compelling reason to either stay involved or close each of the ideas as we enter 2020.*

Stay Short Advanced Micro Devices (AMD US, 2019 TRR: +148.43%, MS Research: EW, 8% Downside to Base Case PT) – AMD is a global semiconductor company. MS Research Analysts Joseph Moore and Craig Hattenbach expected negative YoY revenue and earnings comps throughout 2019 and believed Intel competition was underappreciated. AMD proved their ability to generate new opportunities in IP licensing, semi-custom chips, cloud gaming and supercomputers, all while on a smaller R&D budget than Intel and Nvidia. Given share gains in these various markets, they now believe AMD will remain competitive through 2020. AMD's solid multiyear growth story and business momentum has outweighed valuation concerns. Advanced Micro Devices: Still have some 2H & valuation concerns, but positive proof points keep coming; Upgrade to EW (6 Jun 2019)

Stay Long BMW (BMW GR, 2019 TRR: +3.45%, MS Research: OW, 21% Upside to Bull Case PT) – BMW is a leading manufacturer of automobiles and motorcycles based in Munich, Germany. MS Analyst Harald Hendrikse has been OW the name all year and notes that it has suffered, along with other European OEM's, from additional costs of investments (depreciation and R&D) and CO_2 related content costs. BMW remains one of Harald's key picks for 2020 on short term sentiment recovery, improving OEM behavior, and consolidation improving the outlook. Autos & Shared Mobility: Big 5 and Global Auto Data - key theme for 2020 - Sustainability (16 Dec 2019)

Close Short Compass Group (CPG LN, 2019 TRR: +14.55%, MS Research: EW) – Core name for 2020 – for more details please see slide 20.

Stay Long ConocoPhillips (COP US, 2019 TRR: +4.30% , MS Research: OW, 21% Upside to Base Case PT) – ConocoPhillips is an independent oil & gas exploration and production company with operations in North America, Europe, Asia, and Australia. While COP has underperformed this year, it remains one of MS Analyst Devin McDermott's top picks for 2020 because it has more resilient free cash flow generation, less environmental and political risk, and greater visibility toward long-term capital return. Oil & Gas: 5 Key Themes for 2020 (11 Dec 2019)

Stay Long CVS Health Corp. (CVS US, 2019 TRR: +13.39% , MS Research: OW, 72% Upside to Bull Case PT) – CVS Health Corporation is a vertically integrated pharmacy health care provider. MS Analyst has been OW CVS throughout 2019 and still sees 12 % further upside to the name as the combination with Aetna creates a fully integrated healthcare delivery channel, positioning CVS Health as a premier player in the transformation of US healthcare. Ricky thinks CVS can return to 10% earnings growth over time from alignments of Aetna membership and cost synergies. Healthcare Services & Distribution: Updating Price Targets and Estimates For 7 Companies (22 Nov 2019)

Close Short DSV (DSV DC, 2019 TRR: +78.89%, MS Research: OW, 20% Upside to Bull Case PT) – DSV is a top player in the non asset based European road and rail transport market. MS Research Analyst Uma Samlin expected topline risk given inventory builds in 2018 and ongoing tariff and sanction-related risks to trade. Given better clarity and a road map for the Panalpina merger, Uma expects synergies on admin, IT, and operations, driving both topline and margin accretion. DSV has balanced exposure to road, air, and sea markets, with further scale from the merger. DSV: Clear path to EBIT Dkk 10bn in 2021- reiterate Overweight (4 Nov 2019)

2019 Global Stock Ideas Recap – What Didn't Work…

Below is a recap of ideas that outperformed the MSCI World (ACWI Index) through December 31st, 2019. *There were some strong outliers here, and I wanted to mark-to-market whether MS Research still sees a compelling reason to either stay involved or close each of the ideas as we enter 2020.*

Close Long Energy Transfer (ET US, 2019 TRR: -2.88%, MS Research dropped coverage)

Stay Long Glencore PLC (GLEN LN, 2019 TRR: -14.42%, MS Research: OW, 95% Upside to Bull Case PT) – Glencore is one of the world's leading integrated producers and marketers of commodities. MS Analyst Alain Gabriel was upbeat on GLEN as it had an appealing risk-reward with FCF yield at 15% . However, shares underperformed after the US Commodity Futures Trading Commission (CFTC) notified Glencore it is investigating whether Glencore breached certain provisions of CFTC Regulations or the Commodity Exchange Act in April. More recently, Glencore was notified by the Serious Fraud Office (SFO) that it has opened an investigation into "suspicions of bribery in the conduct of business of the Glencore group". The stock has de-rated due to these investigations/uncertainties and Alain sees upside from these levels as GLEN trades at a 2020 spot FCF yield of ~8.5%. Europe Metals & Mining: A tide of optimism (11 Dec 2019) / Glencore PLC: SFO investigation underlines investment case risks (5 Dec 2019)

Close Short Henry Schein (HSIC US, 2019 TRR: +8.39%, MS Research dropped coverage)

Stay Long Komatsu Ltd (6301 JP, 2019 TRR: +11.69% , MS Research: OW, 82% Upside to Bull Case PT) – While Komatsu generated positive P&L, the name underperformed relative to Nikkei. Komatsu is the domestic leader and global No. 2 in construction and mining machinery manufacture. MS Analyst Yoshinao Ibara was positive on Komatsu for 2019 based on high EM exposure, its discount to US peers, and expectations for earnings to surprise to the upside. Yoshinao remains OW as Komatsu's overseas business now accounts for 80% + of construction equipment sales and it can benefit further from economic growth and accompanying infrastructure investment in emerging markets. Komatsu: We Lower Forecasts on Revised Expectations of Asian Demand Recovery (27 Nov 2019)

Close Short Rockwell Automation (ROK US, 2019 TRR: +34.68%, MS Research: EW, 6% Downside to Base Case PT) – ROK's premium has compressed significantly over the last year, now trading closer to in-line to a slight premium to peers. Investors have contemplated ROK's inability to outgrow IP to the same levels seen since the early 2000s, particularly given the increasing importance of software as a differentiator in automation growth. Additionally, ROK likely has less M&A potential than investors previously believed. Multi-Industry: 2020 Outlook: Under-Invested, Under-Owned, Over the Top; Upgrading US EE/MI to Attractive (11 Dec 2019)

Close Short Splunk (SPLK US, 2019 TRR: +42.84%, MS Research: OW, 50% Upside to Bull Case PT) – Splunk provides operational intelligence software. MS NA Software Analyst Keith Weiss had believed multiples were extended and growth expectations were too high at a time of increased competition. However, the transition to a renewable licensing model that will generate annual recurring revenue can drive top-line growth and FCF dynamics. Kevin now anticipates Splunk's attractive fundamental outlook will become clearer and much better appreciated by investors in the quarters ahead. Splunk Inc: Visibility Set to Improve on a Solid FCF Growth Story; Upgrading to Overweight (18 Nov 2019)

Stay Long Sumitomo Mitsui FG (8316 JP, 2019 TRR: +10.78% , MS Research: OW, 16% Upside to Base Case PT) – Sumitomo Mitsui is one of Japan's 3 major mega-banking groups. Into 2019, MS Analyst Mia Nagasaka was OW on the name based on SMFG's quality topline, sustained structural reform pace, turning point in capital policy, and faster OHR(overhead ratio) decline than expected by the market. SMFG remains one of her top picks for 2020 as she expects income contributions from group subsidiaries and sustainable profit growth from integrated group management. SMFG has also been able to balance risk-taking and high return levels within its asset portfolio leading to the bank's normalized ROE levels (6.5%) being a notch above other majors. Sumitomo Mitsui FG: Stay OW as Core Bank Stock (18 Nov 2019)

2019 Global Stock Ideas Recap – What Didn't Work…

Below is a recap of ideas that outperformed the MSCI World (ACWI Index) through December 31st, 2019. *There were some strong outliers here, and I wanted to mark-to-market whether MS Research still sees a compelling reason to either stay involved or close each of the ideas as we enter 2020.*

Close Short Teleperformance (TEP FP, 2019 TRR: +55.73%, MS Research: OW, 30% Upside to Bull Case PT) – TEP specialized in outsourced omni-channel customer service. MS EU Business Services Analyst Edward Stanley felt the market was not adequately focusing on and discounting the client concentration risk. Our long-term cautions remain, however, these concerns have been part of the narrative for some time and yet strong growth continues. Guidance patterns, capex precedent, momentum, comparatives, and booked revenue made TEP a top performing stock in the Business Services space for 2019. Teleperformance: Best year in a decade? (20 Mar 2019)

