Global Entrepreneurship Monitor

GEM 2021/22 Women's Entrepreneurship Report

From Crisis to Opportunity

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Foreword

We are living in extraordinary times. Ongoing, ever more rapid technological change has become an integral part of "business-as-usual", leading to substantial shifts in consumer expectations and behaviour. In 2020 and 2021, the COVID-19 pandemic presented us with perhaps the greatest collective crisis of most of our lifetimes. Yet, in 2022, lingering fragmentation of supply chains, the war in Ukraine and the resulting emerging energy and food crises present major barriers to global recovery from the pandemic. In so many ways, the business world is witnessing a long-lasting "perfect storm". The latter is defined in the Collins English dictionary as "an unusual combination of events or things that produce an unusually bad or powerful result". Could it be that the trendy managerial acronym of the last few years — VUCA — has become a "new normal" and reflects a business environment that is here to stay?

GEM has continued, in these turbulent times, to fulfil its purpose of carefully monitoring the state of the art of entrepreneurship and entrepreneurship contexts across the world. For entrepreneurs especially, it could be suggested that from crisis comes opportunity. GEM's findings in this report provides supporting evidence that this may be true. Following up on last year's report, the 2021/22 GEM Women's Entrepreneurship Report is testament to how women entrepreneurs the world over continue to forge ahead, and show surprising resilience (given the VUCA circumstances) in the face of constant challenges to the survival and/or stability of their businesses. Women have more than proven that they too can grasp the opportunities presented by chaos and change. However, even though increasing numbers of women are creating value-adding business that will ultimately bring wealth to their economies, support for women entrepreneurs — culturally, structurally and financially — remains woefully inadequate even if there is a clear and robust business case to stir policymakers and investors into action.

With the hope for economic recovery on the radar despite the VUCA context, we need more and better policy solutions to help women entrepreneurs achieve their goals and bring health and wealth to economies; this is even truer after and during crises. In so doing, policymakers can contribute significantly to achieving the Sustainable Development Goals (SDGs) of reducing inequity, promoting gender equality, and ensuring that decent work and economic growth are achievable and accessible to all, while promoting impact contributions by women entrepreneurs to a plethora of other SDGs.

As our readers peruse the multiple dimensions of women's entrepreneurship explored in this report, we invite them to reflect and act on enabling solutions.

Aileen Ionescu-Somers, PhD
GEM Executive Director

Jeffrey Shay, PhD
GEM-GERA Board Director

Collaborate with GEM to assess city and regional readiness for entrepreneurship

What makes a city or region attractive to entrepreneurs? Which factors draw creative entrepreneurs to a city or region … indeed, to any entrepreneurial ecosystem? What gives them the confidence that they can build successful, value-adding and profitable companies in a nurturing context? How good are cities and regions at building these contexts and nurturing entrepreneurship?

Collaborate with GEM to find answers to these questions in cities and regions that are important to you! Our **Entrepreneurial Ecosystem Quality Composite Index (ESI)** is a diagnostic tool that provides frameworks and data to analyse just about any subnational ecosystem. ESI reports have been conducted in several ecosystems around the world.

"The GEM ESI methodology provided a valuable contribution to deepen our knowledge of Madrid's entrepreneurial ecosystem. It is a solid scientific approach and offers the possibility to analyse a number of variables aligned to different key pillars. This enabled us to identify how the main actors interact and the key issues to be addressed to foster ecosystem development. The ESI tool is a great input for diagnosis and policymaking."

—Isidro de Pablo López, Universidad Autónoma de Madrid

"Reporting on the findings from the Global Entrepreneurship Monitor's Entrepreneurial Ecosystem Quality Index in our region of Nova Scotia, Canada, generated a significant amount of interest from policymakers and ecosystem actors. Some of the notable findings, based on our data, have informed debate and helped leading ecosystem players to think about strategies for further ecosystem development."

—Kevin McKague, PhD, Canada Research Chair and Associate Professor of Entrepreneurship, Shannon School of Business, Cape Breton University

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We sincerely thank our sponsors for the essential support that they provide to GEM, allowing us to produce this report annually. GEM is proud to have strategic partnerships with each sponsor that contributes to this report; this means that GEM has identified complementary synergies with its partners to ensure that our GEM research strongly contributes to our partner organizations achieving their own targets and objectives.

In particular, we would like to thank one of GEM's founding organizations, Babson College, USA, for its generous global sponsorship of GEM, the Cartier Women's Initiative (CWI), the Women Entrepreneurs Finance Initiative (We-Fi) and the School of Management, HEG-Fribourg, Switzerland. Special thanks to Jeffrey Shay, Donna Kelley, Candida Brush and Smaiyra Million at Babson College for their consistent support. Warm appreciation also to Executive Director Wingee Sampaio and her team at CWI, who operate at the grass-roots level, driving change by empowering women impact entrepreneurs that aim to have a strong and sustainable social and/or environmental impact. We also acknowledge the support of Wendy Teleki, Farid Tadros and Sean Ding at We-Fi, an organization that supports women entrepreneurs by scaling up access to financial products and services, building capacity, expanding networks, offering mentors and providing opportunities to link with domestic and global markets. We are especially grateful for invaluable support and insights from Rico Baldegger and Raphaël Gaudart at the School of Management, HEG-Fribourg, an institution that has an objective of educating entrepreneurs that will make a positive contribution to a sustainable world. Finally, we are grateful to Ben Baumer, Associate Professor of Statistical and Data Sciences at Smith College, USA, who assisted the co-authors by converting GEM data into the graphics used in this report.

Aileen Ionescu-Somers
GEM Executive Director

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*** GRIPs = GEM Research & Innovation Projects**

About GEM

Entrepreneurship is an essential driver of societal health and wealth. It is also a formidable engine of economic growth. It promotes the essential innovation required not only to exploit new opportunities, promote productivity, and create employment, but to also address some of society's greatest challenges, such as the United Nations Sustainable Development Goals (SDGs) or the economic shock wave created by the COVID-19 pandemic. The promotion of entrepreneurship will be central to multiple governments worldwide for the foreseeable future, especially considering the significant negative impacts on economies due to the pandemic. Governments and other stakeholders will increasingly need hard, robust and credible data to make key decisions that stimulate sustainable forms of entrepreneurship and promote healthy entrepreneurial ecosystems worldwide. During its 23 years of existence, Global Entrepreneurship Monitor (GEM) has repeatedly contributed to such efforts, providing policymakers with valuable insights on how to best foster entrepreneurship to propel growth and prosperity once again.

GEM carries out survey-based research on entrepreneurship and entrepreneurship ecosystems around the world. GEM is a networked consortium of national country teams primarily associated with top academic institutions. It is the only global research source that collects data on entrepreneurship directly from individual entrepreneurs. GEM tools and data are therefore unique and benefit numerous stakeholder groups. By becoming involved with GEM:

- Academics are able to apply unique methodological approaches to studying entrepreneurship at the national level;
- Policymakers are able to make better-informed decisions to help entrepreneurs and entrepreneurial ecosystems thrive;
- Entrepreneurs have better knowledge on where to invest sometimes scarce resources and how to influence key stakeholders so that they get the support they need;
- Sponsors both advance their organizational interests and gain a higher profile through their association with GEM;
- International organizations leverage insights, but can also incorporate or integrate GEM indicators to their own data sets, or use GEM data as a benchmark for their own analyses.

GEM has an impressive and highly credible track record. In numbers, GEM represents:

- 23 years of data, allowing longitudinal analysis in and across geographies on multiple levels;
- Up to 150,000+ interviews annually with experts and adult populations including entrepreneurs of all ages;
- Data from 115 economies on all continents across the world;
- Collaboration with over 500 specialists in entrepreneurship research;
- Involvement of some 300+ academic and research institutions;
- Support from more than 200 funding institutions.

GEM began in 1999 as a joint research project between Babson College (USA) and London Business School (UK). The consortium has become the richest source of reliable information on the state of entrepreneurship and entrepreneurial ecosystems across the globe, publishing not only the GEM Global Report annually, but also a range of national and special topic reports each year. GEM's first annual study covered 10 countries; since then some 115 countries from every corner of the globe have participated in GEM research. As a result, GEM has gone beyond a project to become the highly networked organization that it is today. GEM can confidently stake a claim to be the largest ongoing study of entrepreneurial dynamics in the world.

Join our research project

GEM

It is difficult for policymakers to make informed decisions without having the right data. Global Entrepreneurship Monitor (GEM) fills this void. GEM is the only global research project that collects data on entrepreneurship directly from the source—entrepreneurs!

It is your one-stop shop for everything you need to know about entrepreneurship in your country, region or city.

Be part of future Global Reports, providing a snapshot of entrepreneurial activity across the world. You can contribute towards National Reports that include international benchmarking, local context and national entrepreneurship policy recommendations.

"GEM offers academics the opportunity to be part of a prestigious network, explore various dimensions of entrepreneurship and gain a full picture about the entrepreneurial activity of a country."

Virginia Lasio, Team Leader of GEM Ecuador and Professor at the ESPAE Graduate School of Management

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Executive Summary

This year's report highlights several compelling findings from GEM 2021/22 data, from gender composition of high-potential startups to pandemic impacts and national expert ratings of the enabling environment for women entrepreneurs.

Women tend to be somewhat less active globally than men when it comes to startup activity (on average, 10.4% of women surveyed versus 13.6% of men). In other words, women represent two out of every five early-stage entrepreneurs that are active globally. Also noteworthy are some other sometimes counter-intuitive findings:

- Globally, women represent about one in three *high-growth* entrepreneurs and one in three *innovation* entrepreneurs that are focused on national and international markets.
- Women entrepreneurs in upper–middle-income countries represent some of the most innovative, high-growth entrepreneurs globally, and are at parity with men with regard to international market focus.
- As a result of the COVID-19 pandemic, women experienced similar declines to men in entrepreneurial intentions (to start a business) but sharper declines in startup rates in 2020. However, this was not the case in upper–middle-income countries, where both startup intentions and rates for women actually rose, by 4% and 11%, respectively, from 2019 to 2021.
- Overall, business exit rates for women rose from 2.9% to 3.6% over the two-year pandemic period, in contrast to the higher rates for men (3.5% to 4.4%). Women in upper–middle-income countries showed the largest pandemic impact on business exit with a 74% increase from 2019 to 2021, compared to only 34% for men.
- National experts generally rate the enabling environment for women entrepreneurs very low in most countries. This may explain the persistence of lower entrepreneurial perceptions for women compared to men in these countries. Countries with the highest expert ratings also experienced the highest levels of entrepreneurial intentions.

This report offers a trend analysis of women's entrepreneurship in 50 countries, five global regions and three national income levels. We focus on four key themes in the first half of the report, followed by a closer analysis of region- and country-specific patterns in the second half. The four themes are (1) gender differences in rates at various points in the entrepreneurial lifecycle, from intentions through to startup activity, new business, established business and business exit; (2) gender differences

in COVID impacts, both positive and negative; (3) structural inequalities and women's participation in high-potential startups; and (4) factors in the enabling environment that likely influence gender differences in entrepreneurial activity.

Our findings offer insights to a diverse audience of researchers, policymakers, educators and practitioners. Our goal is to highlight areas where women entrepreneurs have made significant progress, where the COVID-19 pandemic impacted their business outcomes, and where there are still gaps, challenges and opportunities that can be better addressed.

WHAT ARE THE GENDER DIFFERENCES IN PARTICIPATION RATES ACROSS THE ENTREPRENEURIAL LIFECYCLE?

Women are very active globally in a wide variety of businesses and contexts, with a wide variation in participation rates and gender gaps across countries. The highest startup rate for women was found in the Dominican Republic, where 43.7% of women reported startup activity compared to 40.1% of men. In contrast, the lowest startup rates for women were found in Poland (1.6%) and Norway (1.7%), which also showed the largest gender gap with only two women entrepreneurs for every five men.

Much of the variation in rates and gender gaps can be explained by countries' economic and sectoral compositions. For example, women in lower-income countries are twice as likely as women in high-income countries to report startup intentions. In fact, about one-third of women in lower-income countries reported intentions to start a business, compared to only 12.9% of women in high-income countries. However, translating intentions into startup activity and a wage-paying business can be difficult — and more so for women. This is reflected in the finding that, globally, women and men reported nascent activity at about half the rate of intentions (8.5% women vs. 11.5% men), and, in turn, early-stage business about the half the rate of startup activity (4.1% women vs. 5.9% men).

Globally, women tend to have lower rates of business exit compared to men (3.6% women vs. 4.4% men), but they also tend to have lower rates of startup (business entry) to begin with. The ratio of exit to entry suggests that women were slightly more likely to have exited a business in the year prior to data collection, compared to men (34.6% women vs. 32.4% men).

HOW WERE WOMEN ENTREPRENEURS IMPACTED DIFFERENTLY BY THE COVID-19 PANDEMIC?

Globally, entrepreneurial intentions decreased for women, from 19.1% in 2019 to 16.7% in 2021, with the sharpest decline in lower-income countries. Overall business startup rates (Total early-stage Entrepreneurial Activity, or TEA) rose slightly for women from 2019 to 2021 across the 34 countries in the comparative analysis. However, many countries showed a sharp drop in startup rates in 2020 followed by recovery in 2021. In lower-income countries, startup rates showed the biggest decline in 2020, dropping by half for women, from 8.5% to 4.1%, and recovering to 7.9% in 2021. Rates in Established Business Ownership (EBO) also dropped across all national income levels. Women in upper–middle-income countries showed the most significant decrease in established activity from 2019 to 2021, with rates declining 43% on average: from 8.9% to 5.1%. Indeed, business exit rates increased by 24% for women and 26% for men from 2019 to 2021. Women entrepreneurs in upper–middle-income countries saw their exit rates increase by 74%, substantially more than their male peers, while women in high-income countries saw little change in business exit rates over the pandemic period.

On a more positive note, close to half of women early-stage entrepreneurs agreed that the pandemic created new business opportunities, compared to less than one-third of women established business owners. This finding suggests that, like men, women entrepreneurs are highly alert to new opportunities and quick to pivot in the context of market disruption, especially in the most vulnerable early stage of business startup. Both groups of women business owners globally were at near parity to their male counterparts.

Moreover, one-quarter of women early-stage entrepreneurs reported that the pandemic prompted the use of new digital technologies within their businesses, and over half reported that they expected to adopt more digital technologies in the next six months, at parity with men. Women established businesses owners were also at parity with their male peers regarding the use of new digital technologies due to the pandemic but were 65% more likely than men to report plans to use more digital tools in the near future.

HOW ARE WOMEN ENTREPRENEURS CONTRIBUTING TO ECONOMIC GROWTH AND SOCIAL DEVELOPMENT?

Women entrepreneurs are very active globally in growth-oriented, highly innovative businesses focused on national and international markets. In fact, women in upper–middle-income countries represented about one-third of all entrepreneurs starting high-growth businesses, both in terms of job creation at startup (20+ employees) and expected within five years (20+ hires). Women also represent one in three entrepreneurs globally offering innovations to national and international markets. Innovation rates were highest for women in upper–middle-income countries, especially at the international level where they were at parity with men. Moreover, women in high- and upper–middle-income countries represented over two-fifths of entrepreneurs focusing on international markets, compared to one in three women in lower-income countries.

At the global level, there are few gender differences in age and education between men and women entrepreneurs, but clear differences in household income. Women entrepreneurs tend to be less affluent than men globally, except in lower-income countries, where women entrepreneurs are less likely to come from the poorest of households. Conversely, large gender differences were found by industry and business size. Almost half of women entrepreneurs worldwide are involved in the Wholesale/Retail sector and one in five women entrepreneurs in the Government, Health, Education & Social Services sector (18.5% women versus 10.1% men). However, only 2.7% of women compared to 4.7% of men are starting businesses in Information, Computers & Technology (ICT), the sector that draws the majority of venture capital dollars worldwide. Women are also more likely than men to start businesses with no employees but also less likely to start businesses with more than 20+ employees, especially in higher-income countries.

HOW MUCH SUPPORT DO WOMEN PERCEIVE IN THE ENABLING ENVIRONMENT?

As in many parts of the business world, the rules and systems were designed based on male norms and behaviours and are therefore not truly gender-neutral. There are stereotypes that plague women entrepreneurs in access to key resources. This influences the choices that women make about the types of business to start, but also impacts entrepreneurial perceptions (startup skills, opportunity recognition, no fear of failure), especially as they relate to women's self-confidence as entrepreneurs. Notably, women in lower-income countries showed the most parity with men on key entrepreneurial perceptions except for startup skills, while women in high-income countries showed the least gender parity for all perceptions. The largest gender gaps were also most often observed in high-income countries.

When it comes to accessing key resources for successful entrepreneurship, women in

lower-income countries were the least likely to report knowing another entrepreneur, with about two-fifths of women in these countries reporting agreement compared to almost half of women globally. The gender divide was even greater when it came to investment activity, where women were much less active than men and tended to make much smaller investments in business. The largest gender differences were found in lower-income countries, while women in upper–middle-income countries were closest to gender parity.

Finally, several questions are included in the GEM National Expert Survey that pertain specifically to women entrepreneurs. For the six questions related to the enabling environment for women entrepreneurs in their countries, the expert responses were overwhelmingly negative, especially regarding regulations and family support services favourable to women entrepreneurs. The most positive responses were found in high-income countries regarding equal access to finance and procurement for women entrepreneurs.

HOW ARE WOMEN ENTREPRENEURS CONTRIBUTING TO GROWTH AND DEVELOPMENT IN DIFFERENT REGIONS?

Regional trends can vary heavily from year to year in the GEM research program, depending on the specific countries participating from each region. In 2021, some of the most important trends in women's entrepreneurship were found in the Middle East & Africa region, where entrepreneurial intentions were extremely high in contrast to very low startup rates. The wealthiest countries in this region are working hard to change these trends, as evidenced by some of the strongest ratings by national experts on the enabling environment for women entrepreneurs. This region also showed the highest rates of digital technology use prompted by the pandemic.

Consistent with prior years, the highest rates of entrepreneurial intentions, startup activity and established business owner rates for women were found in the Latin American & Caribbean region. However, this region also showed the highest rates of business exit for women. This suggests high volatility and uncertainty. Notably, women in this region were close to parity with men on entrepreneurial perceptions, but also twice as likely to be in the bottom third of household income.

Also consistent with prior years, women in Central & East Asia showed the highest rates of Established Business Ownership in the world. Importantly, the four countries represented for the Central & East Asia region in 2021 could not be more different, displaying important contrasts. Kazakhstan stands out for some of the highest rates of intentions and startup activity for women business owners, but also for extremely high rates of business exits. Japan lay at the other end of the spectrum with extremely low rates of intentions, participation and exit for women. India showed some evidence of heavier pandemic impacts on men compared to women, while South Korea showed the lowest rates of business exit due to the pandemic for women.

Finally, Europe continues to show the lowest rates of entrepreneurial intentions and participation rates for women, but generally higher rates of gender parity compared to other parts of the world. Women in the high-income countries that are heavily represented in Europe and North America are highly involved in high-potential startup activity. However, some of the most significant gender differences in entrepreneurial perceptions are found in these regions. This is perplexing from a gender equity perspective. Clearly, while women in these regions are some of the most impactful and privileged women entrepreneurs in the world, they still face significant barriers to success in their enabling environments.

Importantly, regional trends show considerable variation by country as presented in this report. The high rates of variation in gender patterns by country highlight the fact that entrepreneurship remains locally grounded. This is true for the entrepreneurial activities of both women and men. No matter what type of entrepreneur, the interpretation of regional and national trends are dependent on cultural and structural factors at the local level.

HOW CAN POLICYMAKERS, RESEARCHERS AND PROGRAM LEADERS BETTER SUPPORT WOMEN ENTREPRENEURS?

Women are starting high-growth businesses in all sectors and economies globally. However, it is poorly understood how and why gender differences in business startup and growth are continually reproduced by cultural beliefs and structural inequalities. Policy responses, research studies and entrepreneurial support programs would be more effective if based on a clearer understanding of how gender inequalities persist and how different types of women's entrepreneurship are evolving in their countries. High-potential entrepreneurs have different needs than main-street or subsistence entrepreneurs, in terms of working capital, networks, resources and family support.

Importantly, business characteristics and market conditions are much more important predictors of business success than the gender of the founder. Therein lies the imperative of moving beyond gender in risk calculations of business success. Nonetheless, gender bias is still a huge disadvantage faced by women entrepreneurs, if not in the ways that many stakeholders understand. National experts agree that women face significant disadvantages in business, which suggests that women are not the only ones questioning their odds of success at navigating the startup and growth process. We need to do a better job of presenting top-line statistics in the context of structural inequality and recognize that women are already contributing to economic growth, social development, and innovation in their markets, communities and countries.

Applying a well-informed gender lens to the evidence points policymakers and program leaders towards more effective tailor-made solutions to address the barriers to business startup and growth for women entrepreneurs in different industry sectors and countries. Inspired by the findings in this report, we offer four main recommendations that will help women in all contexts.

- **Support high-potential women entrepreneurs in all sectors and levels of national income.** Women are starting high-growth businesses in all sectors and economies globally. However, their efforts are too often stymied by negative stereotypes reinforced by the narrative that women entrepreneurs are less capable and more disadvantaged by poverty, low education and younger age. To acknowledge and support high-potential women entrepreneurs, we need to move past the false dichotomy of the successful male entrepreneur and the disadvantaged woman entrepreneur. This effort is especially important in male-dominated industries, where negative stereotypes against women are most likely to be triggered.
- **Develop policy that supports the mobilization of financing and support towards the sectors in which women are currently active.** Policy responses to the pandemic have failed to consider the plight of women entrepreneurs and established business owners in many parts of the world. Women entrepreneurs' needs were well addressed by policy interventions that directly addressed the industry sectors in which these women were operating businesses, that offered provisions and support for the smallest businesses, including the self-employed, and that focused on supporting families during the pandemic crisis. Applying a gender lens in economic policymaking during times of crisis and in the normal course of business not only helps women but also the men who share their circumstances.
- **Address structural barriers by debunking gender norms in entrepreneurship through a recognition of the stronger predictive power of business forms, markets and industry sectors.** Research gives a clearer view of how structural inequality, like industry and market factors, influences barriers to financing. Contrary to many of the negative stereotypes about women entrepreneurs, academic research suggests that women are just as likely as men to succeed in business when starting similar businesses in similar industry sectors. However, this reality is often lost in the presentation of research and statistics by researchers, policymakers and the media. A clearer view of structural inequality and barriers to financing, for example, will result in better policy solutions and program support for women entrepreneurs.

- **Celebrate successful women founders as important role models to show younger women what is possible.** Not only are entrepreneurial perceptions lower for women compared to men globally, but national experts tend to agree that there is little cultural support for women entrepreneurs in most countries. Perhaps lower rates of startup confidence and opportunity recognition for women result from a rational assessment of the odds of their personal success as entrepreneurs and investors. Instead of warning young women that the odds are stacked against them, stakeholders need to provide them with examples of women founders and business leaders who have effectively navigated the system to start and grow a successful business.

Introduction

Women business leaders are generating a tremendous impact in their markets, industries and communities through innovation, job creation and economic growth. However, their contributions are often lost in the prevailing narrative that women are over-represented among the poorest and most vulnerable entrepreneurs globally. Women tend to run smaller, younger, less profitable companies. Female-led firms also tend to perform in similar ways to male-led firms within the same industry sectors. With researchers now arriving at a better understanding of how and why women entrepreneurs start and grow new businesses, the evidence is pointing policymakers and program leaders towards more effective solutions to address the barriers to business startup and growth that women face in different industry sectors and regions of the world.

In the 2021/22 GEM Women's Entrepreneurship Report, we provide a trend analysis of women's entrepreneurship in 47 countries, five regions (Central & East Asia; Europe [& UK];[1] North America; Latin America & Caribbean; and Middle East & Africa), and three income levels (high income, upper–middle income, and low and lower–middle income as defined by the World Bank) as shown in Table 1. We combined the two lower-income categories because Sudan was the only low-income country participating in the 2021 GEM survey.

In the first half of the report we focus on four key themes, followed by a closer analysis of region- and country-specific patterns in the second half. In Chapter 1, we present 2021 results for Total early-stage Entrepreneurial Activity (TEA) and motives for starting, as well as rates across stages of the GEM entrepreneurial process, from intentions to entrepreneurial exit. Entrepreneurship is defined as the earliest stages of business startup from the first steps taken in starting a business through the early launch phase. The key measure for entrepreneurship is TEA, which is measured as the percentage of the adult working-age population, 18–64, who are either in the process of starting a new business but have not paid wages for more than three months (nascent entrepreneurship), or have businesses older than three months but younger than 42 months (early-stage business activity).

In Chapter 2, we offer an analysis (2019–21) of gender differences in pandemic impacts across different stages of the entrepreneurial process. In Chapter 3, we show how structural inequality in society contributes to different patterns of business activity for women and men. In Chapter 4, we share data on the enabling context from both the GEM Adult Population Survey (n=47 countries, 2021) and the GEM National Expert Survey (n=50 countries, 2021) and show how these factors influence gender differences in entrepreneurial activity. In Part 2, Chapters 5–9, we take a deeper dive into regional trends on these four themes for countries in five global regions. Finally, we summarize these findings and offer recommendations.

THE GEM METHODOLOGY

The scale and longevity of the GEM project allow research into patterns of entrepreneurship, innovation and economic development over time, in order to better inform policy, programs and practice. Since 1999, GEM has collected data about entrepreneurship in over 100 economies. Studies on women's participation in entrepreneurial activities have long been a part of this global research project, with Global Women's Entrepreneurship Reports being developed approximately every two years, comparing women and men entrepreneurs around the world.

GEM uses a proprietary system of rigorous data collection, extensive analysis and widespread dissemination of results. The research is conducted by a consortium of teams of academic

1 Please note that for the purposes of our study, the United Kingdom is included in Europe notwithstanding its exit from the European Union.

Regions	High income	Upper–middle income	Lower–middle income	Low income
Central & East Asia	Japan South Korea	Kazakhstan	India	
Europe	Croatia Cyprus Finland France Germany Greece Hungary Ireland Italy Latvia Lithuania* Luxembourg Netherlands Norway Poland Slovak Republic Slovenia Spain Sweden Switzerland United Kingdom	Belarus† Romania Russian Federation†		
Latin America & Caribbean	Chile Uruguay	Brazil Colombia Dominican Republic Guatemala Jamaica* Mexico* Panama		
Middle East & Africa	Israel Oman Qatar Saudi Arabia United Arab Emirates	South Africa Turkey	Egypt Iran Morocco	Sudan
North America	Canada United States			

* Jamaica, Lithuania and Mexico only participated in the National Expert Survey in the 2021 GEM survey.

† The GEM National Teams of the Republic of Belarus and the Russian Federation are suspended from Global Entrepreneurship Monitor since the beginning of 2022, owing to the ongoing war in Ukraine. However, the 2021/22 GEM Women's Entrepreneurship Report includes analysis based on data collected from both countries prior to this suspension.

TABLE 1
The 50 countries featured in the 2021/22 GEM Women's Entrepreneurship Report by region and national income level

researchers from countries around the world. The teams use a shared methodology to ensure the comparability of the data, allowing authors of the report to combine all work in order to present this global picture (see Figure 1). The annual surveys collected by the GEM research teams focus on entrepreneurship using a broad set of measures.

Entrepreneurial activities are considered from the first report of intentions to start a business through the nascent stage when first building a business (but not yet paying more than three months in salaries), to new businesses (less than 3.5 years old), through ownership of established businesses (more than 3.5 years old) and entrepreneurial exit. GEM provides information on the personal characteristics of business owners, along with their motivations for starting a business and the cultural contexts in which

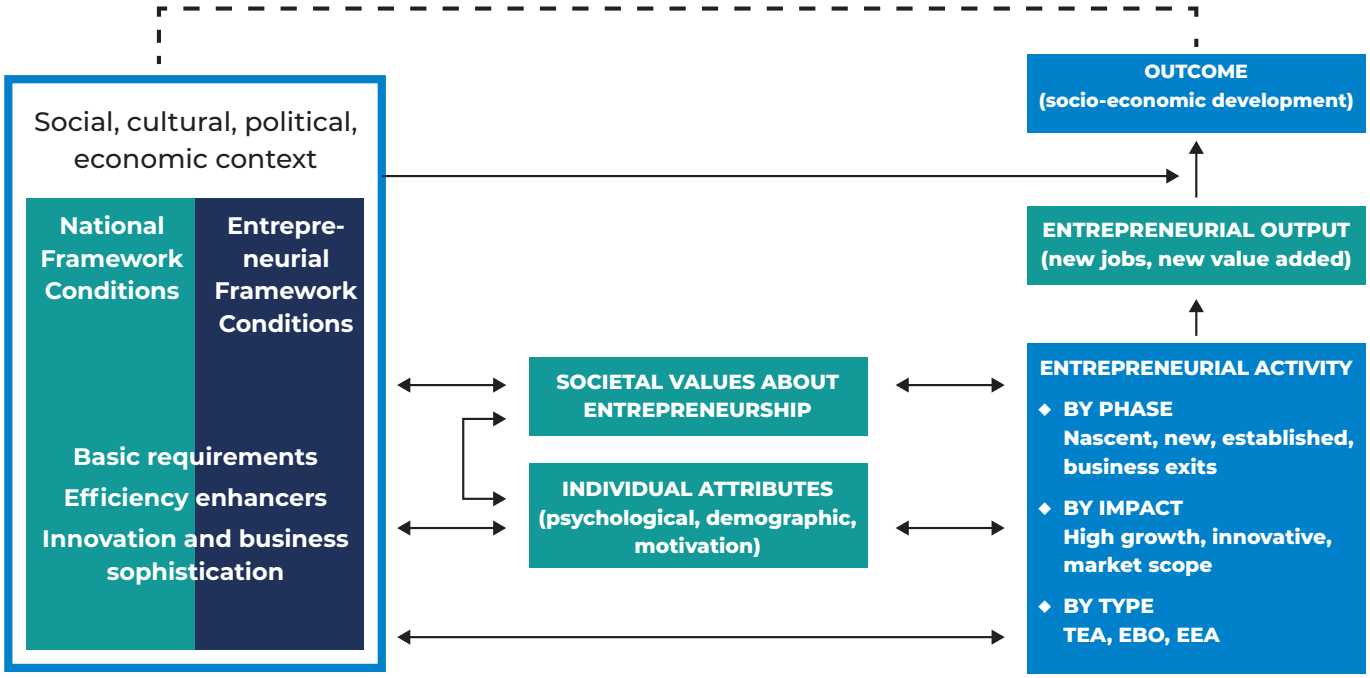


FIGURE 1 The entrepreneurship process and GEM measures

they are pursuing new venture creation. GEM also provides information on the businesses owned by entrepreneurs based on industry choice, job creation, innovation, growth expectations and their local, national and international market scope.

The GEM framework pulls all these dimensions together to guide our analysis, which includes:

- Changes and trends over time across attitudes, and individual and business characteristics;
- Examination of the gender gap on rates of entrepreneurship and other dimensions;
- Changes and trends in societal attitudes;
- Impact indicators and comparisons across businesses led by women and men respectively.

Past reports have considered the importance and benefits of women's entrepreneurship globally and have examined the gender gap and its implications across economies and regions. Because GEM is the only multi-country survey of individuals and their attitudes, previous reports have been able to identify where significant deficits exist in perceptions about entrepreneurship in comparison between women and men entrepreneurs, where TEA rates differ across countries, and where activities differ in businesses led by women and men respectively. Recently, a number of measures were added to the GEM survey to capture COVID-19 business impacts around the world, including questions about the reason for entrepreneurial exit, new business opportunities, growth expectations and quality of government relief. The findings of this study provide a foundation for guiding future research, policy decision making and design of initiatives and programs to enhance growth and development of women's entrepreneurship within specific contexts.

PART 1

Global Trends and Pandemic Impacts

Entrepreneurial Lifecycle from Intention to Exit

A distinguishing feature of the GEM approach is a broad lifecycle view which captures people at different stages of the entrepreneurial process, from the intention to start a business through the earliest stages of startup and growth, Established Business Ownership (EBO) and entrepreneurial exit, i.e. discontinuing as owner. In this chapter, we present the gender differences and similarities in business startup and other stages in the business lifecycle, beginning with startup participation rates and motivations. Importantly, population-level data can point towards key trends, but can also mask heterogeneity in rates and gender patterns. For that reason, we also present averages and gender ratios by global region and national income level. While this adds complexity to the data analysis, it also reveals the incredible diversity of gender patterns across different economic and institutional contexts.

TOTAL EARLY-STAGE ENTREPRENEURIAL ACTIVITY (TEA)

Globally, in our 2021 survey, the average TEA rate for women was about three-quarters the rate of men: 10.4% for women compared to 13.6% for men. In other words, women represent two out of every five early-stage entrepreneurs active globally. Importantly, the countries that participate in the GEM program each year can vary a lot, especially in the lower- and middle-income categories. This variation in global sample composition every year means that we have to exercise caution in comparing rates from year to year. For example, low-income countries typically show the highest average rates of TEA compared to other countries (see Figure 2), due in large part to the fact that these are small market economies. However, only one low-income country — Sudan — participated in the 2021 survey, showing a rate of 26.4% female TEA and 40.8% male (0.65 female–male ratio), which may not be representative of other low-income countries. For that reason, the one low-income country, Sudan, has been subsumed into the lower-income group in this report along with lower–middle-income countries.

In contrast to the TEA rates for lower-income countries, high-income countries typically show the lowest average startup rates for women: 8.7% in 2021 — little change from 8.9% in 2020. The average TEA rates for women were 10.5% for lower-income countries and 18% for upper–middle-income countries, with women in upper–middle-income countries showing the closest parity to men at 0.84. The highest gender gap in startup activity was found in lower-income countries, with 68 women entrepreneurs for every 100 men entrepreneurs active globally.

Regionally, the highest rates of female TEA and the closet gender parity were found in Latin America & Caribbean, showing 24.1% TEA for women and 30.4% TEA for men (0.79 female–male ratio). Consistent with prior reports, the lowest rates are found in Europe: 6.1% TEA for women vs. 7.8% TEA for men, with a gender ratio of 0.78 female to male. TEA rates for women and men in the other three regions ranged from 11.7% for women in Central & East Asia to 15.5% for women in North America. Notably, the gender gaps in average TEA rates across regions ranged from the smallest gender differences in Latin America & Caribbean to the largest gap in Middle East & Africa and Central & East Asia.

Women reported startup rates equal to or greater than men in five countries: the Dominican Republic, Kazakhstan, Morocco, Romania and Spain. Belarus and Saudi Arabia also showed high levels of gender parity in TEA rates. The highest TEA rate for women was found in the Dominican Republic where 43.7% of women reported startup activity compared to 40.1% of men. In contrast, women's TEA rates were lowest in Poland (1.6%) and Norway (1.7%), countries that also showed the lowest level of gender parity in TEA with only four women entrepreneurs for every 10 men entrepreneurs.

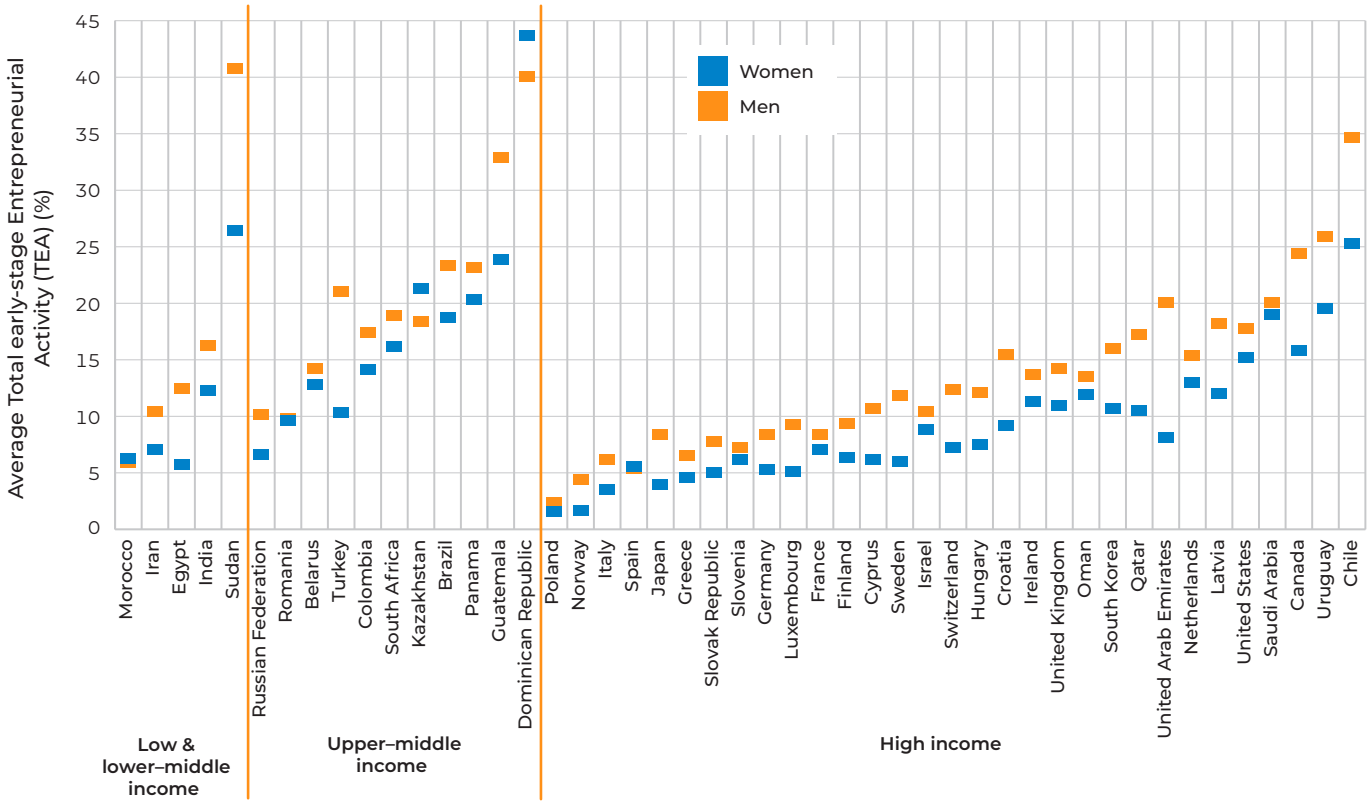


FIGURE 2
Average Total early-stage Entrepreneurial Activity (TEA) rates by gender and country, grouped by national income level
Source: GEM 2021

MOTIVATIONS FOR STARTING A BUSINESS

Women and men tend to start businesses for different reasons, with job scarcity being the most reported startup motivation for all entrepreneurs. Globally in 2021, women were more likely than men to report key motives for starting a business being to make a difference (52.9% women vs. 51.0% men) or due to job scarcity (72.5% women vs. 67.2% men). Meanwhile, men were more likely to report starting a business in order to build wealth (56% women vs. 63.3% men) or to continue a family tradition (32.9% women vs. 35.7% men) (see Figure 3).

These gender differences were generally consistent across national income groups, where women were just as likely as or more likely than men to cite to make a difference and job scarcity as a startup motive but considerably less likely to report to build wealth and also less likely to choose to continue a family tradition. The largest gender difference was wealth building as a startup motive when observed in high-income countries. Representing a wide gender gap in such countries, 48.3% of female entrepreneurs reported wealth building as a startup motive compared to 58.5% of male entrepreneurs. Another large gender difference in high-income countries related to the job scarcity motivation, where women were more likely to report job scarcity as a startup motive (68.9% women vs. 61.9% men); in lower-income countries, however, near gender parity was observed in this metric (84.4% women vs. 85.4% men).

Across regions, the largest gender difference was found in Europe for the wealth building motivation, with a very wide gap of a 0.83 female–male ratio. Two out of five women entrepreneurs in Europe reported wealth building as a startup motive compared to about half of their male counterparts (41.8% women vs. 50.9% men). In contrast, a gender gap in the reverse direction was found in Latin America & Caribbean for job scarcity. Among entrepreneurs in this region, four in five women reported job scarcity as a startup motive compared to less than three-quarters of men (82.4% women vs. 73.0% men). In fact, women entrepreneurs are more likely to report job scarcity as a startup motive in all regions except Central & East Asia where they were at gender parity.

Women and men entrepreneurs in high-income countries are the least likely to report starting

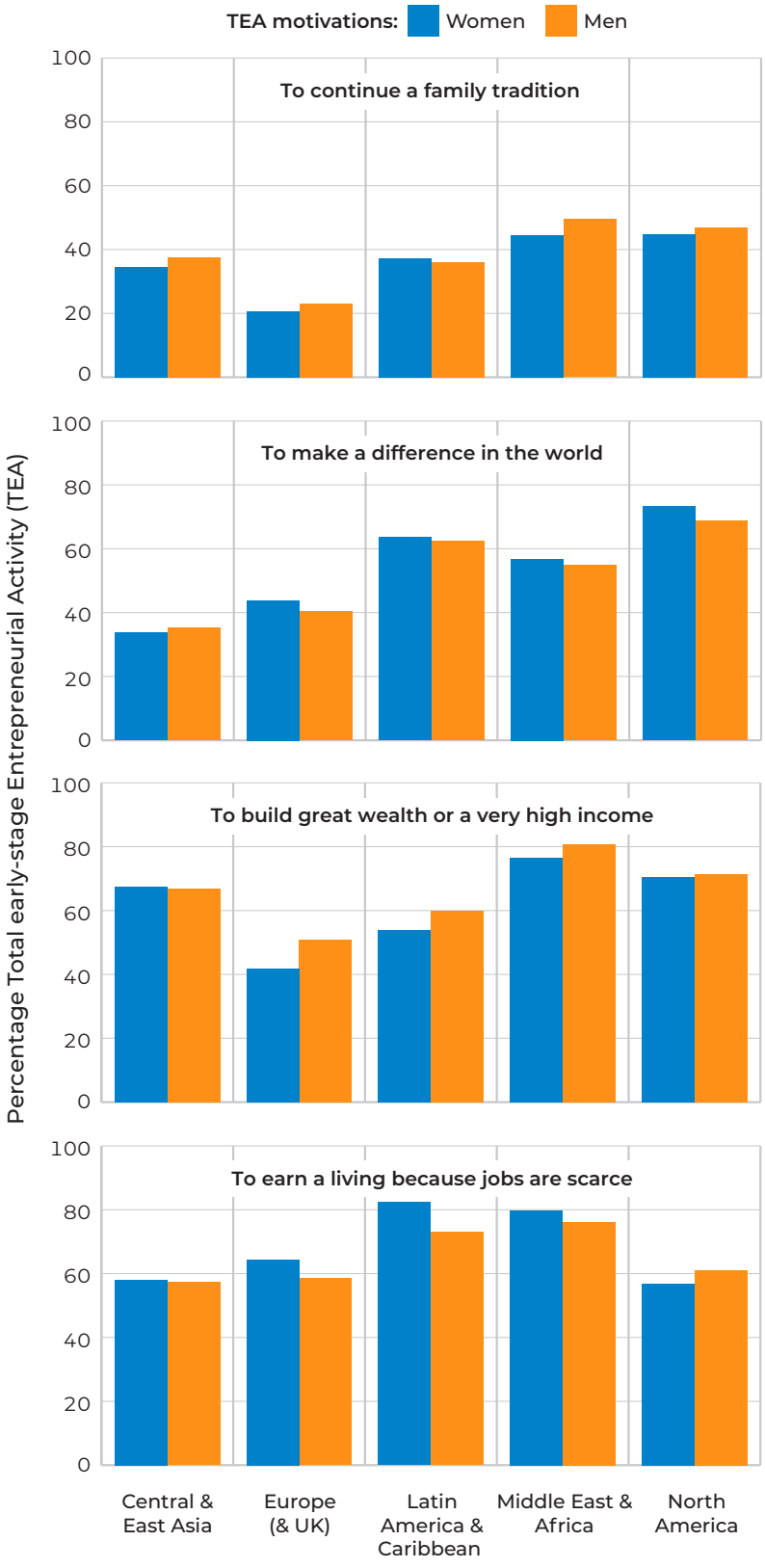


FIGURE 3 Average Total early-stage Entrepreneurial Activity (TEA) motives by gender and region

Source: GEM 2021

a business due to job scarcity, although again women outnumbered men (68.9% women vs. 61.9% men). These findings are consistent with published academic research using GEM data.[2] Women are just as likely or more likely to report job scarcity as a startup motive in all but nine countries where men showed higher rates (Kuwait, Germany, Switzerland, Sweden, Kazakhstan, Iran, Canada, Luxembourg and the Netherlands). Women in Taiwan and South Korea are much more likely to report job scarcity as a motive compared to men.

Women entrepreneurs in North America are more likely to report making a difference as a motive for startup (73.2% women vs. 68.8% men), compared to the global averages (52.9% women vs. 51% men). In all regions except Central & East Asia, women are more likely than men to report making a difference as a startup motive. Only one in three women in Central & East Asia reported making a difference as a reason for starting their business, compared to 35% of men in this region. Women in Morocco are 60% less likely to report making a difference as a motive for starting a business, compared to women in Poland who are 2.5 times more likely than their male counterparts to cite this motive.

Women are generally less likely than men to report continuing a family tradition as a reason for starting a business in all regions except Latin America & Caribbean (37.3% women vs. 36%). Continuing a family tradition is the least-reported startup motive for both men and women. The largest gender difference was observed in Europe where women are much less likely to cite family tradition as a motive (20.6% women vs. 23.1% men). The largest gender differences were found in Hungary (0.38 female–male ratio), Luxembourg (0.39 female–male ratio), Iran (0.43 female–male ratio) and Oman (0.47 female–male ratio). This is not a surprising finding in countries in which women's labour force participation and entrepreneurial activity is historically low; however, the finding is less well understood in countries in which women have high rates of economic participation.

2 Hechavarría, D.M., Terjesen, S.A., Ingram, A.E., Renko, M., Justo, R., & Elam, A. (2017). Taking care of business: The impact of culture and gender on entrepreneurs' blended value creation goals. *Small Business Economics*, 48(1), 225–57.