Close Short Wesfarmers (WES AU, 2019 TRR: +32.36%, MS Research: UW, 23% Downside to the Base Case PT) – WES is a diversified Australian corporation with a large retail portfolio. Structural challenges for brick and mortar, a weak retail environment, and ramp of Amazon online retailing in Australia were expected headwinds for 2019. At their AGM meeting, WES flagged an improvement in sales growth for the majority of its retail businesses as well as a modest improvement in retail conditions, consumer confidence benefiting from recovering house prices, tax and, interest rate cuts. Wesfarmers: Trading update suggests improving retail conditions (14 Nov 2019)

Close Long Zhuzhou CRRC Times Electric (3898 HK, 2019 TRR: -35.02% , MS Research: OW, 52% Upside to Base Case PT) – Times Electric is a leading train-borne electrical system provider for China's railway industry. MS Analyst Kevin Luo has been positive on Times Electric throughout 2019 and remains OW for 2020. In 2019, higher-than-expected expenses and railway maintenance machinery revenue dropped notably YoY driving underperformance in share price. Kevin likes railway equipment companies because they will benefit from an acceleration in railway equipment demand in 2020 and Times Electric is one of his preferred names in the sector. He forecasts net profit to increase by 31% and 10% in 2020e and 2021e, respectively. China Industrials: Railway Equipment Investment to Accelerate in 2020 (10 Dec 2019)

Global Stock Ideas Performance Review (2018)

12/31/2017	12/31/2018	2018 Savone Longs	Ticker	Net Change
OW	OW	Agilent Technologies Inc	A	0.73%
OW	OW	Biogen Inc	BIIB	-5.54%
OW	OW	CaixaBank SA	CABK SM	-18.64%
OW	OW	Cellnex Telecom SA	CLNX SM	4.87%
OW	OW	Cemex SAB de CV	CX	-35.73%
OW	OW	Cisco Systems Inc	CSCO	13.13%
OW	OW	Citigroup Inc	C	-30.04%
OW	OW	Dassault Systemes SE	DSY FP	17.06%
OW	EW	Devon Energy Corp	DVN	-45.56%
EW	EW	Equifax Inc	EFX	-21.02%
OW	OW	ICICI Bank Ltd	ICICIBC IN	14.70%
OW	OW	Komatsu Ltd	6301 JP	-41.99%
OW	OW	MakeMyTrip Ltd	MMYT	-18.49%
OW	OW	PayPal Holdings Inc	PYPL	14.22%
OW	EW	Royal Dutch Shell PLC	RDSA NA	-7.67%
OW	OW	Samsung SDI Co Ltd	006400 KS	7.09%
OW	OW	Shin-Etsu Chemical Co Ltd	4063 JP	-25.45%
OW	EW	Wynn Resorts Ltd	WYNN	-41.33%
OW	OW	YPF SA	YPF	-41.55%
OW	OW	Zhuzhou CRRC Times Electric Co Ltd	3898 HK	-14.65%

Net Change
-13.79%

12/31/2017	12/31/2018	2018 Savone Shorts	Ticker	Net Change
UW	UW	Avis Budget Group Inc	CAR	-48.77%
UW	EW	Bayerische Motoren Werke AG	BMW GY	-18.58%
UW	UW	CH Robinson Worldwide Inc	CHRW	-5.61%
UW	UW	Cypress Semiconductor Corp	CY	-16.54%
EW	EW	Fast Retailing Co Ltd	9983 JP	25.52%
UW	NA	Infineon Technologies AG	IFX GY	-23.95%
UW	UW	JM Smucker Co/The	SJM	-24.75%
UW	UW	KT&G Corp	033780 KS	6.53%
UW	UW	PTT Global Chemical PCL	PTTGC TB	-12.12%
EW	EW	Publicis Groupe SA	PUB FP	-16.18%
EW	EW	Simon Property Group Inc	SPG	-11.60%
UW	EW	Singapore Telecommunications Ltd	ST SP	-2.18%
UW	NA	Sirius XM Holdings Inc.	SIRI	-17.93%
UW	UW	Sonova Holding AG	SOON SW	5.52%
EW	UW	Weichai Power Co Ltd	2338 HK	4.56%
UW	UW	Wesfarmers Ltd	WES AU	0.89%
EW	EW	Williams-Sonoma Inc	WSM	-2.42%
UW	UW	Yamato Holdings Co Ltd	9064 JP	33.36%

Net Change
-6.96%

Benchmarks	Ticker	Net Change
MSCI World - Local	MSDLWI	**-9.45%**
MSCI World - USD	MSDUWI	-10.58%
Nasdaq	CCMP	-4.53%
S&P 500	SPX	**-6.72%**
DOW	INDU	-6.08%
Euro Stoxx 50	SX5E	-14.84%
Euro Stoxx 600	SXXP	-13.32%
MSCI Europe	MSDLE15	-13.20%
Nikkei	NKY	**-12.15%**
MSCI Asia	MXASJ	-16.05%
MSCI LatAm	MXLA	-8.97%
MSCI Emerging Markets	MXEF	-16.29%

	Total Portfolio Comparison	Ticker	Net Change
1.	Longs and Shorts Weighted		**-3.96%**
2.	L/S (150% GMV / 50% Net)		**-10.32%**
3.	Spread (Long vs Short)		**-6.84%**
	HFRX Global Hedge Fund Index	**HFRXGL**	**-6.72%**
	HFRX Global Equity HF Index	**HFRXEH**	**-9.48%**

[1] *by exposure, as had 20 Longs and 19 Shorts*

[2] *Running 200% Gross and 0% Net*

[3] *Running 150% Gross and 50% Net*

All as of December 31st, 2018
Source: Bloomberg

Source: Bloomberg

(Past performance is not indicative of future performance)

Global Stock Ideas Performance Review (2017)

12/31/2016	12/31/2017	2017 Savone Longs	Ticker	Net Change
OW	OW	Advance Auto Parts Inc	AAP US	-41.05%
OW	EW	Akzo Nobel NV	AKZA NA	29.80%
OW	OW	Amgen Inc	AMGN	18.94%
OW	OW	Analog Devices Inc	ADI	22.60%
OW	OW	ASML Holding NV	ASML NA	36.10%
EW	EW	Burberry Group PLC	BRBY LN	19.71%
EW	OW	Cemex SAB de CV	CX	-2.86%
OW	OW	China Jushi Co Ltd	600176 CH	98.66%
OW	OW	Citigroup Inc	C	25.21%
OW	NR	Honeywell International Inc	HON	32.38%
OW	OW	Kyushu Railway Co	9142 JP	14.22%
OW	OW	Larsen & Toubro Ltd	LT IN	39.90%
OW	OW	Marathon Petroleum Corp	MPC	31.04%
OW	OW	MGM Resorts International	MGM	15.82%
OW	OW	ORIX Corp	8591 JP	4.41%
OW	OW	Petroleo Brasileiro SA	PBR	1.78%
OW	OW	Prysmian SpA	PRY IM	11.43%
OW	EW	Synchrony Financial	SYF	6.45%
OW	OW	UBS Group AG	UBSG SW	16.49%
OW	OW	Yum China Holdings Inc	YUMC	53.22%

Net Change
21.71%

12/31/2016	12/31/2017	2017 Savone Shorts	Ticker	Net Change
UW	UW	Brown-Forman Corp	BF/B	-52.87%
UW	UW	Citrix Systems Inc	CTXS	-23.74%
UW	UW	Consolidated Edison Inc	ED	-15.30%
EW	EW	CVS Health Corp	CVS	8.12%
UW	OW	Geely Automobile Holdings Ltd	175 HK	-265.72%
UW	UW	Hennes & Mauritz AB	HMB SS	33.19%
UW	EW	Hong Kong Exchanges & Clearing Ltd	388 HK	-30.90%
EW	EW	Japan Display Inc	6740 JP	31.53%
UW	UW	Keyence Corp	6861 JP	-57.41%
EW	EW	Koninklijke Philips NV	PHIA NA	-8.76%
UW	UW	Peugeot SA	UG FP	-9.42%
EW	EW	Publicis Groupe SA	PUB FP	13.58%
EW	EW	Simon Property Group Inc	SPG	3.34%
UW	UW	Skyworks Solutions Inc	SWKS	-27.18%
UW	UW	SUMCO Corp	3436 JP	-91.26%
UW	NR	VF Corp	VFC	-38.71%
UW	NR	WW Grainger Inc	GWW	-1.72%

Net Change
-31.37%

Source: Bloomberg

Benchmarks	Ticker	Net Change
MSCI World - Local	**MSDLWI**	**16.68%**
MSCI World - USD	MSDUWI	20.31%
Nasdaq	CCMP	28.24%
S&P 500	**SPX**	**19.42%**
DOW	INDU	25.08%
Euro Stoxx 50	SX5E	6.49%
Euro Stoxx 600	SXXP	7.68%
MSCI Europe	MSDLE15	10.32%
Nikkei	**NKY**	**19.10%**
MSCI Asia	MXASJ	38.17%
MSCI LatAm	MXLA	20.43%
MSCI Emerging Markets	MXEF	33.78%

Total Portfolio Comparison	Ticker	Net Change
Longs and Shorts Weighted[1]		**-2.68%**
Market Neutral Weighted[2]		**-9.65%**
L/S (150% GMV / 50% Net)[3]		**6.03%**
Spread (Long vs Short)		**-9.65%**
HFRX Global Hedge Fund Index	HFRXGL	**5.83%**
HFRX Global Equity HF Index	HFRXEH	**9.98%**
HFRX Equity Mkt Neutral HF Index	HFRXEMN	**1.31%**

[1] *by exposure, as had 20 Longs and 17 Shorts*

[2] *Running 200% Gross and 0% Net*

[3] *Running 150% Gross and 50% Net*

All as of December 31st 2017
Source: Bloomberg

(Past performance is not indicative of future performance)

Global Stock Ideas Performance Review (2016)

12/31/2015	12/31/2016	2016 Savone Longs	Ticker	Net Change
EW	EW	Abbvie	ABBV US	5.71%
OW	OW	Advance Auto Parts	AAP US	12.36%
OW	OW	Akzo Nobel	AKZA NA	-3.71%
OW	EW	AMC Networks	AMCX US	-29.91%
OW	EW	American Express	AXP US	6.51%
OW	OW	Amorepacific	090430 KS	-22.44%
OW	OW	Astrazeneca	AZN LN	-3.88%
OW	OW	Cellnex	CLNX SM	-20.74%
OW	OW	Cosan	CSAN3 BZ	51.39%
OW	EW	CVS Health	CVS US	-19.29%
OW	EW	Kansas City Southern	KSU US	13.63%
OW	OW	Larsen & Toubro	LT IN	5.77%
OW	OW	LG Display	034220 KS	28.11%
OW	OW	Naspers	NPN SJ	-5.00%
OW	OW	Noble Energy	NBL US	15.58%
OW	OW	Recruit	6098 JP	31.74%
OW	OW	Santander Mexico	SANMEXB MM	-1.45%
OW	OW	UBS	UBSG VX	-13.55%
OW	EW	WhiteWave Foods	WWAV US	42.89%
OW	OW	Worldpay	WPG LN	-12.17%

Net Change
4.08%

12/31/2015	12/31/2016	2016 Savone Shorts	Ticker	Net Change
UW	EW	Coty	COTY US	27.85%
EW	EW	Dixons Carphone	DC/ LN	29.08%
EW	EW	Dominos Pizza	DPZ US	-43.14%
UW	UW	HK Exchange & Clearing	388 HK	7.71%
UW	UW	Hon Hai	2317 TT	-14.64%
EW	UW	Illumina	ILMN US	33.29%
UW	UW	Intel	INTC US	-5.37%
EW	UW	Lenovo	992 HK	40.28%
UW	EW	Localiza	RENT3 BZ	-37.87%
UW	UW	Lufthansa	LHA GY	15.76%
EW	EW	NCR	NCR US	-65.82%
UW	UW	Nissan	7201 JP	8.13%
EW	EW	Oracle	ORCL US	-5.26%
EW	OW	Priceline	PCLN US	-14.99%
EW	EW	Publicis	PUB FP	-6.79%
EW	UW	Under Armour	UAA US	30.24%

Net Change
-0.10%

Source: Bloomberg

Benchmarks	Ticker	Net Change
MSCI World- Local	**MSDLWI**	**7.07%**
MSCI World - USD	MSDUWI	5.42%
Nasdaq	CCMP	7.50%
S&P 500	**SPX**	**9.54%**
DOW	INDU	13.42%
Euro Stoxx 50	SX5E	0.70%
Euro Stoxx 600	SXXP	-1.20%
MSCI Europe	MSDLE15	3.83%
Nikkei	**NKY**	**0.42%**
MSCI Asia	MXASJ	2.46%
MSCI LatAm	MXLA	29.12%
MSCI Emerging Markets	MXEF	8.10%

Total Portfolio Comparison	Ticker	Net Change
Longs and Shorts Weighted[1]		2.22%
Market Neutral Weighted[2]		3.98%
L/S (150% GMV / 50% Net)[3]		4.03%
Spread (Long vs Short)		3.98%
HFRX Global Hedge Fund Index	HFRXGL	**2.62%**
HFRX Global Equity HF Index	HFRXEH	**0.02%**
HFRX Equity Mkt Neutral HF Index	HFRXEMN	**-4.82%**

[1] by exposure as had 20 Longs and 16 Shorts

[2] Running 200% Gross and 0% Net

[3] Running 150% Gross and 50% Net

(Past performance is not indicative of future performance)

Global Stock Ideas Performance Review (2015)

	2015 Savone Longs	Ticker	Net Change
OW	Axis Bank	AXSB IN	-10.61%
OW	Boston Scientific	BSX US	39.17%
OW	Daqin Railways	601006 CH	-19.14%
OW	Embraer	EMBR3 BZ	23.53%
OW	Fosun Pharmaceutical	600196 CH	11.33%
OW	KKR	KKR US	-32.83%
EW	Mediaset	MS IM	11.40%
OW	Mitsubishi Electric	6503 JP	-11.31%
OW	Oracle	ORCL US	-18.77%
OW	Paradise Co	034230 KS	-25.21%
OW	Philips	PHIA NA	-2.44%
OW	Recruit Holdings	6098 JP	3.49%
OW	Rolls-Royce	RR/ LN	-33.91%
OW	Santandaer Mexico	SANMEXB MM	-1.91%
OW	Schlumberger	SLB US	-18.34%
OW	SPX/SPX Flow		-56.66%
EW	Tesco	TSCO LN	-20.90%
OW	UBS	UBSG VX	21.54%
OW	WhiteWave Foods	WWAV US	11.20%

Net Change
-6.86%

	2015 Savone Shorts	Ticker	Net Change
UW	Avis	CAR US	45.29%
EW	Dixons Carphone	DC/ LN	-8.13%
UW	Garmin	GRMN US	29.64%
EW	ICAP	IAP LN	-12.62%
UW	Intel	INTC US	5.10%
UW	Laboratory Corp	LH US	-14.59%
UW	L'Oreal	OR FP	-11.49%
EW	Otsuka Corp	4768 JP	-56.02%
UW	Samsung SDS	018260 KS	13.46%
EW	Twitter	TWTR US	35.49%
UW	Yamato Holdings	9064 JP	-7.58%
UW	Yapi Kredi	YKBNK TI	32.72%

Net Change
4.27%

Benchmarks	Ticker	Net Change
MSCI World- Local	MSDLWI	0.15%
MSCI World - USD	MSDUWI	**-2.84%**
Nasdaq	CCMP	**5.73%**
S&P 500	**SPX**	**-0.73%**
DOW	INDU	-2.23%
Euro Stoxx 50	SX5E	3.85%
Euro Stoxx 600	SXXP	6.79%
MSCI Europe	MSDLE15	2.66%
Nikkei	**NKY**	**9.07%**
MSCI Asia	MXASJ	-11.57%
MSCI LatAm	MXLA	-33.35%

Total Portfolio Comparison	Ticker	Net Change
Longs and Shorts Weighted	*by exposure - 19 l*	-2.55%
Market Neutral Weighted	*Running 100% G*	-1.29%
L/S (150% GMV / 50% Net)	*Running 150% G*	-4.73%
Spread (Long vs Short)		-2.59%
HFRX Global Hedge Fund Index	HFRXGL	**-3.49%**
HFRX Global Equity HF Index	HFRXEH	**-2.16%**
HFRX Equity Mkt Neutral HF Index	HFRXEMN	**5.64%**

1 *By exposure as had 19 Longs and 12 Shorts*

2 *Running 100% Gross and 0% Net*

3 *Running 150% Gross and 50% Net*

Source: Bloomberg

(Past performance is not indicative of future performance)

Global Stock Ideas Performance Review (2014)

	2014 Savone Longs	Ticker	Net Change
OW	Accor	AC FP	8.86%
OW	eBay	EBAY US	2.29%
OW	ICIC	ICICIBC IN	60.68%
EW	Intuitive	ISRG US	37.72%
OW	ITV	ITV LN	10.93%
OW	KKR & Co	KKR US	-4.64%
OW	Mitsubishi Electric	6503 JT	9.55%
OW	NextEra	NEE US	24.14%
OW	New Oriental	EDU US	-35.21%
OW	Panasonic	6752 JT	16.58%
OW	Prudential	PRU LN	11.34%
EW	RBS	RBS LN	16.65%
OW	Safran	SAF FP	1.47%
EW	Standard Chartered	STAN LN	-29.19%
OW	Takeda	4502 JT	3.55%
OW	Televisa	TV US	12.56%
OW	Tenaris	TS US	-30.85%
OW	Terex	TEX US	-33.60%
OW	Thermo Fisher	TMO US	12.52%
OW	Tinkoff	TCS LI	-79.68%