ENTREPRENEURIAL PROCESS: FROM INTENTIONS TO ENTREPRENEURIAL EXIT

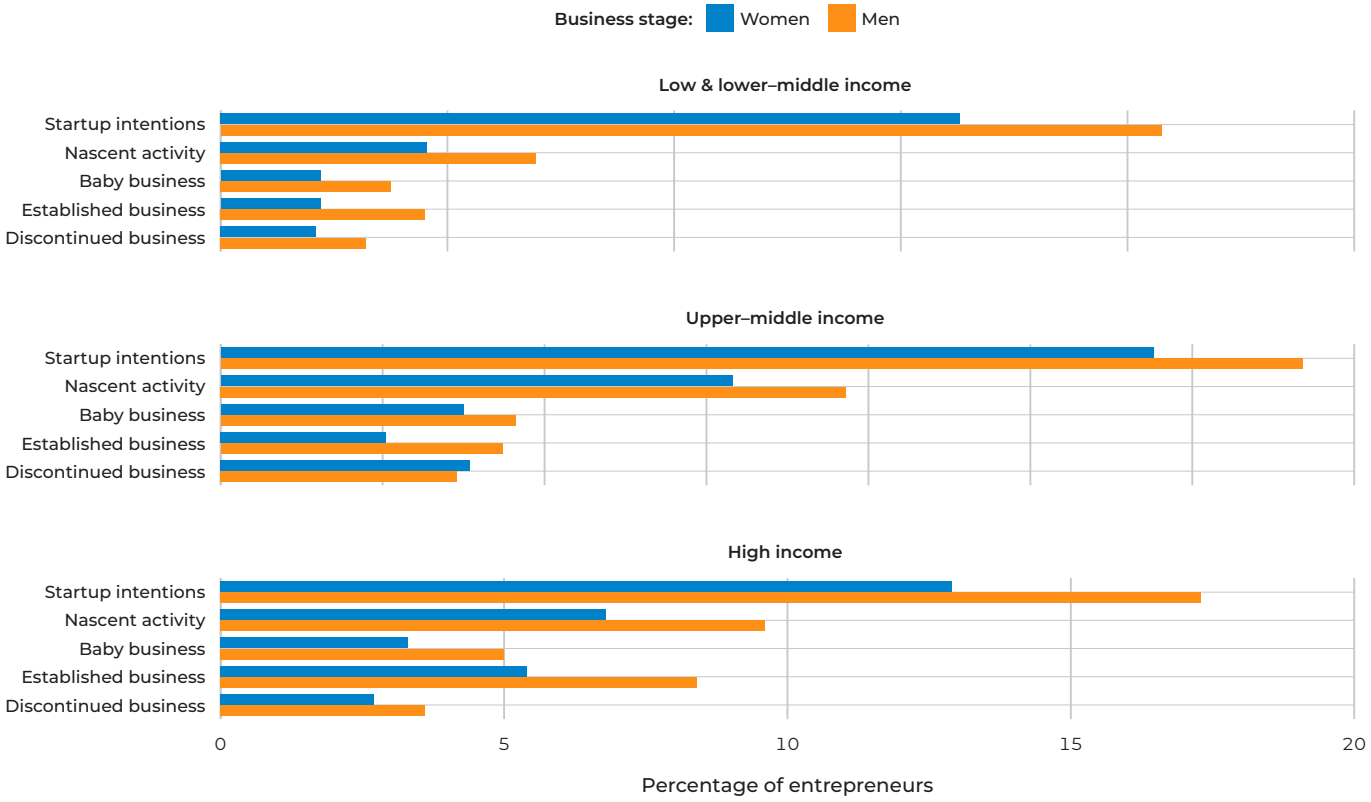
One of the advantages of the GEM methodology is that it collects population rates for entrepreneurial intentions, business startup activity, EBO and entrepreneurial exit, i.e. quitting as owner. This design allows us to approximate the level of interest and activity at different stages of the business lifecycle. Survey participants were asked about their intention to start a business within the next three years, actions they had taken to start a business (nascent activity), how old their business is, and whether the business is paying wages (early stage [up to 42 months of age] vs. established stage [older than 42 months]). Finally, participants were asked if they had exited from a business in the prior 12 months and, if so, their main reason for exiting (see Figure 4).

Globally, in 2021, 17.3% of women and 21.8% of men not already involved in a startup reported an intention to start a business, reflecting a gender ratio of 0.79 women to men. The gender ratio becomes steadily lower across stages of business activity (0.74 for nascent activity, 0.69 for early-stage activity and 0.62 for established businesses) before shrinking for exiting. As shown in Figure 4, this pattern is consistent across all levels of income.

Women in lower-income countries are twice as likely as women in high-income countries to report startup intentions. In fact, about one-third of women in low- and lower–middle-income countries reported intentions to start a business compared to only 12.9% of women in high-income countries. In upper–middle-income countries women and men were closest to gender parity in this regard, but still with a sizeable gender gap. Similarly, women in lower-income countries are a lot less likely to be involved in startup activity than men, representing a gender ratio of 0.65 women to men. In contrast, women in upper–middle-income countries reported the highest average startup rates (15.8%) compared to women in the other national income categories and showed the greatest gender parity with their male counterparts (0.82 female–male ratio).

Entrepreneurial intentions are typically two to three times higher than TEA rates, suggesting that translating intentions into startup activity

FIGURE 4
Entrepreneurial intentions, nascent, baby business, established business and entrepreneurial exit rates by gender and national income level
Source: GEM 2021



ENTREPRENEUR HIGHLIGHT

Andrea Barber

Co-founder of RatedPower (Spain)
Cartier Women's Initiative Fellow, 2021

Creating change in clean energy systems

Renewable energy can play a significant role in mitigating the impact of climate change. However, designing and building large renewable energy plants is a time-consuming process.

Andrea Barber saw first-hand the complexity of designing and engineering large solar plants. Determined to do something about this, she co-founded RatedPower with the mission of digitizing the renewable energy industry and maximizing clean energy's potential through a software as a service (SaaS) strategy. RatedPower helps solar photovoltaic (PV) energy enterprises design and engineer utility-scale PV plants, thereby furthering a green transition to clean energy systems. Andrea said:

> *"We developed cloud-based software to instantly carry out the design and engineering of large-scale solar plants to accelerate the transition to solar energy. We've always loved thinking outside the box to make things more efficient."*

Despite concerns about the global economy, RatedPower's customers have not reduced their software acquisition budgets. Massive deployment of renewable energy is a critical part of most governments' responses to both COVID-19 recovery packages and policies to fight the effects of the war in Ukraine. This includes REPowerEU in the European Union and the Inflation Reduction Act in the United States.

Andrea noted:

> *"The fact is that diversifying the global energy mix is key for both fighting climate change by reducing greenhouse emissions and guaranteeing world security. Renewable energy — specifically solar photovoltaics — is playing a role."*

In addition to the impact she is creating at RatedPower, Andrea is also co-founder of Vostok 6, a podcast in Spanish that aims to raise the visibility of women who are breaking barriers and doing incredible work in different areas. Andrea is positioned 30th in the current Choiseul 100 Spain ranking of Future Economic Leaders and has recently been chosen by *Forbes* as one of the 100 Most Creative People in Business from Spain.

and a wage-paying business is difficult. Evidence of this reality is observable, with rates tending to fall at each stage. Globally, women and men reported nascent activity at about half the rate of intentions (8.5% women vs. 11.5% men), and, in turn, early-stage business at about the half the rate of startup activity (4.1% women vs. 5.9% men). Business ownership has historically been less common for women around the world, so it is not surprising to find that the largest gender gap

in the entrepreneurial lifecycle is for established business rates (5.3% women vs. 8.5% men). This is one metric that we hope to see evening out at the country level as more women start and grow their own businesses.

Rates for nascent activity and early-stage businesses followed the same pattern as entrepreneurial intentions across national income levels. The lowest rates of startup activity for women and men were found in high-income countries and the highest rates in upper–middle-income countries. The gender differences were largest in lower-income countries and smallest in upper–middle-income countries. Established business rates showed a different trend, with the highest rates of women's business ownership in high-income countries (5.4%) and the lowest in lower-income countries (4.4%). The gender gap in EBO is largest in lower-income countries (0.49 female–male ratio) and smallest in lower-income countries (0.64 female–male ratio).

Regionally, women in Latin America & Caribbean report the highest intentions to start a business (43%) followed closely by women in Middle East & Africa, while the largest gender gaps (0.7 female–male ratio) were found in Europe and in North America, where 7% of women reported entrepreneurial intentions compared to 10.2% of men. Importantly, women appear to have a harder time translating intentions into startup activity in Central & East Asia, Europe and North America. Women in Central & East Asia are four times more likely to report an intention to start a business than to report taking action to actually do so. Women own and manage about one-third of established businesses across all regions (0.6 female–male ratio). The highest rates of women's EBO (6.9%) were found in Central & East Asia, compared to 11.9% for men.

Regional patterns for intentions, nascent activity, early-stage and established business also follow the gender patterns of global averages, but with considerable variation in rate and gender ratios across regions. Two-fifths of the women in Latin America & Caribbean reported intentions to start a business compared to less than one in 10 women in Europe, where the largest gender gap was also observed (0.75 female–male ratio). One in five women in Latin America & Caribbean reported nascent activity compared to only 4.4% of women in Europe. The largest gender difference in nascent activity was observed in Middle East & Africa, where 9.8% of women and 14.7% of men are taking steps to start a business, representing a female–male ratio of 0.67.

Following the global pattern, 8.4% of women in Latin America & Caribbean and only 2.5% of women in Europe reported owning/managing an early-stage business. The lowest level of gender parity was found in North America, where women are 38% less likely than men to be involved in an early-stage business (0.62 female–male ratio). Early-stage business rates for women were lowest in Luxembourg and Norway (under 1%), and highest in Guatemala (14.1%) and the Dominican Republic (13.8%). Early-stage business rates were at parity or higher in seven countries: the Dominican Republic, Greece, Kazakhstan, Romania, Slovenia, Spain and the United Kingdom.

Departing from the regional pattern in these first three phases of the entrepreneurial process, the highest rates of EBO for women were found in Central & East Asia (7.6%) and North America (7.1%) compared to only 3.2% of women in Middle East & Africa, where the largest gender gap was observed (0.44 female–male ratio). Among economies, established business rates range from a low of about 1% in Egypt and Oman to a high of 12% or more in Greece and South Korea. Women were at parity with men or higher in Luxembourg and Romania.

One finding that is consistent from year to year in the GEM data is that women tend to report lower rates of entrepreneurial exit than their male counterparts. We find evidence of this tendency again at the global level, with 82 women for every 100 men reporting recent exit. Importantly, when more men than women are early-stage or established business owners, there will be more men than women exiting from ownership. For example, 3.6% women reported a recent business exit versus 4.4% men globally. However, women also showed lower levels of startup involvement, with TEA rates of 10.4% women vs. 13.6% men. That translates to 34.6% dissolution rate for women compared to 32.4% for men. In other words, when viewed proportionately, women globally have higher rates of business closure than men.

While women are less likely to report a recent entrepreneurial exit than men at the global level, the rates and gender gaps do vary across levels of national income. The lowest average rates of entrepreneurial exit are reported by women in high-income countries (2.7% women vs. 3.6% men), and the highest rates in

upper–middle-income countries, where 7.7% of women and 7.3% of men reported a recent exit (1.05 female–male ratio). The largest gender difference was observed in lower-income countries (0.66 female–male ratio), with 4.2% of women and 6.4% of men reporting recent exits.

Entrepreneurial exit rates also showed a different type of gender variation across regions. The lowest rates of exit for women were found in Europe, where 1.8% of women and 2.4% of men reported entrepreneurial exits in the prior 12 months. In contrast, the highest rates of entrepreneurial exit for women were found in Latin America & Caribbean, where women reported higher rates of exit than men (8.1% women vs. 7% men; 1.16 female–male ratio). The largest gender gap was observed in North America, where women are far less likely than men to report a recent exit (0.65 female–male ratio). Exit rates were highest for women in Kazakhstan (15.1%), where 21.4% of women are involved in startup activity, and lowest in Norway (0.5%), where only 1.7% of women are starting businesses.

REASONS FOR ENTREPRENEURIAL EXITS

While women globally are less likely than men to exit, women are more likely than men to report having exited in the prior 12 months due to the pandemic (see Figure 5). As documented in the GEM 2020 survey, exiting due to the pandemic was the most commonly reported reason for both women and men, with almost one in three entrepreneurs reporting business exit (30.1% women vs. 29.5% men). Prior to the pandemic crisis, the most frequently cited reason for exiting was lack of profitability followed by lack of finance. In 2021, lack of profitability was the second most reported reason for exiting for women and men (23.0% women vs. 23.2% men), followed by family or personal reasons (14.3% women vs. 11.3% men) and then lack of finance (10.7% women vs. 11.0% men). Women are 27% more likely than men to report exiting for family/personal reasons and close to parity with men on lack of profitability (0.99 female–male ratio) and lack of finance (0.97 female–male ratio). Women are considerably less likely than men to report exiting a business due to an opportunity to sell (3.9% women vs. 5.6% men), a measure not often reported in GEM reports. The different types of business that men and women own and lead likely explains the difference in opportunity to sell the business.

While almost one in three women globally report entrepreneurial exits because of the pandemic, rates vary from a low of 22.2% for women in lower-income countries to 35.7% for women in upper–middle-income countries. Women in upper–middle-income countries are much more likely than men to report exiting due to the pandemic, representing the largest gender gap. Women in lower- and high-income countries are slightly less likely to report closure due to the pandemic (0.97 and 0.95 female–male ratio, respectively).

Women in lower-income countries are 75% more likely than men to report exiting because of family/personal reasons (17.3% women vs. 9.9% men), which was the largest gender difference observed by national income level. Women in upper–middle-income countries reported the lowest rate of exit due to family/personal reasons but are nonetheless 45% more likely than men to cite this as a reason (12.2% women vs. 8.4% men). The gender gap in high-income countries was the lowest for this metric (1.17 female–male ratio), with 14.7% women and 12.6% men reporting family/personal reasons for exiting.

Women in lower-income countries are more likely than other women and less likely than their male counterparts to report lack of profitability as the reason for exiting (30.9% women vs. 34.3% men), representing the largest gender gap across levels of income (0.90 female–male ratio). In contrast, women in upper–middle-income countries are more likely than men to report exiting due to lack of profitability (25.4% women vs. 24.3% men), while women in high-income countries were at parity with men (0.99) and reported the lowest rate of exit due to lack of profitability (19.8% women vs. 20.1% men).

The highest rate of exit due to lack of finance was reported by women in lower-income countries and the lowest rate by women in high-income countries. In fact, women in low-income countries are much more likely to report exiting due to lack of finance compared to the men there (18.0% women vs. 15.8% men); and

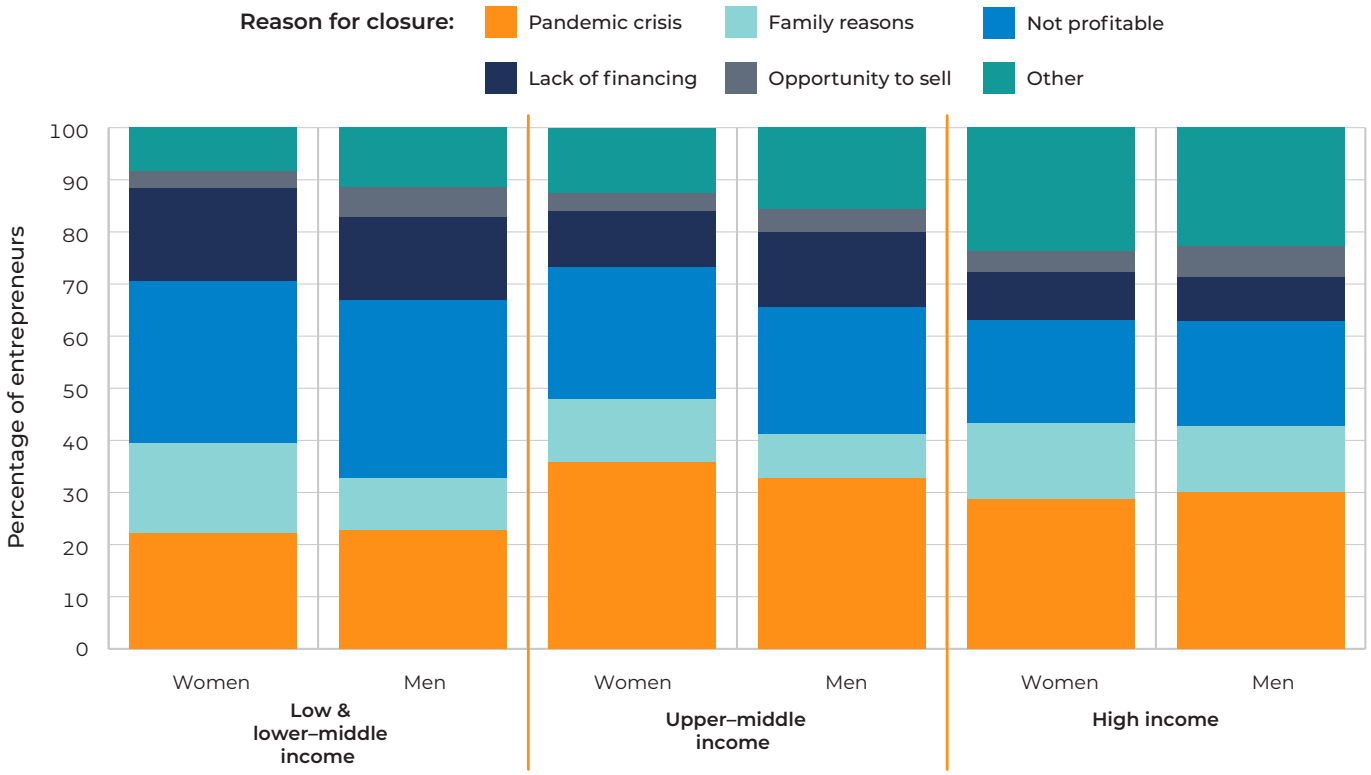


FIGURE 5
Reasons for entrepreneurial exits by gender and national income level
Source: GEM 2021

women in high-income countries are a little more likely to report business closure due to lack of finance compared to men (9.1% women vs. 8.5% men). The largest gender gap was found in upper–middle-income countries, where women are far less likely to report having exited due to lack of financing compared to men (10.7% women vs. 14.4% men). The explanation is again likely found in the types of business these women own and lead in these countries.

When it comes to exit because of an opportunity to sell the business, women are much less likely than men to report this reason across all levels of national income. The rates for women ranged from 3.3% in low- and lower–middle-income countries up to 4.1% in high-income countries. The largest gender gap was found at lower-income level (0.57 female–male ratio) and the smallest in upper–middle-income level (0.75 female–male ratio). These gender gaps are sizeable and warrant further investigation.

Across regions, North America showed the largest gender different in rates of exit due to the pandemic, although women in Europe and in Latin America & Caribbean also reported rates higher than men. Notably, women in North America are far more likely than men to report exiting due to the pandemic (25.7% women vs. 16.0% men). However, the highest rates of exit due the pandemic were report by women in Latin America & Caribbean (38.7% women vs. 37.1% men). Women in Middle East & Africa are the least likely to report exiting due to the pandemic and about 25% less likely than their male counterparts (25.5% women vs. 33.5% men). Women in Iran, the United States and Uruguay are all twice as likely as men to report exiting due to the pandemic, and three times as likely as men in Luxembourg and Latvia. In contrast, women in France, India, Israel and Oman are about one-third less likely than men to report the pandemic as a reason for business closure.

Women in all regions except North America are more likely to report business closure due to family/personal reasons than men. In fact, in North America, women are 42% less likely than men to report closing a business for family/personal reasons and reported the lowest rates of business closure for this reason (7.9% women vs. 13.6% men). In contrast, and representing the largest gender difference, women in Middle East & Africa are 70% more likely than men to report closing a business for family/personal reasons (17.2% women vs. 10.1% men). Women in Oman are 10 times more likely than men to

report business closure due to family/personal reasons and six times more likely than men in Russia. These multiples may be explained by the ways in which family care and the gender division of labour, both inside and outside the home, are managed in these countries with a highly traditional culture. Only men in Finland, Norway and Slovenia, countries with a far less traditional culture, reported exiting due to family/personal reasons.

HIGHLIGHTS

Several key findings stand out in this first set of analyses addressing gender differences in the entrepreneurial lifecycle.

- Women are very active globally in a wide variety of businesses and contexts. The average startup rate (TEA) for women was about three-quarters the rate for men, 10.4% compared to 13.6%. In other words, women represent two out of every five early-stage entrepreneurs active globally.
- The highest startup rate for women was found in the Dominican Republic, where 43.7% of women reported startup activity compared to 40.1% of men. In contrast, the lowest rates of women's TEA were found in Poland (1.6%) and Norway (1.7%), countries that also showed the lowest level of gender parity in TEA, with only two women entrepreneurs for every five men.
- Gender differences in startup motivations were generally consistent across national income groups, where women are just as likely as or more likely than men to cite making a difference and job scarcity as a startup motive but considerably less likely to report building wealth and continuing a family tradition. These patterns relate to gender arrangements in the home and society that push and pull individuals towards different occupational choices. While gender roles are heavily negotiated and changing in fundamental ways around the world, the influence and persistence of traditional gender beliefs can be seen in the reasons why women start and exit businesses, as well in cultural perceptions and stereotypes that support or constrain entrepreneurs.
- However, women are more likely to report job scarcity as a startup motive (68.9% women vs. 61.9% men) compared to those in lower-income countries where gender parity was observed (84.4% women vs. 85.4% men). Less developed countries are often dominated by small market economies with fewer alternatives to starting a business as an occupational choice, whereas, in high-income countries, there are more alternatives to business ownership, but more so for men than for women. Here again, we see the likely influence of gender beliefs and gender division of labour in the home on the options available to women in different social contexts.
- Women in lower-income countries are twice as likely as women in high-income countries to report startup intentions. In fact, about one-third of women in lower-income countries reported intentions to start a business compared to only 12.9% of women in high-income countries. In small market economies, starting a business is ubiquitous — much more common than in high-income countries where half the labour force are employed with large firms. In that sense, we would expect to see high startup intentions in economies where small business is commonplace.
- Translating intentions into startup activity and a wage-paying business can be difficult. We again see evidence of this reality, as rates tend to fall at each stage. Globally, women and men reported nascent activity at about half the rate of intentions (8.5% women vs. 11.5% men), and, in turn, early-stage business at about the half the rate of startup activity (4.1% women vs. 5.9% men). Trends like this one — characterized by a fall-off in rates accompanied by a widening of gender differences at different stages of the entrepreneurial lifecycle — are of concern. What barriers are women facing at each step of the process? Are these trends explained by other factors such as the types of business started or other structural factors?

- While women globally are less likely to report business exit compared to men in 2021 (3.6% women vs. 4.4% men), women were also involved in startup rates at lower levels (TEA of 10.4% women vs. 13.6% men). The adjusted exit rate suggests that, proportionately, women are actually slightly more likely to have exited a business in the prior year compared to men (exit/startup = 34.6% women vs. 32.4% men). The global averages are quite close for women and men, which muddies policy questions about whether women were more impacted by the pandemic in terms of business closures.
- Reasons for business exit help to address questions about differential impacts of the pandemic on women entrepreneurs. While women globally are less likely than men to exit, women are slightly more likely than men to report having exited a business in the prior 12 months due to the pandemic (30.1% women vs. 29.5% men). We look more closely at pandemic impacts on business exit and several other measures for women entrepreneurs in the next chapter.

Global rates can often mask heterogeneity of activity and gender differences across contexts, such as national income level, regional culture, and structural composition of individual and business demographics (e.g. age, education, industry, entrepreneurial framework conditions and physical geography). As shown in Figure 2, differences between countries tend to be greater than differences between women and men throughout the entrepreneurial lifecycle. Moreover, gender differences can vary widely within regions and among countries within a national income group.

For that reason, it is important to view rates and gender differences in business startup and growth with a healthy recognition that top-line numbers can sometimes mask deeper patterns that require a nuanced understanding of the social processes that drive both persistence and change in key trends. For example, a 50% gender gap has different implications for low rates versus high rates. Also, as noted above, business exit rates must be interpreted with caution as they are related closely to overall business startup rates. In fact, from year to year, established business rates tend to be fairly stable for women and for men, while we observe more volatility in intentions, startup activity and business exit.

2

Pandemic Impacts on Women Business Owners

The participation of women in business activity — and in the workforce more generally — was impacted heavily by the pandemic. Not only are women more likely to be working in those industry sectors that were most impacted by COVID-19 lockdowns and market closures — but they are also more likely to be running smaller, more vulnerable businesses and carrying a higher burden of family demands. As such, we would expect women to have experienced, on average, business ownership differences compared to men.

In this chapter, we present a comparative analysis of pandemic-period impacts on key GEM measures, including entrepreneurial intentions, early-stage businesses (startups or Total early-stage Entrepreneurial Activity [TEA]), established businesses and business exits for the 34 countries that participated in 2019, 2020 and 2021 survey years.[3] We also offer findings from analyses of a number of measures designed to capture pandemic impacts in 2020 and 2021. Surveys for both years included questions about business opportunities created by the pandemic, the effectiveness of government responses to the pandemic, and entrepreneurial exits due to the pandemic. In 2021, questions were added regarding the use of digital technologies in response to the pandemic.

ENTREPRENEURIAL INTENTIONS

Across the 34 countries participating in the GEM survey between 2019 and 2021, entrepreneurial intentions decreased at a similar rate overall for women and men (see Figure 6). More specifically, the intention to start a business decreased year on year for women, going from 19.1% to 17.4% to 16.7%, while for men it went from 24.2% to 22.6% to 21.3%. This pattern held for lower- and high-income countries but not for upper–middle-income countries. The drop in entrepreneurial intentions was most pronounced in lower-income countries, where entrepreneurial intentions for women declined from 40% to 31.8% and for men from 51% to 40.7% between 2019 and 2021. In high-income countries, entrepreneurial intentions dropped from 15.6% to 12.9% for women and 20.4% to 17.3% for men. Notably, entrepreneurial intentions for women actually increased in upper–middle-income countries: from 30.3% to 31.4%.

Declines in rates of entrepreneurial intentions were also observed across all regions, except for North America, where 10% of women reported entrepreneurial intentions in 2019 rising to 13.9% in 2021 and men recovered to the same level after a drop in 2020. The variation in gender patterns is a reminder that the gender gap is affected by changes in rates for men as well as for women. The large gender gap in Europe widened further in 2020 yet shrank in again in 2021 due to a heavier decline in the men's rate of intentions to start a business. The highest rates for entrepreneurial intentions were reported in Latin America & Caribbean, declining from 44.1% for women in 2019 to 41.2% in 2021. The gender gap in Middle East & Africa widened from 0.88 to 0.79 over this two-year period, while the gender gap in Central & East Asia shrank to gender parity in 2021 as rates for both men and women dropped by almost half. Rates for startup intentions doubled for women in Italy, rising from 3.6% to 7.3%. In contrast, rates for women dropped two-thirds for women in Slovakia: from 12.6% to 4.3%.

3 Brazil, Canada, Chile, Colombia, Croatia, Cyprus, Egypt, Germany, Greece, Guatemala, India, Iran, Israel, Italy, Latvia, Luxembourg, Morocco, the Netherlands, Norway, Oman, Panama, Poland, Qatar, the Russian Federation, Saudi Arabia, the Slovak Republic, Slovenia, South Korea, Spain, Sweden, Switzerland, the United Arab Emirates, the United Kingdom and the United States.

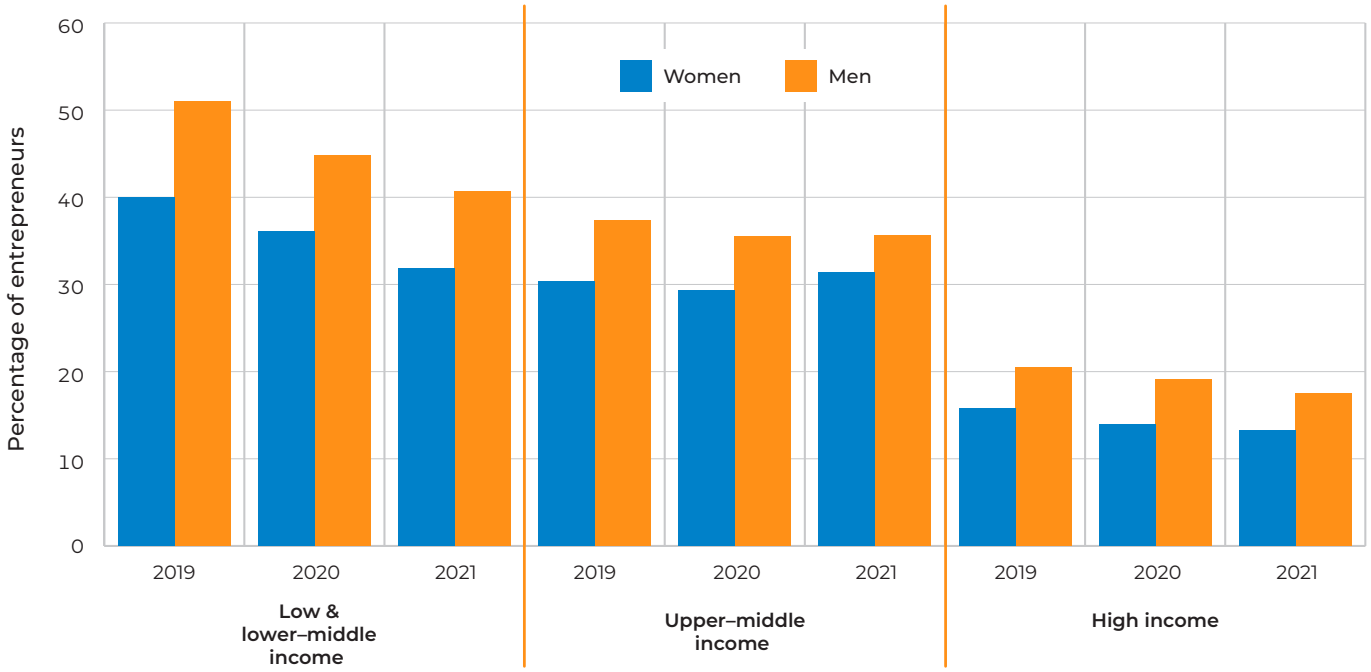
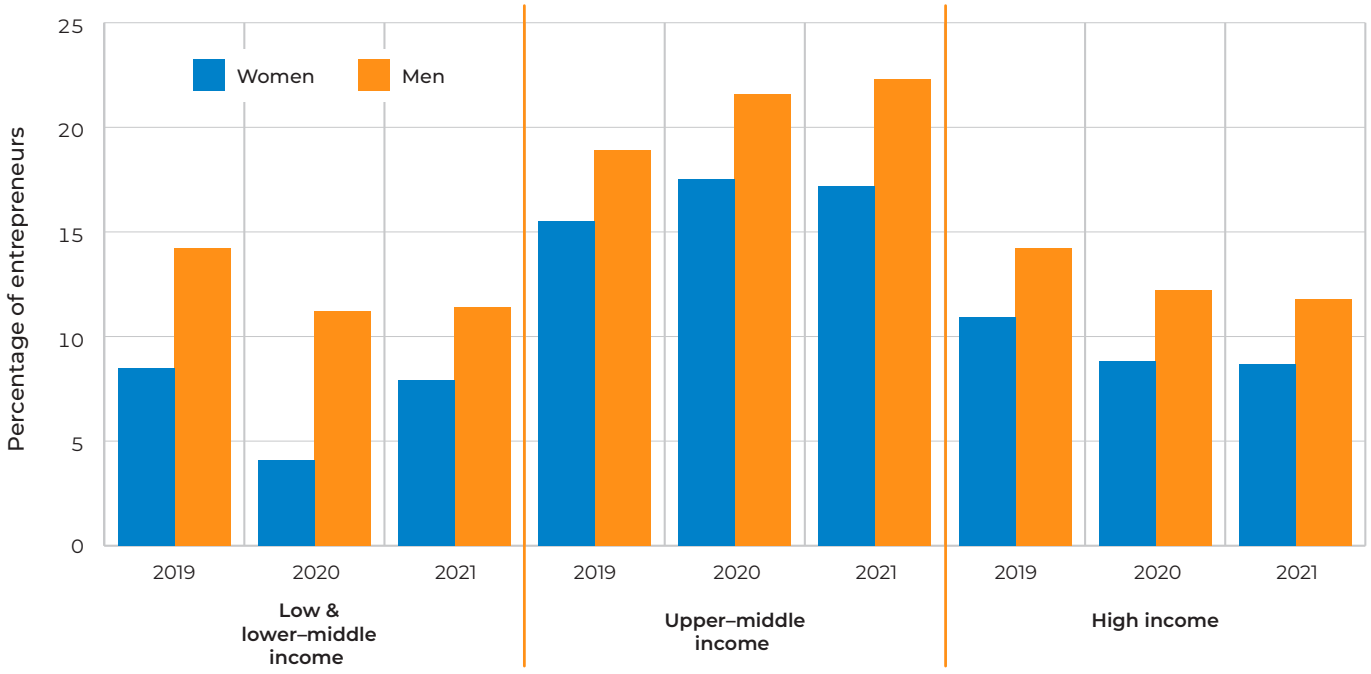


FIGURE 6
Entrepreneurial intentions by gender, year and national income level
Source: GEM 2019–21

TOTAL EARLY-STAGE ENTREPRENEURIAL ACTIVITY

TEA rates rose slightly for women and men from 2019 to 2021 across the 34 countries in the comparative analysis (see Figure 7). The global average for women rose from 9.4% in 2019 to 10.4% in 2021, with little change in the gender gap. In lower-income countries, average TEA rates halved for women — from 8.5% to 4.1% in 2020 — but recovering to 7.9% in 2021. The pattern for men in low-income countries was similar but less pronounced. In contrast, TEA rates for women in upper–middle-income countries actually rose by two percentage points in 2020 — from

FIGURE 7
Total early-stage Entrepreneurial Activity (TEA) by gender, year and national income level
Source: GEM 2019–21



15.5% to 17.5% — and then slightly more in 2021: to 17.2%. TEA rates for men in upper–middle-income countries also rose, on average, in the first year, then dropped slightly in the second year. Yet again, the pattern changes in high-income countries, with TEA rates dropping each year for women (from 10.9% to 8.7%) and men (from 14.2% to 11.8%). The gender gap narrowed over this two-year period for lower-income countries, but widened for upper–middle- and high-income countries.

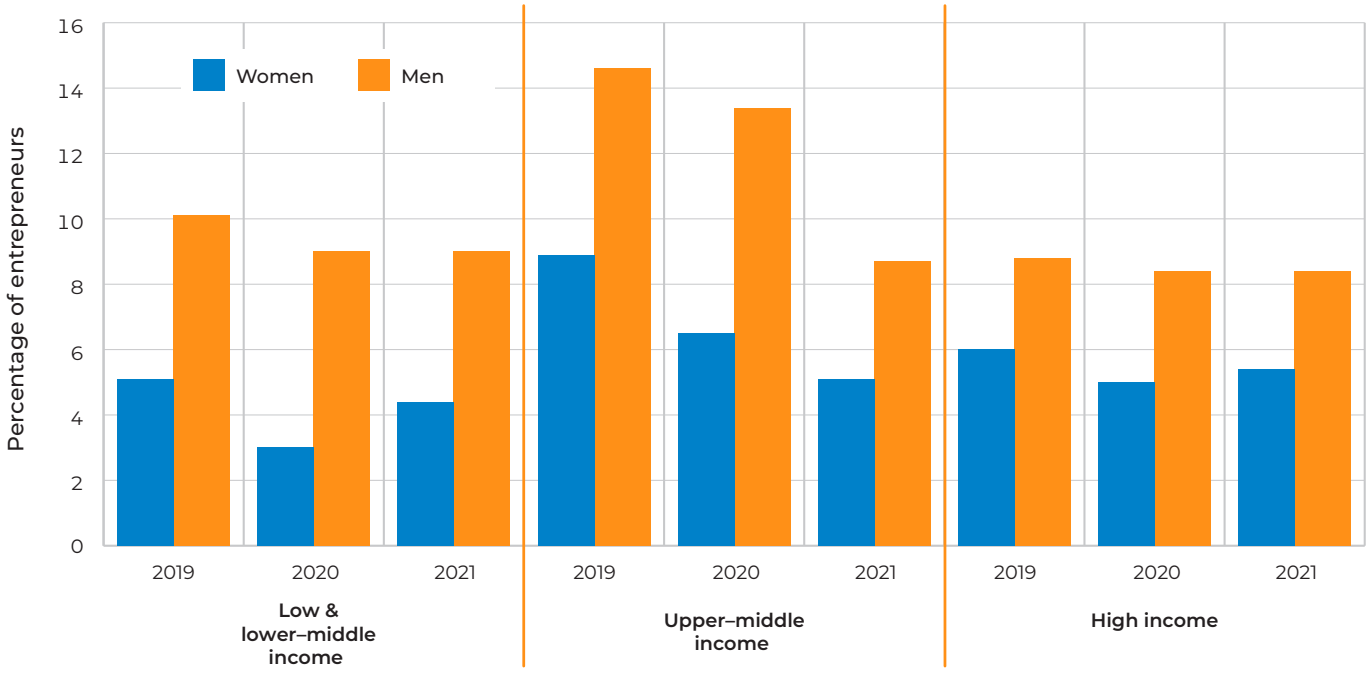
The gender gap in startup rates widened notably in all regions — except in Central & East Asia and Europe. Startup rates dipped precipitously in 2020 for women in Central & East Asia, from 12.8% to 5.6% and then back up to 11.7% over the two-year pandemic period. While rates for women remained constant in North America after a slight dip in 2020, startup rates for women in Middle East & Africa increased by 28% from 2019 to 2021. Of particular note, startup rates for women in Oman doubled from 5.8% in 2019 to 11.9% in 2021. Meanwhile, the largest drop in startup rates for woman was reported in Poland, dropping by more than two-thirds: from 5.1% to 1.6%.

ESTABLISHED BUSINESS OWNERSHIP

Rates of established businesses (those that are over 3.5 years old) decreased from 2019 to 2021 across all 34 countries, suggesting permanent business closures affecting such businesses (see Figure 8). Established Business Ownership (EBO) rates for women declined from 6.4% in 2019 to 5.1% in 2020 and recovered slightly to 5.4% in 2021. Rates for men declined at a steady rate from 9.5% to 8.6% in the same period. Rates in EBO dropped across all national income levels. Women in upper–middle-income countries showed the largest decrease in established activity from 2019 to 2021, with rates declining 43% on average: from 8.9% to 5.1%. Men in upper–middle-income countries also experienced a sharp drop in EBO rates during this pandemic period, declining 41% on average.

Across regions, North America showed a 6% increase in EBO rates for women, rising from 6.5% to 7.1% in 2021 after a slight drop in 2020. In contrast, EBO rates for men in North America showed the most stability and actually rose in 2020 from 9.9% to 10.4% before settling back at 9.9% in 2021. Women in Latin America & Caribbean showed the deepest drop in EBO compared to all other women and men, with a drop from 9% in 2019 to 5.1% in 2021. Consequently, Latin America & Caribbean also

FIGURE 8
Established Business Ownership (EBO) by gender, year and national income level
Source: GEM 2019–21



had the biggest increase in gender gap: from 0.75 to 0.53 (female–male ratio). The gender gap in EBO also widened by four points for Central & East Asia and Middle East & Africa — the latter having the largest EBO gender gap (0.39 female–male ratio). Qatar showed an astounding tenfold rise in the rate of women's EBO: from 0.3% in 2019 to 3% in 2021. Sweden showed a twofold increase in EBO for women, rising from 1.7% to 3.5%. In stark contrast, in Colombia the EBO rates for women dropped by 62%: from 3.9% to 1.5%.

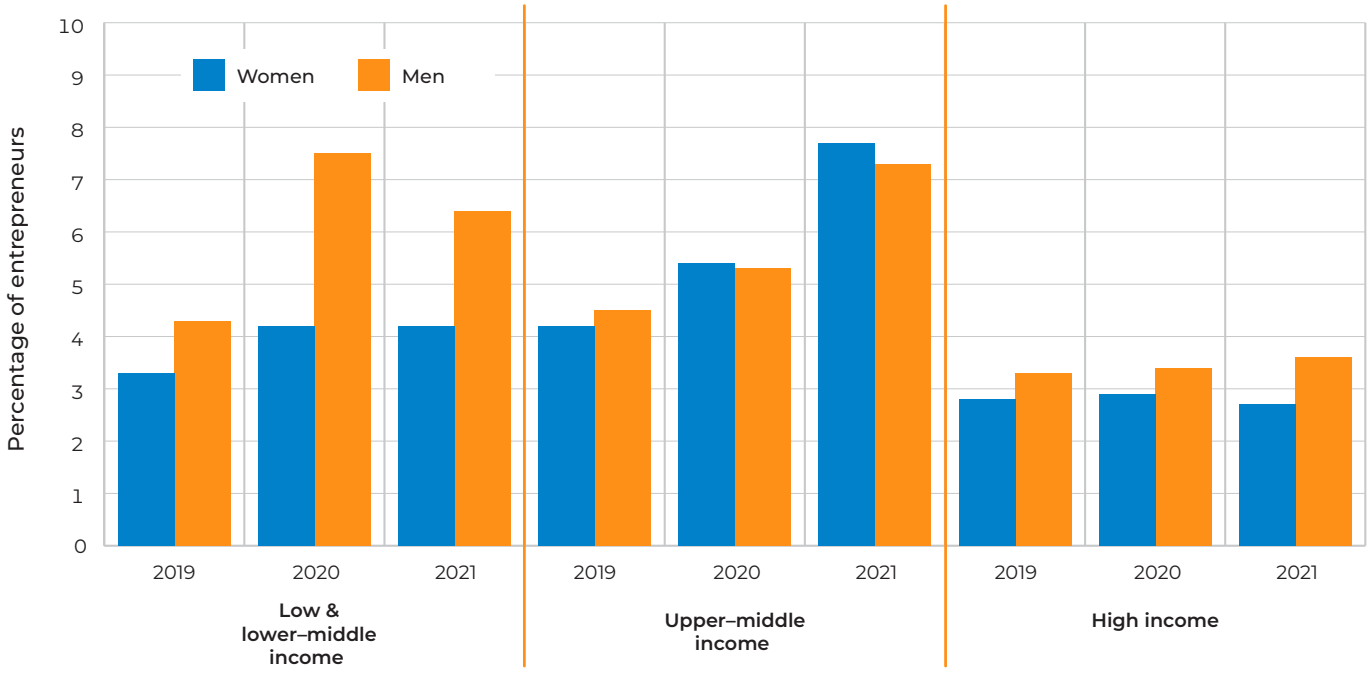
BUSINESS EXITS

Business exit rates increased steadily each year from 2019 to 2021 (by 24% for women and 26% for men) (see Figure 9). Historically, in the GEM data, business exit rates tend to be lower for women than for men, due largely to the fact that women have lower startup rates than men. This is an important example of how trends in population-level data must be interpreted with caution.

Business exit rates for men increased from 3.5% to 4.4% over the two-year pandemic period, while rates for women rose from 2.9% to 3.6%. Women in upper–middle-income countries showed the largest impact, with a 74% increase in exit rates from 2019 to 2021, compared to their male peers (34%). Women in lower-income countries experienced a substantial increase in business exit rates of 24%, but trailed men, who showed an even larger (51%) increase in rates of entrepreneurial exit. Surprisingly, the women in high-income countries showed little change in business exit rates over the two-year period, contrasting with a 12% increase for men.

Exit rates increased for women and men across all regions. Women in Central & East Asia showed the highest increase in exit rates for women, rising from 2.9% in 2019 to 4.3% in 2021, but men's exit rate was even higher. At the other end of the scale, exit rates for women also increased a little in Europe, similar to that of men in the region. The gender gap in business exits widened in three regions: Central & East Asia (1.04 to 0.84 female–male ratio), North America (0.97 to 0.65) and Middle East & Africa (0.8 to 0.72). Of note, women in Slovenia showed a business exit in 2021 rate that was 2.5 times higher compared to 2019, rising from 0.8% to 2%. At the opposite end of the spectrum, women in Norway showed 2021 business exit rates two-thirds lower than 2019 rates, dropping from 1.4% to 0.5%.