Net Change
0.783%

	2014 Savone Shorts	Ticker	Net Change
EW	Accenture	ACN US	-8.62%
EW	ARM	ARM LN	9.46%
EW	Asustek	2357 TT	-29.29%
UW	Atlas Copco	ATCOA SS	-22.49%
EW	Belle International	1880 HK	2.79%
EW	General Electric	GE US	9.85%
EW	Lululemon	LULU US	5.49%
UW	Mercadolibre	MELI US	-18.44%
EW	Otsuka	4768 JP	14.54%
OW	Sainsbury	SBRY LN	32.41%
EW	Wendy's	WEN US	-3.56%

Net Change
-0.715%

Benchmarks	Ticker	Net Change
MSCI World- Local	MSDLWI	7.71%
MSCI World - USD	MSDUWI	**2.93%**
Nasdaq	CCMP	**13.40%**
S&P 500	**SPX**	**11.39%**
DOW	INDU	7.52%
Euro Stoxx 50	SX5E	1.20%
Euro Stoxx 600	SXXP	4.35%
MSCI Europe	MSDLE15	1.98%
Nikkei	**NKY**	**7.12%**
MSCI Asia	MXASJ	2.23%

Total Portfolio Comparison	Ticker	Net Change
Longs and Shorts Weighted		0.252%
Market Neutral Weighted		0.034%
L/S (150% GMV / 50% Net)		0.426%
HFRX Global Hedge Fund Index	HFRXGL	**-1.50%**

1 By exposure as had 20 Longs and 11 Shorts

2 Running 100% Gross and 0% Net

3 Running 150% Gross and 50% Net

Source: Bloomberg

(Past performance is not indicative of future performance)

Global Stock Ideas Performance Review (2013)

	2013 Savone Longs	Ticker	Net Change
OW	AIA Group	1299 HK	29.26%
OW	Alstom	ALO FP	-12.15%
EW	Arcos Dorados	ARCO US	1.34%
OW	CBS	CBS US	67.52%
OW	Canadian Pacific Railway	CP US	48.91%
OW	Dr Reddy's Lab	DRRD IN	38.52%
UW	Goodyear	GT US	72.70%
OW	Japan Tobacco	2914 JT	40.16%
EW	KKR & Co	KKR US	59.82%
EW	OHL	ARTR3 BZ	0.53%
OW	OTE	OTE GR	88.39%
EW	Panasonic	6752 JT	134.48%
OW	Porsche SE	PAH3 GY	22.63%
OW	Santander	SAN SM	6.66%
OW	Sumitomo Mitsui Financial	8316 JP	74.00%
EW	Symantec Corp	SYMC US	25.29%
OW	Yandex	YNDX US	100.32%

Net Change
46.96%

	2013 Savone Shorts	Ticker	Net Change
UW	Aeropostale	ARO US	30.13%
UW	Axel Springer	SPR GY	-44.65%
UW	Bed Bath & Beyond	BBBY US	-43.62%
UW	Ibiden	4062 JT	-43.92%
EW	Intuitive Surgical	ISRG US	21.68%
UW	Progressive Group	PGR US	-29.24%
OW	Qualcomm	QCOM US	-20.03%
UW	Tesco	TSCO LN	0.49%
UW	Trend Micro	4704 JT	-41.92%
UW	Woolworths	WOW AU	-15.41%

Net Change
-18.65%

Source: Bloomberg

Benchmarks	Ticker	Net Change
MSCI World- Local	MSDLWI	26.25%
MSCI World - USD	MSDUWI	**25.19%**
Nasdaq	CCMP	**38.19%**
S&P 500	**SPX**	**29.46%**
DOW	INDU	26.39%
Euro Stoxx 50	SX5E	17.95%
Euro Stoxx 600	SXXP	17.37%
MSCI Europe	MSDLE15	17.88%
Nikkei	**NKY**	**56.72%**
MSCI Asia	MXASJ	0.45%

Total Portfolio Comparison	Ticker	Net Change
Longs and Shorts Weighted		22.66%
Market Neutral Weighted		14.16%
L/S (150% GMV / 50% Net)		37.64%
HFRX Global Hedge Fund Index	HFRXGL	**6.52%**
Hedge Fund VIP Index	GSTHHVIP	**0.00%**

[1] *By exposure as had 17 Longs and 10 Shorts*

[2] *Running 100% Gross and 0% Net*

[3] *Running 150% Gross and 50% Net*

(Past performance is not indicative of future performance)

Global Stock Ideas Performance Review (2012)

	2012 Ideas - Savone	Ticker	Net Change
OW	AIA Group	1299 HK	24.74%
OW	Arcos Dorados	ARCO US	-49.17%
OW	Capital One	COF US	36.98%
OW	Danone	BN FP	2.75%
OW	EMC	EMC US	17.46%
OW	Focus Media	FMCN US	31.71%
EW	Home Depot	HD US	47.12%
EW	KKR	KKR US	18.71%
OW	Mosaic Company	MOS US	12.29%
OW	Mylan	MYL US	27.91%
OW	Porsche	PAH3 GR	49.21%
OW	Sberbank	SBER LI	23.99%
OW	Sumitomo Mitsui	8316 JP	45.29%
OW	Sunoco	SXC US	67.93%
EW	Vale	VALE US	-2.28%
EW	Zoomlion	1157 HK	36.60%

Net Change
24.45%

	2012 Savone Shorts	Ticker	Net Change
UW	Alcatel-Lucent	ALU FP	16.90%
EW	Baidu	BIDU US	13.89%
EW	China Merchants	3968 HK	-8.92%
UW	Deere	DE US	-11.73%
OW	Deutsche Post	DPW GR	-39.73%
OW	Komatsu	6301 JP	-21.40%
EW	Tesco	TSCO LN	16.72%
UW	Tesla	TSLA US	-18.59%
EW	Vivendi	VIV FP	-3.52%
UW	Westfield Group	WDC AU	-35.21%

Net Change
-9.16%

Benchmarks	Ticker	Net Change
MSCI World- Local	MSDLWI	13.07%
MSCI World - USD	MSDUWI	**13.18%**
Nasdaq	CCMP	**15.91%**
S&P 500	**SPX**	**13.41%**
DOW	INDU	7.26%
Euro Stoxx 50	SX5E	13.79%
Euro Stoxx 600	SXXP	14.37%
MSCI Europe	MSDLE15	11.76%
Nikkei	**NKY**	**22.94%**
MSCI Asia	MXASJ	19.33%

Total Portfolio Comparison	Ticker	Net Change
Longs and Shorts Weighted	*by exposure a*	11.53%
Market Neutral Weighted	*Running 100*	7.65%
L/S (150% GMV / 50% Net)	*Running 150*	19.87%
HFRX Global Hedge Fund Index	HFRXGL	**3.51%**

1 By exposure as had 16 Longs and 10 Shorts

2 Running 100% Gross and 0% Net

3 Running 150% Gross and 50% Net

Source: Bloomberg

(Past performance is not indicative of future performance)

Global Stock Ideas Performance Review (2011)

	2011 Ideas - Savone	Ticker	Net Change
OW	Amadeus	AMS SM	-20.06%
OW	BP	BP/ LN	-1.08%
OW	CNInsure	CISG US	-60.67%
OW	Fiat	F IM	-46.98%
EW	Health Net Inc	HNT US	12.68%
OW	Kawasaki Kisen	9107 JP	-61.06%
NR	KKR	KKR US	-7.96%
EW	Komatsu	6301 JT	-26.78%
EW	Li Ning	2331 HK	-62.56%
OW	Monsanto	MON US	0.93%
-	Motorola Mobility	MMI US	33.20%
NR	Posco	005490 KS	-21.97%
OW	Sberbank	SBER RU	-33.96%
OW	SJM Holdings	880 HK	2.76%
OW	UBS	UBSN VX	-27.17%
EW	Valero	VLO US	-10.60%
OW	Visa	V US	45.21%
OW	Zions Bancorp	ZION US	-32.56%

Net Change
-17.70%

	2011 Savone Shorts	Ticker	Net Change
UW	Capita	CPI LN	9.76%
EW	China Merchants Bank	3968 HK	19.98%
UW	Eisai	4523 JP	-8.33%
OW	Hewlett Packard	HPQ US	38.57%
EW	Hitachi	6501 JP	6.70%
UW	Holcim	HOLN VX	28.87%
EW	Logitech	LOGN VX	58.79%
UW	Regal Entertainment	RGC US	-1.87%
UW	Spirit AeroSystems	SPR US	-0.06%

Net Change
16.94%

Source: Bloomberg

Benchmarks	Ticker	Net Change
MSCI World- Local	MSDLWI	-7.56%
MSCI World - USD	MSDUWI	**-7.61%**
Nasdaq	CCMP	**-1.46%**
S&P 500	**SPX**	**0.30%**
DOW	INDU	5.91%
Euro Stoxx 50	SX5E	-17.05%
Euro Stoxx 600	SXXP	-11.33%
MSCI Europe	MSDLE15	-12.68%
Nikkei	**NKY**	**-17.34%**
MSCI Asia	MXASJ	-19.22%

Total Portfolio Comparison	Ticker	Net Change
Longs and Shorts Weighted		**-6.16%**
Market Neutral Weighted		**-0.38%**
L/S (150% GMV / 50% Net)		**-9.23%**
HFRX Global Hedge Fund Index	HFRXGL	**-9.01%**

1 *By exposure as had 18 Longs and 9 Shorts*

2 *Running 100% Gross and 0% Net*

3 *Running 150% Gross and 50% Net*

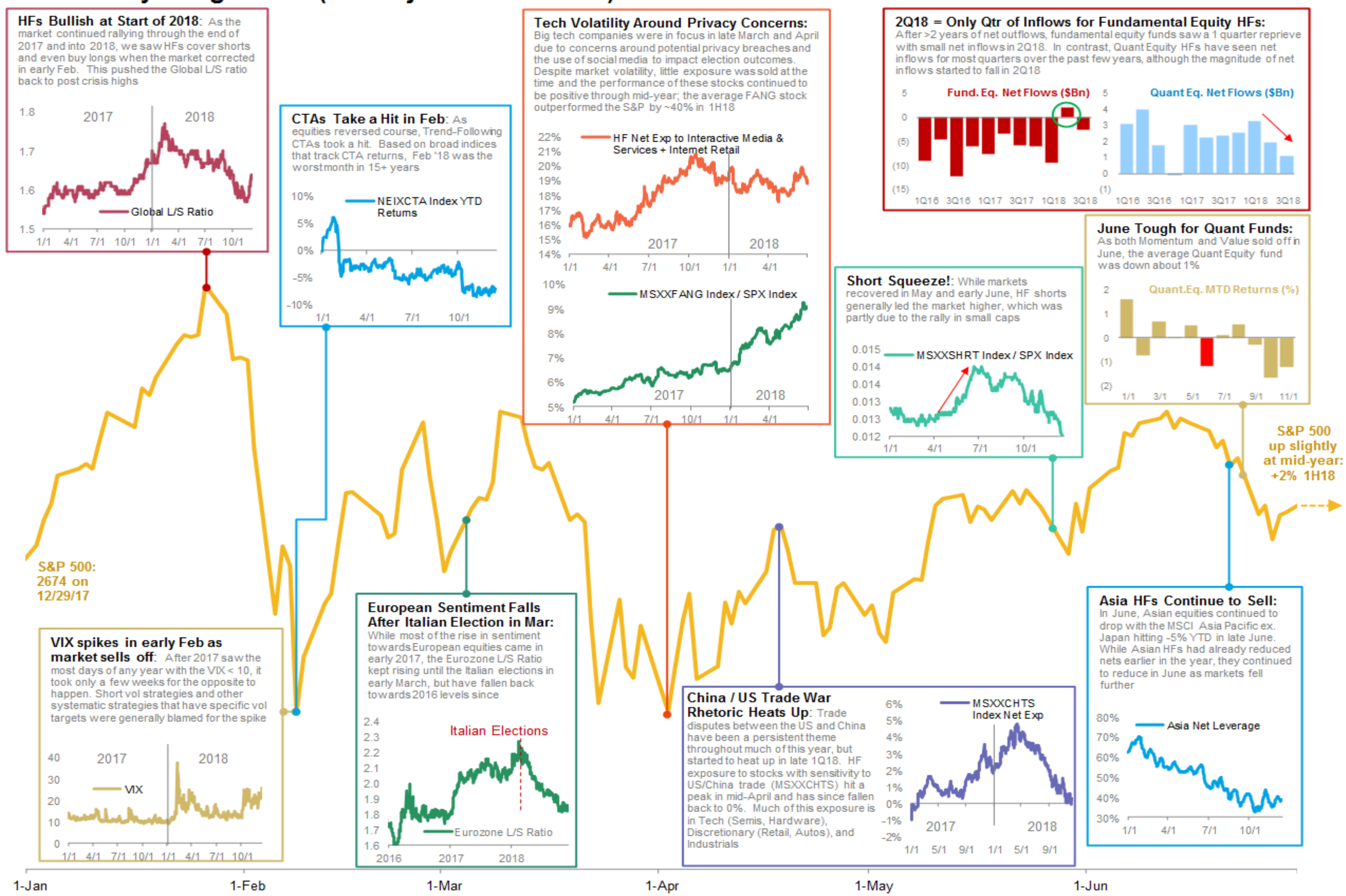
(Past performance is not indicative of future performance)

Appendix 2: Themes, Ideas & Events

Please Note: The following is a market summary by MS Prime Brokerage (MS Sales & Trading):

2018 Year In Review

1H18: A Very Long Year… (this is just the first half)



Source: Morgan Stanley Prime Brokerage, Bloomberg, HFR, Inc.

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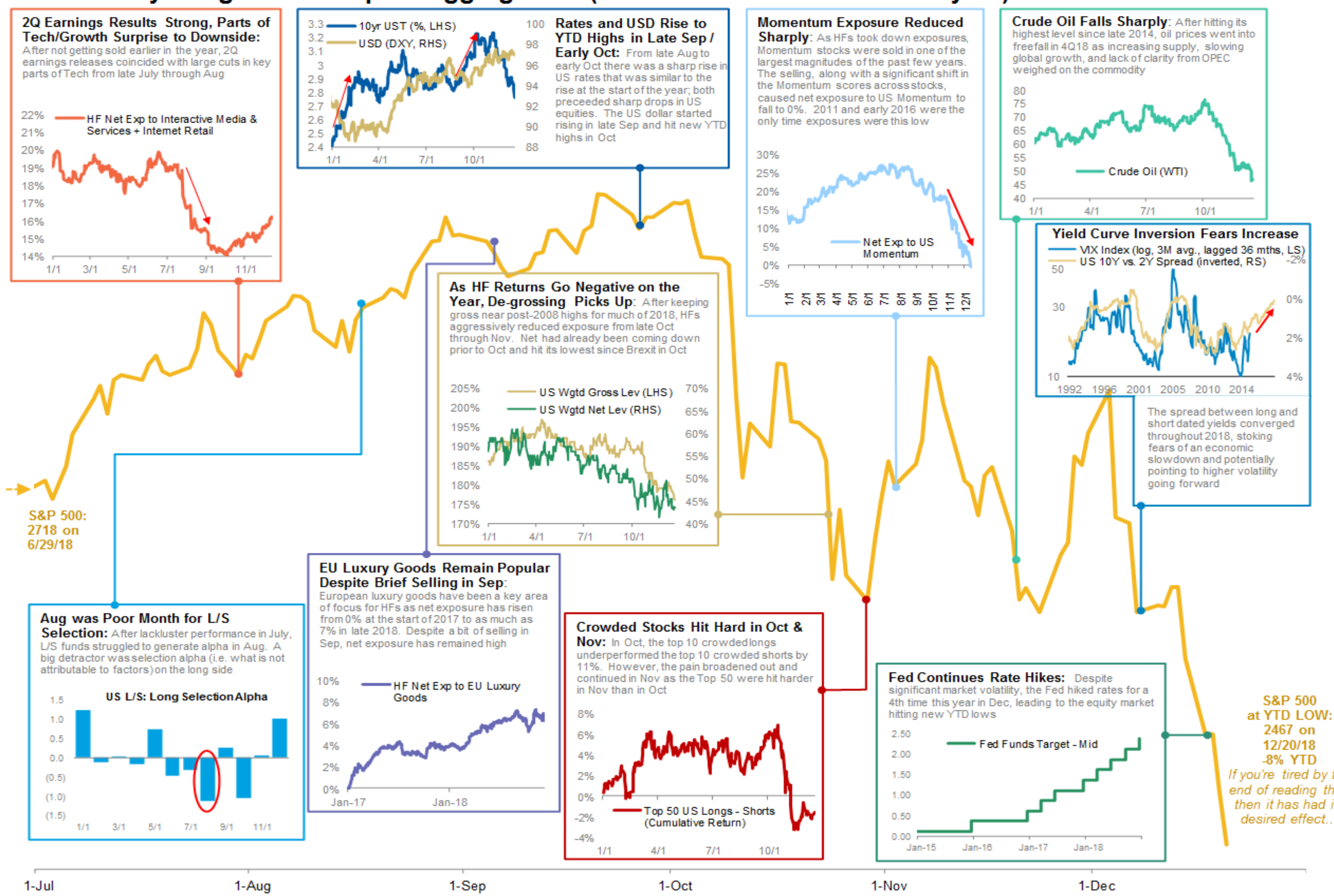
Information Sourced By: John Schlegel