FIGURE 9
Business exits by gender, year and national income level
Source: GEM 2019–21



NEW BUSINESS OPPORTUNITIES

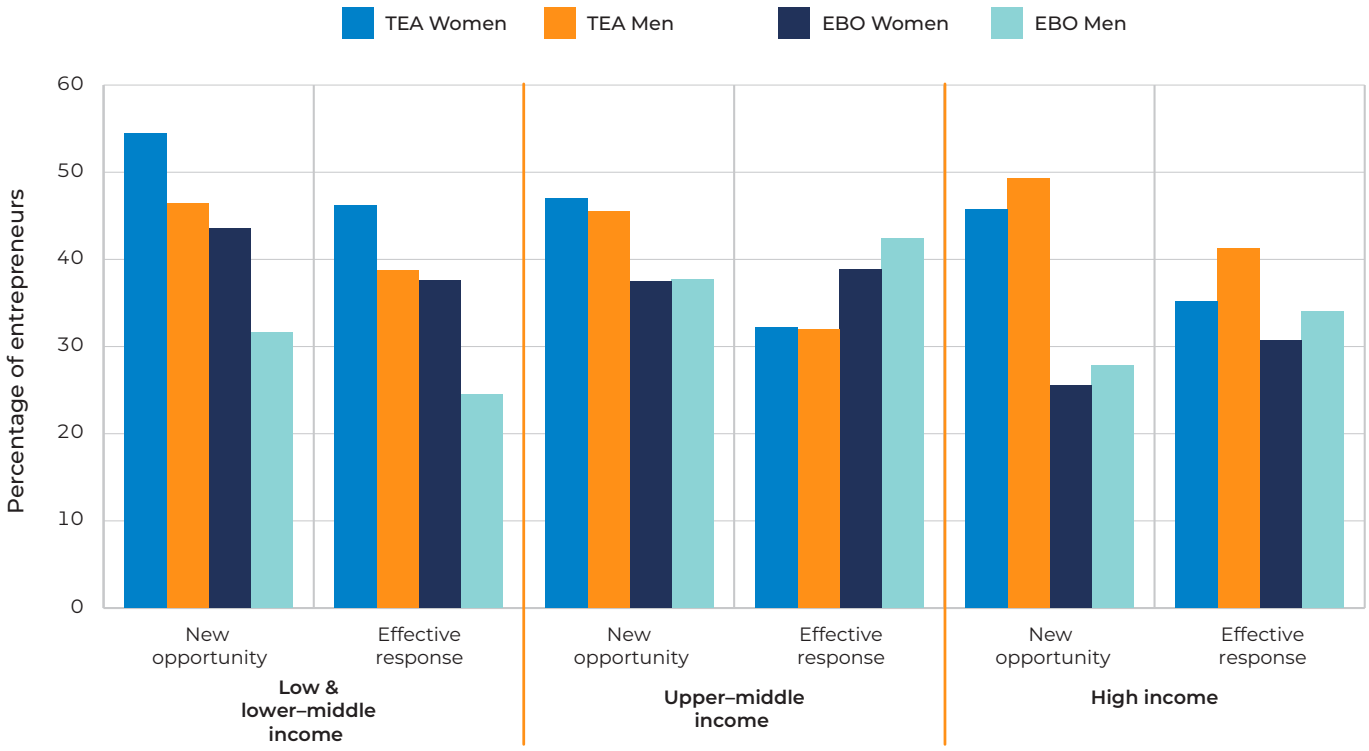
Globally, in the 2021 survey, women and men early-stage entrepreneurs were close to parity, with around half in both cases reporting that the pandemic provided new business opportunities (47% women vs. 48.1% men). Women early-stage entrepreneurs in lower-income countries are 17% more likely than men to agree that the pandemic has provided new business opportunities (54.4% women vs. 46.4% men), while women entrepreneurs in high-income countries are 7% less likely than men to agree (45.7% women vs. 49.3% men) (see Figure 10).

Taken by region, the highest rates of agreement that the pandemic provided new opportunities for women were found in North America (61.8% women vs. 59.6% men) and the lowest in Europe (38.3% women versus 40.8% men). Women early-stage entrepreneurs were close to parity with men in all but one region, Europe, where women agree less often than men that the pandemic provided new opportunities. North America was the only region where more women than men agreed that the pandemic provided new opportunities. Of note at a country level, women entrepreneurs in Iran are more than twice as likely as their male peers to agree that the pandemic created new business opportunities. Women were at or above parity with men in 22 of the 47 countries in the 2021 survey.

The same question was asked of established business owners. Less than one-third of women in established businesses agreed that the pandemic created new business opportunities which compares with close to half of the early-stage entrepreneurs. Importantly, women established business owners were close to parity with their male peers in agreeing that new business opportunities had resulted from the pandemic. However, the response patterns differed across national income levels, with the highest rates in lower-income countries, where women are 38% more likely than men to agree that the pandemic brought new business opportunities (43.5% women vs. 31.6% men). The reverse was true in high-income countries, with women established business owners less likely than men to agree that the pandemic resulted in new business opportunities (25.5% women vs. 27.8% men).

Women established business owners in Latin America & Caribbean were close to parity with men, with close to half in agreement that the pandemic brought new business opportunities. In contrast, only about a quarter of women

FIGURE 10
Pandemic opportunity and government response by gender for early-stage entrepreneurs (TEA) and established business owners (EBO)
Source: GEM 2021



ENTREPRENEUR HIGHLIGHT

Anna Niszkács

Owner and Managing Director of Gerbeaud Gasztronómia Kft. (Hungary)

Innovating in the midst of global disruption

Taking over a reputable family business in the midst of a pandemic is no small undertaking. Just ask Anna Niszkács, owner of Gerbeaud, one of the best-known Hungarian confectionery brands. Begun in 1858 as a stand-alone café, the Gerbeaud group now includes multiple restaurants and other hospitality services.

Prior to 2020, Gerbeaud had never needed to shut down because of a global pandemic in its over 160 years of operation. Anna, however, has experienced a different reality ever since she took over in February of that year. Essentially, she only knows what it is like to own and manage a business that is operating in the midst of disruption due to global events. Once the pandemic emerged in March 2020, all the thriving business's units had to close and Gerbeaud lost over 90% of its revenue overnight. Difficult as these circumstances were, Anna used them as an opportunity to innovate.

> *"The COVID-19 pandemic has been an important multiplier for us and provided us with the opportunity to rethink our well-established brands. During times of peace and normalcy, leaders are reluctant to rethink their successful products."*

An example is the Gerbeaud-owned restaurant Onyx, which opened in 2007 as a pioneer in fine dining and had received two Michelin stars before the pandemic closed it down. The company took this as an opportunity to launch a large-scale professional development program.

Another of the company's units — Émile, a restaurant located in the residential area of Budapest — launched a home delivery service out

of necessity shortly after being obliged to terminate in-person dining. When on-site service became possible again in June 2021, Émile was able to improve on previous years' results thanks to its new delivery service. Just as the extreme pandemic-related disruptions were subsiding, Anna has been forced to lead Gerbeaud through another global disruption: the outbreak of the war in Ukraine (a neighbour of Hungary).

> *"I now see that the handling of the pandemic was an opportunity to prepare for the war between Russia and Ukraine, inflation and the rise in energy prices. COVID-19 was a disaster for companies in the hospitality sector — we are focusing on stabilizing the business. But this does not mean we're staying the same. Rather, we are looking to the future and innovating even more boldly."*

established business owners in Europe agreed — just slightly less often than their male peers (0.96 female–male ratio). The largest gender gap was found in Middle East & Africa, where women are 24% more likely than men to agree that the pandemic brought new business opportunities (37.1% women vs. 29.8% men). In contrast, women in Central & East Asia are 12% less likely than men to agree that the pandemic produced new business opportunities (27.3% women vs. 31.1% men). Women established business owners in Iran are more than three times as likely as men to agree that the pandemic created new business opportunities, while the highest rates for women established business owners were found in India and the United Arab Emirates, with about two-thirds of women in agreement in those countries. No women established business owners in South Korea responded in agreement to this question.

EFFECTIVE GOVERNMENT RESPONSE TO THE PANDEMIC

While the 2020 GEM data offered an initial look at entrepreneurs' assessments of the effectiveness of their governments' pandemic responses, at that time many governments were still to take action as the disease had only begun to spread to some corners of the globe. By mid-year 2021, most governments had responded in some way. Globally, across the 42 countries which had this question in their 2021 survey, over one-third of women early-stage entrepreneurs and women established business owners agreed that the government response in their country was effective, with both groups of women agreeing less often than men.

Among early-stage entrepreneurs in lower-income countries, almost half of women agree that the government response was effective, about 19% more often than men (46.2% women vs. 38.7% men), while in high-income countries women agreed 15% less often than men (35.2% women vs. 41.3% men) (see Figure 10). Meanwhile, women established business owners in lower-income countries are 53% more likely than men to agree that the government response in their country was effective (37.6% women vs. 24.5% men), compared to women in high- and upper–middle-income countries, who are a little less likely than men to agree.

In North America, well over half of women early-stage entrepreneurs agreed that there was an effective government response to the pandemic in their country (57.2%), whereas those in Europe are least likely to agree (28%). Women agreed about an effective government response more often than men in Central & East Asia, Latin America & Caribbean and North America, while the largest gender difference was found in Middle East & Africa, with a gender gap of 19% (44.8% women vs. 55.0% men). Across countries, women were at parity with men in 18 of the 47 countries, with a striking factor of 2.5 times more agreement than men in Poland.

Regionally, women established business owners are more likely than men to agree that the government response in their country was effective in Central & East Asia and North America. The highest rates of agreement were found in North America, where over half the women agreed, while the lowest rates were found in Latin America & Caribbean, where one-third agreed. The largest gender gap was found in the Middle East & Africa region, where 38.1% of women agreed that the government response in their country was effective compared to 43.4% of men.

Among the 42 countries who included this question in the survey, the highest rates of agreement for women established business owners were found in the United Arab Emirates, where 85.7% of women agreed that the government response was effective, which is at parity with men. In Iran, no women established business owners reported agreement that the government response was effective, and only 8.7% in South Korea. Notably, women established business owners in Colombia are more than twice as likely as men to agree that the government response was effective (37.5% women vs. 17.3% men). Women established business owners were at or above parity with men in almost half the countries, revealing a broad range of gender differences in both directions.

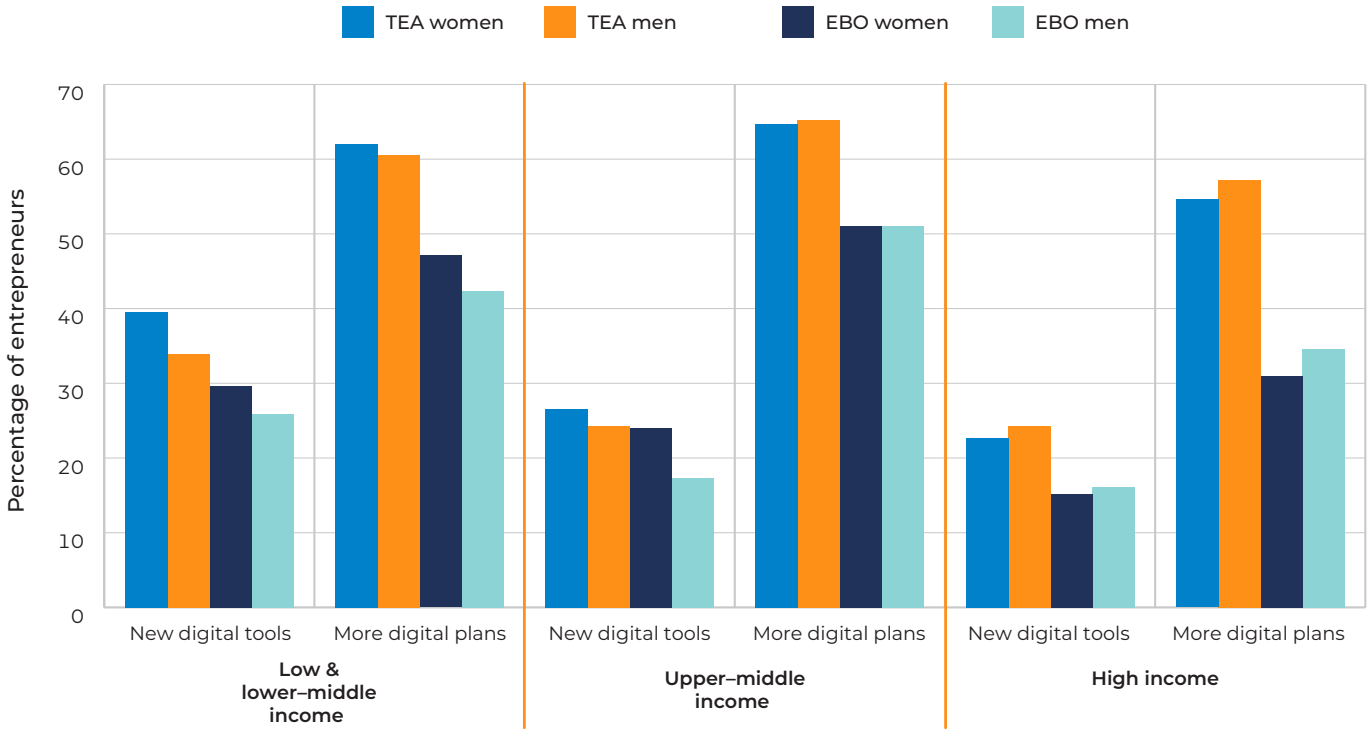


FIGURE 11
Pandemic-engendered digital technology use and expected adoption for early-stage entrepreneurs (TEA) and established business owners (EBO) by gender
Source: GEM 2021

USE OF NEW DIGITAL TECHNOLOGIES

One clear result of the COVID-19 pandemic for businesses around the world is the rapid adoption of digital technologies to reach customers more effectively, manage the supply chain, and increase efficiencies in internal operations, especially in the context of remote work and shifts to e-commerce. Some estimates suggest that the pandemic accelerated the digitization of business by three to four years.[4] Importantly, other research on pandemic impacts has found that the use of digital technologies during the pandemic were more likely to offset revenue losses for small companies and women-led companies.[5] To capture the impact on entrepreneurs and business owners around the world, the 2021 GEM survey asked the following two questions: Has the pandemic prompted use of new digital technologies? and Does the business plan to adopt more digital technologies within the next six months?

Globally, women entrepreneurs were at parity with men on both questions, with about one-quarter of all entrepreneurs reporting that the pandemic prompted the use of new digital technologies (25.3% women vs. 25.2% men) and over half reporting that they expected to adopt more digital technologies in the next six months (58.1% women vs. 59.4% men). Women early-stage entrepreneurs in lower-income countries are 17% more likely than men to report the use of new technologies due to the pandemic (39.6% women vs. 33.9% men) and 9% more likely than men in upper–middle-income countries (26.6% women vs. 24.3% men) (see Figure 11). In contrast, women entrepreneurs in high-income countries are the least likely to adopt new digital technologies due to the pandemic, though the rates are still significant, and are somewhat less likely than their male peers to report the use of new digital technologies (22.7% women vs. 24.3% men).

Women early-stage entrepreneurs across all regions are more likely than men to report having adopted new technologies as a result of

4 McKinsey & Company (2020). How COVID-19 has pushed companies over the technology tipping point — and transformed business forever. Survey, 5 October. https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/how-covid-19-has-pushed-companies-over-the-technology-tipping-point-and-transformed-business-forever

5 Digitally Driven Europe, European small businesses share how digital tools helped them beat the pandemic. https://digitallydriven.connectedcouncil.org/europe/

the pandemic, with the exception of Middle East & Africa. Women in Middle East & Africa report the highest rate of use of new technologies due to the pandemic compared to women in other regions, but are somewhat less likely to do so than their male peers (37.8% women vs. 40.0% men). In North America, women are considerably more likely than men to report adopting new digital technologies (26.2% women vs. 22.1% men). The lowest rates of new digital technology adoption were reported in Latin America & Caribbean, where the rate for women entrepreneurs was a little higher than for men (20.8% women vs. 19.8% men). Notably, women entrepreneurs in Slovenia are twice as likely as men to report using new digital technologies (16.3% women vs. 7.0% men), while women entrepreneurs in Luxembourg are two-thirds less likely than men to be prompted by the pandemic to use new digital technologies (10.6% women vs. 30.8% men).

Compared to early-stage entrepreneurs, established business owners are much less likely to have adopted new digital technologies during the pandemic or to have plans to deploy more digital technologies in the near future. About one in five women established businesses owners reported having adopted new digital technologies and were close to parity with men (17.7% women vs. 17.2% men). More than one in three women established business owners, however, reported plans to use more digital technologies within six months, which is 6% lower than men (35.6% women vs. 37.9% men). There is, again, an inverse relationship between level of national income and the gender gap in rates of use of new digital tools due to the pandemic. Among established business owners, women in lower-income countries are considerably more likely than men to adopt new digital tools (29.6% women vs. 25.9% men).

Regional patterns for established business owners showed the most gender parity in Europe, where about one in eight women and men reported new digital technology use prompted by the pandemic. The highest rates for established business owners were observed in Latin America & Caribbean, where one in five women reported use of new digital technologies, close to parity with men. In North America, however, among established business owners women are about 30% less likely than men to use new digital technologies as a result of the pandemic. Amazingly, over 70% of women established business owners in the Sudan adopted new digital technologies due to the pandemic (70.2% women vs. 66.3% men). Women established business owners in Russia are over four times more likely than men to use new digital tools as a result of the pandemic, representing the largest gender difference, while in North America women are almost half as likely as men to report using new digital technologies due to the pandemic (13.0% women vs. 23.1% men).

Regarding future plans to adopt digital technologies, the patterns are similar for women entrepreneurs and established business owners, albeit at higher rates. Entrepreneurs in lower-income countries (62% women vs. 60.6% men) and upper–middle-income countries (64.7% women vs. 65.2% men) were close to gender parity. Meanwhile, women established business owners in upper–middle-income countries are 39% more likely than men to report plans to use more digital technology (24.0% women vs. 17.3% men), and women entrepreneurs in high-income countries are about 5% less likely than men to report adoption of new technologies (54.6% women vs. 57.2% men).

Regional patterns were similar for established business owners and entrepreneurs (new business owners), although in Middle East & Africa women showed parity with men (45.3% women vs. 45.3% men) and Europe showed a slightly narrower gender gap and much lower rates (26.8% women vs. 28.3% men). Among countries, the largest gender difference was observed in Romania, where women established business owners are more than twice as likely as men to report immediate plans to use more digital technologies (28.1% women vs. 10.7% men). The opposite was found in France, where women are two-fifths less likely to plan to use more digital tools compared to men (18.2% women vs. 30.4% men).

Among established businesses owners, women in lower-income countries are more likely than men to report plans to use new digital technologies (47.1% women vs. 42.4% men), though women in upper–middle-income countries reported a higher rate and were at parity with their male peers (51.1% women vs. 51.1% men). In contrast, among established business owners in high-income countries, women are about 10% less likely than men to report plans to use more digital technologies within the next six months (31.0% women vs. 34.6% men).

In Middle East & Africa, women showed parity with men (45.3% women vs. 45.3% men), whereas Europe showed a slightly narrower gender gap

and much lower rates (26.8% women vs. 28.3% men). Among countries, the largest gender difference was observed in Romania, where women established business owners are more than twice as likely as men to report immediate plans to use more digital technologies (28.1% women vs. 10.7% men). The opposite was found in France, where women are two-fifths less likely than men to plan to use more digital tools (18.2% women vs. 30.4% men).

HIGHLIGHTS

In this first set of analyses addressing gender differences in pandemic impacts, several key findings stand out.

- Women were slightly more likely to report lower intentions to start a business in 2021 compared to 2019 and 2020. Globally, entrepreneurial intentions decreased for women from 19.1% in 2019 to 16.7% in 2021. Women in lower-income countries showed a sharper decline in entrepreneurial intentions, while women in upper–middle-income countries actually showed an increase. Entrepreneurial intentions serve as an indicator of business confidence and are likely very sensitive to market conditions at the country level.
- Meanwhile, business startup rates (TEA) rose slightly for women from 2019 to 2021 across the 34 countries in the comparative analysis, with many countries showing a sharp drop in 2020 followed by recovery in 2021. In lower-income countries, startup rates showed the biggest dip in 2020, dropping by half for women from 8.5% to 4.1% and recovering to 7.9% in 2021. Market interruptions may have been felt more sharply for women entrepreneurs in lower-income countries where the economy is dominated by in-person market contexts with lower rates of digitization and e-commerce.
- Rates in Established Business Ownership (EBO) dropped across all national income levels for both women and men. Women in upper–middle-income countries showed the largest decrease in established activity from 2019 to 2021, with average rates declining 43%, from 8.9% to 5.1%. Lower exit rates for women are to be expected to some extent, as women also start and manage businesses at lower rates. However, the changes in the rates over time serve as an important indicator of pandemic impacts on women.
- Globally, in the 2021 survey, close to half of the women early-stage entrepreneurs agreed that the pandemic created new business opportunities compared to less than one-third of women established business owners, both being at near parity with their male counterparts. It could be argued that established business owners have been retaining a focus on serving their current market, while entrepreneurs have been forced to seek out new sources of income or were more alert to new opportunities in the customer discovery stage of the entrepreneurial lifecycle.
- Over one-third of both women early-stage entrepreneurs and women established business owners agreed that the government response in their country was effective, with both groups of women agreeing less often than men. Women in lower-income countries showed the highest rates, with almost half of early-stage entrepreneurs in agreement compared to two-fifths of established business owners. Unpacking government response patterns would require comparing rates to local policy and programming in support of new and small business — an important direction for future research.
- At parity with men, one-quarter of women early-stage entrepreneurs reported that the pandemic prompted the use of new digital technologies, and over half reported that they expected to adopt more digital technologies in the next six months. While the push to digitalize has been rather similar for female- and male-led businesses around the world, prior research in high-income countries suggests that women may have benefited more.[6]

6 Connected Commerce Council (2021). *Digitally Driven 2021*. https://connectedcouncil.org/reports (accessed 29 June 2022).

- About one in five women established businesses owners reported having adopted new digital technologies due to the pandemic, and over one in three reported plans to use more digital technologies within six months. Importantly, among established businesses owners, women were at parity with men on the use of new digital tools due to the pandemic, but are 65% more likely than men to report plans to use more digital tools in the near future. The higher rate of plans to deploy more digital technologies for women established business owners may be a reflection of the disproportionate representation of women among small businesses.

Explanations for the differential impacts of the pandemic can be generally tracked back to three main factors. Women are more likely to: (1) start and run businesses in industry sectors most impacted by COVID-19 lockdowns and market closures; (2) run many of the smallest most vulnerable businesses; and (3) carry a higher burden of family demands which were increased as a result of school closures, remote education for even the youngest children, and lack of access to non-institutional forms of family care. For these reasons, it is not surprising to see high impacts on entrepreneurial intentions, startup activity, EBO and business exits.

In many instances, women entrepreneurs and established business owners experienced similar impacts to their male counterparts, which reflects the extent of the market shocks and the tendency for men and women to report similar experiences within a given country. In countries with the largest gender differences on particular measures, we have to ask what was happening in that particular context to exacerbate or mediate the market crisis brought about by the pandemic. It is also important to consider the industry segmentation, dominance of the small market economy, digital infrastructure and prevalence in business, and the gender composition of these sectors. In this respect, the GEM data offer a great opportunity for researchers to investigate the complexity of gender differences and pandemic impacts in different entrepreneurial contexts.

3

Structural Factors Influencing Entrepreneurial Activity

Interpreting gender differences in entrepreneurial activity can be very challenging from a policy and programming perspective. While it may be easy to place the blame for gender inequality on cultural issues like gender bias, the social processes that lead to the outcomes reported are often much more complex than is widely appreciated. That said, we are beginning to see a growing appreciation of the role of structural bias: the inequality inherent in the different patterns of entrepreneurial activity between women and men produced in different cultural settings. Structural inequality refers to a social system in which dominant social institutions, norms and networks confer advantages on some social groups but disadvantages on others. In practice, gender biases tend to lead to systems of structural inequality which, in turn, reinforce gender stereotypes and bias against women.

Most people understand that gender bias refers to a cultural bias for or against women, the positivity or negativity of that bias depending on the function being performed. Across all cultures, women are thought to be good at family care but less adept at starting and growing businesses. Classic gender role theory has captured the idea that society confers a high competence on women when it comes to childcare and upkeep of a home, which results in stereotypes that disadvantage women in the workplace. These gender stereotypes are a little more complicated in real-world contexts, especially when we consider the types of business woman tend to start in comparison to men (fashion and personal care vs. engineering and technology, for example). Here, gender stereotypes play an important role in supporting the legitimacy of different types of activity which, in turn, results in gendered patterns of entrepreneurial activity. The important point is that these gendered patterns of entrepreneurial activity influence who starts what types of business and why. They also influence gendered differences in access to resources for funding startup and growth activities and, ultimately, firm performance.

In this chapter, we consider the proportion of women participating in high-potential entrepreneurial activity and the important structural differences for women and men that contribute to these outcomes. Structural patterns often vary considerably by context, which is why, in part, policies and programs designed in one country or municipality may not work in another. Structural arrangements that influence startup rates and outcomes include the personal demographics of entrepreneurs and the types of business they start (especially with regard to industry and business size). Importantly, these structural factors tend to correlate in significant ways to influence outcomes such as growth orientation, market focus and internationalization.

GENDER COMPOSITION OF HIGH-POTENTIAL BUSINESSES

The prevailing narrative about women's entrepreneurship is that women are over-represented among the poorest and most vulnerable business owners in the world. While this is factually true, this narrative overpowers another truth: that women entrepreneurs and business owners are building large, successful businesses in all industry sectors, with an enormous impact on their economies, communities and families. While women may be under-represented in some categories of business creation and growth, GEM data show

that women still constitute a sizeable portion of high-potential entrepreneurs: that is, those individuals starting some of the most promising new firms with high aspirations for growth and impact.

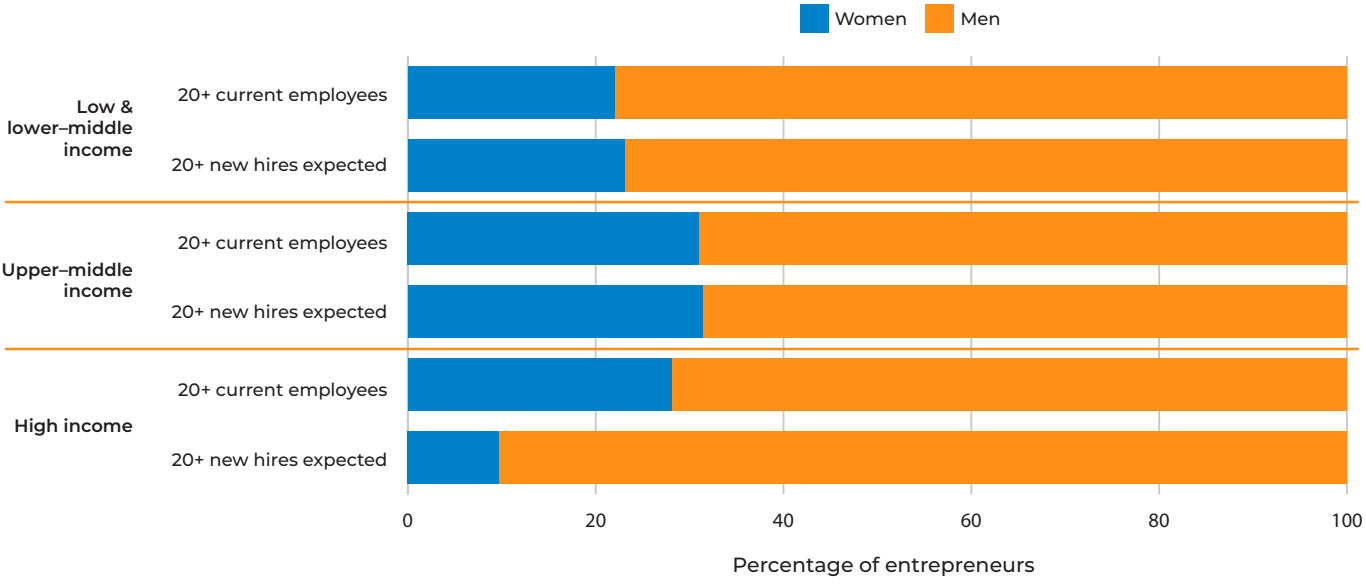
New companies contribute to their local communities and economies in many ways, but most notably through job creation. While most companies start pretty small as solo endeavours or with 1–5 employees, women are typically much less likely to start companies with high numbers of employees. This trend is likely explained mostly by the types of business that women entrepreneurs start. Importantly, the number of employees involved during the startup phase is often a predictor of growth aspirations and the number of new hires expected in coming years.

Women represent about one in four entrepreneurs starting companies with 20+ employees and those expecting to hire 20+ employees over the next five years. In lower-income countries, women only represent about one in 10 entrepreneurs starting with 20+ employees, but well over a quarter of those expecting to hire 20+ employees over the next five years. In contrast, women represent almost one-third of entrepreneurs starting with 20+ employees and those expecting to hire 20+ employees over the next five years in upper–middle-income countries. In high-income countries, about one-quarter of the entrepreneurs starting with 20+ employees and those expecting to hire 20+ employees over the next five years were women (see Figure 12).

The gender composition of growth-oriented entrepreneurs varies considerably across regions. In North America, two-fifths of entrepreneurs reporting 20+ employees were women, but only one in 10 in Middle East & Africa. Among entrepreneurs expecting to hire 20+ employees over the next five years, one in five were women in Middle East & Africa compared to one in three in Europe. In 17 of the 47 countries in 2021, only men reported starting with 20+ employees, while in Greece, India and the United Kingdom only women reported starting with 20+ employees. Three countries — Cyprus, Finland and Italy — showed only men in the category of 20+ expected hires within five years. Meanwhile, in Kazakhstan, two-thirds of entrepreneurs expecting to hire 20+ employees over the next five years were women. Women also represented the majority of entrepreneurs with high growth expectations in Greece, Morocco and Romania.

Another important indicator of high-potential entrepreneurship is how innovative new products or services are for their target markets. Globally, women entrepreneurs are just as likely as men to report offering an innovative product or service (31.4% women vs. 33.9% men). However, a better way to understand the contributions that women make relative to men is to consider the gender composition of groups of entrepreneurs advancing innovation, creating jobs and driving economic growth in their communities, economies and the global marketplace. Women represent almost half the entrepreneurs around the world offering products or services new to

FIGURE 12
High-growth indicators by gender and national income level for early-stage entrepreneurs
Source: GEM 2021



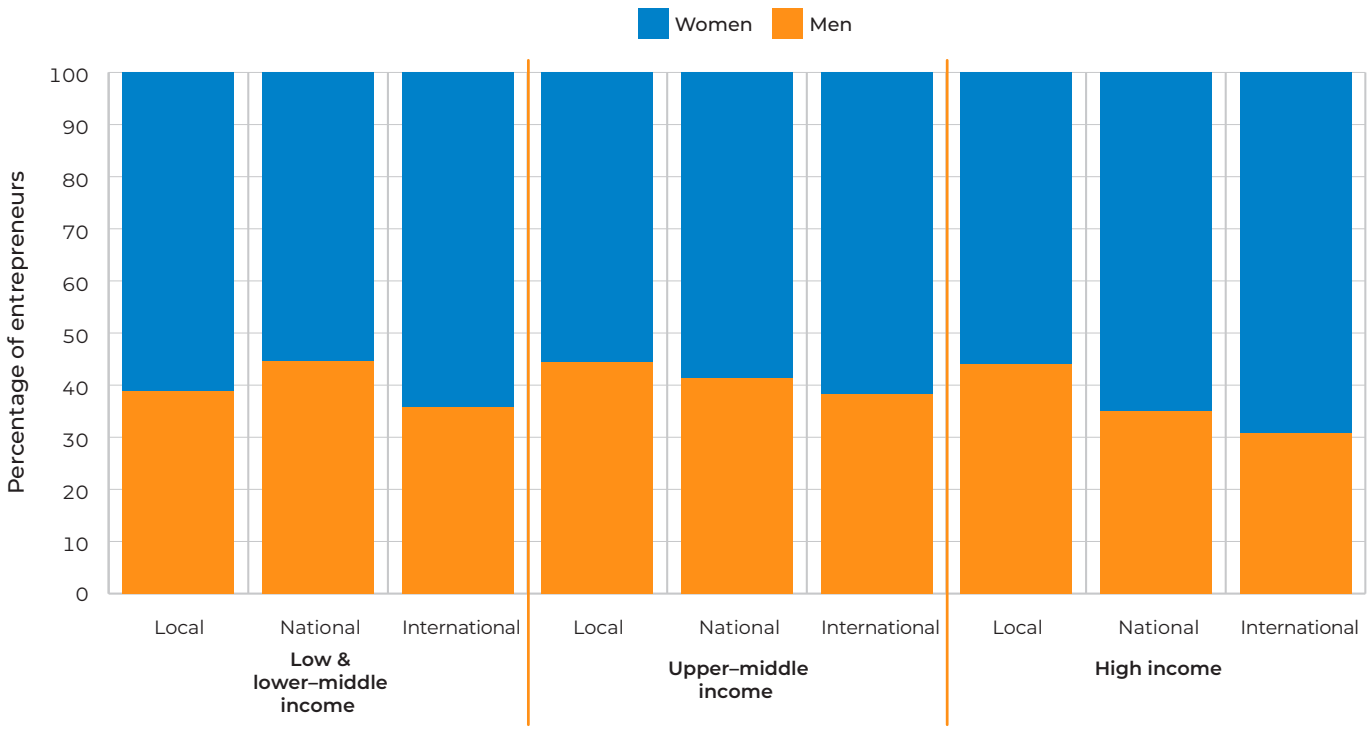


FIGURE 13
Level of innovation by gender and national income for early-stage entrepreneurs
Source: GEM 2021

their local markets and one in three entrepreneurs offering innovations to national and international markets. This gender composition trend is similar for high- and upper–middle-income countries with a couple of exceptions. Women in lower-income countries constitute one in three entrepreneurs offering local innovations, while women in high-income countries represent three in 10 entrepreneurs offering international innovations (see Figure 13).

The gender composition of entrepreneur groups offering different types of innovation varies a little more by region. The women in Latin America & Caribbean are closest to parity, with 47.9% offering local innovations. However, in North America, only 35.7% of the entrepreneurs offering local innovations are women, which is explained by the high proportion of women among entrepreneurs offering international innovations. More strikingly, in Middle East & Africa, women represent only one in four entrepreneurs offering national and international innovations. In some countries, such as Slovenia and Finland, over two-thirds of entrepreneurs offering local innovations were women, which contrasts with Egypt and the United Arab Emirates, where women represent fewer than one in five entrepreneurs offering local innovations. Kazakhstan is the only country in which women entrepreneurs reported offering national innovations, while representing half of all entrepreneurs offering new products for international markets. In contrast, only men reported offering national innovations among entrepreneurs in Brazil and Russia. Among entrepreneurs offering international innovations, in Poland and Romania only women responded. Six countries — Belarus, Cyprus, Egypt, Israel, Italy and Norway — showed only men among the entrepreneurs offering international innovations. Much of this activity is likely explained to a large extent by the gendered nature of industries and occupations in these countries.

Another consistent finding in the GEM data is that women are more likely than men to focus on local markets and less likely to focus on national and international markets. The findings in 2021 are no different, with women 24% more likely to report focusing on a local market compared to men (45.9% women vs. 36.9% men). In contrast, women are 17% and 14%, respectively, less likely than men to focus on national and international markets. However, women still represent almost half of the entrepreneurs focused on local markets globally and one in three entrepreneurs focused on national and international markets. These trends hold pretty well across levels of national income as well. However, over two-fifths of

ENTREPRENEUR HIGHLIGHT

Stephanie Joy Benedetto

Co-founder, Queen of Raw (USA)
Cartier Women's Initiative Fellow, 2020

Challenging the status quo by driving sustainable change

It is estimated that some $288 billion of excess inventory is annually thrown into landfills, burned or else sitting unneeded in warehouses. Queen of Raw is working to reduce this astronomical figure.

The company's award-winning SaaS software, Materia MX, was released in 2021 in response to growing supply chain inefficiencies, rising prices and excess inventory. With this software, enterprises can reuse, resell and recycle excess inventory, recouping lost value. For some of the world's biggest Fortune 500 companies, the amount of wasted material can even represent 15% of their bottom line. Stephanie Benedetto, co-founder and CEO of Queen of Raw, said:

> *"At that volume waste isn't just environmentally irresponsible — it's a financial risk and a CFO issue."*

One Queen of Raw enterprise customer realized savings on $14 millions' worth of inventory and holding costs in a matter of weeks after deploying the Materia MX software. Acting on over 10 metric tons of excess materials, they were able to divert 95% of it from landfills and incineration.

Stephanie's family has been in the textiles business for over 100 years and has seen first-hand the level of waste that can be generated. According to the United Nations, the textile industry is the second biggest polluter in the world of clean water. Queen of Raw has already saved over 1 billion gallons of water — equivalent to three years' worth of drinking water for 1.43 million people.

Benedetto and Phil Derasmo, Queen of Raw's CTO and Co-founder, have built a reporting tool into the software which enables consumers and companies to see their waste footprint. The tool, created in collaboration with data scientists from MIT, calculates the water, chemicals, carbon emissions, waste and money saved by the actions taken. By communicating the results of these efforts to its end-consumers, one Fortune 500 customer increased its conversion rate by a factor of three.

Queen of Raw has drawn attention in prominent media outlets on account of the impact it is creating, and the company is collecting glowing reviews from its customers and partners. Said Noel Kinder, Chief Sustainability Officer of Nike:

> *"I really was compelled by Queen of Raw and what they're trying to do in terms of leveraging waste and incorporating that back into the industry that we all operate in."*

Christian Klein, Chief Executive Officer of SAP, added:

> *"Queen of Raw is challenging the status quo by driving sustainable change."*

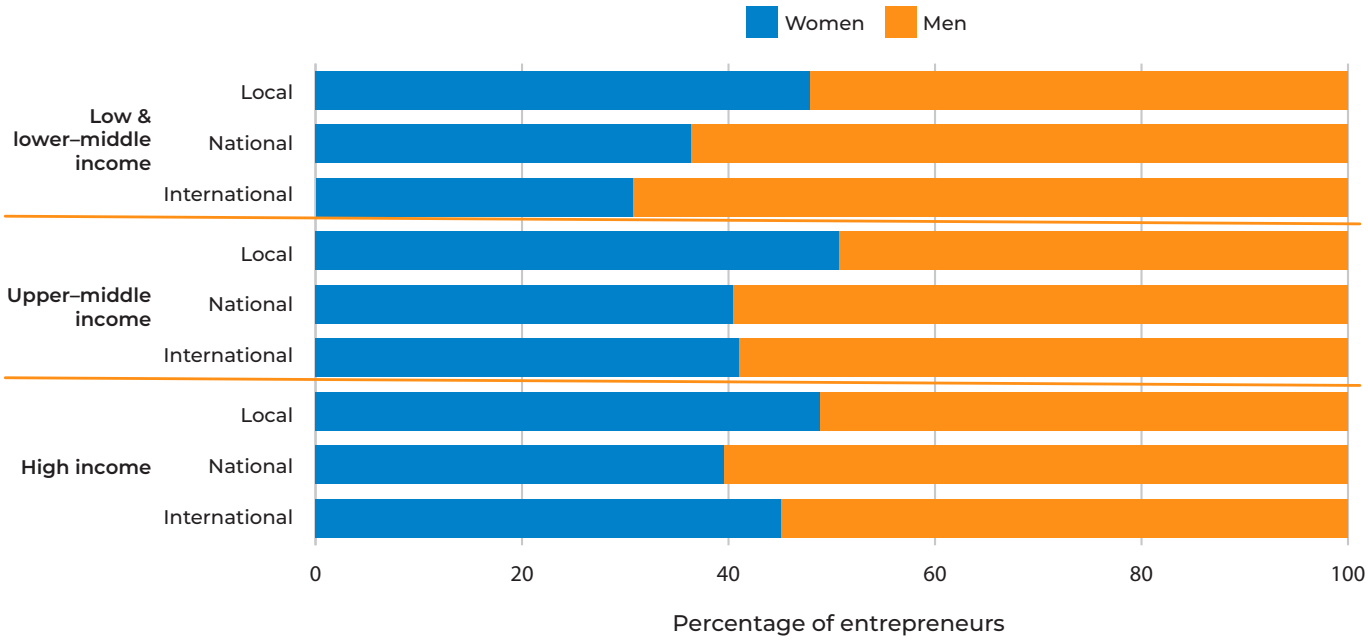


FIGURE 14
Market focus by gender and national income level for early-stage entrepreneurs
Source: GEM 2021

entrepreneurs focusing on international markets in high-income countries and upper–middle-income countries are women. Regionally, these trends also generally hold, except in North America, where women represent slightly over two-fifths of entrepreneurs focusing on local, national and international markets (see Figure 14).

Following these findings, it is not surprising, then, to find that, globally, women also represent about one in three entrepreneurs who have over 25% of their customers in another country. This level of internationalization varies by national income level: from 31.4% of entrepreneurs reporting high levels of internationalization in lower-income countries to 43.7% of those in upper–middle-income countries. Regional trends vary even more: from women representing 21.1% of high-export entrepreneurs in Central & East Asia to 45.8% in Latin America & Caribbean. Women in Morocco constitute over four-fifths of high-export entrepreneurs and half or more in another seven countries: Colombia, the Dominican Republic, Greece, the Russian Federation, the Slovak Republic, Spain and the United Kingdom.

ENTREPRENEURIAL DEMOGRAPHICS

One of the first questions advocates often ask when looking at interventions for women entrepreneurs is "Who are these women?" Gender differences in age, education and household income are often of interest, yet of limited use in understanding many of the gender differences in business startup and growth. Early scholars of entrepreneurship also started with this question and looked for explanations of how personal characteristics served as predictors of business startup success. But they came to find that personal demographics are not useful predictors of business startup up success.[7] Instead, business characteristics and market conditions have turned out to be more reliable predictors of outcomes such as sales, profits and liquidity events. Nonetheless, personal demographics such as age, education and household income can provide important insights into the types of startup activity occurring in different geographies.

Globally, women entrepreneurs in many countries tend to be slightly younger, less educated and from poorer households than men entrepreneurs. However, there is a lot more gender parity in the personal demographics than typically seen in business characteristics and motives for starting a business. For example,

7 Gartner, W.B. (1988). "Who is an entrepreneur?" is the wrong question. *American Journal of Small Business*, 12(4), 11–32.

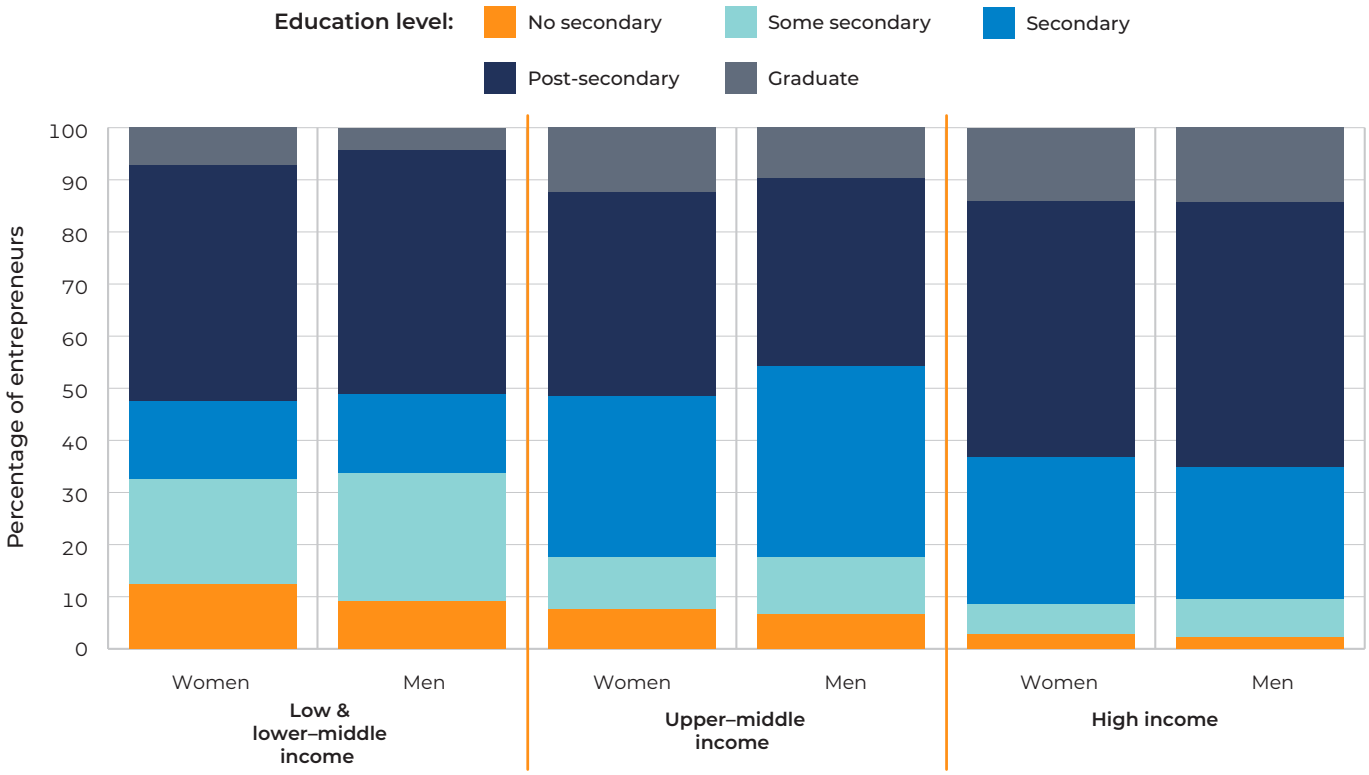


FIGURE 15
Education level by gender and national income level for early-stage entrepreneurs
Source: GEM 2021

women entrepreneurs were at parity with men across the two youngest age groups, where startup activity is higher, but below parity in the 55–64-year-old group. Moreover, while gender parity was found in all age groups in upper–middle-income countries, women entrepreneurs tended to be a little older in lower-income countries and a little younger in high-income countries, relative to men. Women entrepreneurs in lower-income countries tend to be a little younger, with 55.6% in the 18–34-year-old group compared to 50.2% in upper–middle-income countries and 42.6% in high-income countries.

Across regions, Middle East & Africa showed the highest number of women entrepreneurs in the 18–35-year-old group (54.2% women vs. 54.7% men) and a higher proportion of women in the 55–64-year-old category as well (7.9% women vs. 6.0% men). Again, a high degree of gender parity was observed across age groups and regions. The most variation in gender differences and participation rates was found in the 55–64-year-old category. In Egypt, Luxembourg and South Africa, women entrepreneurs are more than twice as likely to be in the oldest age group compared to their male peers and almost seven times as likely as men in the Slovak Republic.

Globally, the majority of entrepreneurs reported post-secondary education or higher at rates close to gender parity (73.6% women vs 73.8% men). In contrast, women entrepreneurs are slightly less likely than men to report no secondary education (9.1% women vs. 10.3% men) and slightly more likely to have a graduate degree (13.0% women vs. 12.1% men). The relative prevalence of graduate degrees among women entrepreneurs is much higher in lower-income countries (7.2% women vs. 4.4% men; 1.64 female–male ratio) and upper–middle-income countries (12.3% women vs. 9.8% men; 1.26 female–male ratio). A similar pattern presented for women entrepreneurs with a lower-than-secondary education. Women entrepreneurs in countries at all levels of income are less likely than their male counterparts to have a lower-than-secondary education. However, in lower-income countries, one in five women entrepreneurs reported no secondary education compared to one in four men (see Figure 15).

These patterns generally held across regions as well, with the majority of women entrepreneurs reporting secondary or post-secondary education. Notably, women entrepreneurs in Central & East Asia are 58%

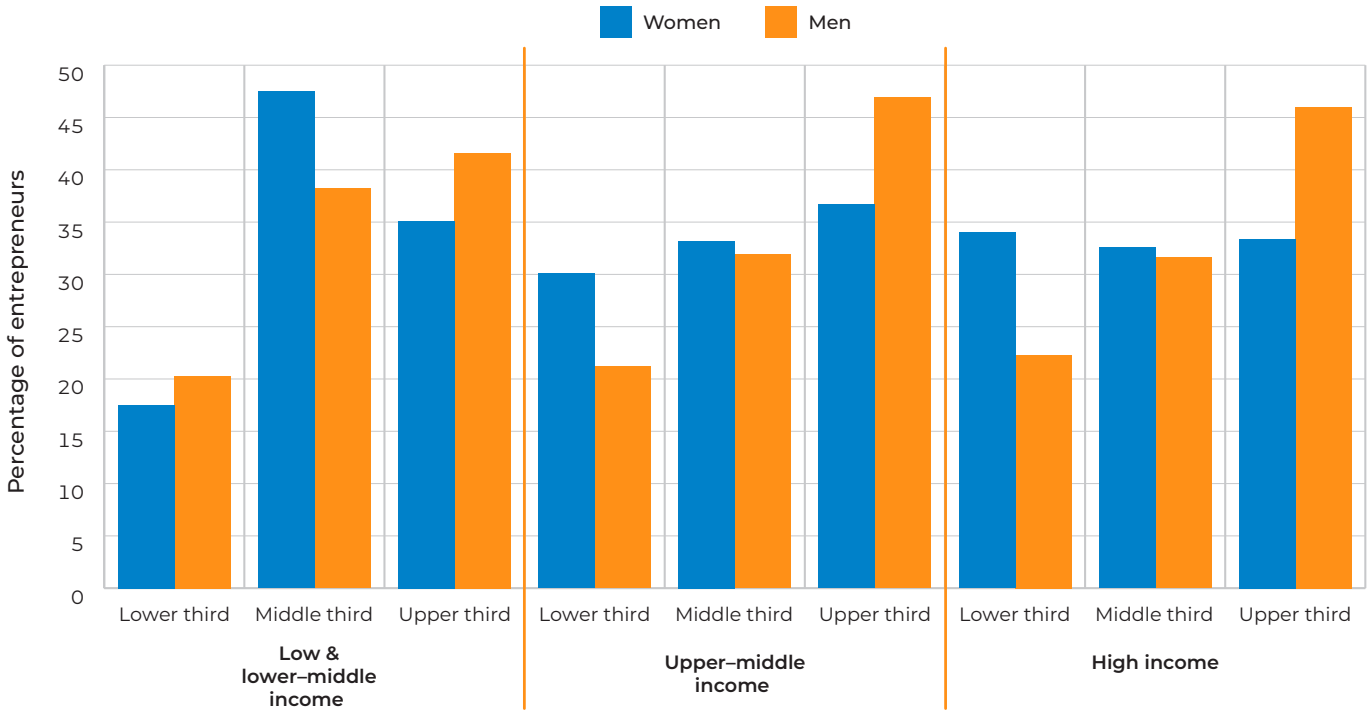


FIGURE 16
Household income by gender and region for early-stage entrepreneurs
Source: GEM 2021

more likely than men to report a graduate degree (20.6% women vs. 13.0% men) but one-third less likely than men to report a graduate degree in Latin America & Caribbean (4.8% women vs. 7.2% men). These variations in educational patterns point to significant differences in types of startup across regions. Women entrepreneurs in Middle East & Africa are the most likely to report no secondary education compared to women in other regions, and 15% less likely to do so than their male peers (13.1% women vs. 15.4% men). Educational levels varied considerably across countries, but not always in predictable ways. For example, women entrepreneurs in India are six times more likely to report no secondary education compared to men, but women in Sweden, surprisingly, show a comparable trend, being 4.5 times more likely to report no secondary education than men. Women in Sweden and Norway are also four times more likely than men to report having a graduate degree. In some countries, startup activity appears to be more polarized, drawing in some of the most-educated and least-educated women.

Finally, women entrepreneurs tend to be less affluent than men globally, except in lower-income countries. Globally, one in three women entrepreneurs reported household income in the lowest third of household incomes compared to one in five men (1.43 female–male ratio). Women entrepreneurs are also a little more likely than men to report middle-third household income (34.0% women vs. 32.3% men) and almost one-quarter less likely to report household income in the high-third category (34.6% women vs. 45.8% men). However, while about one-third of women in high- and upper–middle-income countries reported lower-third household income, less than 20% of women in lower-income countries came from the poorest households. Notably, women entrepreneurs in Latin America & Caribbean are more than twice as likely to report lower-third household income (34.1% women vs. 16.3% men) and also much less likely to report income in the highest third of household income (28.7% women vs. 45.0% men). Gender parity was observed for the highest-third income category in Central & East Asia (44.0% women vs. 44.3% men) (see Figure 16).

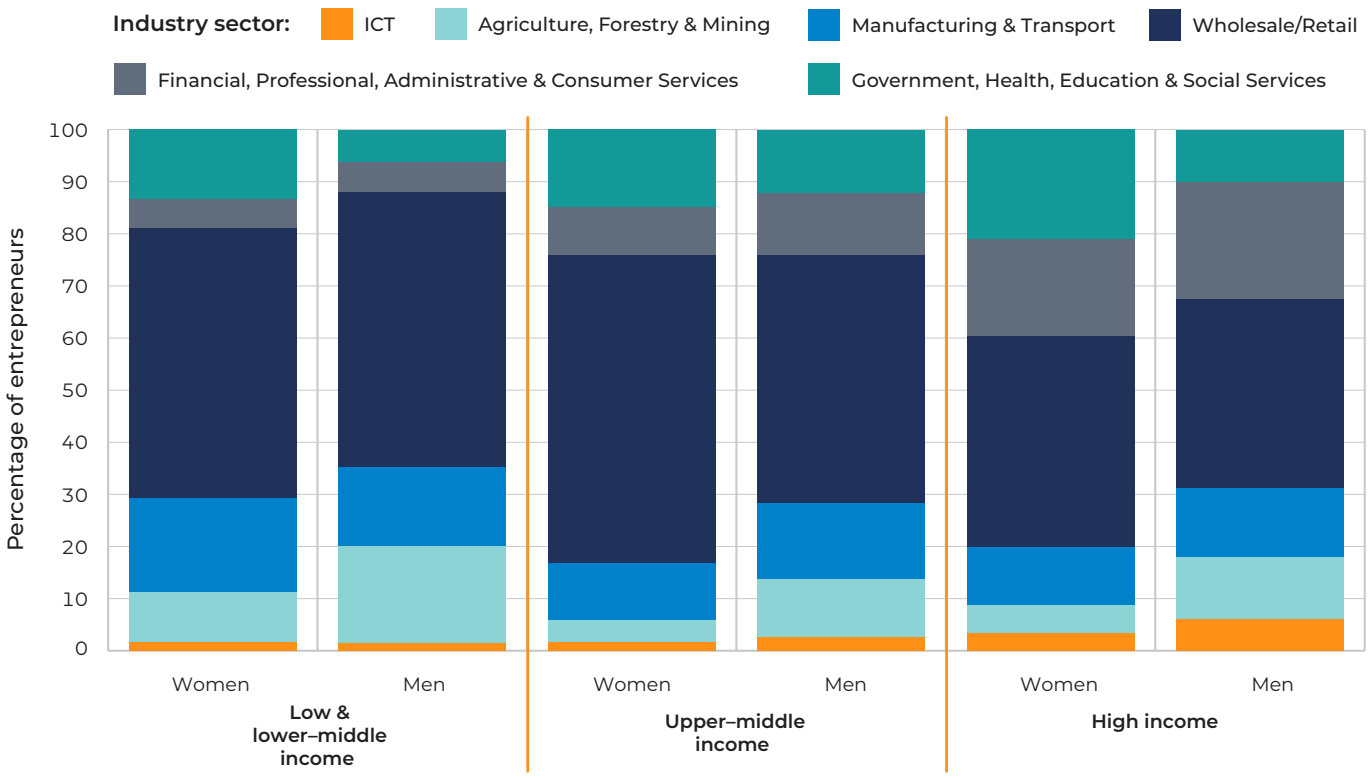
INDUSTRY SECTOR AND BUSINESS SIZE

Industry and business size are two of the most important predictors of business outcomes. While some industry sectors tend to be dominated by small service firms with low profit margins and a local market focus, others are more heavily concentrated with large, capital-intensive firms with a national or international focus and often higher average profit margins. In most countries, women tend to run smaller, younger firms in different industry sectors, relative to the numbers of men doing so. In 2021, the majority of entrepreneurs surveyed reported startup activity in the Wholesale/Retail sector, with women about 15% more likely than men to be involved in this sector (46.8% women vs. 40.7% men). Women entrepreneurs are almost twice as likely as men to start a business in the Government, Health, Education & Social Services sector (18.5% women vs. 10.1% men) and less than half as likely to be involved in the Agriculture, Forestry & Mining sector (5.4% women vs. 12.6% men). Importantly, globally, women entrepreneurs are much less likely to be involved in ICT startups than men (2.7% women vs. 4.7% men), a sector that draws the majority of venture capital dollars in the United States and worldwide.[8]

In lower- and high-income countries, women are more than twice as likely as men to start businesses in Government, Health, Education & Social Services. However, women entrepreneurs are much less active than men in the ICT sector in high-income countries (3.3% women vs. 6.0% men) and upper–middle-income countries (1.7% women vs. 2.6% men). Surprisingly, women are 13% more likely to report starting a business in the ICT sector in lower-income countries (1.7% women vs. 1.5% men). Women entrepreneurs were at close to parity or above in the Wholesale/Retail sector across income levels, but also less likely to start businesses in the Agriculture, Forestry & Mining and Financial, Professional, Administrative & Consumer Services sectors (see Figure 17).

8 Mathur, Priyamvada (2019). 21 charts showing current trends in US venture capital. Pitchbook, 24 July. https://pitchbook.com/news/articles/21-charts-showing-current-trends-in-us-venture-capital; KPMG (2022). *Venture Pulse 2022: Global Analysis of Venture Funding*. 20 July. https://assets.kpmg/content/dam/kpmg/xx/pdf/2022/07/venture-pulse-q2-2022.pdf

FIGURE 17
Industry sector by gender and national income level for early-stage entrepreneurs
Source: GEM 2021



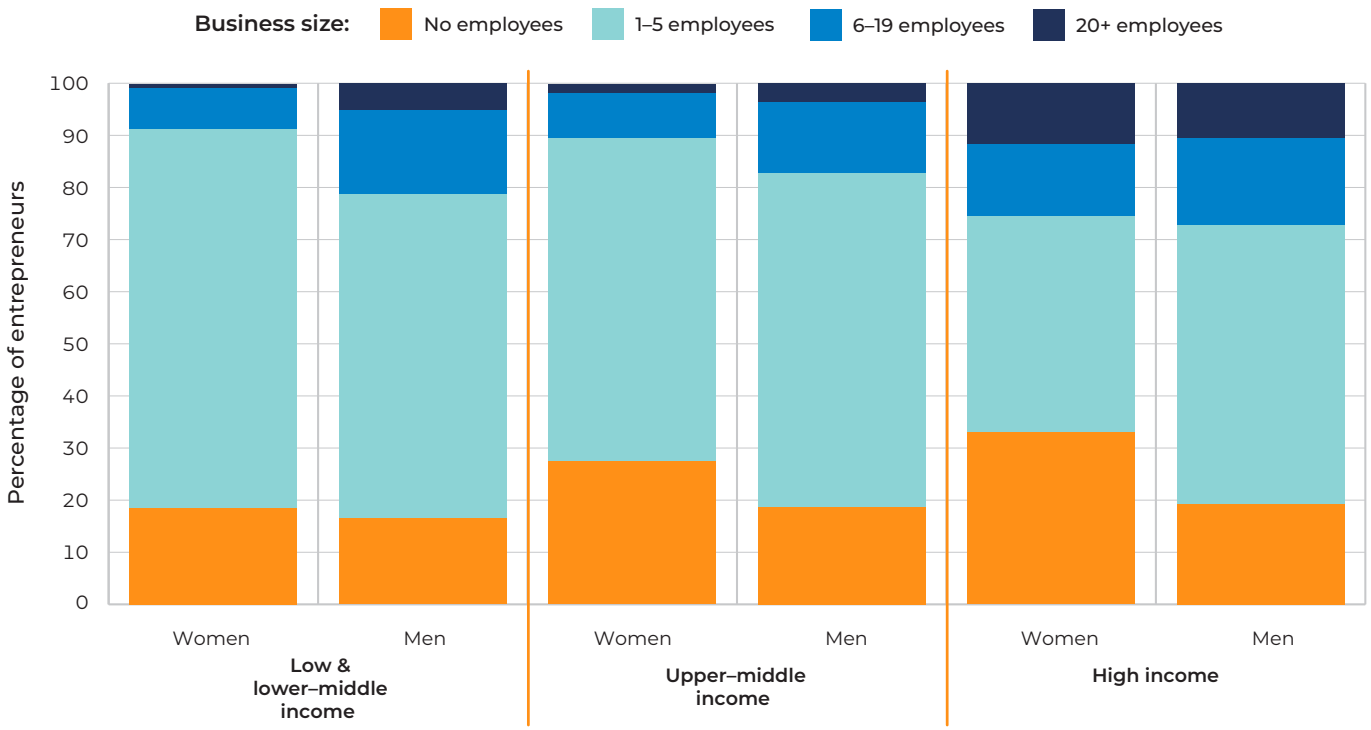


FIGURE 18
Business size by gender and national income level for early-stage entrepreneurs
Source: GEM 2021

These gender patterns of startup activity by industry sector generally hold across regions, with a few notable exceptions. Women in North America are 78% more likely to report startup activity in the ICT sector (8.9% women vs. 5.0% men). This is a startling increase, pointing to some important trends in Canada and the United States, no doubt promoted by STEM programming for women and girls. In Europe, women are twice as likely as men to start businesses in Government, Health, Education & Social Services (23.5% women vs. 11.6% men), followed by women in Latin America & Caribbean at a 80% higher rate (14.9% vs. versus 8.3% men). Women in Latin America & Caribbean are also one-third more likely than men to report startup activity in the Wholesale/Retail sector, where businesses are often smaller and more locally focused. Women entrepreneurs in Middle East & Africa reported ICT startup activity at a rate close to parity with men (2.1% women vs. 2.2% men).

The contrasting nature of gender participation rates in ICT and Government, Health, Education & Social Services for entrepreneurs is most notable in countries such as Finland, where no women reported ICT startup activity compared to 10% of men. Actually, no startup activity in ICT was reported by women in seven other countries as well: Cyprus, Hungary, India, Oman, Qatar, Saudi Arabia and the Slovak Republic. In only five countries — the Dominican Republic, Greece, Guatemala, Poland and South Africa — were women less active than men in Government, Health, Education & Social Services.

Globally, women are half as likely as men to start companies with six or more employees (2.8% women vs. 6.0% men) and 35% more likely to be solopreneurs in this early stage of startup activity (31.6% women vs. 23.4% men). Along with the majority of men, most women entrepreneurs report having 1–5 employees in the startup phase (57.6% women vs. 55.3% men). In other words, as researchers so often find in studies of gender differences in business activity, women and men have far more in common than they have differences.

Importantly, gender differences and rates of similarity can vary quite a bit by level of income. Women entrepreneurs in high- and upper–middle-income countries report much higher rates of solopreneurship (having no employees) compared to women in lower-income countries (see Figure 18). It is a challenge to interpret this variation correctly. On the one hand, women entrepreneurs in low- and lower–middle-income contexts appear to be creating more jobs. On the other hand, solopreneurs in more developed countries can range from micro-enterprises

to multi-million-dollar virtual corporations where labour is outsourced to contractors and contract organizations.[9] Nonetheless, women entrepreneurs appear to be much less involved than men in labour-intensive startups that employ 20 or more employees (0.9% women vs. 5.1% men).

These gender patterns also hold across most regions — again, with a few notable exceptions. Women entrepreneurs in North America are starting business with both more employees (11.7% women vs. 10.6% men) and no employees more often than men (33.0% women vs. 19.2% men; 1.72 female–male ratio). Women in Latin America & Caribbean are also much more likely than men to start businesses with no employees (38.2% women vs. 27.4% men). In several countries, women started solo businesses at much higher rates than men. Women entrepreneurs in Turkey and Romania, for example, are almost five times more likely to report no employees and in Qatar about four times more likely. In contrast, women in Iran and Uruguay are about half as likely as men to start businesses with no employees.

HIGHLIGHTS

Results presented in this chapter have focused on structural factors influencing gender differences in entrepreneurial activity and high-potential outcomes. Key findings include:

- Women in upper–middle-income countries represent almost one-third of entrepreneurs starting high-growth businesses both in terms of 20+ employees at startup and expectations of hiring 20+ within five years. Upper–middle-income countries are marked by strong Wholesale/Retail sectors, where women entrepreneurs are very active alongside their male peers.
- Women represent almost half the entrepreneurs around the world offering products or services new to their local markets and one in three entrepreneurs offering innovations to national and international markets. Innovation rates are highest for women in upper–middle-income countries, especially at the international level where they are at parity with men.
- Almost half of the entrepreneurs globally focus on local markets, and one in three entrepreneurs focus on national and international markets are women. However, women in high- and upper–middle-income countries represent over two-fifths of entrepreneurs focusing on international markets, compared to one in three women in lower-income countries. These findings suggest that women entrepreneurs in lower-income countries may benefit from support in connecting to international markets.
- While younger age groups show high levels of parity, the largest gender differences are found in the oldest age group of 55–64 years. In Egypt, Luxembourg and South Africa, women entrepreneurs are more than twice as likely to be in the oldest age group compared to their male peers and almost seven times as likely as men in the Slovak Republic. There are a number of reasons why women may be over-represented in the oldest age group of entrepreneurs, including higher rates of poverty, occupational choice after child-rearing, and part-time work to accommodate eldercare demands — in addition to many of the same reasons why some men start businesses late in their careers.
- Women and men entrepreneurs share similar levels of education, with almost half reporting post-secondary degree and more than a quarter reporting a secondary degree. However, women entrepreneurs in lower- and upper–middle-income countries are more likely than men to report both having no secondary education and having a graduate degree. These findings suggest that startup activity may be more polarized for women in countries at the lower and upper–middle levels of national income. This gender disparity is also apparent in some high-income countries, suggesting that startup activity is more common among the most advantaged and the least advantaged women.

9 Pofeldt, E. (2018). *The Million-Dollar, One-Person Business: Make Great Money. Work the Way You Like. Have the Life You Want*. New York: Lorena Jones Books (Penguin Random House).

- Women entrepreneurs tend to be less affluent than men globally, except in lower-income countries. Notably, while about one-third of women reported lower-third household income in high- and upper–middle-income countries, less than 20% of women in lower-income countries come from the poorest households. These findings are a reminder that many global data sets are biased towards more affluent countries and urban centres.
- Almost half of women entrepreneurs worldwide are involved in the Wholesale/Retail sector and one in five women entrepreneurs in the Government, Health, Education & Social Services sector (18.5% women vs. 10.1% men) but less than 3% in ICT, the sector that draws the majority of venture capital dollars in the world.
- Women entrepreneurs in high- and upper–middle-income countries reported much higher rates of solo enterprises (having no employees) compared to women in lower-income countries. While women entrepreneurs in low- and lower–middle-income contexts appear to be creating more jobs, solo enterprises in more developed countries tend to have a larger Financial, Professional, Administrative & Consumer Services sector, with a range of different types of solo enterprise from traditional self-employment to modern virtual corporations.

Women represent a significant portion of entrepreneurs worldwide starting and growing high-potential businesses, but too often against the odds. Not only are women often working against negative stereotypes that characterize them as less adept, but they have to scramble hard to access key resources that are critical for business survival and growth. Importantly, the results presented in this chapter show that there is a competing narrative which deserves more attention. While it is true that women tend to be over-represented among entrepreneurs running some of the most vulnerable businesses in the world, they are also working alongside their male peers to grow some of the largest, most innovative and impactful firms in their countries.

Importantly, when it comes to designing policies and programming in support of women entrepreneurs, it is critical that policymakers and program leaders understand the diversity of women entrepreneurs and tailor programming to specific segments. Gender bias matters, but perhaps more in the way that gender bias leads to structural differences like industry and occupational gender composition. In other words, context matters a lot in explaining business startup and growth patterns.

Finally, we cannot ignore the importance of family demands and the gender norms that direct women towards industries and business models that will accommodate these demands. In many cultural contexts, mothers face even more gender bias than single women, a phenomenon termed the motherhood penalty.[10] We see this discount in entrepreneurial competence play out in last-mile communities in terms of time poverty, mobility constraints and security concerns, and in high-potential entrepreneurship in the double standards in investment risk assessments of startup founders. More attention to the predictive power of structural factors, such as business characteristics and market conditions, would also help women overcome the negative stereotypes associated with being female and being a mother.

10 Budig, M.J., Misra, J., & Boeckmann, I. (2012). The motherhood penalty in cross-national perspective: The importance of work–family policies and cultural attitudes. *Social Politics*, 19(2), 163–93.

4

An Enabling Environment for Women's Entrepreneurship

Entrepreneurship ecosystems have drawn a lot of attention from academic researchers, policymakers and program leaders in economic development. GEM research has contributed in important ways to this study of the conditions that provide strong enabling environments for entrepreneurs around the world.[11] However, additional research has revealed that the conditions that support women and men entrepreneurs may not be the same.[12] As such, the ecosystem research may suffer from the underlying assumption that ecosystems support men and women with equal access to critical resources and support. In this chapter, we present data from the GEM Adult Population Survey (APS) and National Expert Survey (NES) which directly address key measures that affect women entrepreneurs. These measures include cultural perceptions, investment activity and national framework conditions.

ENTREPRENEURIAL PERCEPTIONS

One of the most valuable contributions of the GEM data to entrepreneurship research is evidence of how microfoundations — such as cultural perceptions and behaviours — contribute to startup rates. Prior research has shown that, controlling for structural factors like industry sector, business size, education and household income, individual perceptions are the most important predictors of startup activity, particularly for women.[13] In 2021, women and men worldwide were at parity on perceptions of entrepreneurship as a good career choice, as being high-status and as receiving good media coverage in their countries. More than two-thirds of adults agreed with these statements. However, women were considerably less likely than men to agree that it is easy to start a business (46.6% women vs. 52.3% men). Additionally, less than half of women in high- and upper–middle-income countries agreed that starting a business is easy, compared to more than half of women in lower-income countries.

Across regions, women were at parity with men on the ease of starting a business in 14 countries, and slightly more likely to agree that starting a business is easy in two countries: Iran and Italy. Surprisingly, women are considerably more likely than men in Japan to agree that starting a new business is a good career choice (27.4% women vs. 21.1% men). Women in Belarus are 20% more likely than men to agree that there is good media attention to new businesses in their country. While the high rates of gender parity on these measures of cultural support for entrepreneurs are heartening from an ecosystem perspective,

11 Levie, J., & Autio, E. (2008). A theoretical grounding and test of the GEM model. *Small Business Economics*, 31(3), 235–63.

12 Brush, C., Edelman, L.F., Manolova, T., & Welter, F. (2018). A gendered look at entrepreneurship ecosystems. *Small Business Economics*, 53, 393–408. Hechavarría, D.M., & Ingram, A.E. (2018). Entrepreneurial ecosystem conditions and gendered national-level entrepreneurial activity: A 14-year panel study of GEM. *Small Business Economics*, 53(2), 9. Hughes, K.D., & Yang, T. (2020). Building gender-aware ecosystems for learning, leadership, and growth. *Gender in Management*, 35(3), 275–90.

13 Langowitz, N., & Minniti, M. (2007). The entrepreneurial propensity of women. *Entrepreneurship Theory and Practice*, 31(3), 341–64. Elam, A. (2008). *Gender and Entrepreneurship: A Multilevel Theory and Analysis*. London: Edward Elgar Publishing.

FIGURE 19
Gender ratio (female–male) for entrepreneurial perceptions by national income level
Source: GEM 2021

they do not capture gender-specific attitudes and perceptions. For a better sense of how women may be individually affected by cultural support for entrepreneurship we need to turn to individual perceptions, such as ease of starting a business, where individuals tend to make very personal assessments.

Average global rates for key perceptions — such as seeing new business opportunities (also called opportunity recognition or alertness), having the skills to start a business, and being undeterred by a fear of business failure — show consistently lower rates of agreement for women than men. While around half of women surveyed agreed with these entrepreneurial perceptions, gender differences remain, with the largest difference found for startup skills (0.81 female–male ratio), as shown in Figure 19.

The gender gap for startup capabilities was largest in high-income countries, where women are much less likely than men to agree that they had startup skills (47.8% women vs. 60.9% men), and lowest in upper–middle-income countries, where 59.5% of women agreed compared to 68.6% of men. Notably, women in lower-income countries reported the highest rates, with almost two-thirds of women agreeing that they have the skills to start a business. Regionally, North America showed the largest gap in startup capabilities; there, over half of women agreed compared to over two-thirds of men. The gap was narrowest in Latin America & Caribbean, where almost two-thirds of women compared to over three-quarters of men agreed they had the skills to start a business (0.85 female–male ratio). In no countries did women report higher rates of startup capabilities than men in 2021.

Women are 11% less likely than men to report that they have seen new business opportunities in the past six months (48.8% women vs. 54.7% men). Women in lower-income countries were the closest to parity with men on opportunity recognition (60.3% women vs. 63.4% men), while the gender gap was largest in high-income countries (47.2% women vs. 54.1% men). Women in North America reported the highest rates of seeing new business opportunities compared to men (63.7% women vs. 69.2% men). In contrast, women in Europe reported the lowest rates of opportunity recognition, with only one in five women agreeing compared to just under half of men. Women reported rates of seeing new business opportunities at gender parity or above for six countries: Colombia, Cyprus, Kazakhstan, Qatar, Romania and Sudan.

Women in lower-income countries were close to parity with men when reporting a lack of fear of business failure (55.8% women vs. 57.5% men). In contrast, the gender gap was largest in high-income countries, where 47.7%

of women compared to 52.9% men reported feeling undeterred by a fear of failure (0.90 female–male ratio). Women in Central & East Asia appeared to be the least concerned with fear of business failure and more so than men (67.2% women vs. 65.1% men). Women are just as likely as or more likely than men to report feeling undeterred by fear of business failure in eight countries: Egypt, India, Japan, Kazakhstan, Oman, Poland, South Korea and the United Arab Emirates. Fear of business failure for women is a much greater concern in several countries, such as Finland and Spain, where rates are less than one in five reporting feeling undeterred, and Slovenia and the Slovak Republic, where women are at least 20% less likely to be unconcerned with a fear of business failure.

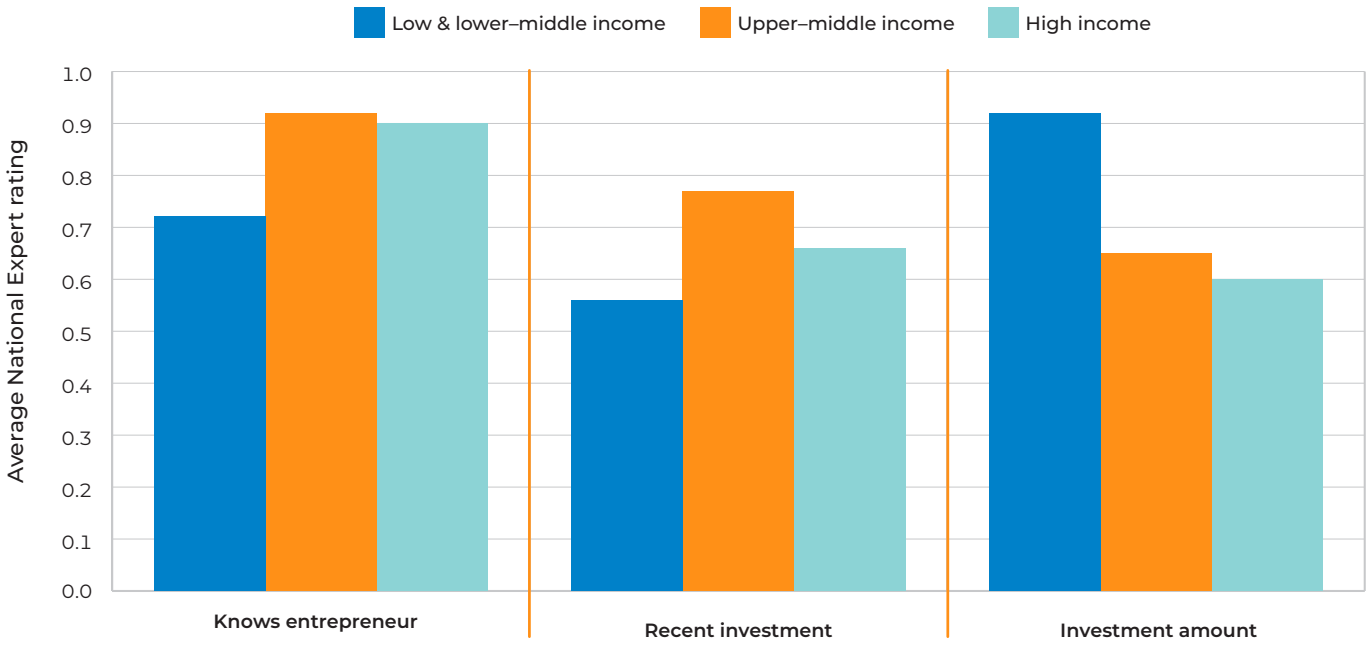
ENTREPRENEURIAL NETWORK AND INVESTMENT ACTIVITY

Entrepreneurs require access to a number of different resources to support startup and growth activities, not least of which are good network connections and growth financing. Social networks exert tremendous influence over individual perceptions and behaviours. What looks normal and doable in business startup and growth is heavily influenced by proximity to other entrepreneurs. These relationships also provide access to funding, connections and expertise critical to successful business startup and growth. Access to capital is a particular area of concern for women entrepreneurs. Too often women founders encounter significant barriers in accessing business financing, including bank credit and private investment. There are a number of promising trends, however, including impact investing, women-focused investing and the rise of women investor groups.[14]

On average across all countries in the 2021 survey, women were 11% less likely than men to report knowing an entrepreneur (47.2% women vs. 53.0% men). Women in lower-income countries were the least likely to report personally knowing at least one entrepreneur compared to other women and men in and outside of this level of national income. Only one in five of these women reported knowing an entrepreneur at a rate 28% lower than their male peers (39.8% women vs. 54.9% men). Women in high-income countries reported the

14 Brush, C., & Greene, P. (2020). *Catalyzing Change in Equity Investing: Disruptive Models for Financing Women's Entrepreneurship*. Diana International Impact Report, January. Diana International Research Institute, Babson College. https://www.babson.edu/media/babson/assets/cwel/Diana-Impact-Report.pdf

FIGURE 20
Entrepreneurial activity and investment activity by gender and national income level
Source: GEM 2021



ENTREPRENEUR HIGHLIGHT

Marjana Sikošek

Co-founder of Vitjashop d.o.o. (Slovenia)

How government programmes can propel entrepreneurs

Government programmes can play an important role in supporting entrepreneurs. Just ask Marjana Sikošek, co-founder of Vitjashop d.o.o. in Slovenia. She runs the company together with her husband and co-founder Vitja. Marjana and Vitja say that they complement each other perfectly in their work and are like yin and yang. What one lacks, the other makes up for.

The company runs the vitja.si website, which raises awareness about the importance of health, fitness, well-being and appearance. It offers comprehensive solutions for achieving goals through dietary changes and optimization of trace elements in the body. The company's work aligns with the couple's personal hobbies and interests.

Fulfilling this company dream has been made possible thanks in part to a government programme. Vitjashop d.o.o. was incubated within the scale-up programme of Venture Factory, made possible by SPIRIT Slovenia. The company received a convertible loan from the Slovene Enterprise Fund and joined the startup Plus programme in 2020. Today, Vitjashop d.o.o. markets its own and other innovative products and has built a large community of trusting customers. Said Marjana:

> *"Entrepreneurship allows us to live a fulfilled life. It is like a never-ending game. The work never ends, but if you love what you do, you are happy to do it even on holidays, weekends and wherever you are."*

most parity with men (0.90 female–male ratio), with close to half knowing an entrepreneur. By region, the lowest rates of women knowing an entrepreneur were found in Central & East Asia, which also showed the lowest level of parity (39.0% women vs. 49.7% men). The highest rates of women knowing an entrepreneur were observed in Latin America & Caribbean, which also boasted the smallest gender gap (64.6% women vs. 69.3% men). Gender parity or higher was documented in 10 countries: Belarus, Finland, Israel, Kazakhstan, Latvia, Panama, Poland, Romania, the Russian Federation and the United Kingdom.

In the APS, participants were asked if they had made a business investment in the past 12 months and, if they had, how much. The good news is that women are actively investing in businesses around the world. However, they are investing at lower rates than men, especially in lower-income countries. As shown in Figure 20, women are almost one-third less likely to report a recent business investment compared to men (6.1% women vs. 8.9% men) and, when an investment was made, invested about half the amount on average compared to their male peers (US $1,600 for women vs. US $2,986 for men).

Women in lower-income countries were about half as likely as men to report investing in a business within the prior year and had the lowest rate compared to women in other national income groups (3.8% women vs. 6.8% men). In contrast, 9.1% of women in

upper–middle-income countries reported a recent business investment compared to 11.6% of men (0.77 female–male ratio). In high-income countries, women are about one-third less likely than men to report a recent investment; and investments come in at about 60% the rate of men's median investments. Importantly, the average median investment for women in high-income countries was three to five times higher than those reported by women in countries at lower income levels.

Gender differences in investment activity range widely across regions. Impressively, women in Central & East Asia showed the highest levels of gender parity with men, with 7% of women compared to 7.6% men reporting a business investment in the prior year and median investments rates 5% higher than men. On the other hand, the largest gender gap was observed in Middle East & Africa, where 5.9% of women compared to 9.5% of men reported a recent business investment (0.62 female–male ratio). The highest median investment averages were reported in Europe and the UK (US $3,948 for women vs. US $5,825 for men), while the lowest median investments were found in Latin America & Caribbean, where women reported investments at values about half the median amount of those reported by men (US $675 for women vs. US $1,347 for men).

Women reported higher business investment activity in four countries — Colombia, Kazakhstan, Poland and Romania — and below 50% the rate for men in 11 countries: Belarus, Croatia, Egypt, Hungary, Iran, Ireland, Italy, the Netherlands, Slovenia, Sudan and the United Arab Emirates. Gender parity in median investments was observed in 14 countries, including the highest median investment for women in South Korea at US $26,381, and median investments twice the size for women compared to men in Iran (US $2,400 for women vs. US $1,200 for men). The largest gender gaps in median investment were found in Sudan and Turkey, where investment for women amounts to, respectively, 20% and 10% of the levels reported by men.

FIGURE 21
National conditions supportive of women entrepreneurs by national income level
Source: GEM 2021

ENABLING CONDITIONS RELEVANT TO WOMEN

Every year, GEM collects data from national experts on a set of entrepreneurial ecosystem conditions. In 2021, six questions were added to capture additional conditions that may be favourable for women entrepreneurs. Experts were asked to rate how true or false the following statements were for their countries.

- In my country, the national culture encourages women as equally as men to become self-employed or start a new business;
- In my country, regulations for entrepreneurs are so favourable that women prefer becoming an entrepreneur instead of becoming an employee;
- In my country, access to financing is equally granted for male and female entrepreneurs;
- In my country, market and public procurement are equally accessible for male and female entrepreneurs;
- In my country, there are sufficient affordable support services (i.e. childcare, home services, after-school programs, eldercare . . .) so that women can continue to run their businesses even after they have started a family;
- In my country, as a result of the pandemic, the increase in teleworking has improved work–life balance for women.

As shown in Figure 21, the responses to these statements were overwhelmingly negative. Scores range from negative 5 ("completely false") to positive 5 ("completely true"), while zero represents a middle response of "neither completely false nor completely true". Across all 50 countries in the 2021 NES,[15] the average score for having a culture supportive of women entrepreneurs was –0.5 and negative across all national income levels and regions. In fact, expert agreement was positive in only 13 countries: the Dominican Republic, Finland, Germany, Jamaica, Luxembourg, the Netherlands, Norway, Oman, Qatar, Saudi Arabia, South Korea, the United Arab Emirates and the United States. Experts in Saudi Arabia and the United Arab Emirates showed the most agreement that their countries have a culture supportive of women entrepreneurs. Governments in these two countries and others in the Middle East are making significant investments in the advancement of women entrepreneurs in their countries, with the hope of driving change from the top down. In contrast, experts in Iran, Japan and Turkey evaluated this statement as "somewhat false". Scores were the most negative in lower-income countries and least negative in high-income countries. Regionally, experts rate cultural support for women entrepreneurs lowest in Central & East Asia and less negative in Middle East & Africa and in North America.

National experts also rated regulatory conditions as somewhat unfavourable to women entrepreneurs with an average rating of –1.7 across all 50 countries. Experts scored regulatory conditions as somewhat favourable to women entrepreneurs in only three countries: Lithuania, Saudi Arabia and the United Arab Emirates. In three countries — Brazil, Croatia and Iran — national experts gave particularly strong negative evaluations of –3 points or worse. An assessment of regulatory conditions as being unfavourable to women entrepreneurs was greatest in lower-income countries and in Latin America & Caribbean.

Access to finance is a huge challenge for many women entrepreneurs, particularly those in the informal economy and without established banking and credit histories. National experts at least somewhat agreed that women entrepreneurs have equal access to finance in their countries, with a global average response of 1.2. Average responses — from the lowest among national experts in lower-income countries of 0.3, to 1.3 in high-income countries — were all positive. However, across regions, national experts in North America generally did not agreement that women have equal access to finance, while experts in the UK agreed that equal access to finance was somewhat true. At a regional level, national experts in North America generally did not perceive women as having equal access to finance, while experts in the United Kingdom agreed that equal access to finance was "somewhat true".

National experts were in agreement that women entrepreneurs have equal access to market and public procurement, with a global average response of 1.7 points. Experts in seven countries — Brazil, Iran, Israel, Italy, Panama, Sudan and

15 Jamaica, Lithuania and Mexico only participated in the 2021 National Expert Survey, and not the Adult Population Survey.

ENTREPRENEUR HIGHLIGHT

Supporting women entrepreneurs at the School of Management Fribourg

Across the globe a whole generation of young people are missing out on entrepreneurship education. This has been a consistent finding from GEM's National Expert Survey, in which experts are asked to assign a score to 13 distinct elements of an economy's entrepreneurial ecosystem. In the last GEM Global Report, "entrepreneurial education at school" scored lowest in more than three-quarters of the GEM participating economies. According to GEM research, 45.9% of women entrepreneurs have a post-secondary education, compared to 46.9% of their male counterparts.

The School of Management Fribourg (HEG-FR) at the University of Applied Sciences and Arts of Western Switzerland is a business school that has a number of programs to support aspiring female entrepreneurs. According to HEG-FR dean Rico J. Baldegger, this includes:

- Unique research programs fostering young female talents from academia and industry;
- A week-long program called Adopreneur for young people aged 13–16, which includes a special focus on women's entrepreneurship;
- The creation of StrukturElle, a foundation to foster women entrepreneurship; and
- Events and discussions about women's entrepreneurship that are embedded into the curriculum.

Female faculty and collaborators lead various strategic projects at HEG-FR. There is also an emphasis on industries that have a high percentage of women entrepreneurs, which includes fashion, health, food, education, sustainability and social innovation projects. Said Baldegger:

> *"There needs to be an active integration of the higher education institution in the entrepreneurial ecosystem. This includes close contact to industry, associations and political institutions. Facilities are needed to enhance projects and informal discussion."*

Notable HEG-FR female alumni include: Johanna Gapany, member of the Council of States, Swiss Parliament; Nadja Perroulaz, co-founder of Liip; Liliane Kramer, CEO of Joggi; Claudine Esseiva, co-president of BPW Switzerland; Juliane Butty, Head of B2B, Partnerships and Startups for Platzi; Kristina Babina, founder of TotUP daycares and primary school; Sabine Suter, owner of Cascina San Giovanni srl; Mélina Neuhaus, co-owner of the Swiss Wine Directory; and Francesca Prospero Cerza, a startup and business growth consultant.

Baldegger concluded:

> *"To create an inspiring school culture around female entrepreneurship, mentoring plays a critical role. We need role models at every level: former students, local and regional entrepreneurs, passionate entrepreneurial professors, and an active student organization."*

Turkey — did not perceive women as having equal access to markets and public procurement, with the most negative score coming from Iran. National experts in Finland and Saudi Arabia reported the strongest agreement regarding equal access to procurement. Average responses across national income levels showed modest positive scores in high- and upper–middle-income countries and a slightly negative score of –0.5 in lower-income countries. Experts in Europe and the United Kingdom showed the most agreement for equal access to procurement (1.6), while Latin America & Caribbean showed the lowest positive scores.

When asked about sufficient and affordable family support services to allow mothers to continue to run businesses, national experts scores were slightly negative across all countries. In fact, only nine countries — Finland, Kazakhstan, Lithuania, the Netherlands, Norway, Qatar, Saudi Arabia, Sweden and the United Arab Emirates — showed positive responses from national experts on this question. National experts in Finland reported the highest agreement (3.1) and those in Iran reported the most negative assessment (–3.2).

When asked if an increase in teleworking has improved work–life balance for women, the global average response for all countries was slightly positive. National experts in upper–middle-income countries returned a neutral score on this issue, while experts in high- and lower-income countries returned a modest agreement that teleworking has improved work–life balance for women. From a geographical point of view, experts in Middle East & Africa showed the most agreement, while experts in Latin America & Caribbean gave a slightly negative score. Twelve countries — Belarus, Brazil, Chile, Colombia, Greece, Hungary, Iran, Israel, Morocco, Norway, Poland and Turkey — showed negative average expert responses. Experts in Brazil showed the strongest disagreement (–1.8), while experts in the United Arab Emirates were the most in agreement (3.3) about the benefits of teleworking.

HIGHLIGHTS

In this chapter, we have presented results from GEM measures related to an enabling environment for women entrepreneurs, which includes cultural perceptions related to business startup, entrepreneurial connections, rates of informal investment activity, and national framework conditions relevant to women entrepreneurs.

- Women were at gender parity with men regarding business startup as a high-status endeavour and a good career choice with good media coverage. However, less than half of women compared to over half of men agreed that it is easy to start a business in their country (46.6% women vs. 52.3% men). In contrast, in lower-income countries, the proportion of women rises to over half.
- Women in lower-income countries showed the most parity with men on key entrepreneurial perceptions, with the exception of startup skills, while women in high-income countries showed the least gender parity for all perceptions. It is puzzling to find that women in high-income countries — with so many advantages, including education, wealth, business experience and network connections — tend to show lower entrepreneurial perceptions compared to men. This raises a question of whether gender bias is greater in these countries, or perhaps more of a perceived concern for women.
- Women are just as likely as or more likely than men to report no fear of business failure in eight countries: Egypt, India, Japan, Kazakhstan, Oman, Poland, South Korea and the United Arab Emirates. Importantly, the "undeterred by fear of failure" rates for these countries ranged widely, from 51.1% in the United States to 87.7% in Kazakhstan, which indicates considerable cultural differences around fear of business failure. Importantly, the costs of failure also vary considerable from one economy to another and from one culture to another.
- Women in lower-income countries are the least likely to report knowing an entrepreneur, with 39.8% reporting agreement with this question, compared to 47.2% for women globally. This is a surprising result given the dominance of small-market contexts in lower-income

countries. However, many other factors could contribute to this result, including traditional cultures in which women are less active outside the home, definitions of "entrepreneur" in contrast to "small business owner", and so on.

- Women in lower-income countries were about half as likely as men to report investing in a business within the prior year and had the lowest rate compared to women in other national income groups (3.8% women vs. 6.8% men). This is the largest gender gap in investment activity, with women in upper–middle-income countries closest to parity with a 23% gender gap. A recent trend in business investment is the rise of women investor groups, which are emerging around the world. This is an important trend and it bears promise for women entrepreneurs, if the assumption holds true that women are more likely to invest in women founders.
- Women invested amounts closest to men in lower-income countries, with a gender gap of about 8%, compared to those in high-income countries who invested 40% less on average compared to men. The fact that women tend to have lower rates of personal savings and tend to have less control over jointly held wealth assets than men is well established, and likely contributes to gender differences in amounts invested.
- For the six questions asked of national experts about the enabling environment for women entrepreneurs in their countries, the responses were overwhelmingly negative. The most positive responses were found in high-income countries with regard to equal access to finance and procurement for women entrepreneurs. The most negative responses were found in lower-income countries with regard to regulations favourable to women and sufficient family support services.

Most research on the enabling environment for entrepreneurs is based on assumptions of a male norm — assumptions that are slowly being challenged as scholars apply a gender-inclusive lens to research on entrepreneurial ecosystems. GEM research has contributed in important ways to the study of the conditions that provide strong enabling environments for entrepreneurs around the world. However, additional research has revealed that the conditions that support women entrepreneurs may not be the same as those that help men entrepreneurs.

Men and women experience cultural and economic contexts from very different perspectives; and those differences influence entrepreneurial perceptions in important ways. Are women less likely to believe that starting a business is easy because they are less confident in themselves? Or are men overconfident? Are women less confident in their startup skills because they are thinking of the challenges of starting a business while juggling family demands? Or is it because access to funding and key resources must come from business networks which they are told may be closed to them?

Data from the NES seem to support the fact that lower perceptions are being reported by women. Most experts surveyed delivered a negative rating for cultural support for women entrepreneurs in their countries. Moreover, national experts rate government regulations as being largely unfavourable for women and agree that there is a lack of adequate family support services for women. While there seems to be some hope for equal access to financing and procurement for women entrepreneurs, at least in high- and upper–middle-income countries, one is left wondering if the gender differences in cultural perceptions are not justified. More research is needed to uncover the extent of support or constraint for women entrepreneurs. As discussed in the previous chapter, this requires a consideration of structural factors, such as industry, business size and family responsibilities, which can also contribute to different rates of entrepreneurial perceptions for women and men.