2018 Year In Review (Cont.)

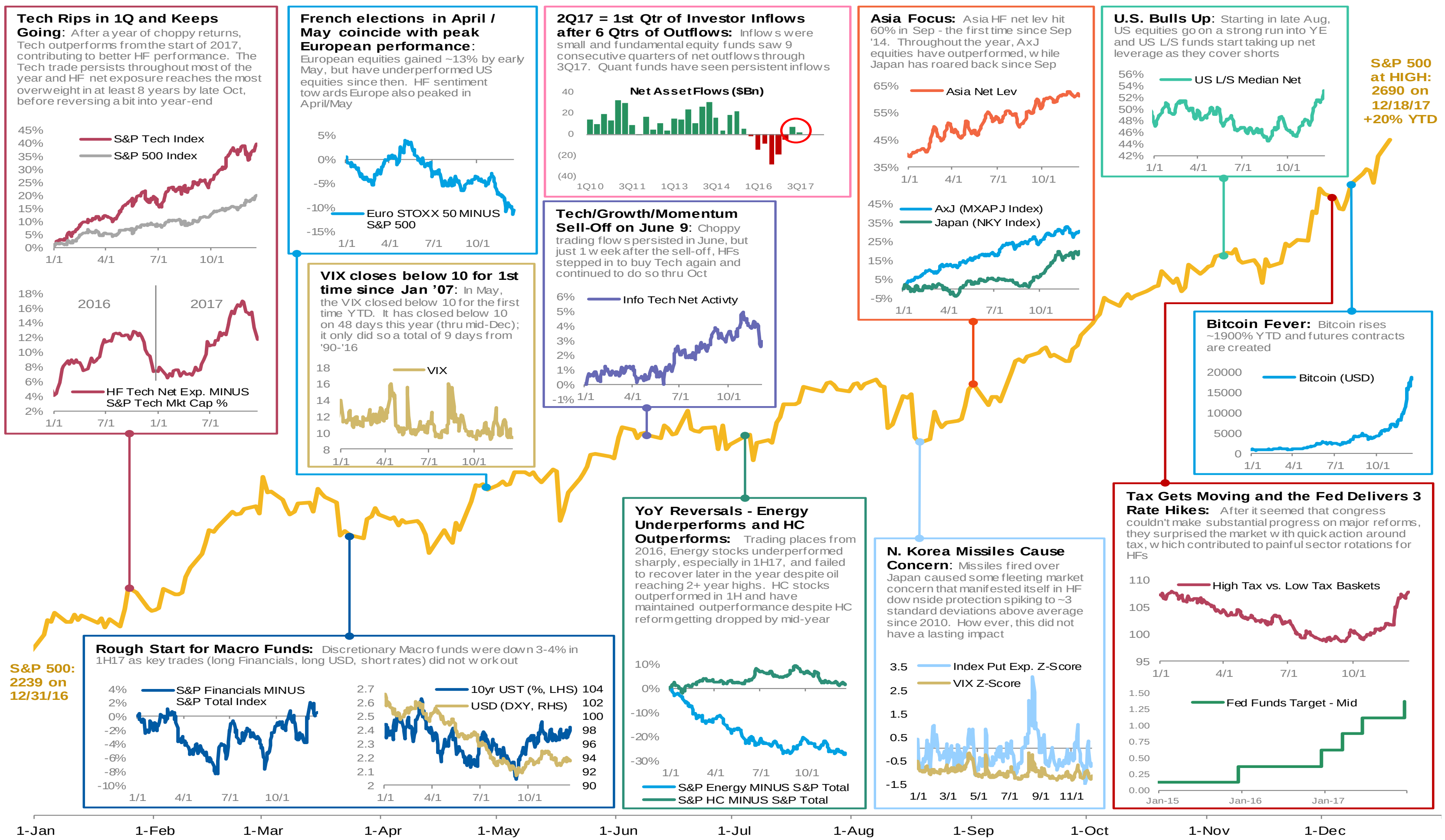
2H18: A Very Long Year…Keeps Dragging On… (this is the second half of the year)



Source: Morgan Stanley Prime Brokerage, Bloomberg, HFR, Inc.

Prior Years In Review (2017)

2017: Up, Up, and Away! Economic growth, markets, leverage, momentum, Fed Funds, and even oil up!

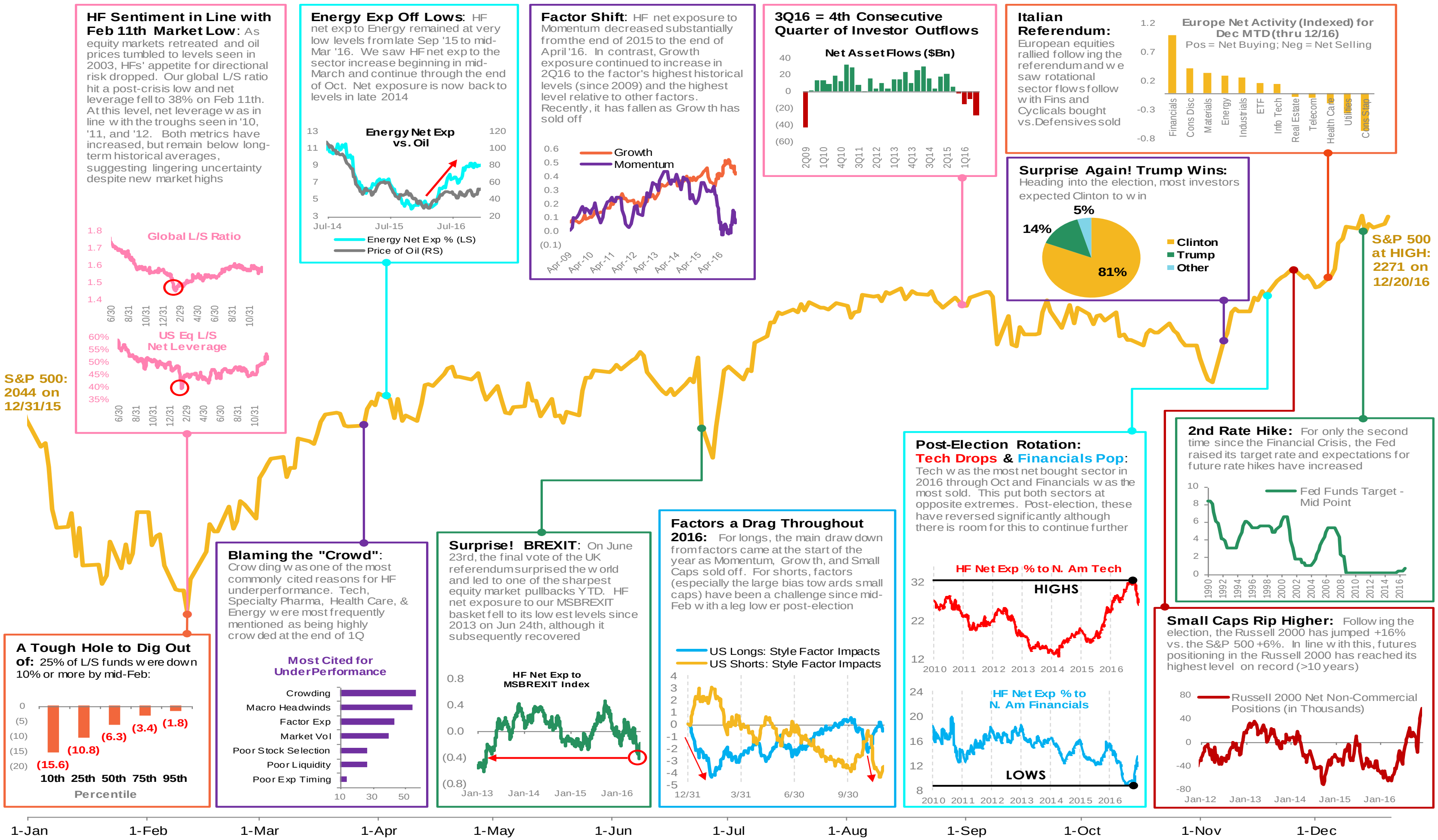


Source: Morgan Stanley Prime Brokerage, Bloomberg, HFR, Inc., MS PB Quarterly Investor Surveys

Information Sourced By: John Schlegel

Prior Years In Review (2016)

2016: Factor/Sector Reversals, Sentiment Swings, Surprise Election Results, Redemptions…& Market Highs!



Source: Morgan Stanley Prime Brokerage, Bloomberg, HFR, Inc., MS PB Quarterly Investor Surveys

Morgan Stanley Research: Blue Papers & Global Insights

Morgan Stanley Blue Papers & Global Insights are collaborative, in-depth reports that span different regions to provide analysis on topical investment themes and technological disruptions.