PART 2

Regional Trends and Pandemic Impacts

5

Central & East Asia

Countries in Central & East Asia include a range of different economies and patterns of women's entrepreneurship, from highly advanced to those in early stages of economic development. In this chapter, we present findings for the four countries that participated in the GEM 2021 Adult Population Survey (APS): India, Japan, Kazakhstan and South Korea. These four countries offer very different contexts for women's entrepreneurship, as evidenced by the variations in rates of entrepreneurial activities and motivations, pandemic impacts and key factors that characterize the business and market conditions in this region.

STARTUP RATES, INTENTIONS, MOTIVATIONS AND BUSINESS STAGE

Women in Kazakhstan showed the highest rates of startup activity (Total early-stage Entrepreneurial Activity or TEA) compared to all the other women and men surveyed in this region, with more than one in five women starting businesses: a 16% higher rate than men and double the global average for women. Meanwhile, women in Japan had the lowest TEA rates in this region, starting businesses at half the rate of men (4% women vs. 8.4% men). Women in India and South Korea were also well below gender parity in startup, with rates closer to the global average, but one-quarter and one-third lower than men, respectively. Compared to 2020, startup activity rates were similar for women in Kazakhstan and South Korea but had increased by about five times for women in India — from 2.6% to 12.3%.

The government of India has designed various policies, schemes and support systems for women entrepreneurs in the last few decades. Many research programs are being conducted to help understand the gaps and requirements of women entrepreneurs, and robust support systems are being created based on the research findings. One such system has been provided by the Women Entrepreneurship Platform (WEP), an initiative by NITI Aayog (National Institution for Transforming India, Government of India). It provides assistance and hand-holding throughout the entrepreneurial journey, from starting through to scaling and expanding the business,[16] and can take some of the credit for the country's increased startup activity. In 2021, NITI Aayog partnered with Cisco to launch the next phase: WEP Nxt.[17]

Job scarcity and a desire to make a difference were the two most important motivations for women entrepreneurs in India, with women at parity with men on job scarcity but 11% more likely than men to report making a difference. To build wealth and to continue a family tradition were also commonly cited, with about three in four women in India reporting these as startup motivations. In contrast, over 90% of women in Kazakhstan reported building wealth as a key startup motivation, at parity with men. This was also a key startup motivation for women entrepreneurs in South Korea, with over two-thirds of them referring to it, about 8% less often than their male peers. Only two in five women entrepreneurs in Kazakhstan and South Korea reported job scarcity as a startup motivation, with gender parity in Kazakhstan. Women entrepreneurs in Japan and South Korea are 30% more likely to report job scarcity as a startup motivation compared to their male counterparts. Surprisingly, very few women entrepreneurs in Kazakhstan (0.5%) and South Korea (5.7%) report "to make a difference" as a startup motivation, well below the global average for women of 52.9%.

16 NITI Aayog, Government of India. (2022). About WEP [Women Entrepreneurship Platform]. https://wep.gov.in/about-wep

17 Press Information Bureau. (2021). NITI Aayog partners with Cisco to foster women entrepreneurship in India. Government of India press release, 26 August. https://pib.gov.in/PressReleasePage.aspx?PRID=1749197

Over half of the women in Kazakhstan reported having entrepreneurial intentions, the highest among women in Central & East Asia. Women in Kazakhstan also reported much higher rates of nascent and baby business activity compared to men, with rates 30% and 22% above parity, respectively. In contrast, women in Japan are about half as likely as men to report intentions to start a business (2.2% women vs. 4.2% men) and are the least likely of all women in this region to report entrepreneurial intentions. In India, the women reported startup intentions at parity with men and close to the global average, while one-quarter of women in South Korea expressed startup intentions, albeit 15% less often than men (see Figure 22).

According to the *New York Times*, women choose entrepreneurship in South Korea primarily because of workplace discrimination or the restrictions they are facing.[18] South Korea is constantly working towards a robust entrepreneurial ecosystem, though there is still much scope, especially for women entrepreneurs.[19] The government of South Korea is developing support systems to help women entrepreneurs through training, consulting, funding education, mentoring, commercialization, research and development, overseas marketing, and networking. The Korean Women Entrepreneurs Association (KWEA) — with 16 branch offices and 2,500 member companies — has been established to assist women's startups and corporate management activities.[20]

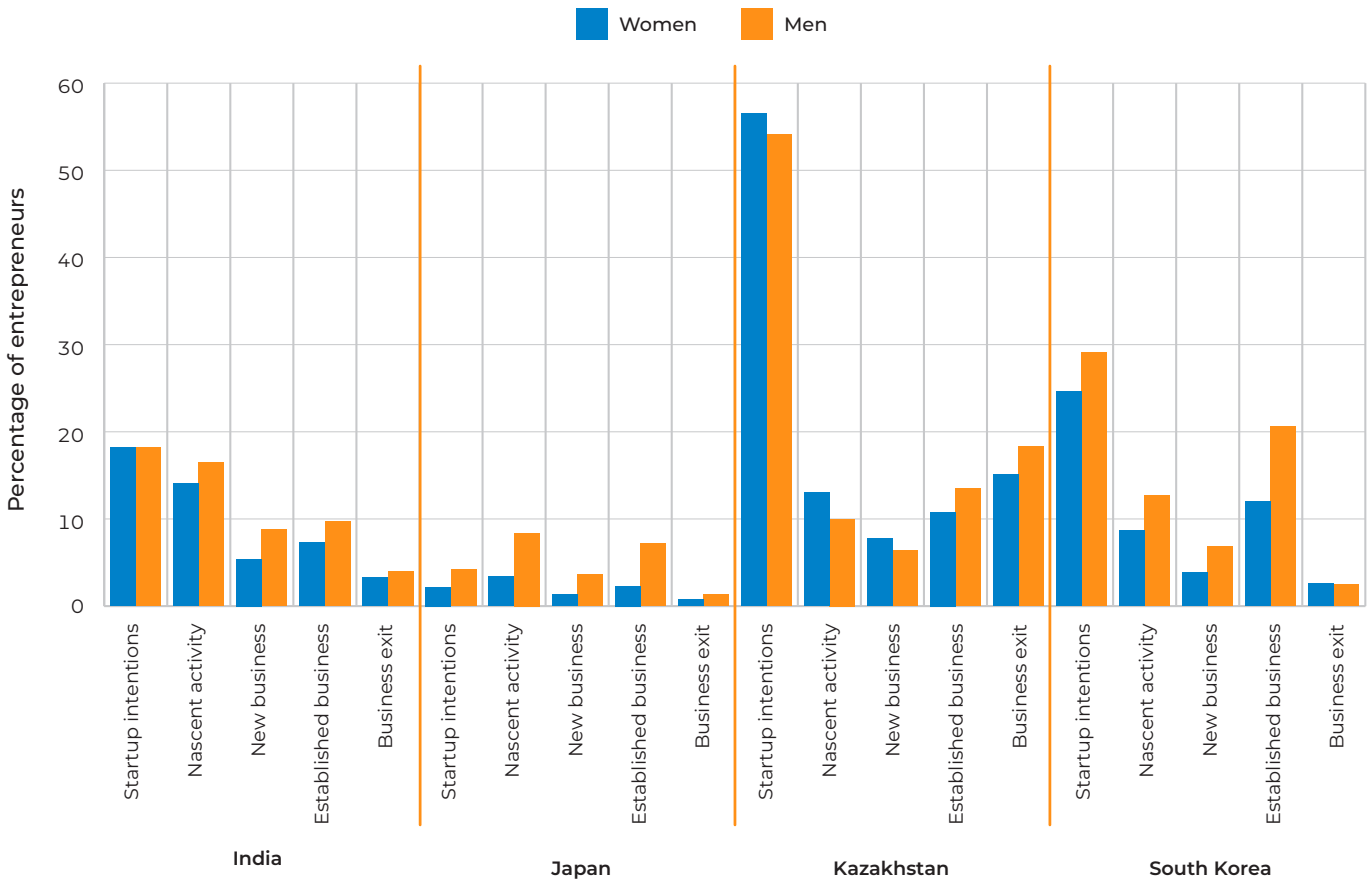
Consistent with prior years, women in Japan also showed the lowest rates of nascent activity and early-stage and established businesses,

18 Schuman, Michael. (2019). Blocked in business, South Korean women start their own. *New York Times*, 30 August. https://www.nytimes.com/2019/08/29/business/south-korea-women-startups-entrepreneurs.html

19 Buchholz, Katharina. (2019). More Korean women turn towards entrepreneurialism. Statista. https://www.statista.com/chart/19238/share-of-male-and-female-entrepreneurs-in-south-korea

20 Korean Women Entrepreneurs Association. (2022). About Korea Women Entrepreneurs Association Seoul Branch. http://swbiz.or.kr/woman/eng/index.do

FIGURE 22
Entrepreneurial intentions, nascent, early-stage business, established business and business exit rates for women in Central & East Asia
Source: GEM 2021



with significant gender differences ranging from 60% to two-thirds. Established Business Ownership (EBO) rates were highest for women in South Korea, though significantly lower than for men (0.58 female–male ratio). Rates from intentions through to nascent and early-stage business decline steadily for women in India, suggesting that these women have a hard time translating intentions into operational businesses. However, women in India are running established businesses at about three-quarters the rate of men, representing a gender gap only five points lower than that of Kazakhstan, where women are owner-managers of four established businesses for every five owned by men.

Many businesses are jointly owned by men and women, which can mask the extent to which women are involved in the creation and growth of highly successful firms (see example below).

India has many success stories of women entrepreneurs. However, it should be acknowledged that many of these startups and businesses have male founders and women co-founders. One illustrious such example is a business that was technically founded and led by a woman. That woman is Falguni Nayar, the founder of Nykaa, a business that has recently entered the league of unicorns in India with a net worth of US $4.8 billion.[21]

In 2021, women in Central & East Asia showed lower rates of business exit than men in all countries except South Korea, where women are 4% more likely than men to report a recent business exit. Women in Japan were 30% less likely than men to report a business exit in 2021, which was the largest gender difference for business exit rates in this region. Women in India and Kazakhstan were 17% less likely than men to report a business exit in the prior 12 months, with rates close to the global average for women in India but with five times higher exit rates for women in Kazakhstan.

Regarding reasons for business exit, women in South Korea were least likely to report the pandemic as the reason but still almost four times more often than for men (9.1% women vs. 2.4% men). At almost three times the rate of women in South Korea, women in Japan (27%) and Kazakhstan (30.6%) were also more likely than men to report the pandemic as the reason for business exit, while women in India reported this reason one-third less often than men (26.2% women vs. 39.7% men). For women in Kazakhstan and South Korea, the most commonly reported reason for business exit was lack of profitability, with almost half of the women in Kazakhstan and one-third of the women in South Korea citing these reasons. Lack of finance was also a very important reason for business exit in India and South Korea, with rates totalling one in four for women — double the rate for women in South Korea compared to men.

About one in five women in Japan reported family reasons as the cause of business closure, 50% more often than men. In contrast, women in South Korea were 50% less likely to report family reasons for business exit compared to men. Women in India were at parity with men on family reasons, but almost 50% less likely to report lack of profitability as a reason for business closure. The opportunity to sell was reported by almost one in 10 women in India and Japan as a reason for business closure, but not reported at all by women in Kazakhstan.

Work–family conflict for early-stage entrepreneurs is not universal across all national cultures and contexts. For women in Japan, family issues appear to be more challenging than in other cultures where family care arrangements are shared more equally with partners or managed through other institutional arrangements (see example below).

It has never been easy for women in Japan to start something of their own. However, Connie Sui Fung, who started her business, Color Me Tokyo, an image consulting salon, when she was 40 years old, has been an inspiration in this regard. She is a role model for women in Japan as a working mother operating a successful business.[22]

21 Gupta, Poorvi. 2021. India saw the most women-led startups turning unicorns in 2021, but we need to do better. Herstory. https://yourstory.com/herstory/2021/12/india-women-led-startups-unicorn-equality

22 Kay Me, 2022. Meet Connie Sui Fung, working mother and entrepreneur from Malaysia helping women look and feel their best — Part 2. https://kaymeweb.wordpress.com/2021/06/04/connie-sui-fung-part-2; Color Me Tokyo, 2022. About Color Me Tokyo. https://www.colormetokyo.com

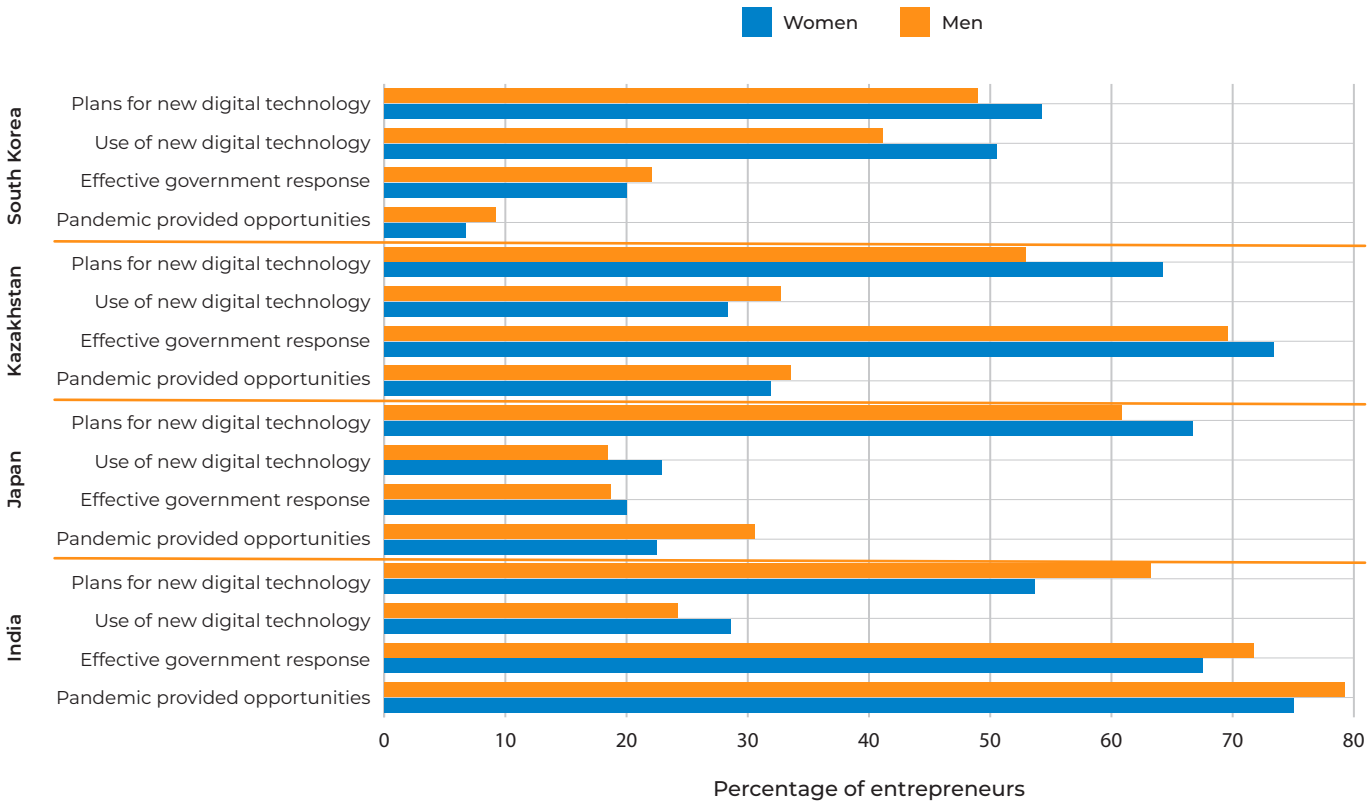
PANDEMIC IMPACTS ON WOMEN-OWNED BUSINESSES

Over one-third of women entrepreneurs and established business owners in India reported new business opportunities as a result of the pandemic, at parity with men. In contrast, no women established business owners in South Korea reported new opportunities due to the pandemic. In Japan, women entrepreneurs were about half as likely as men to report new opportunities (5% women vs. 9.4% men), and here no women established business owners reported such opportunities. Both women entrepreneurs and women established business owners across the region were less likely than men to report new opportunities provide by the pandemic (0.96 and 0.88 female–male ratio, respectively), with the rate for established business owners about one-third of that for entrepreneurs (see Figure 23).

More than one in three women entrepreneurs and established business owners in Kazakhstan reported an effective government response to the pandemic, which was about 20% more often than men. In South Korea, very few women entrepreneurs or established business owners agreed that the government response to the pandemic was effective in their country (1.9% women TEA; 2.6% women EBO) and about half as often as their male counterparts. Japan also returned low rates of agreement that their government pandemic response was effective, with only 5% of women entrepreneurs and no women established business owners saying that was the case. In India, about one-quarter of women entrepreneurs and one-fifth of women established business owners agreed that the government pandemic response in their country was effective. However, the women entrepreneurs responded 13% more favourably than men, while the women established business owners agreed 9% less often than men.

Women entrepreneurs and established business owners were more likely than men in all four Central & East Asia countries to report that the pandemic had led them to use new digital technologies, the exception being women entrepreneurs in Kazakhstan. Over a quarter of the women entrepreneurs in Kazakhstan compared to one-third of the men reported use of new digital technologies due to the pandemic, while women entrepreneurs in India, Japan and South Korea were about 20% more likely than

FIGURE 23
Pandemic impacts for early-stage entrepreneurs by gender and country in Central & East Asia
Source: GEM 2021



men to do so. Half of women entrepreneurs compared to one-fifth of men reported using new digital technologies following the pandemic.

Over half the women entrepreneurs in all four countries reported plans to increase the use of digital technologies in their business over the next six months, outpacing men in all countries except India, where women were about 15% less likely to agree. Women established business owners in India and Japan were close to parity with men, at 48.1% and 45%, respectively, in reporting plans to use more digital technologies. Two in five women established business owners in Kazakhstan reported plans to use more digital tools, which was 66% more often than men. Finally, among established business owners in South Korea, two-thirds of women reported plans to use more digital technologies compared to 58.9% of their male peers.

Both India and South Korea participated in the GEM survey from 2019 through 2021, which allows us to take a more longitudinal look at those two countries. In India, entrepreneurial intentions took a dive in 2020 — from a high of 31.4% in 2019 to 18.4% in 2020 — and they have not recovered as of 2021. Conversely, intentions for men and women in South Korea remained relatively stable over the two-year pandemic period. The gender differences in startup intentions closed in India but widened slightly in South Korea. Similarly, TEA rates dropped heavily In India from 12.8% to 2.6% in 2020, but recovered in 2021 at 12.3%. South Korea saw only a modest drop in TEA rates from 2019 to 2020 and remained stable in 2021. The gender ratio in TEA rates remained stable in India at 0.75 women–men, but closed slightly in South Korea due primarily to a deeper decline in TEA activity for men.

EBO dropped by more than half for both women and men entrepreneurs in India from 2019 to 2020, with rates dropping for women from 9.1% to 4.0% and then settling at 7.3% in 2021, with the gender ratio improving, primarily due the greater decline in men's EBO rates. South Korea saw an opposite trend, with established business owner rates increasing for both women and men, but especially for women with a 38% increase (8.7% in 2019 to 12% in 2021). The gender gap in EBO closed in both countries, and this was due to a disproportionate drop in rates for men in India and an increase for women in South Korea.

Importantly, business exit rates increased for all entrepreneurs in India and South Korea. However, consistent with the changes in established business owner rates, exit rates increased more for men in India (2.8% to 4%) and for women in South Korea (1.7% to 2.6%) from 2019 to 2021. The gender gaps also reversed in accordance with these trends. Where women had higher exit rates than men in India in 2019, the opposite was true in 2020 and 2021. In South Korea, exit rates increased sharply for women in 2020 and held constant while increasing slightly each year for men. The result was not only a narrowing of the gender gap, but a reversal from a 0.85 female–male ratio in 2019 to 1.04 in 2021.

STRUCTURAL INEQUALITY AND COMPETING NARRATIVES

Research suggests that differences in the types of business that men and women own/manage explain much of the variability in business outcomes. About half of all women entrepreneurs in Central & East Asia are active in the Wholesale/Retail sector. Startup activity for women in this sector is highest in India (63.9%) and lowest in Kazakhstan (37.6%). Women in Central & East Asia were more likely than men to work in Government, Health, Education & Social Services in all four countries, with the rate more than double in Japan and South Korea. The participation of women entrepreneurs in Government, Health, Education & Social Services was lowest in India (9.4% women vs. 6.4% men). Women entrepreneurs in India were twice as likely as men to start businesses in the Financial, Professional, Administrative & Consumer Services sector (1.9% women vs. 0.8% men), and women entrepreneurs in Kazakhstan were almost three times more likely than men to start businesses in the Agriculture, Forestry & Mining sector (10.0% women vs. 3.5% men). No women entrepreneurs in India reported participation in the ICT sector, and rates were below 3% in Japan, Kazakhstan and South Korea. While women in Kazakhstan were 29% more likely to report starting a business in the ICT sector compared to men (1.8% women vs. 1.4% men), women in South Korea were almost two-thirds less likely than men to do so.

In all four countries in Central & East Asia, well over half of women entrepreneurs reported

ENTREPRENEUR HIGHLIGHT

Charlotte Wang

Founder of EQuota (China)
Cartier Women's Initiative Fellow, 2020

Entrepreneurship and the United Nations Sustainable Development Goals

Entrepreneurship is an essential driver of societal health and wealth. It can address some of the globe's greatest challenges, such as the United Nations Sustainable Development Goals (SDGs). One of the many entrepreneurs around the world that can speak to this is EQuota founder Charlotte Wang. The company combines artificial intelligence and big data to deliver energy efficiency solutions. Says Charlotte:

> *"Sustainability means a responsibility for this and the next generation."*

Charlotte was raised in a rural village in China known for its coal mining. She saw how this activity negatively impacted citizens' health. From a young age, she experienced issues with her sinuses and breathing. At the age of 11, Charlotte moved with her family near the coastline city of Dalian, China. While she still continued to struggle with her sinuses, Charlotte was able to enjoy a different environment with much cleaner air. Following the birth of her first child, Charlotte decided to leverage her education at MIT in the United States and her experiences in China to launch EQuota in 2014.

> *"It is truly our generation's duty to improve our environment. After my time at MIT, I felt a strong calling to be back in China."*

Charlotte sees EQuota's services as similar to personal fitness monitoring tools that provide immediate, real-time feedback to facilitate healthier choices. For large energy consumers, EQuota's non-intrusive technology gathers data from existing monitoring systems such as smart meters and applies artificial intelligence (AI) to analyse usage patterns and identify inefficiencies. Customers

access the data using an online dashboard and have reported significant annual fatality decreases, electricity conserved, carbon emissions reduced and money saved. The positive feedback from clients and the push to reduce carbon emissions are playing a role in Charlotte's future thinking to tackle climate change through data insights.

> *"My plan is to use our service starting from the energy demand side — manufacturers and buildings — to transmission to energy generation to get system-level change. Solving climate change and sustainability requires all of us to keep relentless focus. I truly believe that innovative technology provides different views for addressing climate change while striving for harmony in the environment."*

starting with 1–5 employees and all at higher rates than men, except for Kazakhstan, where two-fifths of women entrepreneurs reported starting with 6–19 employees. No women in Kazakhstan reported starting a business with no employees, which stands in stark contrast to Japan, where more than a third of women are solopreneurs. Women in India were 82% more likely to report starting a business solo compared to men (15.1% women vs. 8.3% men). None of the women entrepreneurs in Japan or Kazakhstan reported starting a business with 20 or more employees.

Most women entrepreneurs in Kazakhstan are in small-size businesses. In 2021, the proportion of women-owned small and medium enterprises reached 43.3%, according to national statistics. By the end of 2021, approximately 10,000 women entrepreneurs' projects received support, and nearly 7,000 women entrepreneurs received financial support through guarantee loans. Kazakhstan has opened women's entrepreneurship development centres nationwide to enhance women's economic empowerment.[23] However, government support notwithstanding, the women themselves are joining forces to work towards a better ecosystem. An Association of Businesswomen has united 15,000 women entrepreneurs and assists them in voicing their concerns and sharing experiences.[24]

Women entrepreneurs in Japan and South Korea, both high-income countries, tend to be older than entrepreneurs in India and Kazakhstan. Almost half of women entrepreneurs in India and Kazakhstan were in the youngest age group, 18–34, compared to about a quarter in Japan and South Korea. India also showed about half the rate of women entrepreneurs in the 55–64 age category compared to the other three countries. The majority of women entrepreneurs in India, Japan and South Korea have at least a secondary education, while over half of women entrepreneurs in Kazakhstan reported having a graduate degree. Notably, over half of the women entrepreneurs in Japan reported household income in the lowest third in their country, which suggests that starting a business is a common strategy for poor women. In contrast, more than two-fifths of women entrepreneurs in India, Kazakhstan and South Korea reported household incomes in the top third, which suggests a completely different pattern in these countries. Women in South Korea were the least likely to report lower-third household income (8.7%) compared to others in their region.

Women in India, Japan and South Korea represented about half of the entrepreneurs offering innovative products to their local markets, while women in Kazakhstan represented about 28.6%. Importantly, in Kazakhstan, women are the only entrepreneurs offering innovative products/services at the national level, and represent half of the entrepreneurs in that country bringing innovative offerings to international markets. Women in India also comprise the majority of entrepreneurs offering innovative products to international markets. In Japan, women comprise one in five entrepreneurs offering innovative products/services to national markets and one in four entrepreneurs offering innovations to international markets. Women in South Korea represent one in three of those offering innovations to national markets and one in four entrepreneurs with innovative offerings for international markets (see Figure 24).

An example of a high-potential business led by a women founder is Market Kurly, a premium grocery delivery app founded by CEO Sophie Kim, one of South Korea's top women entrepreneurs (see example below).

Sophie Kim's passion for good-quality fresh food inspired her to start her own enterprise, Market Kurly, an online application for ordering deliveries. Kim's prime focus is on customer satisfaction, a key to the company's success. After six years in the market, Kurly entered the league of unicorn businesses in South Korea. The current valuation of the company is US $2.2 billion. Kim is an inspiration for many women, having worked hard to defy structural barriers.[25]

23 *Astana Times*. (2022). Women-owned businesses grow in Kazakhstan, make up nearly 45 percent of total in 2021. 26 September. https://astanatimes.com/2022/09/women-owned-businesses-grow-in-kazakhstan-make-up-nearly-45-percent-of-total-in-2021

24 Asian Development Bank. (2022). Building a better normal for women entrepreneurs in Kazakhstan. https://www.adb.org/results/building-better-normal-women-entrepreneurs-kazakhstan

25 Han-Shin Park. (2022). Kurly CEO Sophie Kim on the road less traveled. *Korea Economic Daily*, 19 January 2022. https://www.kedglobal.com/chief-executives/newsView/ked202201190017

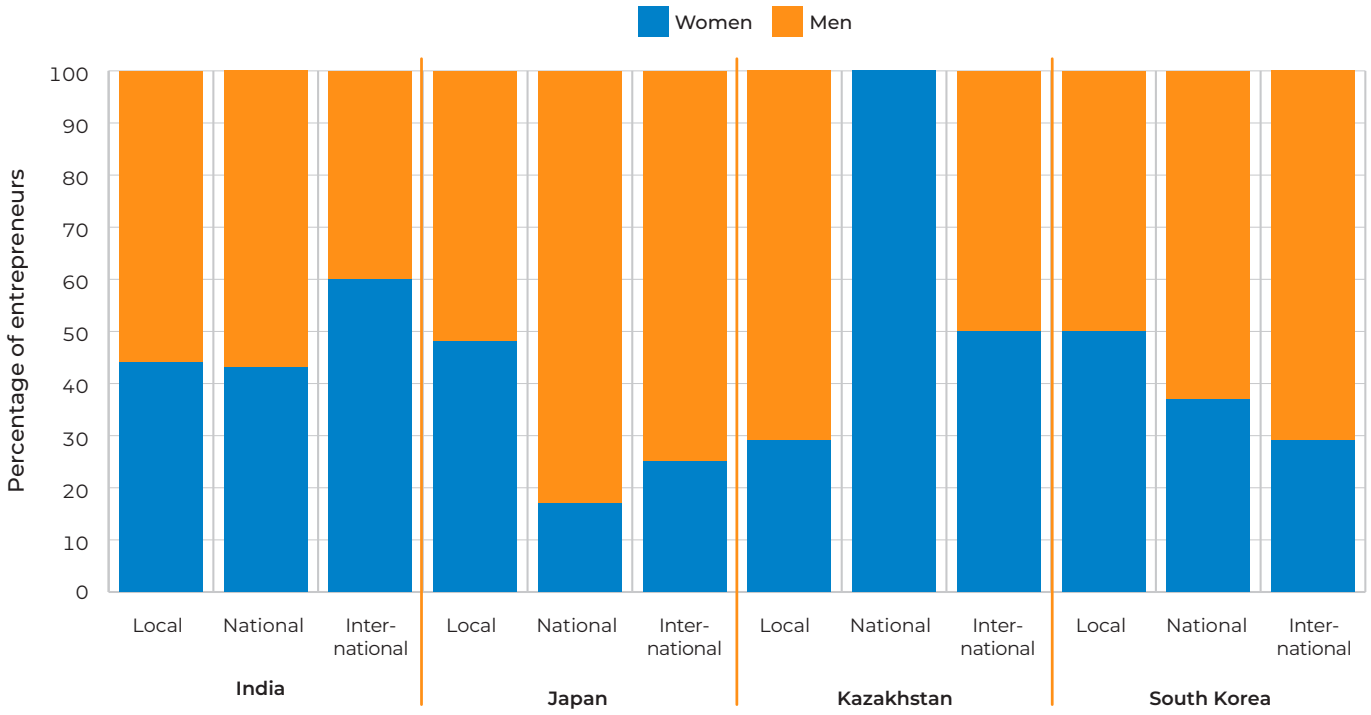


FIGURE 24
Gender composition of level of innovation by country in Central & East Asia
Source: GEM 2021

The high innovation rates of women entrepreneurs in Central & East Asia countries are also in line with trends in market focus for women entrepreneurs. More than half of the entrepreneurs focused on local markets in Kazakhstan and South Korea are women, while in India and Japan it is men who are more focused on local markets. Women in Kazakhstan represent about half of the entrepreneurs with a national market focus and over 60% of those focused on an international market. Women in India, Japan and South Korea represent one in three entrepreneurs with a national market focus in their countries, while women in South Korea showed a strong focus on international markets, comprising almost half of these businesses. Despite these numbers, no women in India or Japan reported having more than 25% of customers outside their countries, while women in Kazakhstan represented one in four high-export entrepreneurs and women in South Korea 14.3%.

Only in India did women entrepreneurs report starting businesses with 20 or more employees, and women in this country represent more than one-third of those entrepreneurs expecting to hire 20 or more employees within the next five years. Women in South Korea make up half of the entrepreneurs starting companies with 20 or more employees and almost one in three of those with ambitious hiring plans. Meanwhile, none of the women entrepreneurs in Japan or Kazakhstan reported starting a business with 20+ employees. Nonetheless, women comprise two-thirds of entrepreneurs with big job creation plans in Kazakhstan, with the proportion being about one-fifth in Japan.

ENABLING ENVIRONMENT FOR WOMEN ENTREPRENEURS

Women were generally at parity with men on cultural perceptions about support for entrepreneurship in Central & East Asia countries. However, in Japan, where only a quarter of adults agree that starting a business is a good career choice, women were much more likely than men to agree (27.4% women vs. 21.1% men). Women were close to parity with men about the ease of starting a business in India and Kazakhstan, but significantly less likely than men to agree in Japan and South Korea. Importantly, agreement that starting a business is easy ranged from a third or less of women in Japan and South Korea to more than half of

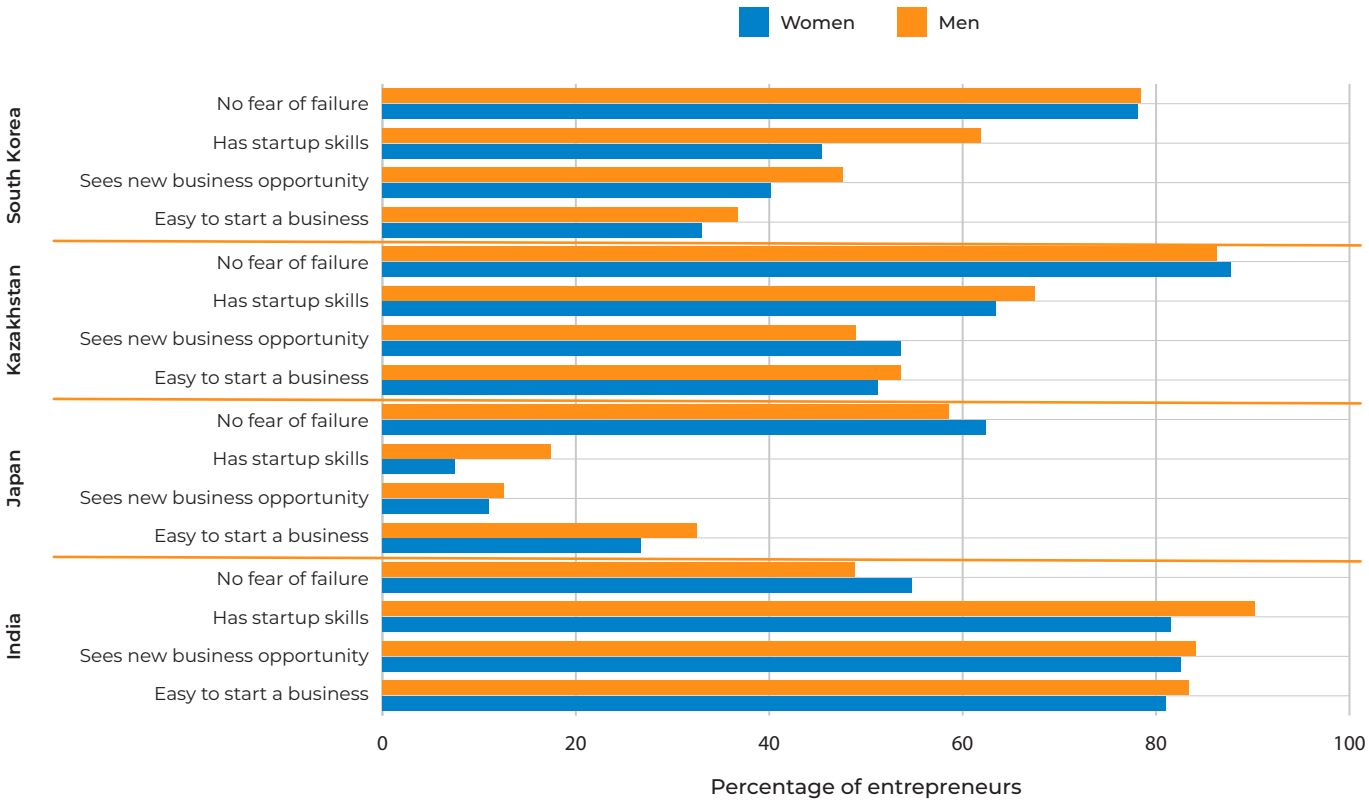
women in Kazakhstan and four in five women in India.

Opportunity recognition was strongest for women in India (82.6%) and lowest for women in Japan (11%). Similarly, four in five women in India reported high confidence in their skills to start a business compared to only 7.5% of women in Japan, where women were half as likely as men to agree that they have the skills to start a business. Women were also near parity with men in all four countries when it comes to feeling undeterred by fear of failure, from more than half of women in India to a high of 87.7% of women in Kazakhstan. More than half the women in India and Kazakhstan reported knowing an entrepreneur compared to only 16.4% of women in Japan and a little more than a third of women in South Korea. The largest gap is, again, observed in Japan (see Figure 25).

There may well be a diminished sense of opportunity among women entrepreneurship in Japan, but women entrepreneurs are nonetheless striving hard to help other women to grow as entrepreneurs. One example is Coly Inc., an online gaming company started by two twin sisters, Mizuki and Anna Nakajima, and which has a net worth of ¥429.37 million. A unique project is a plan to assist 10 companies: in addition to making investments, they provide management advice and workspace. The founders believe that women entrepreneurs face numerous barriers, and there are few senior women whom they can consult and get advice from about starting or operating a business. Their project aims address these issues.[26]

One in five women in Kazakhstan reported having made a business investment in the prior 12 months and are apparently more active investors than men (1.19 female–male ratio). Women in India, Japan and South Korea are much less active than men in making business investments, with the largest gender gap being in South Korea (2.2% women vs. 3.5% men). In terms of size of investment, women in Kazakhstan and South Korea were at parity with men, while in Japan women reported median investments 68% larger than men.

FIGURE 25
Entrepreneurial perceptions by gender and country in Central & East Asia
Source: GEM 2021



26 *Kyodo News*. (2021). More firms supporting female entrepreneurs in Japan. 24 October. https://english.kyodonews.net/news/2021/10/2d2ac1f4fa97-focus-more-firms-supporting-female-entrepreneurs-in-japan.html

Results from the 2021 GEM NES suggest that, of the four countries in this regional analysis, Japan has the poorest cultural support for women entrepreneurs, the least favourable regulations in encouraging women to start businesses and poor family support services for women entrepreneurs. According to national expert assessments, South Korea appears to have the most supportive culture for women entrepreneurs, while offering equal access to finance and procurement services. Experts in Japan and India were the most optimistic in their opinions about teleworking's contribution to helping women in their countries to juggle work–family challenges.

HIGHLIGHTS

The diversity of the countries in this region underscores the importance of understanding the heterogeneity of contexts in which women entrepreneurs work as well as the diversity of the entrepreneurs themselves. One size does not fit all, even within a region. The low number of countries in this region being analysed also serves as a reminder to interpret regional averages, like global averages, with caution, as the countries involved can vary from year to year. For the trends in gender differences, the diversity of patterns is striking.

- Kazakhstan stands out for its high rates of intentions and activity along all of the entrepreneurial lifecycle. Business exits are high for both women and men. Importantly, women entrepreneurs in Kazakhstan are highly motivated by wealth building, have a strong focus on national and international markets, and tend to start businesses with more employees than is the case for women entrepreneurs in the other three countries studied in this region.
- At the other end of the spectrum, Japan stands out both for having the lowest rates of activity, but also for some of the largest gender differences in rates and very poor framework conditions for women entrepreneurs. Not surprisingly, women in Japan showed the lowest rates in the region of nascent activity and early-stage and established businesses, with significant gender differences ranging from 60% to two-thirds. Moreover, one in five women in Japan reported family or personal circumstance as a reason for business exit, surpassed only by men in South Korea who were twice as likely as women to report business exit for a family or personal reason. The gender divide in Japan is great in both the workplace and the marketplace. Significant efforts must be made to address both gender norms and the structural inequalities that constrain women's entrepreneurship in Japan.
- In terms of pandemic impacts, women were more heavily impacted than men, with higher rates of business closures in all countries except India. While South Korea showed the lowest rates of business exit due to the pandemic, women were much more strongly impacted than men. The reverse trends in India are notable, where women showed less negative impact than men from the pandemic on established business rates and business exit rates. These trends require explanation, as they deviate considerably from both regional and global patterns.
- On a more positive note, women early-stage entrepreneurs and established business owners were more likely than men in all four Central & East Asia countries to report that the pandemic had prompted the use of new digital technologies, the exception being women entrepreneurs in Kazakhstan. While the economies in Japan and South Korea are heavily digitalized, India and Kazakhstan are less so. The rates suggest that women entrepreneurs in all economies are moving strongly towards a digital future. In fact, over half the women entrepreneurs in all four countries reported plans to increase the use of digital technologies in their business over the next six months, outpacing men in all countries except India. This is a promising trend for women entrepreneurs in this region.

6 Europe

The 23 European countries that participated in the GEM 2021 Adult Population Survey comprise primarily high-income countries, with three upper–middle-income countries. In this chapter, we present findings for: Belarus, Croatia, Cyprus, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Luxembourg, the Netherlands, Norway, Poland, Romania, the Russian Federation, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland and the United Kingdom. Despite sharing high levels of economic development, there are often wide variations in gender patterns in entrepreneurial activities, pandemic impacts and market conditions. Moreover, gender differences are heavily influenced by both formal and informal institutional factors.

STARTUP RATES, INTENTIONS, MOTIVATIONS AND BUSINESS STAGE

In Europe, Total early-stage Entrepreneurial Activity (TEA) rates tend to be low compared to other regions of the world but often reflect a high level of gender parity. Among countries in this region, startup activity rates for women ranged from a low of 1.6% in Poland to a high of 13% in the Netherlands, which is double the regional average. The gender ratio also varies widely across countries, from a low of a 0.39 female–male ratio in Norway (1.7% women vs. 4.4% men) to parity or higher in Romania (9.6% women vs. 9.8% men) and Spain (5.6% women vs. 5.4% men), respectively (see Figure 26).

Regionally, job scarcity was the most reported motivation for a business startup for both women and men. Only in three countries — France, Luxembourg and Sweden — were women less likely than men to report job scarcity as a motivation for starting a business. About one-quarter of women entrepreneurs in Luxembourg and Sweden cited job scarcity as a key motivation compared to 98% of women in the Slovak Republic. Women entrepreneurs in this region were also more likely than men to report making a difference and less likely than men to cite building wealth as a startup motivation. However, the rates and gender differences vary widely across countries (see Figure 27).

Women entrepreneurs cited making a difference as an essential startup motivation more often than men in 10 countries and were at parity with men in another three countries in the European region. Women entrepreneurs reported making a difference as a startup motivation more than twice as often as men in Poland (24.6% women vs. 9.9% men). In contrast, women in the Slovak Republic were about one-third less likely to report making a difference as a startup motivation (14.0% women vs. 21.1% men).

Women entrepreneurs reported wealth building as a startup motivation much less often than men in all but four countries, at parity in Germany, 9% more often in the Russia Federation, and over 20% more often in Hungary and Poland. While only 12% of women entrepreneurs in the Slovak Republic cited wealth building as a key motivation, over 71% of women entrepreneurs in Belarus did so. The most significant gender gap was observed in Finland, where women reported wealth building as a startup motivation at about one-third the rate of men.

Continuing a family tradition is another startup motivation where women were less likely to report agreement than men, but with considerable variation across countries in this region. For example, two in five women entrepreneurs in Greece reported family tradition as a reason to start a business, compared to only one in 10 women entrepreneurs in Hungary. The most significant gender differences were observed in Latvia, where women reported continuing a family tradition as a startup motivation 61% more often than men, and in Hungary, where women were 62% less likely than men to do so. The wide

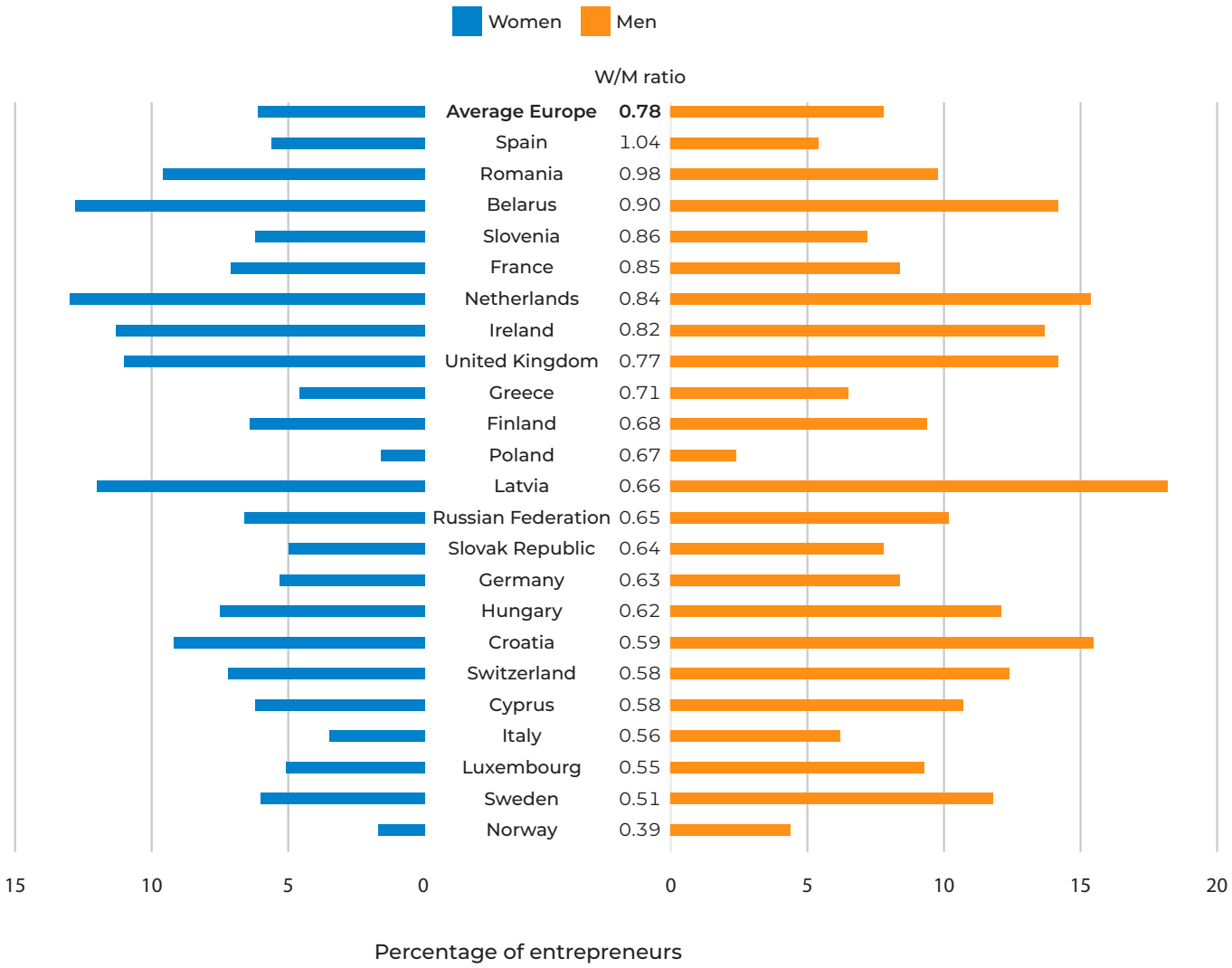


FIGURE 26
Gender ratio (female–male) for Total early-stage Entrepreneurial Activity (TEA) rates by gender and country in Europe
Source: GEM 2021

variation in these rates suggests very different gender beliefs or business traditions.

Finally, women-led startups are diverse and extend far beyond traditional definitions of growth-oriented, profit-seeking entrepreneurship. Alternative models attractive to women include values-driven, socially oriented and locally focused enterprises ("impact entrepreneurship"). The media should highlight and celebrate these different forms of entrepreneurship in addition to "power women" leading growth-oriented startups. The increasing interest in topics like social entrepreneurship reflects the values and priorities of many women and could incentivize women towards entrepreneurial activity. In addition, linking social entrepreneurship with technology to increase social value creation (i.e. "social-tech entrepreneurship") offers the potential to boost women's interest in entrepreneurship.

While Europe had the lowest rate of entrepreneurial intentions for women among global regions, rates varied widely across countries in this region, from a low of 3.1% in Poland to a high of 23.4% in Belarus. The gender gap in entrepreneurial intentions in this region varied from half the rate for women in Sweden to a high 1.19 female–male ratio in Poland, the only country in the region in which women reported entrepreneurial intentions more often than men. Rates of nascent and early-stage business activity were among the lowest rates for women globally, about half the global average. Norway stands out as the country with the lowest nascent and early-stage activity rates for women at 0.6%, representing the region's most considerable gender difference. Only in Poland and Spain were women at parity with men for nascent activity, while women were equal with men for

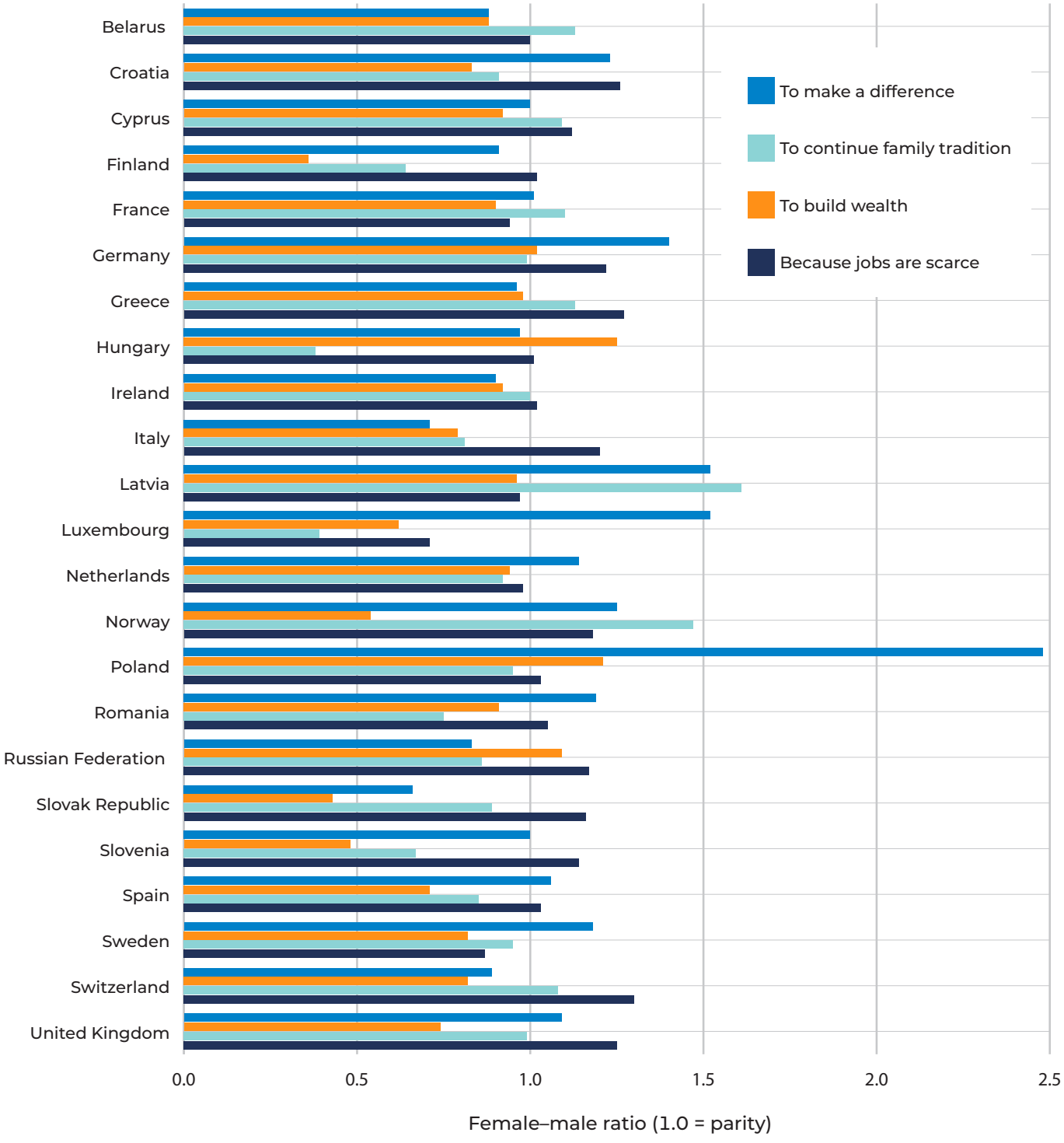


FIGURE 27
Female–male ratio in motivations to start a business by gender and country in Europe
Source: GEM 2021

early-stage activity in Greece and showed higher rates than men in Romania, Slovenia, Spain and the United Kingdom. Established business rates were highest for women in Greece (12.4%) and Poland (10.6%) and lowest in Norway (2.1%), with women above parity in Luxembourg and Romania.

Women reported higher business closure rates in France (1.9% women vs. 1.4% men) and Romania (2.0% women vs. 1.6% men). In every country in this region, women are less likely than men to report a recent business closure, with the most significant gender difference in Sweden, where women showed half the business

closure rate of men. In 2021, one-quarter of women in this region reported business closure due to the pandemic. Over half of women in Norway, Romania and the Slovak Republic cited the pandemic as the reason for closing their businesses. In contrast, only 5.9% of women in Greece identified the pandemic as the reason for business closure. Women in only six countries — Croatia, France, Ireland, the Netherlands, Poland and the Russian Federation — reported rates lower than men.

The most common reason for business closure in this region was a lack of profitability. Rates varied for women from 5% in Romania to 42.9% in Italy. Women in Croatia were almost three times more likely than men to report a lack of profitability as a reason for business closure (35.7% women vs. 12.5% men), and women were almost five times more likely than men (33.3% women vs. 6.7% men). The rates for women were much lower than for men in seven countries — most notably the United Kingdom and Romania — where women are five times less likely than men to report a lack of profitability as the reason for business closure.

Sometimes, business owners exit because of family demands. While women are slightly more likely than men to report family reasons for discontinuing a business, the gender ratio varied widely. Women in the Russian Federation, for example, reported business exit six times more often than men, while the women in Luxembourg about one-third less often than men. On the other hand, no women in Finland, Norway or Slovenia reported family reasons as the reason for business closure, compared to 28.6% in Italy.

Finally, sometimes entrepreneurs exit a business because they have an opportunity to sell it. Regionally, women are 28% less likely to report an opportunity to sell as the reason for business exit, but in nine countries no women reported this reason. Otherwise, rates for women ranged from a low of 1.1% in Poland to a high of 15% in Germany. Gender differences also varied widely from the Netherlands, where women reported the opportunity to sell 85% less often than men, to Belarus, where women reported the opportunity to sell as a reason for exit 88% more often.

PANDEMIC IMPACTS ON WOMEN-OWNED BUSINESSES

Regionally, Europe had the lowest rate of early-stage entrepreneurs agreeing that the pandemic provided new business opportunities (14.5% women vs. 16.3% men), with nine women entrepreneurs agreeing for every 10 men. However, the gender gap varied widely across countries in the region, from four women to 10 men in Cyprus to three women for every one man in Poland agreeing that the pandemic provided new opportunities.

Among early-stage European entrepreneurs, women are also less likely than men on average to agree that the government response was effective (7.7% vs. 10.0% men), about half the global average. However, women were above parity in seven of the 23 countries in Europe, with the most considerable difference being in Greece, where women are three-quarters more likely to agree that the government response to the pandemic was effective (14.6% of women vs. 8.3% of men). Conversely, in Cyprus, women entrepreneurs are 70% less likely than men to agree that the government response was effective (3.1% women vs. 10.5% men).

One in five women early-stage entrepreneurs in Europe reported adopting new digital technologies due to the pandemic — about 10% more than men. Across countries in this region, however, rates for women varied from a low of 5.1% in Finland to a high of 34.7% in Cyprus (see Figure 28). Women are multiple times more likely to report the use of new technologies in several countries, including Luxembourg (27.5% women vs. 3.0% men), the Russian Federation (12.9% women vs. 2.9% men), Romania (9.4% women vs. 3.1% men) and the Slovak Republic (15.2% women vs. 7.2% men). Women were below parity with men in seven countries: Croatia, Cyprus, Hungary, Ireland, Italy, the Netherlands and Norway.

When it comes to planning to use more digital technologies within the next six months, two in five women early-stage entrepreneurs showed agreement slightly less often than their male peers. Nevertheless, more than half the women in seven countries — Croatia, Cyprus, Greece, Ireland, Luxembourg, Slovenia and the United Kingdom — reported plans to use more digital technologies in the near future. The gender ratio

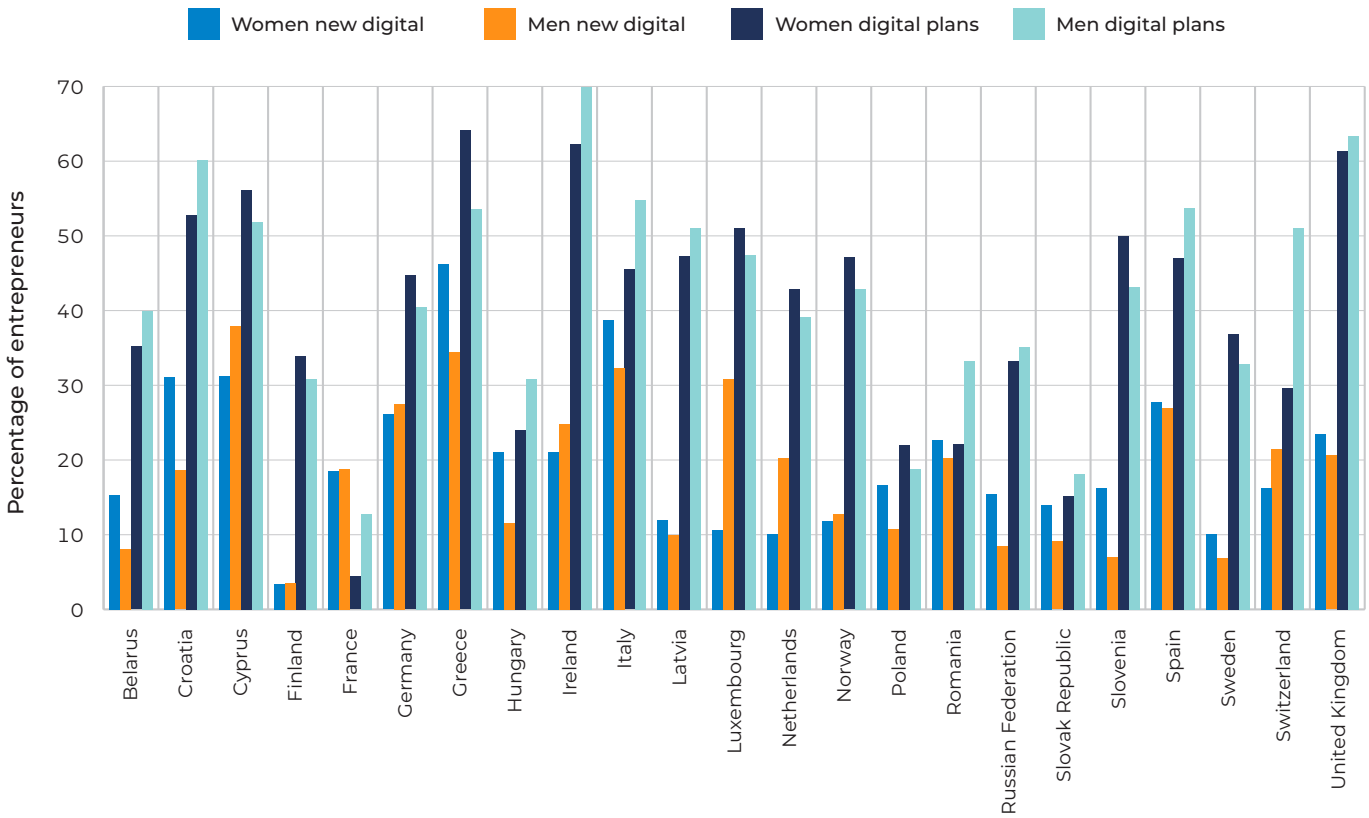


FIGURE 28
Pandemic impacts on use of digital technology for early-stage entrepreneurs by gender and country in Europe
Source: GEM 2021

ranged from a low of 0.34 women–men in France to 1.20 women–men in Greece.

About one in 10 women with established businesses reported new opportunities provided by the pandemic, again slightly less often than men (0.97 female–male ratio). One in four women established business owners in Norway agreed that the pandemic provided new opportunities compared to 2.9% in the Netherlands. Among established business owners, twice as many women as men in the Russian Federation reported seeing new opportunities due to the pandemic, although rates were low (6.3% women vs. 2.7% men). In contrast, only one woman to five men established business owners in Hungary reported seeing new opportunities provided by the pandemic (1.7% of women vs. 8.3% of men).

Women established business owners in Europe responded slightly more favourably on average than women early-stage entrepreneurs when assessing the effectiveness of the government response to the pandemic, but still only at a rate of one in 10. Rates for women ranged from only 4% in Latvia to 41% in agreement in Switzerland. Women are more likely to agree with an effective government pandemic response in eight countries in Europe, most notably Romania (12.5% women vs. 3.7% men) and the Slovak Republic (4.3% women vs. 1.2% men), where women are three times more likely than men to agree.

Among those with established businesses in Europe, 12.6% of women reported having adopted new digital technologies due to the pandemic, showing gender parity. This rate is much lower than for women entrepreneurs in the early stage of business startups. Women established business owners' rates ranged from 5.2% in Finland to over one-quarter in Italy, Luxembourg and Switzerland. The most significant gender gap was found in Latvia, where women established business owners reported using new digital technologies due to the pandemic nine times more often than men. Conversely, women with established businesses in Croatia and Ireland reported using new digital technologies due to the pandemic about two-fifths less often than their male peers.

One in four women established business owners in Europe reported plans to use more digital technology within six months, slightly less often than men (0.95 female–male ratio). While rates for women were well over 20% in all three countries, they varied from only 3.9% of women

Rana Sanyal

Co-founder of RS Research (Turkey)
Cartier Women's Initiative Fellow, 2021

Targeted therapies with no compromise

Entrepreneurs pave the way for innovative discoveries to become our reality tomorrow. The pursuit and achievement of what others may perceive as merely fantasy can be a rocky road. And perhaps changing minds can ultimately be more difficult than discovering life-changing technologies. But Rana Sanyal accomplished both, and she did so by being determined not to give up on her goals, regardless of those who thought they would be impossible to achieve. Said Rana:

> *"Hurdles motivate us to jump higher."*

After completing her chemistry PhD studies in Boston, Rana worked for Amgen (in Thousand Oaks, California), where she witnessed a patient with terminal cancer recover from a coma having received the medicine developed by her team.

> *"That was the moment when I decided to do what it takes to make a difference in human life."*

Rana returned to her native Turkey and started her own lab as a professor at Boğaziçi University. She co-founded RS Research, a clinical-stage biotechnology startup focusing on an innovative drug delivery platform technology in targeted therapies for patients fighting cancer. The goal was to take the necessary steps to develop nanomedicines from the bench (the laboratory) to the patient's bedside. Thanks to her perseverance and the ecosystem she helped build for drug development, today her startup has a pipeline of smart nanomedicines, one of which has already reached patients with lung cancer at phase I clinical trial. It's more than a pipeline. RS Research's Swiss subsidiary PDC Therapeutics reinforces other researchers' work via its drug carrier technology. Rana said:

> *"To make it possible, patients volunteering in our clinical trial are contributing as much as our brilliant team. The future of oncology will be targeted therapies: precisely identifying and attacking cancer cells only. Cancer is responsible for 10 million deaths every year. We must urgently bring innovative therapies to patients, while protecting them from miserable side effects. This is what we call a Cure with a Smile."*

Rana is one of the female scientists who didn't take no for an answer and sailed into the wind until the wind favoured her. She is grateful to Cartier Women's Initiative for fostering a community that instils such perseverance.

"Role models are important to inspire other researchers to find the strength to take another step forward. With my Cartier Women's Initiative fellows, we are in different geographies and environments, but we have many things in common. Being part of this sisterhood is much more than the competition and the prize. These platforms help us grow and equip us to support others with the ripple effect for a better future with science."

in Poland to 61% in Norway. Women established business owners were at or above parity with men in about half of the countries in Europe, with the largest gender gap in Romania, where women were more than twice as likely to report plans to use more digital technologies in the near future (28.1% women vs. 10.7% men).

Seventeen countries in Europe participated in the GEM survey throughout the period 2019–21. Of those countries, entrepreneurial intentions increased for women in 10, most notably Italy, where they doubled, and decreased in the others, especially the Slovak Republic, where intentions dropped by two-thirds for women. Rates of early entrepreneurship increased for women in eight countries and dropped most dramatically by two-thirds in Poland and Norway. Established business rates for women recovered or increased in 10 countries while doubling in Sweden. On the other hand, business closure rates more than doubled for women in Cyprus and Slovenia.

STRUCTURAL INEQUALITY AND COMPETING NARRATIVES

To best understand the potential impact of women entrepreneurs, we consider the gender composition of early-stage entrepreneurs offering innovations, targeting different markets, exporting goods and services, and creating jobs. Women in Europe represent two of every five entrepreneurs offering innovative products or services new to local and national markets, and almost one in three offering innovations new to international markets. While women entrepreneurs tend to be less likely than men to offer international innovations, women were the only early-stage entrepreneurs in Poland and Romania reporting offering innovations new to global markets in 2021. In eight countries, women represented more than half the entrepreneurs offering local innovations in eight countries and half or more of those offering national innovations in six countries.

Women represent one in two entrepreneurs focusing on local markets in Europe, compared to two in five entrepreneurs concentrating on national and international markets. Again, we see a familiar pattern of women entrepreneurs focusing more often on local markets, representing more than half of those starting local businesses in 11 countries. Women represent at least one in three entrepreneurs focusing on national markets in all but six countries, and the same for international markets. Similarly, while women represent two-fifths of entrepreneurs with more than 25% of customers abroad in Europe, the proportion of women varies from 15% in Switzerland to 57% in the Russian Federation.

Regarding job creation, women constitute about one-third of the early-stage entrepreneurs with 20+ employees and who expect to hire 20+ employees within five years. So, while women are thought to start and grow smaller companies in Europe, they are also very active in job creation, albeit at lower rates than men. However, the gender composition in this growth-oriented category of early-stage entrepreneurs varies extensively across countries. For example, no women in seven countries — Croatia, Cyprus, Finland, Hungary, Norway, Poland and Slovenia — reported starting businesses with 20+ employees, while only women entrepreneurs in Greece and the United Kingdom reported starting with 20+ employees. Again, while no women in three countries — Cyprus, Finland and Italy — reported plans to hire 20+ employees within five years, women represented 30% or more of the early-stage entrepreneurs expecting to hire 20+ employees (see Figure 29).

In Europe, women entrepreneurs are slightly younger on average than their male peers, with the largest gender gap in the over-55 group. Women are less likely to be in the youngest category in seven of the 23 countries. The gender differences in age variation across countries are much more dramatic in the over-55 group, where women are at or above parity in about half the countries. Older women entrepreneurs were most common in Finland (20.6%) and Norway (23.5%) and least common in Poland (3%). Remarkably, women in the Slovak Republic were almost seven times more likely than men to be 55–64 years old (17.6% women vs. 2.6% men).

Women entrepreneurs in Europe tend to be better educated than their male peers, reporting a graduate degree 24% more often than men, but much less likely to have secondary education or less. Most European women entrepreneurs tended to have post-secondary education, ranging from 11.7% in Hungary to 87% in the

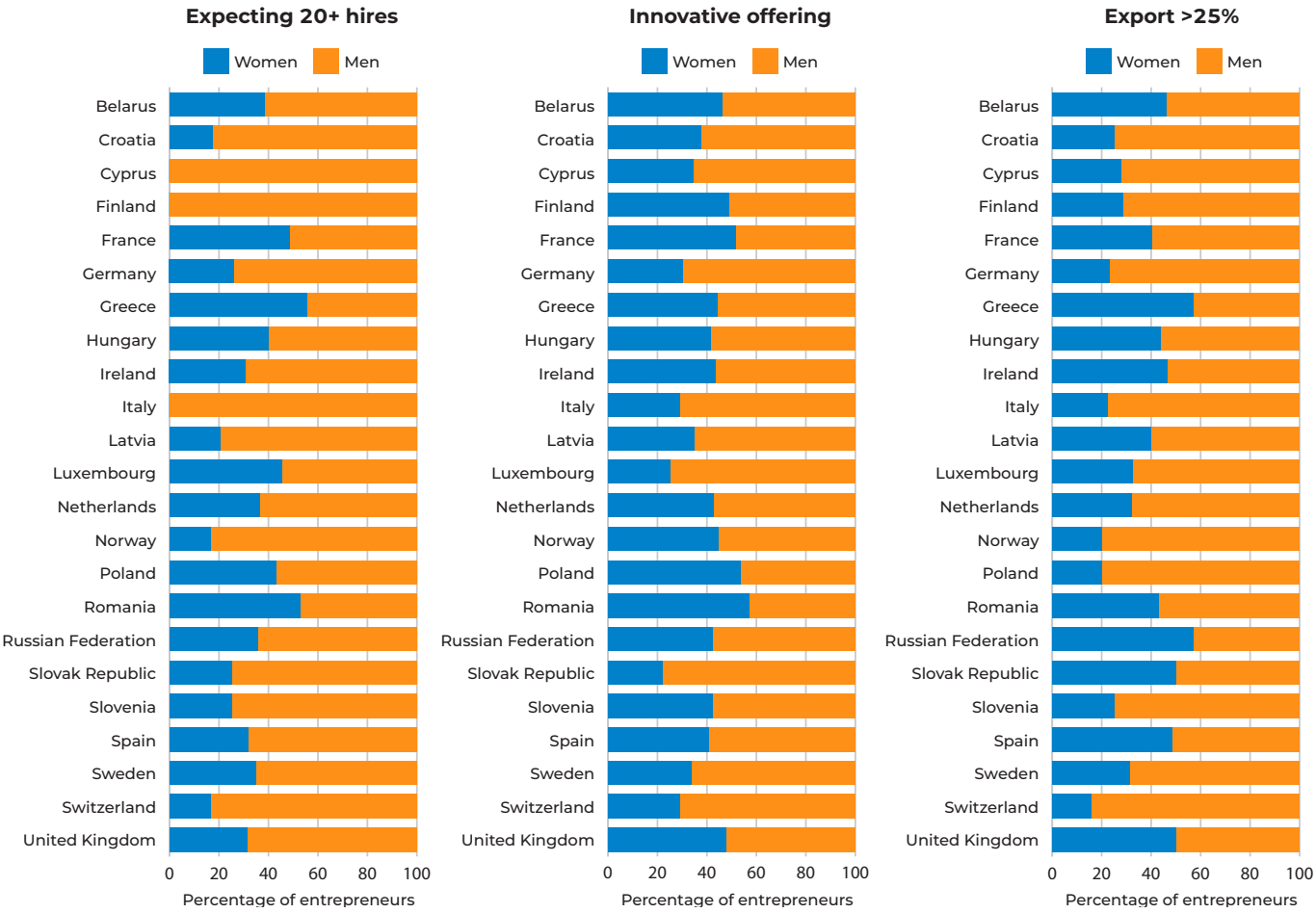


FIGURE 29
Gender composition of high-growth indicators by country in Europe
Source: GEM 2021

Russian Federation. More than 50% of women reported post-secondary education in over half of the countries in this region. Similarly, women entrepreneurs are more likely to have graduate degrees than men in 11 countries, at over four times the men's rate in Norway (29.4% women vs. 6.8% men) and Sweden (1.8% women vs. 0.4% men).

Women early-stage entrepreneurs also tend to be less affluent than their male peers in Europe, reporting household income in the lower-third bracket 30% more often than men and in the upper-third bracket 20% less often. In most European countries, women entrepreneurs tend to be concentrated in the highest-third income bracket, though less often than men. Rates for women in the upper-third household income level range from 16.1% in Poland to 62% in Hungary, with these rates only dropping below 30% in five countries.

The industry distribution of women in Europe showed women starting businesses at half the rate of men in the ICT and Agriculture, Forestry & Mining sectors, about three-quarters the rate in Manufacturing & Transport, and a greater rate in Wholesale/Retail, Financial, Professional, Administrative & Consumer Services, and in Government, Health, Education & Social Services. However, there was quite a bit of variation across counties in this pattern in 2021.

No women early-stage entrepreneurs reported activity in the ICT sector in four countries — Cyprus, Finland, Hungary and the Slovak Republic — while women in Italy were almost 3.5 times more likely than men to start a business in ICT (11.4% women vs. 3.3% men). No women in the United Kingdom or the Netherlands reported startup activity in the Agriculture, Forestry & Mining sector, compared to almost a quarter of women in Poland. Women entrepreneurs in Germany and Poland were more active in this sector than men but in every other European country much less active.

Notably, women were almost three times more active in the Manufacturing & Transport sector in the United Kingdom (10.2% women vs. 3.6%

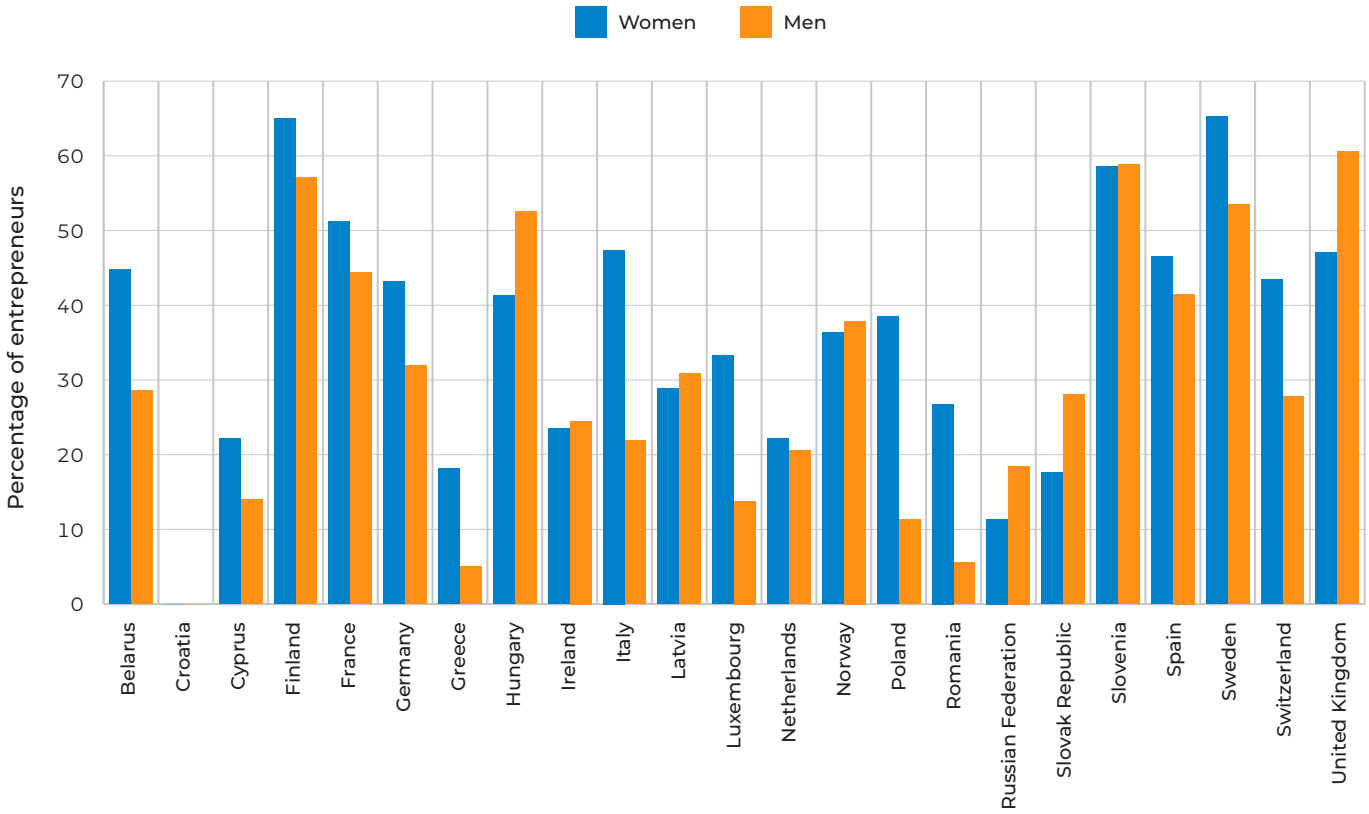


FIGURE 30
Rates of startups with no employees by gender and country in Europe
Source: GEM 2021

men), in contrast to Norway, where no women reported startup activity in this sector. Women are also more likely than men to start businesses in Manufacturing & Transport in Croatia, France, Luxembourg and Switzerland. In addition, women were involved in startup activity in the Wholesale/Retail sector at fairly high rates and gender parity or above in 17 of 23 countries.

Women entrepreneurs participated in the Financial, Professional, Administrative & Consumer Services sector near gender parity or above in 15 countries, ranging from 12% in Hungary to 40% in Italy and Luxembourg. However, the largest gender difference was observed in the Russian Federation, where women were 64% more active than men in this sector (17.9% women vs. 10.9% men).

Finally, women are nearly twice as likely as men to start businesses in the Government, Health, Education & Social Services sector in Europe, with rates below 20% for women in only four countries: Cyprus, Greece, Luxembourg and Poland. In fact, women in Finland and Luxembourg were more than six times more involved than men in startup activity in this sector. Greece and Poland were the only two countries where men were more likely than women to be starting a business in this sector (see Figure 30).

Europe showed the highest rate of solopreneurs in the world, with two in five women early-stage entrepreneurs reporting no employees, about 18% more often than men. Women were near or above gender parity in all countries except Greece, Latvia, the Russian Federation, the Slovak Republic and the United Kingdom. Women entrepreneurs are almost five times more likely to report no employees in Romania and 3.5 times more likely in Poland and Greece.

At the other end of the scale, women in Europe are about 40% less likely than men to report starting businesses with more than 20 employees and half as likely to report having 6–19 employees. However, again, there was a high degree of variation in these rates, with women in Finland four times more likely than men to report having 6–19 employees in this early startup stage (7.5% women vs. 1.8% men) and women in the Slovak Republic 3.8 times more likely than men to report having 20+ employees (11.8% women vs. 3.1% men).

ENABLING ENVIRONMENT FOR WOMEN ENTREPRENEURS

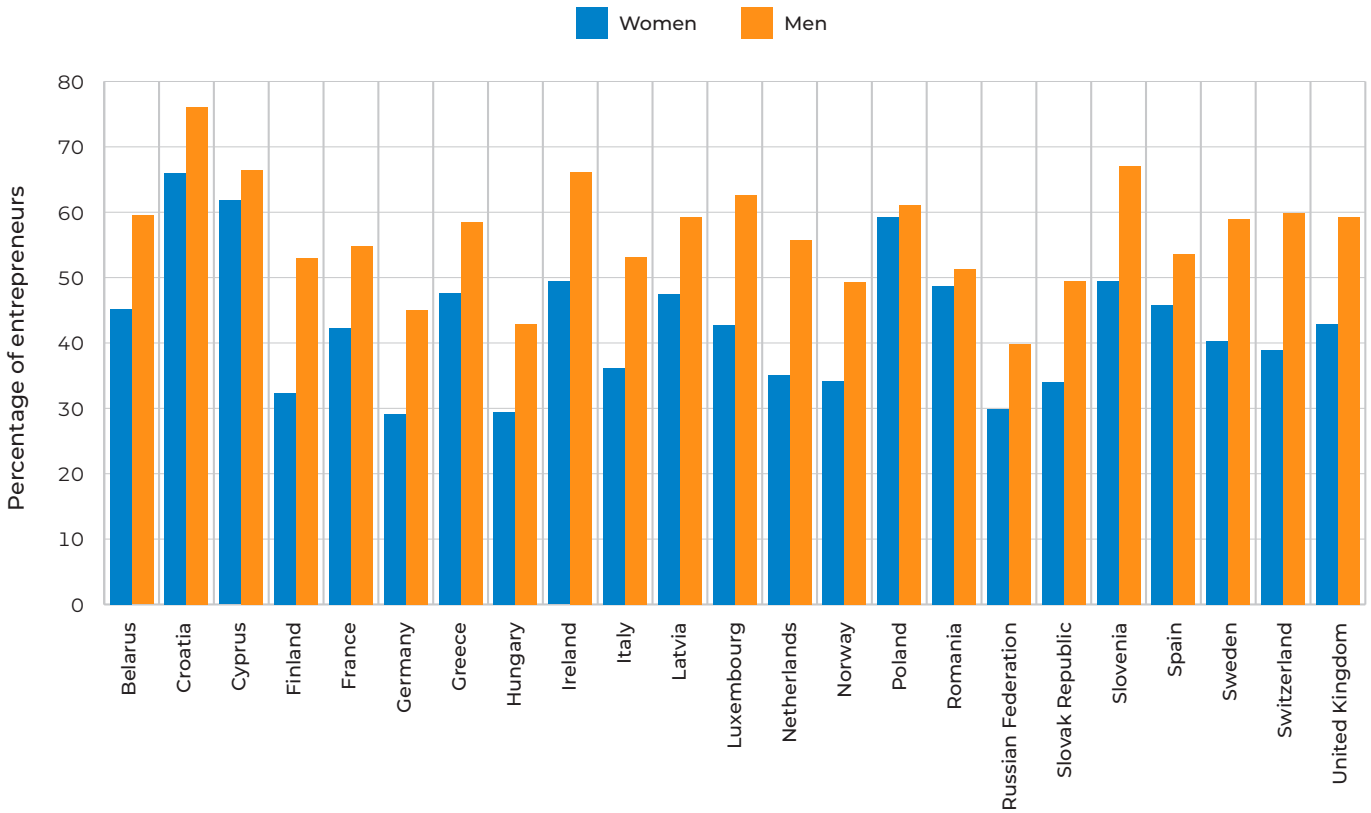
Starting a new business was generally considered a good career choice in Europe, with over 60% of women agreeing, at parity with men. However, European women are less likely than men to say that starting a business is easy, less likely to have recently seen new opportunities, less likely to believe they have the skills to start a business (see Figure 31) and less likely to be undeterred by failure. Rates of perceiving business startups as easy varied widely across countries for women, from 22.8% in the Slovak Republic to 84.3% in the Netherlands. Women were near or slightly above parity with men in six countries — Cyprus, Germany, Italy, Luxembourg, Norway and Sweden — with the most significant gender difference in Croatia (25.4% women vs. 36.5% men).

When it comes to recognizing new business opportunities, women were near or above parity with men in four countries: Cyprus, Latvia, Poland and Romania. Rates of opportunity recognition ranged from 23.8% in Belarus to over 70% in Norway, Poland and Sweden. There was a much tighter range of rates for having the skills to start a business, from a low of 29.4% in Hungary to a high of 66% in Croatia. While close to parity with men in Poland (59.2% women vs. 61.1% men), women in Finland reported confidence in their startup skills 40% less often than men (32.4% women vs. 53.0% men) (see Figure 31).

Women in Europe are also less likely than men to report an absence of fear of failure in every country except Poland (55.4% women vs. 55.3% men). Most of the gender gaps were less than 20 points below parity, with the largest in Finland, where women are about one-third less likely to report no fear of failure. Women are also less likely than men in most European countries to personally know an entrepreneur. However, they were at parity with men in five countries: Belarus, Latvia, Poland, Romania and the United Kingdom.

Another critical factor in the enabling environment for women entrepreneurs is access to funding. Here, the rise of women investors may be a promising trend for women entrepreneurs. In Europe, women are about one-third less active as informal investors compared to men (4.0% women vs. 6.1% men), with investment rates the lowest compared to other regions. The median size of these investments was also about one-third lower for women in Europe than their

FIGURE 31
Perceptions of having startup skills by gender and country in Europe
Source: GEM 2021



male counterparts. Rates that capture whether a business investment has been made in the prior 12 months varied for women from a low of 1.3% in Italy to a high of 8.7% in Sweden and Switzerland. The highest median investment made by women was found in Greece (US $11,946), while the lowest was documented in Croatia (US $477).

Finally, data from the GEM National Expert Survey (NES) show negative scores in Europe for cultural support and for favourable regulations for women entrepreneurs at the regional level. The cultural support scores ranged from –1.8 for Belarus, Croatia and Cyprus to 1.7 for Finland. The score for a favourable regulatory climate was strongly negative from experts in Croatia at –3.0, with only one modestly positive score of 0.9 in Lithuania. In contrast, while equal access to finance and procurement were scored positively and a little higher than the global average, country scores ranged widely from –0.6 in the United Kingdom to 3.4 in Finland for equal access for finance and from –0.1 in Italy to 3.1 in Finland for equal access to procurement.

The category of sufficient family services to support women entrepreneurs was scored negatively by experts in most European countries, from a low of –2.5 in Ireland to a high of 3.1 in Finland. When asked if telework resulting from the pandemic helped women manage family demands better, experts in most countries agreed. Scores range from a mild disagreement of –0.8 in Belarus and Norway to 2.1 in Finland. Overall, experts in Finland scored all measures quite favourably compared to most other countries.

HIGHLIGHTS

Europe is a big region with high participation rates among constituent countries. Importantly, gender differences in entrepreneurship participation rates, entrepreneurial intentions, motivations, perceptions and environmental support varies widely from one country to another. Some of the highlights from the 2021 GEM surveys include:

- Europe showed the lowest rate of entrepreneurial intentions for women among global regions, with rates ranging from a low of 3.1% in Poland to a high of 23.4% in Belarus. Not surprisingly, Europe also showed very low startup rates compared to other regions of the world but at a high level of gender parity. Startup activity rates for women ranged from 1.6% in Poland to 13% in the Netherlands at double the regional average.
- Job scarcity is the most reported motivation for a business startup for both women and men. Only in three countries — France, Luxembourg and Sweden — are women less likely than men to report job scarcity as a motivation for starting a business. This finding fits with gender differences in household income, where women early-stage entrepreneurs also tended to be much less affluent in Europe, reporting household income in the lower-third bracket 30% more often than men.
- Europe had the lowest rate of early-stage entrepreneurs agreeing that the pandemic provided new business opportunities across regions, with an average of nine women entrepreneurs for every 10 men in agreement. On a more positive note, one in five women early-stage entrepreneurs in Europe reported adopting new digital technologies due to the pandemic, about 10% more often than men. The highest rates for women entrepreneurs were reported in Greece and Italy at 60% or above, and women were multiple times more likely to report the use of new technologies in four countries.
- While women are thought to start and grow much smaller companies in Europe, they are also very active in job creation in many countries. Women in Europe represent one-third of the early-stage entrepreneurs with 20+ employees and expecting to hire 20+ employees within five years. Women in Europe represent two-fifths of entrepreneurs offering innovative products or services new to local and national markets, and one in three offering new innovations to international markets. In fact, women were the only early-stage entrepreneurs in Poland and Romania offering innovations new to global markets in 2021.
- Importantly, European countries showed some of the largest gender gaps globally for entrepreneurial perceptions. While close

to parity with men in Poland, where two in three women reported having startup skills, women in Finland agreed 40% less often than men and at half the rate of women in Poland. Women in Europe were also twice as likely as men on average to start businesses in the Government, Health, Education & Social Services sector and over six times more involved in startup activity than men in this sector in Finland and Luxembourg. Future research is needed to clarify the relationship between entrepreneurial perceptions and industry sector.

- Finally, national experts in Europe reported largely negative average scores for many of the enabling environment indicators in support of women entrepreneurs. One exception was Finland, where national experts rated several conditions as being favourable for women entrepreneurs, including cultural support for women entrepreneurs (1.7), equal access to finance (3.4) and equal access to procurement (3.1).

7

Latin America & Caribbean

In the GEM 2021 survey, and in line with previous years, the Latin America & Caribbean region, which includes two high-income and five upper–middle-income countries, boasts the highest rates of entrepreneurial activity in the world. In this chapter, we present findings for these seven countries which participated in the GEM 2021 Adult Population Survey (APS): Brazil, Chile, Colombia, the Dominican Republic, Guatemala, Panama and Uruguay.[27] Despite sharing high levels of economic development, gender patterns in entrepreneurial activities, pandemic impacts, and market conditions reveal good advances but also large disparities in women's business participation in the region.

STARTUP RATES, INTENTIONS, MOTIVATIONS AND BUSINESS STAGE

Regionally, one in four women were involved in startup activity in 2021, ranging from 14.1% in Colombia to 43.7% in the Dominican Republic. Women were less active in business startups in all countries in the region except for the Dominican Republic, where women reported startup activity 9% more often than men. Conversely, in three countries — Chile, Guatemala and Uruguay — women were about one-quarter less likely to be active in a startup (see Table 2).

However, women in this region show very high intentions, with two in five women expecting to start a business in the next 12 months compared to almost half of men. Women were closest to parity with men in Brazil and the Dominican Republic where over half reported intentions to start a business in the near future. Entrepreneurial intentions were lowest in Colombia, where only one in five women reported starting a business, while gender differences were greatest in Chile (45.0% women vs. 56.9% men) and Guatemala (40.2% women vs. 51.2% men).

In rates from intentions to Established Business Ownership (EBO), the gender gap widens at each stage. Women are less likely to report startup intentions (a 0.85 female–male ratio), nascent activity (0.79), early-stage businesses (0.66) and established businesses (0.55), suggesting challenges in starting and sustaining businesses relative to men. Participation rates also decline through the entrepreneurial process, dropping by half at each stage, from a high of 41% startup intentions to 4% established businesses.

While the Dominican Republic showed the highest rates of intentions and nascent activity for women (53.6% and 52.1%, respectively), Guatemala showed the highest rates of baby businesses and established businesses (14.1% and 10.2%, respectively) for women among countries in this region. Conversely, Colombia showed the lowest rates for women from intentions to EBO, from 20% of women reporting intentions to start a business to only 1.5% of women reporting established businesses. For established businesses, women were closest to parity with men in the Dominican Republic (3.4% women vs. 4.3% men) and furthest from gender parity in Brazil (6.1% women vs. 14.0% men).

In the Latin America & Caribbean region, women are about 16% more likely to report business closure than men in 2021 (8.1% women vs. 7.0% men). In fact, women were at gender parity or higher in all countries in this region, with the exception of Chile, where they are just slightly less likely to report a recent business closure (6.8% women vs. 7.0% men). Business closure rates for women varied from a low of 5.4% in Colombia to a high of 11.3% in the Dominican Republic, with the largest gender gap in Guatemala (8.7% women vs. 5.8% men).

27 When comparing data from different survey years, it is important to take into account that not all of these countries have participated in previous GEM surveys, although Colombia, Uruguay and Chile, for example, have participated in the three previous years.

		Intentions		Startup		Established		Discontinued	
		Women	Men	Women	Men	Women	Men	Women	Men
Rates		41.2%	49.0%	24.1%	30.4%	4.8%	8.8%	8.1%	7.0%
Contrast with 2019 rates		No changes		No changes		Big changes*		No changes	
Benchmarking against other regions	W/M ratio	0.85		0.79		0.55		1.16	
	Better positioned than	Central & East Asia [0.84] Middle East & Africa [0.78] Europe [0.76]		Europe [0.78] North America [0.73] Middle East & Africa [0.72] Central & East Asia [0.72]		Middle East & Africa [0.44]		None	
	Less well positioned than	North America [0.89]		None		North America [0.72] Europe [0.68] Central & East Asia [0.58]		North America [0.65] Middle East & Africa [0.72] Europe [0.75] Central & East Asia [0.84]	
Women entrepreneurs' challenges in Latin America & Caribbean region		· A need for fewer businesses motivated by lack of opportunities in the labour market. · The transition to the consolidation/establishment stage of the business, as well as the reduction of discontinuity numbers (i.e. survival). · Better social perception of the role of business failure.							

* See footnote 27.

TABLE 2
2021 gender entrepreneurial dynamics in Latin America & Caribbean

This region also showed the highest rates of closure due to the pandemic, with over half of women in Panama reporting closure due to the pandemic compared to only 27.5% of women in Uruguay. Importantly, women in Uruguay are more than twice as likely as men to report closure due to the pandemic. Lack of profitability and family/personal reasons were the next two most commonly reported reasons for business exit in this region and more often reported by men than women. One in four women in Guatemala reported a lack of profitability for business closure, compared to 14.1% of women in Chile, with the largest gender gap being in Brazil, where women reported rates more than 50% higher than men (20.2% women vs. 13.0% men). Women are twice as likely to report business closure for family/personal reasons in Panama (15.4% women vs. 6.5% men) but half as likely in Uruguay (17.5% women vs. 32.4% men). This variation in gender gaps shows how similar rates for women (when taken in isolation from men) can in fact be the product of very different gender dynamics.