- **Decarbonisation: The Race To Net Zero**- The desire to halt climate change has never been more pronounced. MS' Strategists and Analysts look at five technologies that offer solutions to decarbonise industry, power and mobility. But it will require $50 trillion of investment and new regulation. Sustainability: Decarbonisation: The Race to Net Zero (29 Oct 2019)
- **Global Technology: The Data Era Disrupts the Supply Chain** - Technology component suppliers face increased disruption in the shift from mobile computing to the new data-led cycle. MS' Tech team introduce a unique framework combining quantitative and qualitative factors that ranks companies' ability to transition to the Data Era. Global Technology: The Data Era Disrupts the Supply Chain (21 Oct 2019)
- **The Power Of Words: Going Global** - MS' Quant team has extended its Power of Words work on US stocks to Morgan Stanley Research reports globally. In backtests, the team's proprietary sentiment model extracted alpha from the text of analysts' reports in all regions, with the highest Sharpe Ratios in Asia ex Japan and Europe. Quantitative Equity Research: The Power of Words: Going Global (14 Oct 2019)
- **Global Energy: Natural Gas: Fueling Global Disruption** - Shale gas disrupted the US energy industry, transforming it over the past decade. Now cheap LNG is set to do the same globally. Coal, Oil & Gas, Power, and US Chemicals likely face headwinds, while EU Chemicals, Oil Services, Industrials, and Regulated Utes/Infrastructure companies should benefit. Natural Gas: Fueling Global Disruption
- **Quantitative Investment Strategies: Capturing Alpha in Risk Reward** - For over a decade, the Risk Reward framework has been a hallmark of Morgan Stanley Equity Research. Besides providing depth and context for fundamental investors, can it add value to quant investing? MS' Quant Strategists introduce rule-based investment strategies for global equity markets that capture analyst alpha. Quantitative Investment Strategies: Capturing Alpha in Risk Reward (19 Sep 2019)
- **How the GenY+Z Boom Rolls Through the US Economy** - The coming lift from Millennials and Gen Z should dispel much of the gloom around the aging Baby Boomers. MS economist Ellen Zentner and Research Analyst Richard Hill chart the long-term impact on growth, asset classes, sectors, and companies. An AlphaWise survey sheds new light on Gen Y+Z and their long term impact on the economy. How the Gen Y+Z Boom Rolls Through the US Economy (9 Jun, 2019)
- **Global Asset Management: Still Early Days for Private Markets** - Surveying the Private Markets landscape, MS Research Analysts see 4 common misconceptions and 5 sustainable growth drivers in the context of a late cycle backdrop with 3 emerging cyclical risks. Three stocks to own: Blackstone, Hamilton Lane, and Partners Group. Global Asset Management: Still Early Days for Private Markets (17 Sep 2019)
- **Lithium: New Technologies, Same Oversupply** - New technologies in the production of lithium will both smooth and depress the cost curve. MS Research now expects the lithium cycle to trough in 2025 (vs. 2021 previously), with a floor price of $7.2k/t for carbonate (vs. $8k/t previously). With battery technology also advancing and demand moving toward lithium hydroxide, MS Research puts the global lithium stocks covered into perspective, finding opportunities to invest in the space after the strong derating. Lithium: New Technologies, Same Oversupply (12 Jul 2019)
- **Quantitative Equity Research: Introducing HERS: Employing Diversity Pays Off** - Gender diverse firms tend to outperform their less diverse peers globally. Morgan Stanley has developed a proprietary framework – the Holistic Equal Representation Score (HERS) – to help investors identify the most gender diverse companies. Quantitative Equity Research: Introducing HERS: Employing Diversity Pays Off (13 Aug 2019)

Information Sourced By: Lesley Zhang

ESG/SRI: Integration Notes

Morgan Stanley Research has created an interactive model highlighting companies whose products and services can help to solve at least one of five global sustainability challenges: Climate Change, Resource Management, Health & Wellbeing, Inclusion and Safety & Security. The model provides a framework for finding "solution stocks" by sustainability theme and country. Sustainability: Sustainable Solutions Interactive (21 May 2019)

Investor Framework for Evaluating China A-Share Governance – Governance is the first stepping stone for ESG analysis. We expand our Asia coverage by considering how to approach the topic when investing in China A-Shares. Investor Framework for Evaluating China A-Share Governance (18 Nov 2019)

2020 Election: Climate Change in Focus – Amidst growing attention to the effects of climate change, presidential candidates have proposed a range of actions on decarbonization. We provide a closer look at leading candidates' climate agendas, and the sectors and stocks potentially exposed to their policy proposals. 2020 Election: Climate Change in Focus (13 Nov 2019)

Decarbonisation: The Race to Net Zero – The desire to halt climate change has never been more pronounced. We look at five technologies that offer solutions to decarbonise industry, power and mobility. But it will require $50 trillion of investment and new regulation. Decarbonisation: The Race to Net Zero (21 Oct 2019)

Healthcare Gains from Tech Pain – Digital devices and social media are more pervasive than ever. And while the benefits can be great, growing technology adoption also drives healthcare product growth – from extended screen time potentially causing myopia to social media usage boosting cosmetic fixes. We highlight healthcare companies that look best-positioned to provide solutions. Healthcare Gains from Tech Pain (5 Nov 2019)

Sustainability & Utilities: A Deep Dive into Decarbonization – The economic benefit of moving to renewables has enhanced some Utilities' growth outlooks, while also lowering emissions. With investors focused on environmental performance, MS Research Analysts benchmark emissions profiles & identify Utilities with the most aggressive decarbonization targets, e.g., XEL, NEE, AES. Sustainability & Utilities: A Deep Dive into Decarbonization (9 Sep 2019)

Quantitative Equity Research: Introducing HERS: Employing Diversity Pays Off – Gender diverse firms tend to outperform their less diverse peers globally. Morgan Stanley has developed a proprietary framework – the Holistic Equal Representation Score (HERS) – to help investors identify the most gender diverse companies. Quantitative Equity Research: Introducing HERS: Employing Diversity Pays Off (12 Aug 2019)

Sustainability and Biopharma: Climate Change Raises Risk of Infectious Disease; Sizing the Impact on Biopharma – The warming climate is expected to put nearly 1 billion additional people at risk of infectious diseases over time, with Europe most exposed. The biopharma sector will have a key role to play, with up to $125B in incremental vaccinations needed. Sustainability and Biopharma: Climate Change Raises Risk of Infectious Disease; Sizing the Impact on Biopharma (23 Jul 2019)

Sustainability: Revisiting the Link Between Say-on-Pay and Share Performance; Stocks to Watch – Weak say-on-pay results continue to serve as a warning sign for shareholders, with 2018 failures underperforming the market by 15%. Among these failures, MS Research Analysts see notable improvement in the exec comp plans at MDLZ and NVRO, but see lingering reasons for concern at CHK, NBR, and QLYS. Sustainability: Revisiting the Link Between Say-on-Pay and Share Performance; Stocks to Watch (2 May 2019)

ESG/SRI: Impact Investing Via The UN's Sustainable Development Goals

SDGs: Identifying Investment Ideas: new interactive heat map enables investors to identify global stocks aligned to the SDGs. SDGs: Identifying Investment Ideas (22 Jan 2019)

SDG #1: No Poverty: identified 112 public companies across banks, insurance, telcos and utilities whose products / services help to address SDG #1.. SDG#1: No Poverty - Impact Ideas (5 March 2018)

SDG #2: Zero Hunger: highlighted 37 companies in Agriculture, Animal Health, Crop Services, and Equipment that helped eliminate food shortage issues. SDG#2: Zero Hunger – Impact Ideas (5 June 2018)

SDG #3: Good Health & Well-Being: call out 122 companies that help ensure healthy lives and promote well-being for all at all ages. Insurance, auto suppliers, utilities, testing, chemical and cap goods all work toward this goal in some capacity. SDG #3: Good Health & well-Being - Impact Ideas (5 Sept 2018)

SDG #4: Quality Education: identify 44 companies whose products/services ensure inclusive and equitable quality educate and promote lifelong learnings opportunities for all. The telecom sector is especially well positioned to improve education opportunities in emerging markets via expanded internet access. SDG #4: Quality Education - Impact Ideas (2 Oct 2018)

SDG #6: Clean Water & Sanitation: Waste and water management companies in emerging markets and water quality testing are the key facilitators by providing solutions to supply safe drinking water services to cities globally, as well as increase the volume of wastewater treated and recycled. SDG#6: Clean Water and Sanitation - Impact Ideas (31 May 2018)

SDG #7: Affordable and Clean Energy: focused on targets #7.1 (ensure universal access to energy), #7.2 (increase the share of renewable energy) and #7.3 (double the rate of improvement in energy efficiency). Utilities is the key sector in focus.. SDG#7: Affordable & Clean Energy – Impact Ideas (4 April 2018)

SDG #8: Decent Work & Economic Growth: list of ~300 public companies whose products / services help promote sustainable and inclusive economic growth + productive employment/decent work for all. SDG #8: Decent Work & economic Growth - Impact Ideas (7 Nov 2018)