The largest gender gaps in business closure due to lack of finance were found in the two high-income countries: Chile (15.6% women vs. 8.8% men) and Uruguay (20.0% women vs. 8.8% men). Women are much more likely than men to report closure due to lack for finance in all but two countries: Guatemala (9.8% women vs. 14.7% men) and the Dominican Republic (4.0% women vs. 8.5% men). In contrast, women are less likely than men to report business exit due to an opportunity to sell in all but two countries: Colombia and Panama. In fact, in Colombia women are 3.5 times more likely than men to report the opportunity to sell as a reason for business exit (5.6% women vs. 1.6% men).

PANDEMIC IMPACTS ON WOMEN-OWNED BUSINESSES

The Latin America & Caribbean region is historically highly entrepreneurial, leading other regions in intentions and startup activity. Similarly, the rate of agreement that the pandemic provided new business opportunities was the highest among early-stage entrepreneurs compared to other regions, with women tending to agree more often than men in four of the seven countries. Rates of agreement ranged from 23% in Guatemala to 37% in Brazil and Chile. The largest gender differences among early-stage entrepreneurs were found in Panama (26.2% women vs. 41.9% men) and the Dominican Republic (28.9% women vs. 22.7% men).

However, when it comes to an assessment of the effectiveness of government pandemic response, entrepreneurs in this region leaned towards scepticism, with women being slightly more favourable than men (14.1% women vs. 12.1% men). Women and men entrepreneurs were at parity in Uruguay (26.7% women vs. 27.1% men), where women were most likely to be positive about the government pandemic response. In contrast, women entrepreneurs in Colombia, while more often in agreement then men, rated the government response less favourably (5.3% women vs. 3.5% men). The largest gender differences were found in Guatemala (14.7% women vs. 8.0% men) and Brazil (11.7% women vs. 16.1% men).

Rates of new digital technology adoption as a result of the pandemic were lowest in Latin America & Caribbean compared to other regions, with women slightly more likely than men to report use of new digital technology (20.8% women vs. 19.8% men). Women were at parity with men in all countries except Chile and the Dominican Republic. The highest rates for women were reported in Colombia, where about two in five women adopted new digital technologies due to the pandemic. The lowest rates were reported in Chile, where women reported new digital technology use about 12% less often than men (13.7% women vs. 15.6% men).

Among early-stage entrepreneurs, women were at parity with men regarding plans to use more digital technologies within the next six months, with over three-quarters reporting digital plans. Women were at parity or higher than men in all countries except Panama (70.6% women vs. 77.7% men). Brazil showed the highest rates of women entrepreneurs with plans to use more digital technology in the next six months (85.9% women vs. 81.9% men), which contrasts with women in Uruguay, who reported the lowest rates among women but higher than their male peers (69.2% women vs. 60.4% men) (see Figure 32).

Concerns about pandemic impacts extend beyond entrepreneurs at the earliest stages of business startup (<42 months from start) to include established business owners. Both women and men established business owners in Latin America & Caribbean reported the highest rates globally of new opportunities provided by the pandemic, though slightly higher for women (29.3% women vs. 28.2% men). This optimism is seen across countries as well, with women reporting higher rates of new business opportunities from the pandemic in all countries except Chile (26.0% women vs. 33.9% men) and Panama (29.6% women vs. 35.4% men). Conversely, women established business owners in Colombia and Uruguay were about 80% more likely than men to report seeing new opportunities following the pandemic.

Women established business owners were more favourable in their assessments of the government pandemic response than men (15.7% women vs. 14.1% men) in Latin America & Caribbean. Rates for women established business owners ranged from 5.5% in Guatemala to 48.8% in Uruguay. The women established business owners agreed that the government pandemic response was effective more than three times as often as their male peers in the Dominican Republic (25.8% women vs. 7.9% men). In contrast, women established business owners in Guatemala agreed about half as often as men.

One in five women established business owners in Latin America & Caribbean reported using new digital technologies as a result of the pandemic, and only women in Uruguay reported the use of new digital technologies. The highest rates for women established women business owners were found in the Dominican Republic, where half of women compared to only a quarter of men established business owners used new digital technologies. In fact, rates of use of new digital technology due to the pandemic were considerably higher for women compared to men among established business owners (1.68 female–male regional average).

More than half of women and men established business owners reported plans to use more

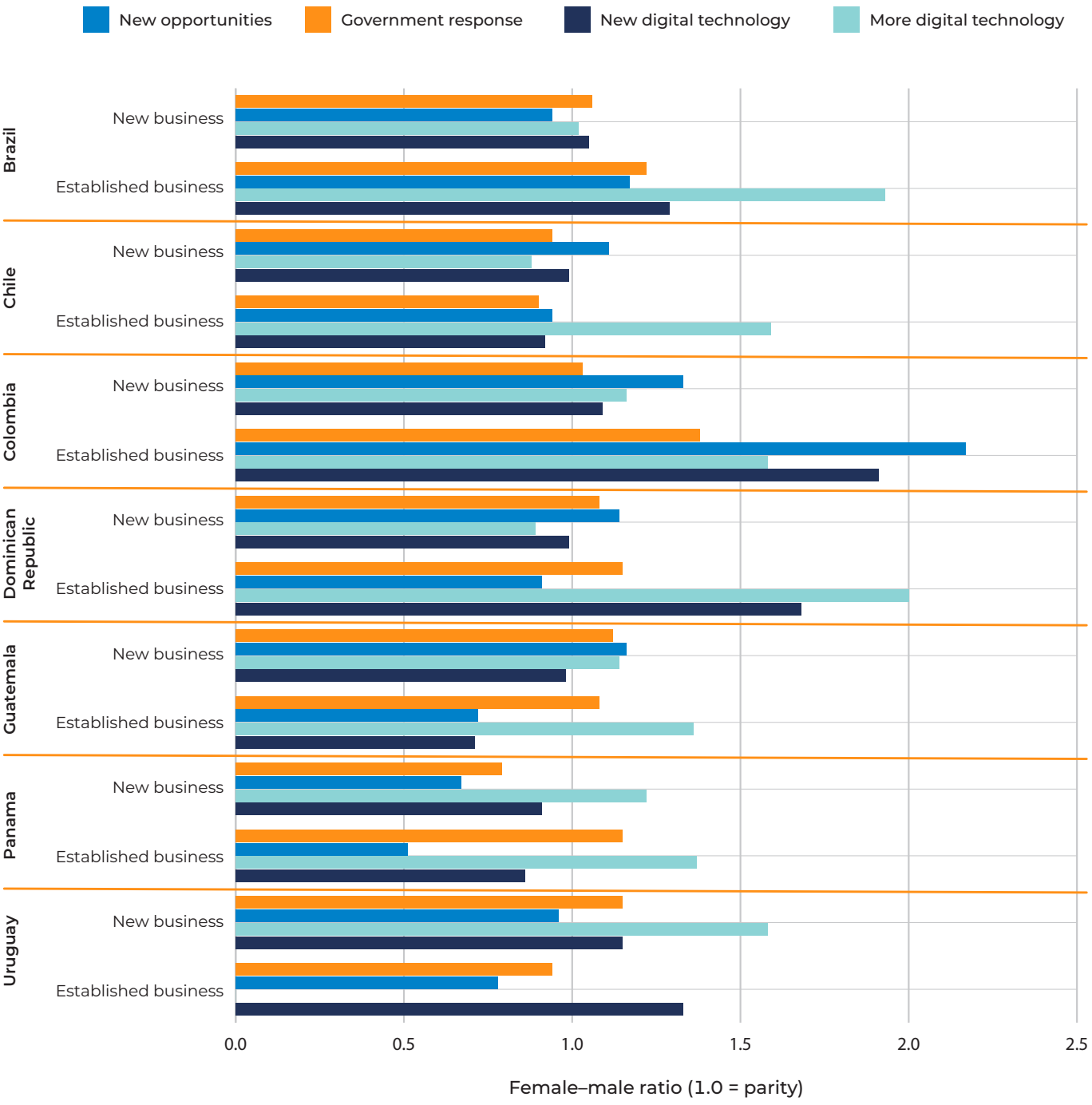


FIGURE 32
Female–male ratio in pandemic impacts by country for entrepreneurs and established business owners in Latin America & Caribbean
Source: GEM 2021

digital technologies in the next six months, at gender parity. However, rates varied from about one in three women in Uruguay to more than four in five women established business owners in Colombia and the Dominican Republic. In fact, women established business owners in Colombia are almost twice as likely to report plans to use more digital technology in the near future, while women are less likely than men to report such plans in Chile, Guatemala and Panama.

In Latin America & Caribbean, five of the seven countries in the 2021 survey also participated in the 2020 and 2019 surveys. While average regional rates of entrepreneurial intentions for women declined by about 7% from 2019 to 2022, startup intentions increased in Brazil from 28.5% to 52.1%. Startup intentions declined the most for women in Chile from one in three women to one in five women from 2019 to 2021.

ENTREPRENEUR HIGHLIGHT

Claudia Isabel Barona

Co-founder of Lifepack (Colombia)

Optimism in responding to disruption

> *"An entrepreneur is passionate, a dreamer, creative, optimistic and has confidence to bring one's ideas to fruition."*

These are the words of Claudia Isabel Barona, co-founder of Lifepack, a Colombian-based company that produces 100% biodegradable ecological products made from natural fibres and seeds. Lifepack relies on an environmentally sustainable business model and is supported by NGOs, government entities and universities, among others.

This optimism has been on display throughout her entrepreneurial journey, especially over the past few years.

Lifepack has evolved in response to COVID-19. Before COVID, business was primarily conducted face to face. But, as sales channels changed due to the pandemic, Lifepack adapted; now over 70% of its transactions are digital.

Lifepack used the disruptions caused by the pandemic as an opportunity to improve internal operational and production processes, something that had not been done since the company's founding in 2014.

> *"We had the opportunity to explore other fibres (agro-industrial residues/agricultural residues) in our production process and to expand our lines of business, further encouraging the circular economy."*

As a result, new lines of business were born including a technology transfer programme. The company sell its knowledge in implementing the production process in other regions and countries.

In 2022, Lifepack has needed to operate in the face of inflation that has doubled the prices of raw materials. This inflation is reflected in the company's selling prices, but has resulted in lower sales due to the lack of purchasing power of the peso. This reality doesn't deter Claudia. She concluded:

> *"The entrepreneur identifies opportunities that arise from the environment and creates innovative solutions with global and social well-being in mind."*

Startup activity also declined for women over this two-year period, 2019–21, by about 9%. Rates declined the most for women in Colombia by about one-third, from 20% in 2019 to 14% in 2021 after spiking at 50% in 2020. Startup rates in Guatemala and Panama actually rose modestly for women. The gender gap in startup activity widened in all countries except Panama, which is explained primarily by the decline in male startup rates.

Importantly, established business rates declined by almost half for women compared to a quarter decline for men in Latin America & Caribbean region and dropped for women and men in all countries in the region. The steepest drop for women was found in Colombia, where established business rates for women dropped from 3.9% in 2019 to 1.5% in 2021 after a spike of 5.3% in 2020. The smallest drop in rates for women was found in Panama, from 3.1% in 2019

to 2.7% in 2021. Women in Panama experienced a lower decline than men in established business rates. The gender gaps widened dramatically in three countries — Brazil, Chile and Colombia — while remaining the same in Guatemala and narrowing in Panama.

Rates of business exit or closure increased by 40% for both women and men in Latin America & Caribbean, from 5.8% in 2019 to 8.6% in 2020 and 8.1% in 2021. Business closure rates for women increased in all countries in the region except for Chile, where rates declined from 7.2% to 6.8%. In contrast, business closure rates for women in Panama more than doubled from 4.2% in 2019 up to 9.2% in 2021, after a leap to 11.1% in 2020. In contrast to trends in other parts of the world, women tend to report much high business closure rates in this region, the exceptions being Colombia and Panama. Intriguingly, gender differences in all countries narrowed over the pandemic period, except in Guatemala, where the gender gap in business closure increased from a 10% higher rate to a 50% higher rate of business closure for women compared to men.

STRUCTURAL INEQUALITY AND COMPETING NARRATIVES

When it comes to high-impact businesses, women in Latin America & Caribbean tend to innovate less frequently than men, tend to be less internationally focused, less active in internationalization and less likely to start firms with 20+ employees and to have plans to hire 20+ employees within five years. That said, women entrepreneurs in this region still constitute a hefty proportion of entrepreneurs in each of these categories. In Uruguay, for example, women represent only one in 10 entrepreneurs with innovative offerings for international markets, but half of entrepreneurs offering innovations to their local markets and two in five entrepreneurs bringing innovative offerings to national markets. Moreover, women in the Dominican Republic represent 60% of early-stage entrepreneurs with international innovations, over half of the entrepreneurs focusing on local, national and international markets, and over half of those with high export activity.

Women represent one in three growth-oriented entrepreneurs in Latin America & Caribbean. While no women among early-stage entrepreneurs in Brazil, the Dominican Republic, Guatemala and Panama reported starting their business with 20+ employees, 85.7% of those in Colombia starting businesses with 20+ employees were women, compared to half of the high-growth entrepreneurs in Uruguay and one in four in Chile. Women also constituted 44.5% of entrepreneurs expecting to hire 20+ employees within five years in Colombia, but only 15.8% of these growth-oriented entrepreneurs in Chile.

Women early-stage entrepreneurs are at near gender parity across most age and education categories, but are less likely than men to start businesses after age 55 and less likely to hold a graduate degree. Importantly, women in Latin America & Caribbean tend to be a lot poorer than men, twice as likely as men to report household income in the lowest third and 40% less likely than men to report income in the top third. These rates vary across countries in some intriguing ways. Almost two-thirds of women entrepreneurs in Guatemala were quite young, in the 18–34 age group, while almost half reported at least a secondary education and almost two in five said they were in the lower-third household income group. In contrast, 43.4% of women entrepreneurs in Colombia were in the lowest age group, but better educated on average, with 57.2% reporting post-secondary education, and over half in the middle household income group.

The Dominican Republic showed the highest proportion of women entrepreneurs with a high income, with two in five in the top-third income group, compared to less than a quarter in Chile and Uruguay. Women entrepreneurs in Chile were almost 3.5 times more likely than men to report household income in the lower third (35.4% women vs. 10.4% men), while Uruguay showed the largest proportion of women entrepreneurs in the lower-third income bracket (59.9% women vs. 45.1% men). Women entrepreneurs are more likely to report post-secondary education in all countries except Chile (56.5% women vs. 63.1% men) and Guatemala (5.1% women vs. 9.5% men). While Guatemala had the highest rate of women entrepreneurs in the youngest age group, Chile and Colombia showed the highest rates of women entrepreneurs in the oldest age group, 55–64, but at moderately lower rates than men.

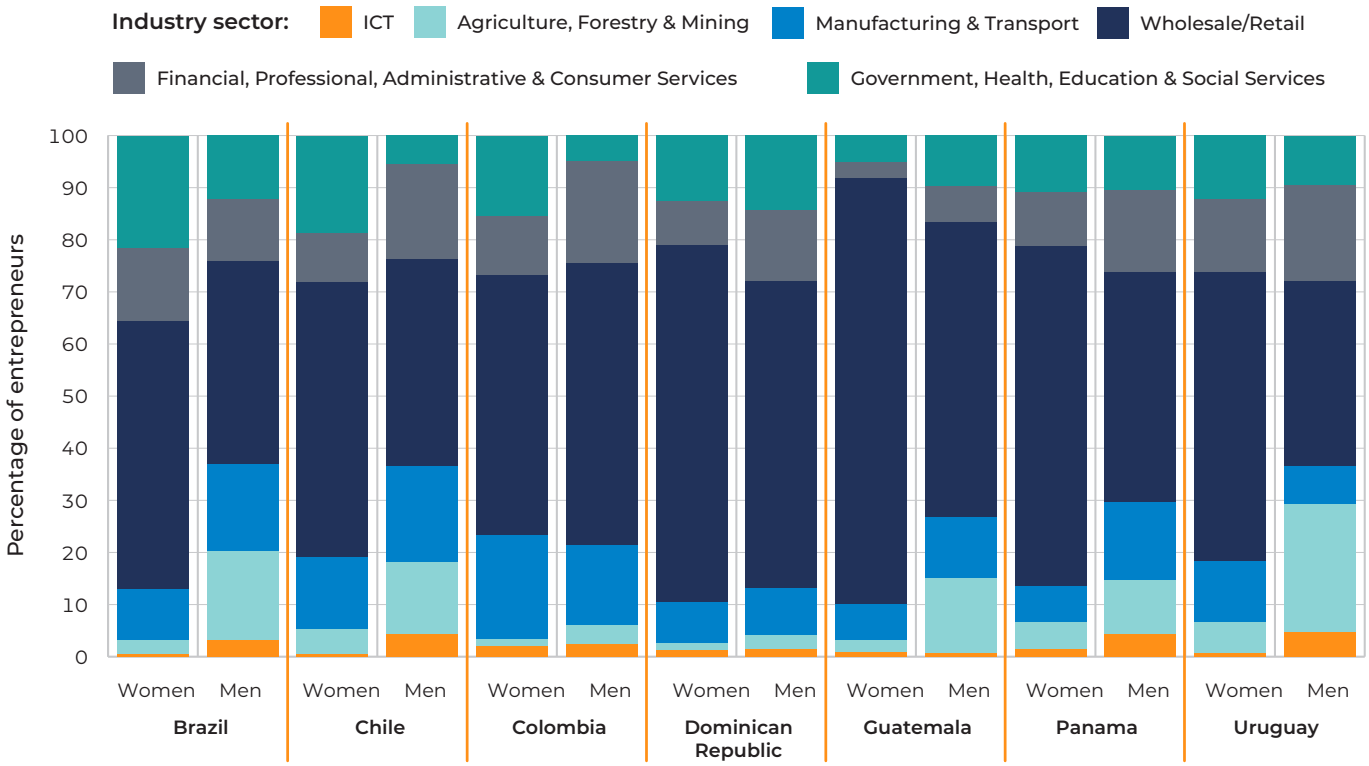


FIGURE 33
Industry distribution by gender and country in Latin America & Caribbean
Source: GEM 2021

The Latin America & Caribbean region displays a stark pattern of industry segregation (see Figure 33), with women 80% more likely than men to start a business in Government, Health, Education & Social Services and 33% more likely to start a business in the Wholesale/Retail sector, where the majority of startup activity occurs for women in this region. Conversely, women in this region are about three-quarters less likely to start a business in the ICT or Agriculture, Forestry & Mining sectors. In fact, the average startup participation rate for women in ICT is less than 1% compared to over 3% for men. The participation rates of women early-stage entrepreneurs in male-dominated sectors vary across countries, from 0.5% in Brazil and Chile to 2% in Colombia. While the rates are pretty low, women are actually above parity compared to men in the ICT sector in Guatemala (0.9% women vs. 0.7% men). Women are below parity with men in every other country, with the largest gender differences found in Chile, Uruguay and Brazil.

Women entrepreneurs are about 50% less likely to start a business in Panama, which has the highest female–male ratio in this group of countries (5.0% women vs. 10.3% men). The largest gender ratios in this sector were found in Brazil and Guatemala. Women entrepreneurs were also less active in Manufacturing & Transport, from a low of 6.8% in Guatemala to 20.1% in Colombia. Two exceptions are: women are 63% more likely than men to start a business in Uruguay and one-third more likely in Colombia.

Women entrepreneurs were less active in the Financial, Professional, Administrative & Consumer Services in all countries except Brazil, where women are 19% more likely to start businesses in this sector (14.1% women vs. 11.8% men). Rates for women in this sector vary from 3.1% in Guatemala up to 14.1% in Brazil, with the largest gap being in Guatemala, where the women entrepreneurs rate was less than half of their male counterparts.

Women are much more likely to start businesses in Government, Health, Education & Social Services in all countries apart from the Dominican Republic (12.7% women vs. 14.3% men) and Guatemala (5.1% women vs. 9.9% men). One in five women entrepreneurs in Brazil were active in this sector compared to only 5.1% in Guatemala. In Chile and Colombia, women are three times more likely than men to start a business in this sector. About half or more of women entrepreneurs in all countries in Latin America & Caribbean were starting businesses in the Wholesale/Retail sector and at much higher

rates than men in all countries except Colombia (49.7% women vs. 54.3% men), which had the lowest rate of women's startup activity in this region. The highest rate of women entrepreneurs in Wholesale/Retail was found in Guatemala (81.8% women vs. 56.6% men) and the largest gender gap in Uruguay (55.5% women vs. 35.5% men).

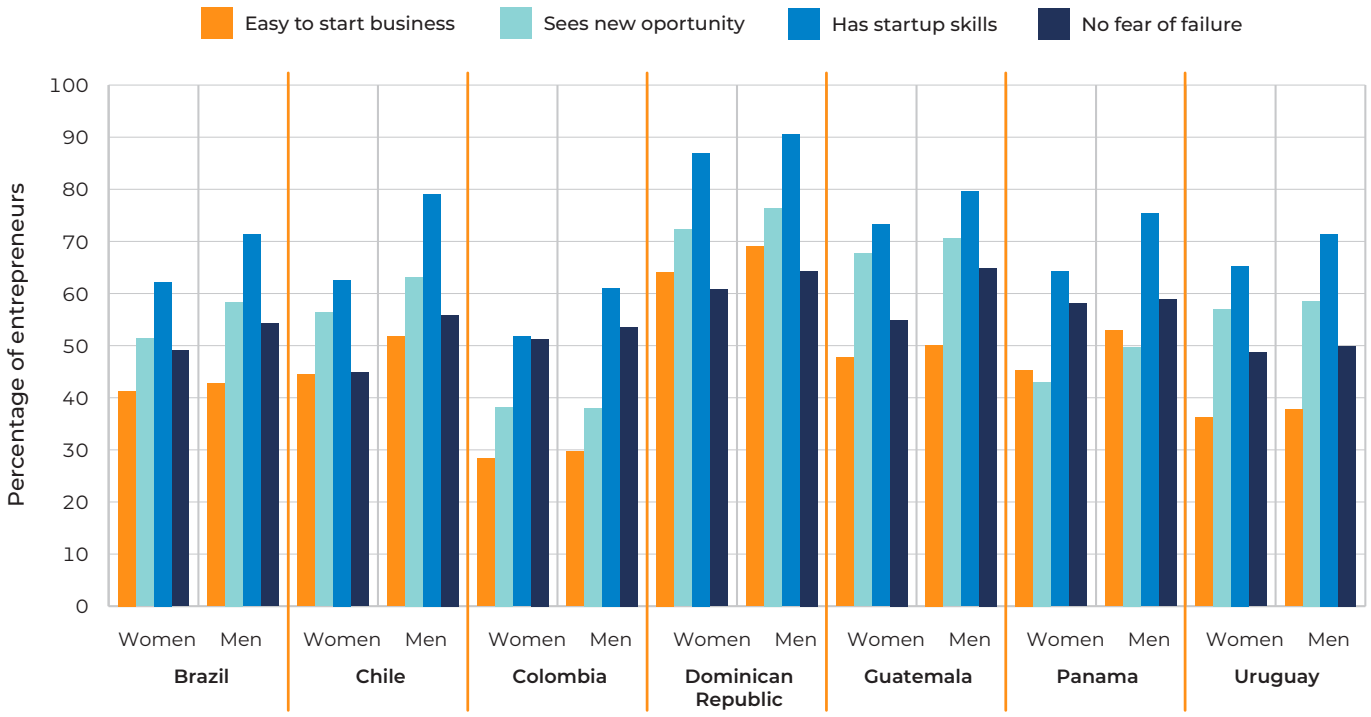
Women entrepreneurs are 38% more likely to start solo enterprises compared to men in this region, and dramatically much less likely than men to start companies with six or more employees. In fact, only men reported starting a business with 20+ employees in Brazil, the Dominican Republic, Guatemala and Panama.

Rates of starting a business with no employees varied from 8.8% in Panama to 63.1% in Guatemala. Women in Brazil and Colombia are almost twice as likely to report starting a solo enterprise and 42% less likely in Uruguay, where women are twice as likely as men to start with 1–5 employees. In the 6–19-employee category, women entrepreneurs came in from 1.5% in Guatemala to 11.1% in Colombia, which showed the closest level of gender parity (0.80 female–male ratio). One woman to every five men started a business with 6–19 employees in the Dominican Republic and Guatemala, representing the largest gender differences across countries in this region.

ENABLING ENVIRONMENT FOR WOMEN ENTREPRENEURS

On average, over 70% of women in Latin America & Caribbean view starting a new business as a good career choice, as having high status in their country and with good media coverage — close to parity with men. However, women in this region are less likely than men to agree that it is easy to start a business, to have recently seen new business opportunities, and to report having the skills to start a business. While almost two-thirds of women in the Dominican Republic agree that starting a new business is easy, less than one-third of women in Colombia agreed. Women were close to parity on ease of starting a new business in Brazil (41.3% women vs. 42.7% men), but the largest gender differences were found in Chile (44.5% women vs. 51.7% men) and Panama (45.3% women vs. 52.9% men), where women are about 14% less likely to agree than men (see Figure 34).

FIGURE 34
Entrepreneurial perceptions by gender and country in Latin America & Caribbean
Source: GEM 2021



Women's rates for opportunity recognition varied from 38.2% in Colombia, at gender parity, to a high of two-thirds of women in Guatemala, about 4% less than men. The gender gap with regard to having recently seen a new business opportunity were modest in most countries in this region, with the largest found in Panama (43.0% women vs. 49.7% men). Women are also less likely than men to report having the skills to start a business, ranging from a low of 62.2% in Brazil to a high of 87.2% in the Dominican Republic, where women were closest to parity with men. Conversely, the largest gender gap was found in Chile, where 62.6% of women reported having the skills to start a business compared to 79.1% men. Women were at parity with men in Panama and Uruguay with respect to having no fear of business failure. Rates varied from 44.9% in Chile to 60.8% in the Dominican Republic. The largest gender difference was found in Chile, where four women for every five men reported no fear of business failure.

Personal connections with other entrepreneurs provide important resources for those starting and growing businesses and can help demystify the startup process. In Latin America & Caribbean almost two-thirds of women personally know at least one other entrepreneur — the highest rate for women across global regions. While women were close to parity with men in Panama, the largest gender difference was found in Uruguay, where women are 11% less likely to report knowing an entrepreneur (50.9% women vs. 57.1% men). About four in five women in the Dominican Republic knew another entrepreneur, compared to only 45% of women in Uruguay.

Financial capital is another important resource for entrepreneurs starting businesses, and women investors may take more of an interest in women founders and offerings for female-dominated markets. In fact, women investors are more active in Latin America & Caribbean than in any other global region, with a rate of business investment in the prior 12 months of 13.6%. Among the countries in this region, women are less likely than men to have made a recent investment in all but one country. Women in Colombia reported having made a recent investment 18% more often than men (6.5% women vs. 5.5% men). Uruguay showed the lowest rate of women investing, as well as the largest gender difference (4.3% women vs. 7.7% men). The highest rate of women investors was found in the Dominican Republic, where 16.5% of women had invested in the prior 12 months compared to more than one in five men.

However, while Latin America & Caribbean had the highest rate of women investors globally, these women made the smallest median investment compared to women in other regions, showing about half the median invested by men in this region (US $675 for women vs. US $1,347 for men). Importantly, median investment levels varied significantly across countries in this region, from a low of US $386 in Brazil, 60% lower than the median for men, to a high for women of US $1,754 in the Dominican Republic, which was 87% higher than for men. The largest gender gap in median amounts invested was found in Panama, where women invested about 70% less than men.

Nine countries participated in the GEM National Expert Survey (NES) in the Latin America & Caribbean region in 2021. At the regional level, experts scored access to finance and procurement somewhat positively on average, while favourable regulations for women entrepreneurs and family support services received moderately negative scores. Cultural support for women entrepreneurs and the benefit of telework for women juggling family in the pandemic was rated slightly negatively. The most negative scores were found in Brazil for cultural support for women entrepreneurs (–2.0), favourable regulations (–3.1), family support services (–2.8) and telework services being helpful (–1.8). Brazil was also where equal access to procurement was scored the most negatively by experts (–0.6), while Chile showed the most negative score for equal access to finance (–0.4). In contrast, the most positive expert scores for equal cultural support (0.4), equal access to finance (1.4) and equal access to procurement (1.6) were found in Jamaica. Jamaica was also tied with Mexico for the positive score for telework helping women juggle family in the pandemic (0.9). All the expert assessments for family support services in Latin America & Caribbean countries were negative, with the least negative score being in the Dominican Republic (–1.0).

HIGHLIGHTS

GEM findings have historically shown that the Latin America & Caribbean region is highly entrepreneurial, leading other regions in intentions and startup activity. The results are no different this year, with several highlights and two clear messages that emerge from this chapter:

- Regionally, one in four women was involved in startup activity in 2021, ranging from 14.1% in Colombia to 43.7% in the Dominican Republic. Women in this region had very high intentions, with two in five women expecting to start a business in the next 12 months compared to almost half of men, and closest to gender parity in Brazil and the Dominican Republic.
- The Latin America & Caribbean region showed the highest rates of business exit (8% for women) and highest rates of business closure due to the pandemic (38.7% for women). In fact, rates were at or above gender parity in all countries except Chile.
- Both women and men established business owners in Latin America & Caribbean reported the highest rates globally of new opportunities provided by the pandemic, though slightly higher for women.
- More than half of women and men established business owners reported plans to use more digital technologies in the next six months, at gender parity. However, rates varied from about one in three women in Uruguay to over four in five women established business owners in Colombia and the Dominican Republic.
- Women represent one in three growth-oriented entrepreneurs in Latin America & Caribbean. No women early-stage entrepreneurs reported starting businesses with 20+ employees in four countries: Brazil, the Dominican Republic, Guatemala and Panama. Meanwhile, 85.7% of women early-stage entrepreneurs in Colombia, over half in Uruguay and one-quarter in Chile reported having 20+ employees.
- The Latin America & Caribbean region shows a stark pattern of industry segregation, with women 80% more likely than men to start a business in Government, Health, Education & Social Services and 33% more likely to start a business in the Wholesale/Retail sector, where the majority of startup activity occurs for women in this region. Conversely, women in this region are about three-quarters less likely to start a business in the ICT or Agriculture, Forestry & Mining sectors.
- Women entrepreneurs are 38% more likely to start solo enterprises compared to men in this region, and dramatically less likely than men to start companies with six or more employees. In fact, only men reported starting a business with 20+ employees in Brazil, the Dominican Republic, Guatemala and Panama.
- Women were close to parity on several entrepreneurial perceptions regionally. In fact, women were at party with men on ease of starting a new business in Brazil, while the largest gender differences were found in Chile and Panama.
- The most negative scores from national experts were found in Brazil for cultural support for women entrepreneurs (–2.0), favourable regulations (–3.1), family support services (–2.8) and telework services having been helpful (–1.8).

The first message from these findings is that, in Latin America & Caribbean, entrepreneurial dynamic trends in 2021 were generally positive, showing the highest rates of intentions and startup activity globally but with smaller gender differences (0.85 and 0.79 female–male ratio, respectively) compared to previous years and regions. The Latin America & Caribbean region also boasts favourable social perceptions about entrepreneurship as a good career option, opportunity recognition and startup skills, which contribute to higher rates of intentions and startup activity. Indeed, the entrepreneurial conditions in the region have been mostly focused on fostering the initial stages of the entrepreneurial process.

Second, we also observed a decline in the dynamic entrepreneurial trends in 2021 related to women's participation in established business (0.55 female–male ratio) and business closures (1.16), especially a significant drop from previous years and compared to other regions (except for Middle East & Africa). It was surprising to find women entrepreneurs more favourable in their perception of government intervention during the pandemic. Factors that may help to explain

these trends relate to the industry distribution of women's businesses (retail, government and educational sectors motivated by the lower opportunities in the labour market), associated business strategies (low investment in digital technologies, organic growth due to the fear of failure) and difficulty in surviving during the pandemic (lack of profitability and liquidity).

In this region, therefore, the key challenge is to identify which elements in the ecosystems could be useful in taking advantage of these globally high rates of women's intentions/startups to transition to more advanced stages in the entrepreneurial process (established business) and reduce the levels of discontinued business.

8

Middle East & Africa

Middle East & Africa is a diverse region, affected by economic and political transformations but with a potential for more and better growth. It benefits from a privileged geographic location with access to large markets, a young and increasingly educated population, and comparative advantages in several industry sectors. In recent years, women in Middle East & Africa have made unprecedented gains as a vital part of the region's active population. But the region has yet to reap the full potential of women in entrepreneurship.

In this chapter, we present findings from the 11 countries from the region that participated in the 2021 GEM survey: Egypt, Iran, Israel, Morocco, Oman, Qatar, Saudi Arabia, South Africa, Sudan, Turkey and the United Arab Emirates. These economies are spread across all three national income groups: five high-income, two upper–middle-income and four lower-income.

STARTUP RATES, INTENTIONS, MOTIVATIONS AND BUSINESS STAGE

In the Middle East & Africa region, startup activity rates for women were just above the global average at 12% with a sizeable gender gap of 28 points (0.72 female–male ratio). In fact, women are less likely than men to start businesses in this region in all countries except Morocco, where women reported startup activities 7% more often than men (6.3% women vs. 5.9% men). However, rates for women in Morocco were also the lowest in the region, while women in Sudan showed the highest rates, with over a quarter of adult women reporting business startup activity. Sudan also showed a large gender gap, with women reporting startup activity about one-third less often than men. The largest gender gap in startup activity was found in the United Arab Emirates, where only two women for every five men were involved in starting a business (8.1% women vs. 20.1% men). Egypt and Turkey also showed large gender differences, with women more than half as likely as men to report startup activity.

Four in five women in Middle East & Africa reported job scarcity as a motivation for starting a business, while three-quarters of women reported wealth building and over half reported making the world a better place as startup motivations. The least-reported motivation for starting a business was continuing a family tradition, with slightly less than half of women in this region reporting. Women were at parity with men on two motivations: job scarcity and making the world a better place. Rates for women varied considerably by country, with the most gender parity being for job scarcity.

Rates for job scarcity as a startup motivation ranged from 57.3% in Turkey to 90.7% in Oman. Women were below parity with men in only three countries in this region: Iran, Israel and Saudi Arabia. The largest gap was actually found in Qatar, where women reported job scarcity as a startup motivation 15% more often than men. In contrast, women were below parity with men for wealth building as a startup motivation in only three countries, with rates varying from 36.2% in Sudan to 91.9% in Iran. The largest gender gap was observed in Morocco, where women are about one-quarter less likely to report wealth building as a startup motivation compared to men (39.8% women vs. 54% men).

Women in Israel are almost two-thirds more likely than men to report making the world a better place as a startup motivation (47% women vs. 28.7% men), while women in Morocco are 60% less likely than men to do so (10.2% women vs. 25.6% men). The rates for women ranged widely, from 36.4% in Turkey to a high of 78.7% in South Africa. Women were below parity with men on making the world a better place in five of the 11 countries in Middle East & Africa. Continuing a family tradition as a reason for starting a business was much more commonly reported by men in all countries except Saudi Arabia and Sudan, where

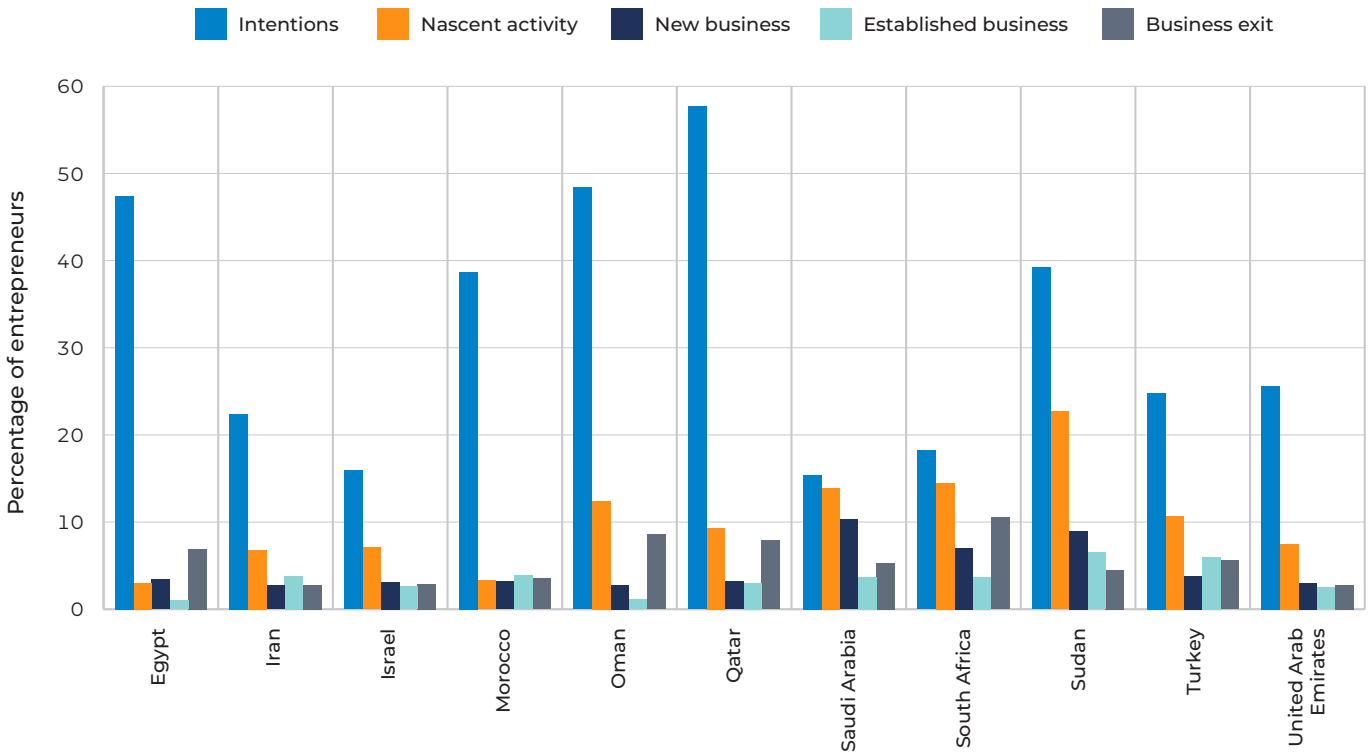
women were at parity with men. Rates for women varied from a low of 9.8% in Iran up to 65.6% in Saudi Arabia. The largest gender gap was found in Iran, where about one in 10 women compared to one in five men reported continuing a family tradition as a startup motivation (9.8% women vs. 22.7% men).

Throughout the entrepreneurial process, men are more active than women in Middle East & Africa. Rates drop dramatically from startup intentions through nascent activity, early-stage businesses and established businesses, but at a faster pace for women than for men as indicated by the increase in gender differences at each stage. Almost one in three women in Middle East & Africa report startup intentions, but only one in 10 women report nascent activity, dropping to one in 20 women with an early-stage business and 3.2% reporting an established business. The gender ratio also shrinks from 0.78 female–male ratio for startup intentions to 0.44 for established businesses. This regional pattern more or less holds for five countries in this region: Iran, Israel, Oman, Qatar and the United Arab Emirates. The pattern of gender differences varies across the other six countries in complex ways (see Figure 35).

Entrepreneurial intentions vary for women from a low of 15.4% in Saudi Arabia to 57.7% in Qatar, where women reported intentions to start a business 19% more often than men. The largest gender gap in intentions were found in Turkey and the United Arab Emirates, where women in both countries were 38% less likely than men to report startup intentions. The lowest rate of nascent activity for women was found in Egypt, where only 3% of women were taking steps to start a new business compared to 8.4% of men, representing the largest gender gap across countries in this region. Meanwhile, women were close to parity with men (13.9% women vs. 13.4% men) in Saudi Arabia.

Women were least active in running a new business in Iran at only 2.7% compared to 5.8% of men, and most active in Saudi Arabia (10.3% women vs. 13.0% men). Women were less active at this stage than men in all countries, but closest to parity in Morocco (3.2% women vs. 3.4% men). The largest gender difference was found in the United Arab Emirates, where women are more than two-thirds less likely than men to report an early-stage business (3.0% women vs. 9.6% men). Established business rates for women in this region drop to 3% on average, with the lowest rate at 1% in Iran and the highest at 6.5% in Sudan. The largest gender difference was found in Iran, where there was one woman established business owner for every five men. Women were closest

FIGURE 35
Entrepreneurial lifecycle for adult women by country in Middle East & Africa
Source: GEM 2021



to parity with men in owning an established business in Sudan, where women were about one-third less likely to report an established business (6.5% women vs. 9.8% men).

The highest rate of business closure, or exit, was reported in South Africa, where women were at parity with men at 10.5%. Conversely, the lowest rate of business closure, 2.8%, was reported in Iran and the United Arab Emirates. Moreover, the largest gender difference was found in the United Arab Emirates, where women are about two-thirds less likely to report a business closure in the prior 12 months. The most commonly reported reason for business closure for women was the pandemic, with one in four women compared to one-third of men reporting this reason. Rates for women varied across countries, from 2.1% in Sudan to almost half of women in Qatar. Women are much more likely than men to report business closure due to the pandemic in Iran (23.2% women vs. 11.3% men), Morocco (15.0% women vs. 8.9% men) and Turkey (33.3% women vs. 23.2% men).

Typically, before the pandemic crisis, the most common reason for business closure is lack of profitability. In 2021, about one in four women who closed a business in Middle East & Africa reported lack of profitability as the reason for closure, about 8% more often than their male peers. Women are more likely than men to report business closure due to lack of profitability in all countries in the region but five: Egypt, Morocco, Qatar, Sudan and Turkey. The largest gender difference was found in Oman (23.8% women vs. 16.2% men), while women are 28% less likely to report lack profitability as the reason for closure in Turkey (10.6% women vs. 14.7% men).

After lack of profitability, the next most cited reason for business closure by women in Middle East & Africa is family/personal reasons, which was reported about 70% more often by women than men. The regional gender gap is startling compared to other regions. Women are more likely than men to report family reasons in all countries but three — at parity with men in Saudi Arabia and South Africa and less likely than men in Morocco (11.7% women vs. 12.7% men). In fact, women are nine times more likely to report family reasons for business closure in Oman (24.8% women vs. 2.7% men), almost three times more likely than men in Iran, and more than twice as likely in Egypt, Qatar, Sudan and Turkey.

Lack of finance as a reason for business closure showed regional rates close to gender parity in Middle East & Africa (13.5% women vs. 13.9% men). However, gender differences varied widely — from women reporting lack of finance almost four times more often than men in Israel, compared to women in Iran who did so more than two-thirds less often than men (10.7% women vs. 33.0% men). Importantly, rates for business closure due to lack of finance ranged from 3.8% of women in Oman to 33.8% of women in Turkey. The least commonly reported reason for business exit regionally and globally is the opportunity to sell. No women reported business exit due to the opportunity to sell in four countries — Egypt, Iran, Oman and Turkey — while women reported this reason for business exit more often than men in Qatar, South Africa and the United Arab Emirates, and 2.5 times more often than men in Qatar (3.8% women vs. 1.5% men), although 73% *less* often in Morocco (1.7% women vs. 6.3% men).

PANDEMIC IMPACTS ON WOMEN-OWNED BUSINESSES

While the pandemic was the commonly reported reason for business closure among women in Middle East & Africa, GEM data offer other insights into the ways in which the pandemic impacted women early-stage entrepreneurs and those who run established businesses. It turns out that women involved in early-stage business activity were impacted more than established business owners across all measures, but gender differences were similar.

One in four women early-stage entrepreneurs in Middle East & Africa agreed that the pandemic provided new business opportunities compared to almost one in five women established business owners, at slightly higher rates than their male peers. Surprisingly, women early entrepreneurs in Iran were four times more likely than men to report new opportunities provided by the pandemic (34.8% women vs. 8.8% men), while no women in Morocco agreed that the pandemic had provided new opportunities. Women entrepreneurs in Sudan were the most optimistic in this regard, with two in five agreeing that new opportunities were provided by the pandemic.

For women established business owners, rates of agreement ranged from 1.6% in Morocco up to 40% in the United Arab Emirates. Notably, women established business owners in Oman were almost three times more likely than men to agree that the pandemic provided new business opportunities (18.2% women vs. 6.5% men).

Women early-stage entrepreneurs were also more positive about the effectiveness of government responses to the pandemic[28] compared to established women business owners; both these groups of women were about one-third less likely than their male peers to agree that their government's response was effective. Rates of agreement for women entrepreneurs ranged from 8.4% in Israel to over half in Qatar and the United Arab Emirates. The largest gender differences were found in Sudan, where women entrepreneurs agreed 58% more often than men, and in Turkey, where women entrepreneurs agreed that their government's pandemic response was effective 56% less often than men. For women established business owner, rates varied even more widely, from a low of 3.5% in Morocco up to 57.1% in the United Arab Emirates. Sudan showed the largest gender difference; here women reported agreement that the government response to the pandemic was effective almost twice as often as their male counterparts. In contrast, in Morocco women made this claim only half as often as men (3.5% women vs. 8.0% men).

With shutdown and restrictions, many entrepreneurs adjusted their business models using digital technologies. Regionally, women entrepreneurs were slightly more likely than established women business owners to adopt new digital technologies due to the pandemic (37.8% vs. 31.8%, respectively). These rates varied somewhat across countries for both groups of women but were generally high. The lowest rate for women early-stage entrepreneurs was found in Turkey (19.8% women vs. 16.2% men), while the highest rate was found in Sudan (64.1% women vs. 53.9% men). Women entrepreneurs were close to parity with men in three countries — Egypt, Oman and South Africa — with higher rates of new digital technology adoption in four countries: Iran, Morocco, Sudan and Turkey. Notably, women entrepreneurs were more than half as likely as men to report adoption of new digital tools in the United Arab Emirates (28.9% women vs. 45.8% men). Rates for women established business owners ranged from 10% in Oman to 70.2% in Sudan, with the largest gender differences in South Africa (38.6% women vs. 30.0% men) and Oman (10.0% women vs. 16.2% men) (see Figure 36).

At the regional level, women established business owners were also less likely than women early-stage entrepreneurs to report plans to use more digital technologies within six months (45.3% and 56.4%, respectively). Again, rates for using more digital technologies are quite high for both groups of women business owners. For women early-stage entrepreneurs, rates ranged from 47.3% in South Africa to 68.3% in Sudan. Among early-stage entrepreneurs, rates for women were at parity with men or higher in six countries: Iran, Morocco, Oman, Saudi Arabia, Sudan and Turkey. Rates for women established business owners range even more widely: from 11.1% in Oman to 86.7% in the United Arab Emirates reporting plans to use more digital technology in the near future. While women established business owners in Morocco were 65% more likely than their male peers to report plans to use more digital technologies (45.5% women vs. 27.5% men), this contrasts with Israel, where they were over 50% less likely than men (15.4% women vs. 36.8% men).