SDG #9: Industry, Innovation, and Infrastructure: the team highlights telcos, utilities, transportation and financial services companies as those that are best able to promote industry, innovation and infrastructure development. SDG#9: Industry, Innovation, and Infrastructure — Impact Ideas (18 July 2018)

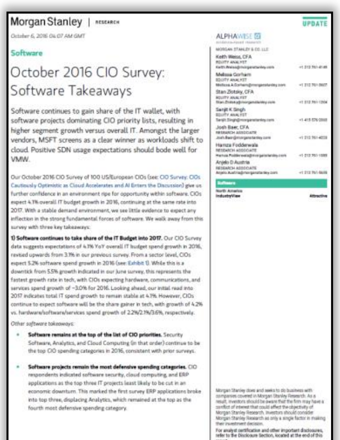
SDG #11: Sustainable Cities and Communities: Autonomous transport, electric vehicles and sustainable transport systems can create environmental and social benefits for cities from increased road safety to reduced air pollution. SDG#11: Sustainable Cities and Communities - Impact Ideas (15 May 2018)

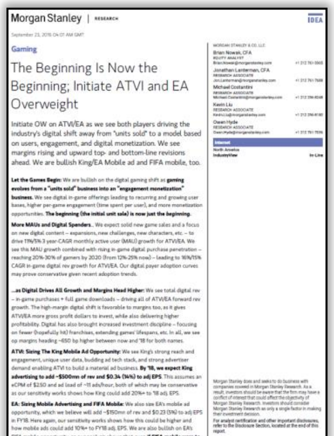
SDG #13: Climate Action: the team highlights 18 insurance companies that provide climate risk related insurance can help to reduce the direct economic losses caused by natural disasters and therefore help support resilience. SDG #13: Climate Action - Impact Ideas (3 Dec 2018)

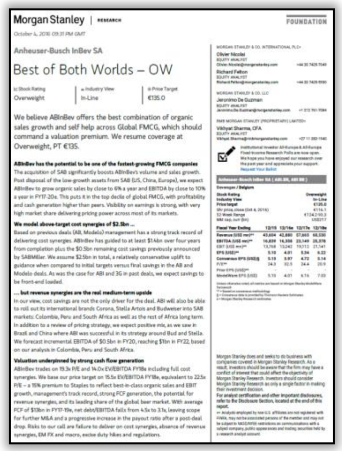
SDG #17: Partnerships for the Goals: lists 115 companies that improve internet connectivity/access/use which in turn can help improve financial inclusion, reduce inequalities, provide access to educational services and increase resource efficiency. SDG #17: Partnerships for the Goals - Impact Ideas (10 Dec 2018)

Morgan Stanley Research: Redesigned For The Way You Work

- **UPDATE – How today's key data points affect the MS investment outlook**
- **IDEAS – High conviction calls you can act on now**
- **FOUNDATION – Learn about a new company, market, economy, or theme**
- **INSIGHT – Groundbreaking analysis, integrating thinking across regions, sectors, & asset classes**
- **BLUEPAPER – Long-term outlook on what can transform an industry or economy**







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http://www.morganstanley.com/pub/content/msdotcom/en/what-we-do/research/myresearch.html

Morgan Stanley Research: Global Coverage

Coverage

86% of MSCI World covered

~ **3,200** stocks worldwide

480+ Equity Analysts

30+ Economists

50+ Fixed Income Strategists

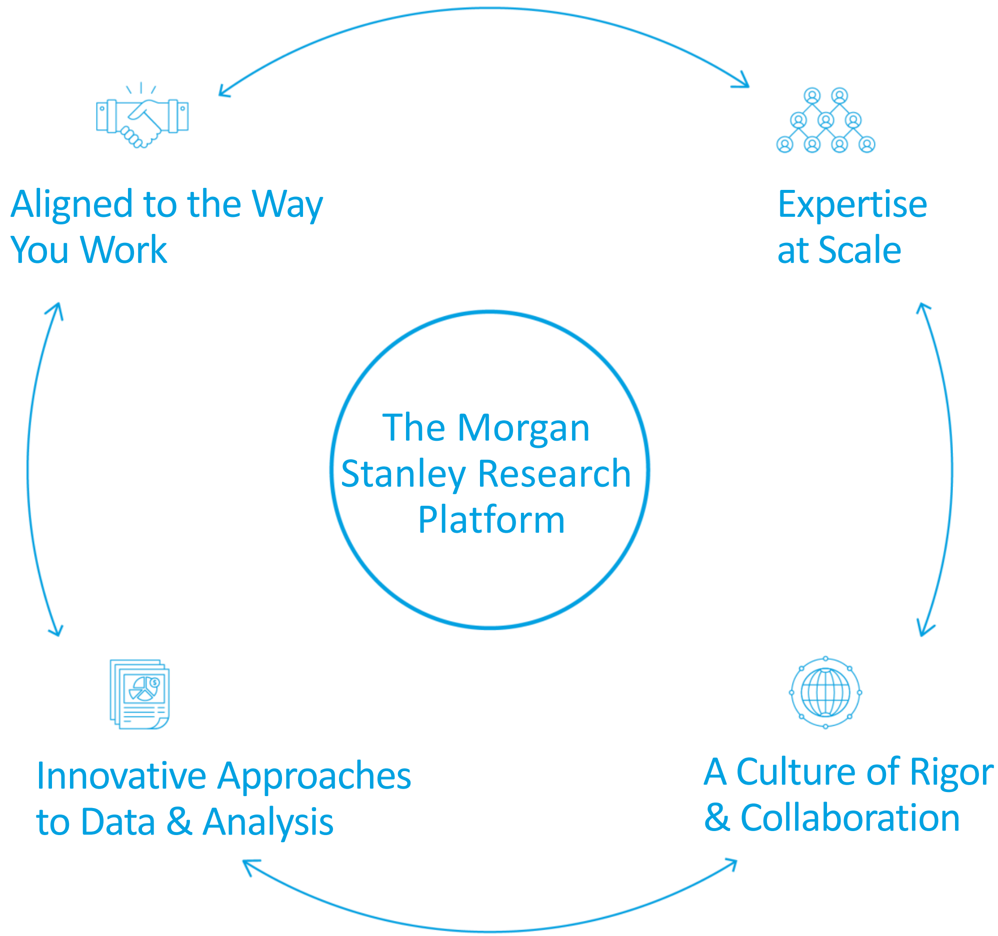
30+ Equity Strategists

Scope (1H19)

25,838 reports published globally

5.2mm report reads

~**80,000 hours** spent with clients



alphawise α

adding data expertise to research workflow

Analyst + Alphawise

Data
- Creation
- Evaluation
- Acquisition
- Delivery
- Data Analysis

Storage/ Discovery
- Ingestion
- Auto-update
- Search
- Discovery
- Delivery

Analysis
- Sector Quant
- Equity Quant
- Data Science
- Data Analysis
- Training
- AI/NLP/ML

Model/ Conclusion
- ModelWare
- Risk-Reward
- Context Analytics
- Model Automation

Research
- Data as a product
- Automation
- Data *Research*

Research Data Management Organization

- 100+ Data Analysts, Data Scientists, Quantitative Analysts, Computer Scientists and Technologists
- Fully Integrated with Morgan Stanley Research's global team of 450+ Equity Analysts, 100+ Equity and Fixed Income Strategists and 30+ Economists
- Focused on the key investment debates and driving Alpha

alphawise α Components

Global Valuation, Accounting, & Tax (GVAT)

Delivers insight and best practices in these disciplines through in-depth research and expertise, ModelWare – MS Research's proprietary database of forecasts – and unique Risk-Reward platform.

Primary Research

Gathers alternative data and generates unique insights via an innovative analytical and visualization platform.

Sector Strats

Integrates quantitative analysis with fundamental intelligence to develop sector alpha signals.

Data Solutions & Services

Helps deliver data-driven insights via MS Research's Data Science Expertise and Research DataLake, using proprietary and external alternative data.

Information Sourced By: Matt Robertson

Corporate Access: MS Global Corporate Events Calendar

Worldwide market intelligence and access to corporate management that only a powerful global firm can provide. Below please find some examples of the global corporate access calendar…

Jan 7, 2020	**6th Annual Autos 2.0 Conference**	Las Vegas
Jan 8, 2020	**Biopharma Physician Expert Panel Day**	New York
Jan 13-14, 2020	**12th Annual Latin America Executive Conference**	Miami
Feb 13, 2020	**Chemicals, Agriculture, and Packaging Corporate Access Day**	New York
March 2-3, 2020	**European MedTech & Services Conference**	London
March 2-4, 2020	**Global Energy & Power Conference**	New York
March 2-5, 2020	**Technology, Media, and Telecom Conference**	San Francisco
March 17-19, 2020	**European Financials Conference**	London
May 12-13, 2020	**EEMEA Conference 2020**	London

Information Sourced By: Amanda Pruthi

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