Eight countries in Middle East & Africa participated in the GEM survey in 2019, 2020 and 2021: Egypt, Iran, Israel, Morocco, Oman, Qatar, Saudi Arabia and the United Arab Emirates. Analysing trends in intentions, startup activity, Established Business Ownership (EBO) and business exits over this three-year period provides a better sense of how the pandemic impacted these metrics of business activity. The range of patterns may be best explained by the rate and timing of disease spread, policy interventions and the resulting market disruptions.

At the regional level, women's rates of startup intentions decreased in a linear fashion each year, from a high of 39.4% in 2019 to 33.9% in 2020 and 32.3% in 2021, representing a 19% decline. The gender ratio also declined, indicating an increase in the gender gap from 0.88 to 0.81 female–male ratio from 2019 to 2021. Entrepreneurial intentions dropped for women in all countries except Morocco and Qatar. Moreover, gender gaps in entrepreneurial intentions widened in all countries except Morocco. Rates of startup intentions for women in Morocco initially

28 Note that responses were not provided in Egypt, Oman or Saudi Arabia.

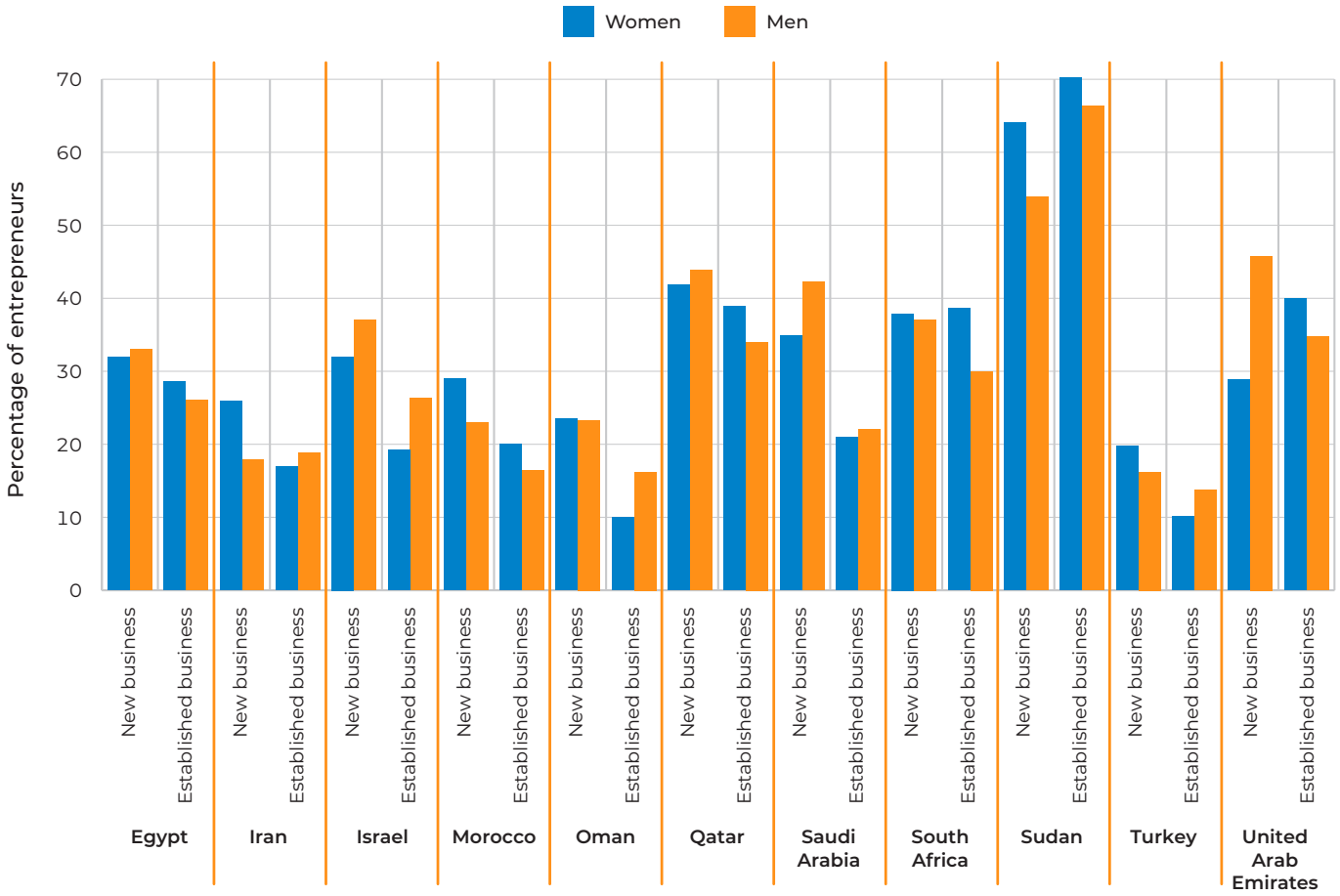


FIGURE 36
Digital technology use prompted by the pandemic for new business and established business owners by gender and country in Middle East & Africa
Source: GEM 2021

increased from 35.3% in 2019 to 44.5% in 2020, settling back down to 38.7% in 2021. In most other countries in this region, rates of entrepreneurial intentions for women initially declined in 2020 and rose again in 2021. For example, rates for women dropped from 20% in 2019 to 14.9% in 2020 and rose slightly to 15.9% in 2021.

In contrast to the changes in entrepreneurial intention rates for women, startup activity rates remained fairly constant on average in Middle East & Africa, from 9.8% to 9.4% from 2019 to 2021. Similarly, there was very little change in the gender ratio for startup activity, just a slight decline from 0.69 to 0.68 female–male ratio. Across countries in this region, startup activity rates for women increased in three countries and declined in the other five during the two-year pandemic period. Notably, startup rates doubled for women in Oman, rising from 5.8% to 17.4% then falling to 11.9% between 2019 and 2021. Startup rates for women in Saudi Arabia rose from 14% to 19% over these years and from 4% to 5.7% in Egypt. The biggest changes in gender ratios were found in Morocco (0.51 to 1.07 female–male ratio) and the United Arab Emirates (0.70 to 0.40).

At the regional level, rates of EBO decreased for women, but increased slightly for men, with an overall widening of the gender gap. This is a good example of why it is important to consider changes in rates for both men and women when interpreting the gender ratio. For women, established business rates declined in five countries — Iran, Israel, Morocco, Oman and the United Arab Emirates — while increasing in Egypt and Qatar and staying about the same in Saudi Arabia. Remarkably, the rate of EBO increased by 10 times for women from 0.3% in 2019 to 3% in 2021, reducing the gender differences considerably (0.08 to 0.44 female–male ratio). Established business rates declined the most for women in the United Arab Emirates in this period, dropping from 4.5% to 2.9%.

In Middle East & Africa region, business closure rates actually increased more for men while remaining about the same for women, widening the gender gap (from 0.80 to 0.66

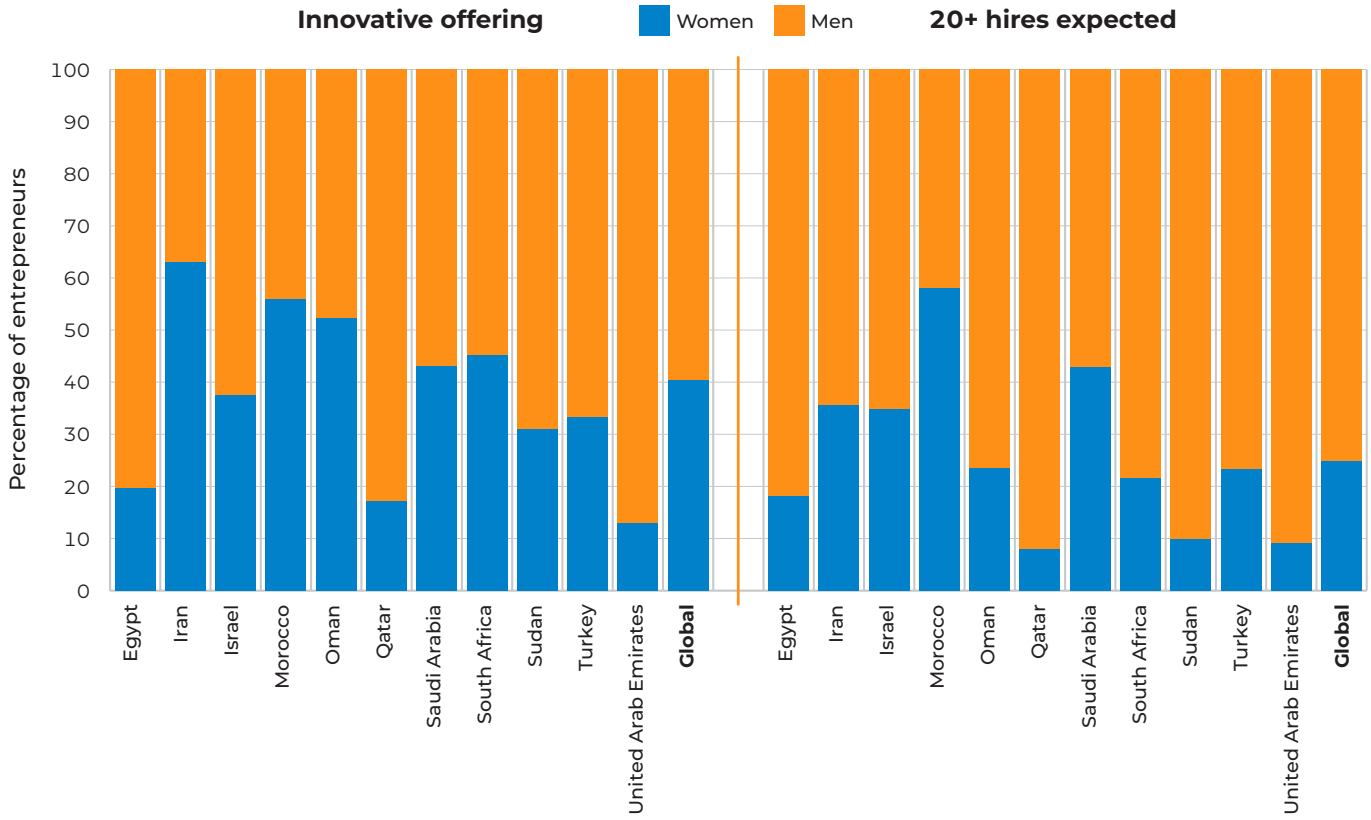
female–male ratio). Business closure rates increased for women in three countries — Egypt, Morocco and Qatar — and decreased in the other five. Closure rates for women increased the most from 2019 to 2021 in Morocco, from 2.1% to 3.5%, and decreased the most in the United Arab Emirates, from 4.7% to 2.1%. The gender gap in business closure rates widened the most in Iran and the United Arab Emirates, changing to a 0.43 and 0.33 female–male ratio, respectively.

STRUCTURAL INEQUALITY AND COMPETING NARRATIVES

Gender composition provides a novel perspective on business impact factors. While women represent one in three entrepreneurs with innovative offerings for local markets in this region, they represent more than half of the entrepreneurs with innovative local offerings in Iran, Morocco and Oman. In Iran, women represented four out of five entrepreneurs offering innovative products for national markets and one in three entrepreneurs with innovative offerings for international markets. In Saudi Arabia, women represented almost half of the entrepreneurs with innovative offerings for local markets, one in three for national markets and 75% of those offering innovative products/services for international markets. Women entrepreneurs in Egypt, Israel, Morocco and Sudan were not involved in innovative offerings for international markets. In fact, neither women nor men entrepreneurs in Morocco or Sudan reported innovative offerings for international markets (see Figure 37).

The market focus of a business matters a lot for growth potential, and women entrepreneurs in Middle East & Africa are more likely than men to focus on local markets. That said, while women represent just less than half of entrepreneurs focused on a local market, they still represent one in three entrepreneurs focused on national markets and more than one in four entrepreneurs with an international market focus. In fact, women constitute the majority of entrepreneurs focused on international markets in Iran (65%) and Morocco (75%) and close to half of the entrepreneurs with a national market focus in

FIGURE 37
Gender composition of job growth expectations and innovation (all levels) for early-stage entrepreneurs in Middle East & Africa countries compared to global average
Source: GEM 2021



Oman and South Africa. When it comes to export activity, women represented the majority of entrepreneurs, with 25% or more international customers in Morocco (81.8%) and more than one in three in Iran (33.3%), Israel (43.3%) and South Africa (36.4%). Women were least involved in high exports in Qatar (8.9%), Oman (10%) and the United Arab Emirates (12.5%).

When it comes to growth orientation, women in Middle East & Africa represent less than one in 10 entrepreneurs starting a business with 20+ employees but one in five who expect to hire 20+ employees within five years. Women own half the new businesses with 20+ employees in Morocco and one in three new businesses in Saudi Arabia. Among entrepreneurs with plans to hire 20+ employees within five years, women represented over half in Morocco (58.1%) and at least one in three in Iran (35.6%), Israel (34.8%) and Saudi Arabia (42.9%). Women represented the smallest portion of entrepreneurs with high growth plans in Qatar, Sudan and the United Arab Emirates, less than one in 10.

While over half of women entrepreneurs in Middle East & Africa are in the 18–35 age group, they are about one-third more likely to be starting businesses over the age of 55. Women entrepreneurs in this region also tend to be more educated than their male peers, with a higher rate of secondary education (22.0% women vs. 17.9% men) and close to parity at post-secondary and graduate education levels. Women entrepreneurs are also about 20% more likely than men to report household income in the upper third, but 24% more likely to report household income in the middle third. These structural factors vary quite a bit across countries and likely influence the types of business that these individuals start.

Oman showed the highest rate of young women entrepreneurs, with 72.3% in the 18–35 age group, while Israel had the lowest rate: one in five women. Women entrepreneurs in Egypt and South Africa were more than twice as likely as men to be in the oldest age group: 55–64 years old. Rates for women in this older age group ranged from 1.8% in Iran to 16.7% in Israel, with women in Iran the least likely compared to men to be starting a business after age 55 (1.8% women vs. 8.0% men).

The least-educated women entrepreneurs were found in Sudan, where two in five women entrepreneurs reported less than secondary education. One in three women entrepreneurs in Egypt also reported a less than secondary education. The most-educated women entrepreneurs were found in Israel, where about half reported post-secondary education and almost half graduate education. One-third of women entrepreneurs in Iran, Oman and the United Arab Emirates reported having a graduate education, with women in Iran and Turkey more than twice as likely as men to report a graduate education.

The majority of women entrepreneurs in Iran (82.9%), Sudan (63.2%) and the United Arab Emirates (60.9%) reported having household income in the middle-third bracket. Conversely, the majority of women entrepreneurs in Morocco (54.3%), Oman (57.5%) and Qatar (60.5%) reported household income in the top third. None of the women entrepreneurs reported household income in the highest-third bracket.

Women entrepreneurs in Middle East & Africa are more active than men in three industry sectors. Over half of women entrepreneurs are starting businesses in the Wholesale/Retail sector at a rate 8% higher than men. Women entrepreneurs were also 62% more likely than men to start a business in Government, Health, Education & Social Services (16.0% women vs. 9.9% men) and 14% more active than men in Manufacturing & Transport (14.2% women vs. 12.5% men). Remarkably, women are starting business at close to parity in the ICT sector (2.1% women vs. 2.2% men), though at considerably lower rates than men in Agriculture, Forestry & Mining (4.9% women vs. 12.2% men) and in Financial, Professional, Administrative & Consumer Services (7.9% women vs. 12.4% men).

These gender patterns vary extensively across countries, however. In ICT, neither women nor men reported startup activity in Oman or Saudi Arabia and no women in Qatar. In contrast, women in Iran, Israel, Turkey and the United Arab Emirates are more likely than men to report startup activity in ICT. Women entrepreneurs were more active than men in Government, Health, Education & Social Services in every country except South Africa (13.8% women vs. 15.8% men). Notably, women in Sudan were more than five times more active than men, and in Qatar almost four times more active, in that sector. Participation rates for women in the sector varied from 12.2% in Egypt to 25.6% in Oman.

In the Wholesale/Retail sector, rates for women ranged from 22.1% in Israel up to 71% in Saudi Arabia where women were at parity with men. Women entrepreneurs were more active than

ENTREPRENEUR HIGHLIGHT

Rasha Rady

Co-founder and CEO of Chefaa (Egypt)
Cartier Women's Initiative Fellow, 2020

Delivering for patients while working in different environments

Chronically ill patients in Egypt fill two million prescriptions each month. Yet, despite the high prescription volume, Egyptian pharmacy systems are not tech-enabled. The MENA region has the highest incidence of non-communicable diseases globally and medication shortages are common. What is the point of going to the doctor if you don't get the right medicine?

This sentiment was captured in a dialogue between Dr Rasha Rady and her friend Doaa Aref. Following surgery, Doaa asked: "Do you realize I can order anything online, except the medication I need to stay alive?"

Dr Rady knew from her work with chronically ill patients that many people were experiencing this same frustration. In response, Dr Rady and Doaa created Chefaa, a digital platform that helps chronic patients order, schedule and refill prescriptions regardless of location or income. Patients enter prescriptions on an AI-powered, GPS-enabled application which locates the nearest pharmacy. The prescription is then ordered, delivered and refilled using a companion professional app.

Launched in 2017, Chefaa was well positioned to address the disruptions and health care needs resulting from the COVID-19 pandemic. Dr Rady explained:

> *"With chronic patients being at highest risk amid the global COVID-19 crisis, staying at home was their only option and they had to explore digital solutions. Chefaa aligned perfectly to this need."*

In addition to patients, the Chefaa team was also able to adapt, pivoting operations to a remote work

set-up. Said Dr Rady:

> *"Working from home had a positive impact on the Chefaa team."*

After COVID-19 pandemic restrictions were lifted, some employees returned to the office while others worked from home.

> *"As per our experience, a 100% working-from-home policy didn't have the same result. We found that a healthy work environment and interdepartmental interactions of employees creates a strong bond resulting in more productive outcomes."*

men in five countries, including Egypt, Oman, Qatar, South Africa and the United Arab Emirates. Much like women entrepreneurs in some Central & East Asia countries, women in seven of the 11 countries in Middle East & Africa were starting businesses at higher rates than their male peers. In fact, women are almost twice as likely as men to be starting businesses in Manufacturing & Transport in Iran, Oman and Saudi Arabia. In contrast, in Egypt women were half as likely as men to start a business in this sector. Almost one in three women in Iran were starting businesses in Manufacturing & Transport compared to less than one in 10 in Saudi Arabia.

Women were less active than men starting businesses in the Agriculture, Forestry & Mining sector in all countries except Israel (1.2% women vs. 1% men). The rates varied from no women participating in Saudi Arabia to 11% in Egypt. Women were closest to parity with men in Morocco in the Agriculture, Forestry & Mining sector. After Saudi Arabia, the largest gender gap was found in Oman (2.4% women vs. 20.4% men). Women entrepreneurs in Turkey and Egypt were twice as active as men in the Financial, Professional, Administrative & Consumer Services sector. Participation rates for women entrepreneurs ranged from 2.9% in South Africa up to more than one-third in Israel. Women were more active in starting businesses than men in this sector in four countries — Egypt, Morocco, Oman and Turkey — and least active compared to men in the United Arab Emirates (6.5% women vs. 23.1% men).

Over 70% of women entrepreneurs in Middle East & Africa reported businesses with 1–5 employees, 23% more often than men. They were also 18% more likely than men to report being solo entrepreneurs with no employees. Conversely, women entrepreneurs were at least one-third less likely than men to report businesses with 6–19 employees, and four-fifths less likely to report 20+ employees. The majority of women entrepreneurs in all countries except the United Arab Emirates reported having 1–5 employees. In fact, no women in Saudi Arabia, South Africa or the United Arab Emirates reported having no employees. Women in Turkey are almost five times more likely than men to report no employees and more than four times more likely in Qatar to report starting a business with no employees.

ENABLING ENVIRONMENT FOR WOMEN ENTREPRENEURS

Over three-quarters of women in Middle East & Africa see entrepreneurship as a good career and a high-status occupation with good media coverage, close to parity with men. The highest agreement with these views were found in Saudi Arabia and the lowest agreement in Iran, with few gender differences. However, women are 12% less likely than men in this region to see business startup as easy to do. Women are also 11% less likely than men on average in this region to report seeing new business opportunity in the prior six months. Nine out of 10 women in Saudi Arabia agreed that starting a business is easy, compared to only one in 10 women in Israel. Only in Iran are women more likely than men to see business startup as easy (18.4% women vs. 17.1% men). The largest gender difference was observed in Turkey, where women agreed 31% less often than men (20.5% women vs. 29.7% men). Women in Saudi Arabia also showed the highest rates of opportunity recognition (93.0%), while women in Iran showed the lowest (16.2%). Women were close to parity with men in Qatar, Saudi Arabia and Sudan, with the largest gender gap in Turkey (28.5% women vs. 34.9% men).

Over half the women in Middle East & Africa reported having the skills to start a business and no fear of failure. However, women were almost one-fifth less likely than men to report startup skills in this region. Women in Saudi Arabia reported the highest rate of having startup skills (85.3%), while women in Israel reported the lowest (28.3%). Women are less likely than men to report having the skills to start a business in all countries, with the largest gender difference in Israel, where women are 40% less likely than men to do so. Women are slightly less deterred by fear of failure than men in three countries: Egypt, Oman and the United Arab Emirates. The highest rate of lack of fear of failure for women was in Oman (78.7% women vs. 75.2% men) and the lowest in Israel (42.8% women vs. 49.8% men), which showed the largest gender difference.

Connection to other entrepreneurs can serve as important sources of know-how and other resources critical for business startup. Women in

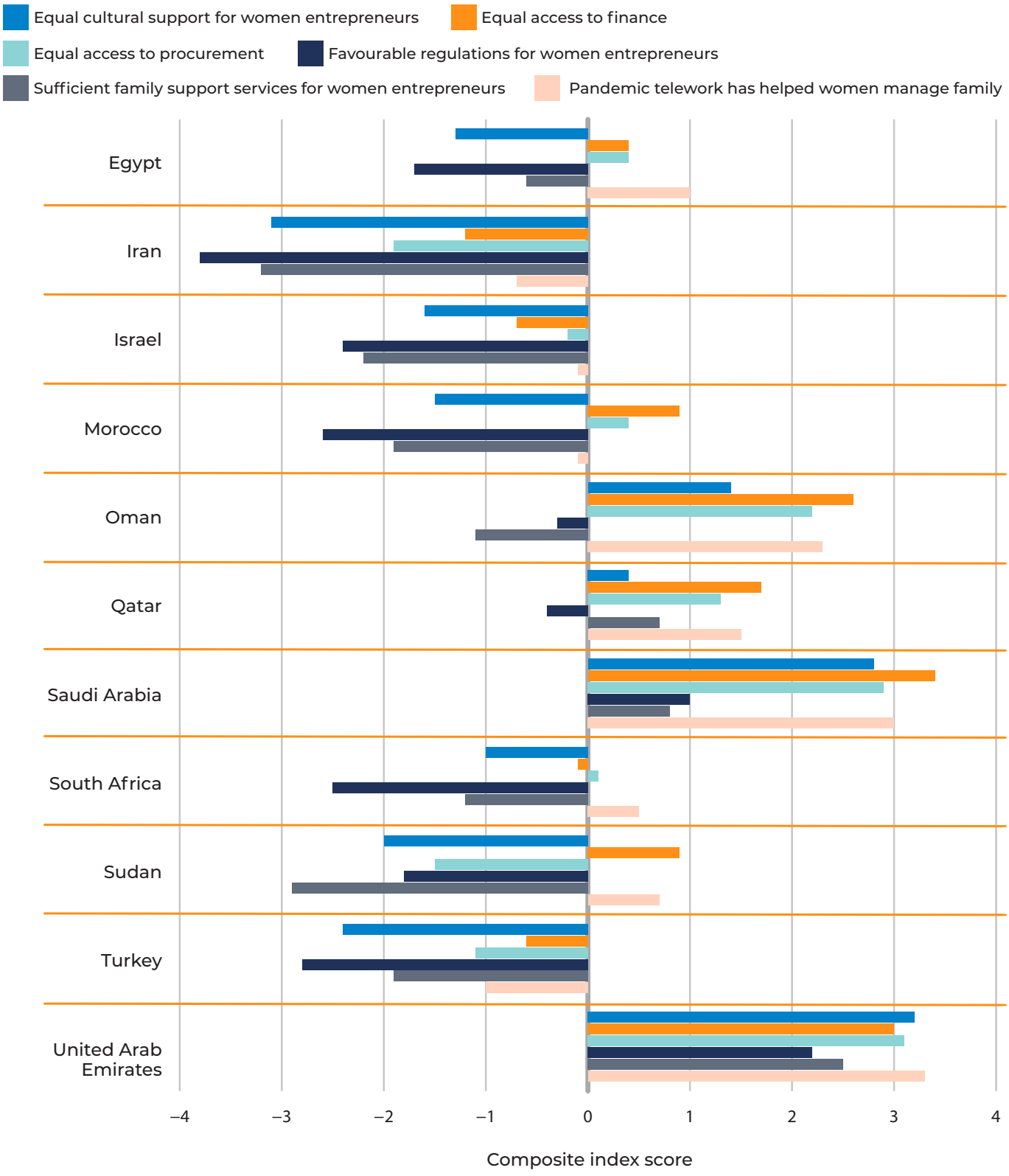


FIGURE 38 Enabling conditions for women entrepreneurs, composite index scores by country in Middle East & Africa
Source: GEM 2021

Middle East & Africa are 20% less likely than men to know at least one entrepreneur (44.3% women vs. 55.5% men), representing the largest gender gap across global regions. Across countries in this region, the largest gender gap in knowing an entrepreneur was found in Egypt, where women were almost two-thirds less likely than men to know an entrepreneur (15.6% women vs. 44.9% men). Women in Israel were closest to parity with men in knowing an entrepreneur (62.0% women vs. 65.1% men).

Startup and growth capital is also critical for new businesses, and women investors can be an important source of capital for women starting businesses. While there is a growing trend towards more women investing in businesses around the world, women in Middle East & Africa are still almost two-fifths less likely to have invested in a business in the prior 12 months (5.9% women vs. 9.5% men) and tend to invest about 40% less money on average (US $2,400 women vs. US $4,000 men). Importantly, these rates varied quite a bit for women across countries. Women reported the most investment activity in Saudi Arabia (12.4%) and the lowest in Egypt (1.8%). Women were closest to parity with men in investment activity in Saudi Arabia (12.4% women vs. 13.5% men) and furthest from parity in Iran (3.7% women vs. 8.4% men). Surprisingly, the median investment amount for women in Iran was twice that for men (US $2,400 women vs. US $1,200 men). Women were also at parity with men in Saudi Arabia with regard to media investment amounts (US $4,000), but showed the largest gender difference in median amounts invested in Turkey (US $143 vs. US $1,173 men) (see Figure 38).

Six questions were included in the 2021 GEM National Expert Survey (NES) that directly address environmental conditions helpful to women entrepreneurs. Among the six factors, experts in Middle East & Africa scored the following the most positively, albeit modestly: equal access to finance, equal access to procurement, and telework as helpful to women managing family care. Equal access to finance received the highest score in Saudi Arabia (3.4) and the lowest score in Israel (–1.2). Equal access to procurement received the highest score in the United Arab Emirates (3.1) and the lowest in Israel (–1.9). The usefulness of telework resulting from the pandemic in helping women manage family care was scored highest by experts in the United Arab Emirates (3.3) and lowest in Turkey (–1.0).

Equal cultural support for women entrepreneurs, favourable regulations for women entrepreneurs, and sufficient family support services for women were all scored modestly negative on average by experts at the regional level. Equal cultural support for women entrepreneurs received the highest scores from experts in the United Arab Emirates (3.2) and the lowest scores from experts in Iran (–3.1). Favourable regulations for women entrepreneurs were evaluated by national experts as being strongest in the United Arab Emirates and poorest in Iran (–3.8). Finally, sufficient family support services for women was scored highest in the United Arab Emirates (2.5) and lowest in Iran (–3.2). Overall, the enabling environment for women entrepreneurs appears to be strongest in the United Arab Emirates, Saudi Arabia and Oman, according to national experts.

HIGHLIGHTS

Despite some gains made in the past few decades, many economies in Middle East & Africa have struggled to ensure that the benefits of economic development and diversification accrue equitably to all segments of their populations. Regarding GEM results, several findings stand out:

- Startup activity rates for women were just above the global average at 12%, with a sizeable gender gap of 28 points, posing new challenges around the long-standing issues of high unemployment and deep inequalities in the region.
- Even with a significant jump, startup rates for women in Morocco remain the lowest in the region, while women in Sudan showed the highest rates, with over a quarter of adult women reporting business startup activity. Four in five women in Middle East & Africa reported job scarcity as the motivation for starting a business.
- Regarding the impact of COVID-19, women in Middle East & Africa seemed to be more resilient with less rate of discontinuation. Moreover, women are 24% more likely than

men to agree that the pandemic brought new business opportunities. Women early-stage entrepreneurs were also more positive about the effectiveness of the government's response to the pandemic compared to established women business owners; women in Sudan and Turkey were particularly optimistic compared to men.

- Women in Middle East & Africa report the highest rate of use of new technologies due to the pandemic compared to women in other regions, but are somewhat less likely to do so than their male peers, except for four countries which show higher rates of new digital technology adoption: Iran, Morocco, Sudan and Turkey.
- When it comes to high-potential startups, women in Middle East & Africa region represented less than one in 10 entrepreneurs starting a business with 20+ employees and one in five of those expecting 20+ hires within five years. More striking, in Middle East & Africa women only represent one in four entrepreneurs offering national and international innovations. The market focus of a business matters a lot for growth potential, and women entrepreneurs in Middle East & Africa are more likely than men to focus on local markets. Across regions, Middle East & Africa showed the highest number of women entrepreneurs in the 18–35 age group (72.3% in Oman). Women entrepreneurs in this region also tend to be more educated than their male peers.
- Women entrepreneurs in Middle East & Africa are more active than men in three industry sectors: Government, Health, Education & Social Services, Manufacturing & Transport and Wholesale/Retail. Notably, women in Iran, Israel, Turkey and the United Arab Emirates are more likely than men to report startup activity in ICT.
- Even though women have as many favourable attitudes towards entrepreneurship as men, perception of opportunities is not as evident among women. Importantly, there are significant differences in opportunity recognition by women between countries in the region (16.2% in Iran vs. 93% in Saudi Arabia). More meaningfully, women are almost one-fifth less likely than men to report startup skills regionally, with the largest gender difference in Israel. In terms of networking, Middle East & Africa represents the largest gender gap across global regions in knowing an entrepreneur.
- According to national experts, the enabling environment for women entrepreneurs appears to be strongest in the United Arab Emirates, Saudi Arabia and Oman.

Policymakers should consider ways of supporting women entrepreneurs in their efforts to scale their businesses to the benefit of the local communities and the national economy. In most countries in this region, women appear to have more difficulty translating high intentions into new businesses. Rates drop dramatically from startup intentions through nascent activity, early-stage businesses and established businesses, the gender gap increasing at each stage.

There is a clear need to unlock the region's potential and to enact economic and social policies that create long-term sustainable and inclusive economic growth for countries in Middle East & Africa. A critical aspect in achieving this goal is policymakers in the region focusing on establishing an enabling environment in which women entrepreneurs can emerge, compete and innovate. In doing this, the promotion of equal opportunities for women and enhancement of women-targeted business support can remain key priorities for countries in this region. Removing barriers that prevent women's participation in entrepreneurship is something with the potential for a substantial impact on economic output and social welfare.

9

North America

The North America region is comprised of the United States and Canada, two countries with well-developed economies and high rates of female economic participation. In 2021, women entrepreneurs in the region continued to navigate the unfolding COVID-19 pandemic amid signs of an economic rebound. Compared to the negative shock in 2020,[29] GDP growth was 5.5% in the United States and 4.0% in Canada in 2021.[30] Within this context, this chapter examines women's business activity, motivations, pandemic impacts, business outcomes, and the role of enabling environments.

STARTUP RATES, INTENTIONS, MOTIVATIONS AND BUSINESS STAGE

In 2021, women's Total early-stage Entrepreneurial Activity (TEA) rate was 15.2% in the United States and 15.8% in Canada, up from 13.6% and 13.9%, respectively, in 2020. These rates were well above the global average for women (10.4%). Gender gaps were evident, however, with women less active than men in the United States (0.85 female–male ratio) and especially in Canada (0.65 female–male ratio).

Motivating many women entrepreneurs was the desire to make a difference (70.5% in the United States and 75.8% in Canada) and to build wealth (71.9% in the United States and 69.5% in Canada). Job scarcity was also important for women, though much more so in Canada (67.9%) than in the United States (45.7%). A desire to continue a family tradition was less important, reported by less than half of women in both countries. Compared to women globally, those in North America were more motivated to make a difference and build great wealth, and less motivated by job scarcity. Gender parity was evident for some motivations, but women in the United States were more likely than men to continue a family tradition (1.23 female–male ratio), while women in Canada were less likely than men to do so (0.81 female–male ratio).

More than one in 10 women in the United States (14.3%) and Canada (12.4%) reported entrepreneurial intentions in 2021, below the global average for women (17.3%). Gender gaps were evident, with women having lower intentions than men in Canada (0.84 female–male ratio) and in the United States (0.93 female–male ratio). Concerning nascent activity, women in Canada (16.2%) and the United States (13.6%) had rates far above the global average for women (8.5%). For early-stage business, women's activity rates were 7.9% in Canada and 5.3% in the United States, above the global average (4.1%). Established business rates for women were fairly close at 6.6% in Canada and 7.6% in the United States Notably, across each business stage, men were more likely than women to be active, with an especially wide gap in Canada for early-stage businesses (0.55).

In 2021, business closures impacted 4.4% of women in Canada and 3.4% in the United States. Interestingly, women were less likely than men to have discontinued a business in the past 12 months. There was also a marked differences in women's reasons for exiting businesses across the North America region. In the United States, women were twice as likely as women in Canada to cite pandemic-related reasons (40% vs. 18.2%)

29 For valuable discussions, see Hughes, K.D., Saunders, C., & Denier, N. (2022). Lockdowns, pivots and triple shifts: Early challenges and opportunities of the COVID-19 pandemic for women entrepreneurs. *Journal of Small Business & Entrepreneurship*, 34(5), 483–501; Manolova, T.S., Brush, C.G., Edelman, L.F., & Elam, A. (2020). COVID-19: Pivoting to stay the course. How women entrepreneurs take advantage of opportunities created by the COVID-19 pandemic. *International Small Business Journal*, 38(6), 481–91.

30 World Bank data: https://data.worldbank.org/indicator/NY.GDP.PCAP.KD.ZG

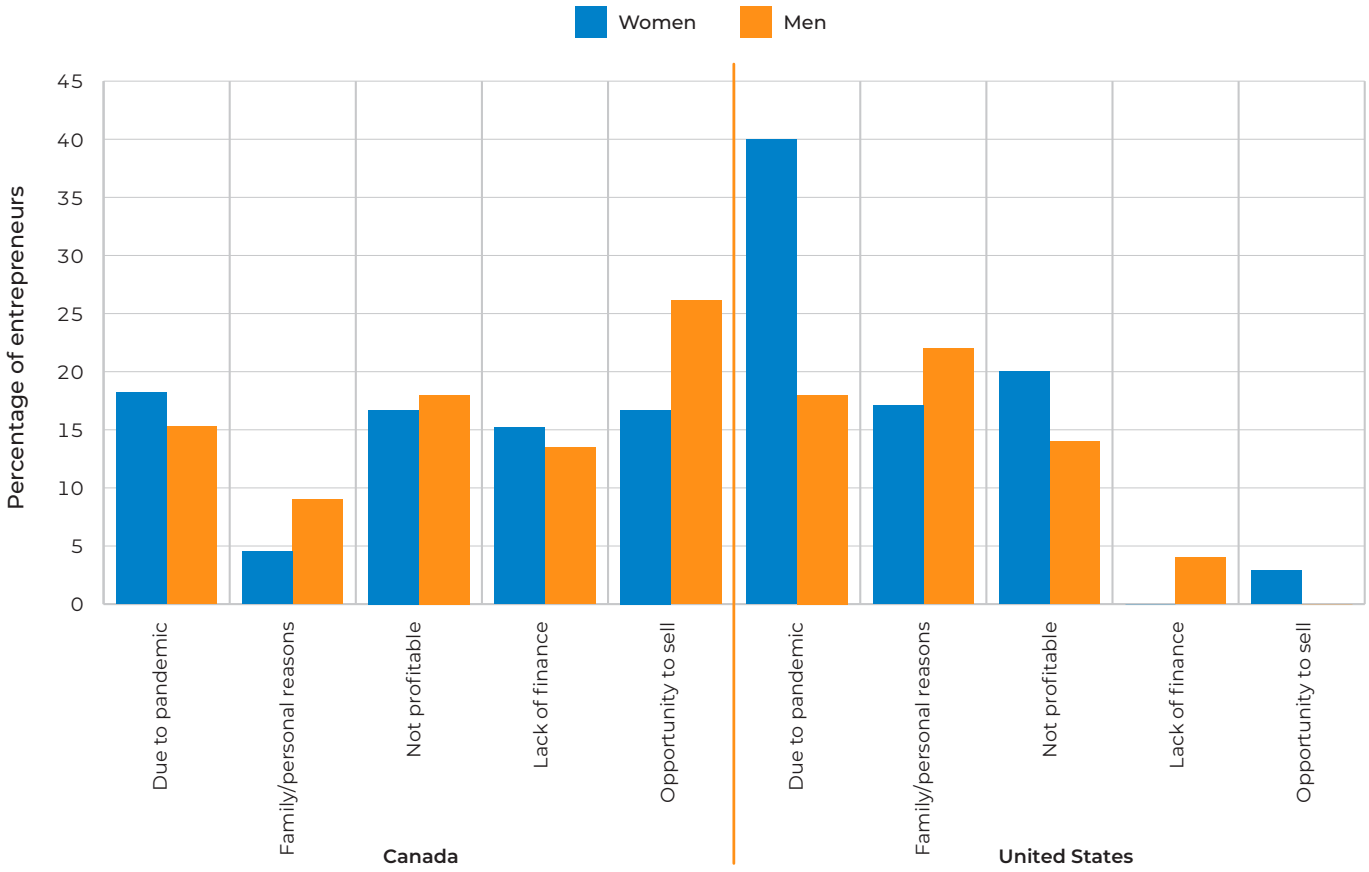


FIGURE 39
Reasons for business exit by gender and country in North America
Source: GEM 2021

and nearly four times as likely to report family reasons (17.1% vs. 4.5%). In Canada, women were more likely to cite a lack of finance (15.2% vs. 0%) and the opportunity to sell a business (16.7% vs. 2.9%). The one shared reason across both countries was a lack of profitability, affecting 16.7% of women in Canada and 20% in the United States (see Figure 39).

PANDEMIC IMPACTS ON WOMEN-OWNED BUSINESSES

Studies show that the COVID-19 pandemic sparked new opportunities for some entrepreneurs. In Canada, nearly one-third of early-stage women reported new opportunities, at parity with men and above the global average for women (23.4%). In the United States, early-stage women were a bit less likely to see new opportunities (21.5%), trailing men slightly (0.90 female–male ratio). For established businesses, new opportunities were less common in both countries, involving 16% of women reporting, compared to 20–21% of men (see Figure 40).

In assessing government responses to the COVID-19 pandemic, Canadian women had more favourable views, with nearly one-quarter of early-stage and one-third of established owners viewing government responses as effective. In contrast, just 16.4% of early-stage and 12.5% of established women owners in the United States felt this was the case. Overall, the assessments of US women were in line with the global average for women, while Canadian women held more positive views. Gender differences were apparent within the region, however, showing diverse patterns. In the United States, women in early-stage business responded 6% more favourably than men, while established women responded 3% less favourably than men. In Canada, early-stage women were about 3% less likely than men to feel responses had been effective, with gender parity among established business owners.

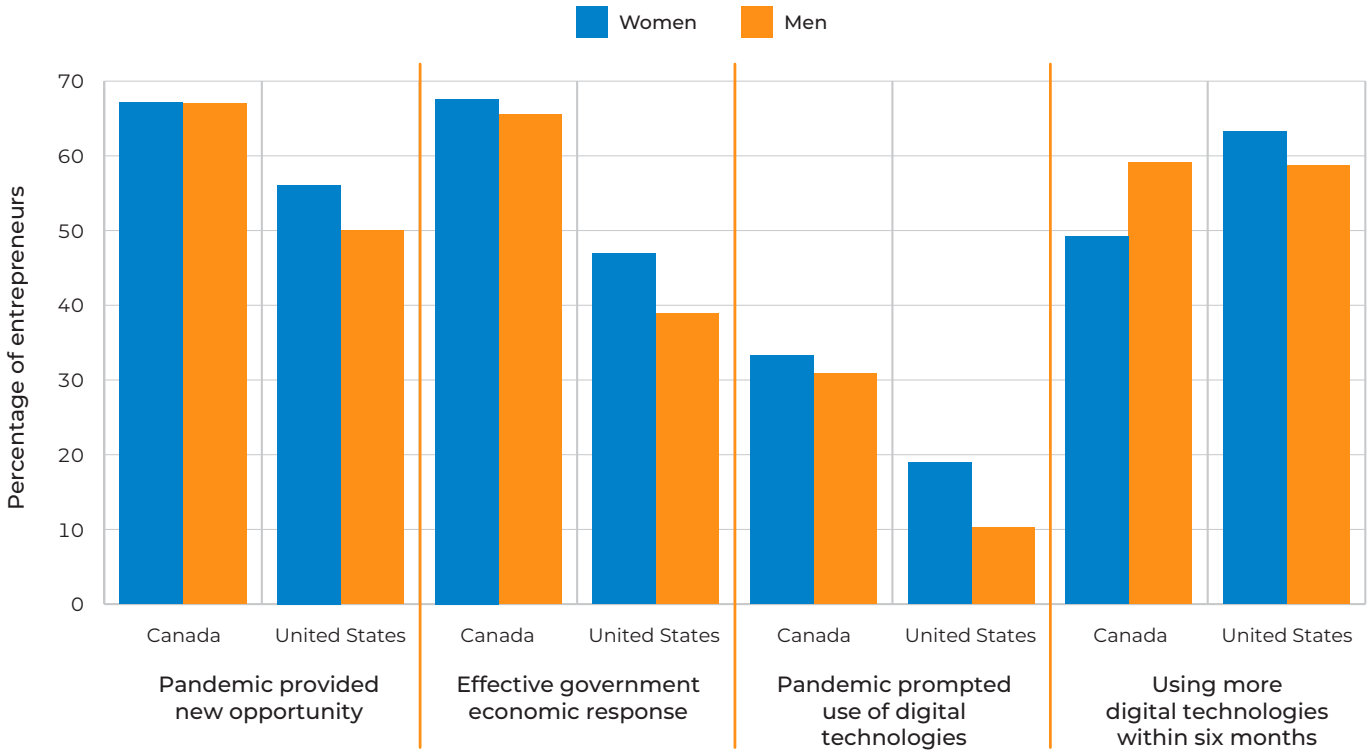


FIGURE 40
Pandemic impacts for early-stage entrepreneurs by gender and country in North America
Source: GEM 2021

In 2021, new technologies were adopted by nearly one in five early-stage women entrepreneurs in the United States and over one-third in Canada. Rates were somewhat lower for established women entrepreneurs in both countries, involving just over one in 10 women. There were some notable gender differences with respect to the adoption of new digital technologies. Early-stage women owners in the United States were far more likely than men to adopt new technologies (1.84 female–male ratio), while in Canada established women were far less likely than men to do so (0.56 female–male ratio).

Women entrepreneurs also increased their use of digital technologies to adapt to pandemic conditions. In the United States, over two-thirds of early-stage women entrepreneurs reported such change, compared to one-half of women in Canada. Established women had lower rates of technological enhancement, with roughly one-third of women in the region reporting increased use. Overall, US women led men slightly in technological enhancement at both business stages. In contrast, women in Canada were roughly 10% less likely than men to intensify their use of digital technologies overall.

STRUCTURAL INEQUALITY AND COMPETING NARRATIVES

From the standpoint of innovation, women in the United States represented over 40% of entrepreneurs offering innovative products to local, national and international markets, respectively. In Canada, there were similar proportions for local and national markets, while women represented less than one-quarter of innovative offerings internationally. Regarding market focus, women in both countries comprised roughly 40% of entrepreneurs focused on the local market and national market. Women in the United States comprised over half of entrepreneurs focused on international markets, however, higher than in Canada (38.7%). Concerning export activity, women in the United States were slightly more engaged, though more than four in 10 women in both countries reported having 25% of customers outside their countries.

With respect to firm size and growth expectations, in the United States, women entrepreneurs represented over four-fifths of entrepreneurs having 20 or more employees.

In contrast, women in Canada represented just one-fifth. Comparing women's expectations in the region, more women in the United States (38.1%) than in Canada (23.8%) had high growth plans of 20+ employees. Yet men in both countries were still more likely to report ambitious growth plans of 20+ employees in the next five years.

Demographically, women in early-stage firms were younger in Canada than in the United States, with 12% more women in Canada in the 18–35 age category and 15% more women in the United States in the 35–54 age category. Women entrepreneurs in North America continued to be highly educated. Roughly two-thirds had post-secondary education, well above the global average (45.9%). Another 16% of women had graduate education, 2–3% higher than men in both countries. Concerning household resources, women entrepreneurs in the region were fairly equally distributed across household income tertiles, with roughly 30% in middle- and high-income bands, and 36–37% reporting lower income.

A strong body of research shows that women entrepreneurs operate in distinct industries

ENTREPRENEUR HIGHLIGHT

Swarna Shiv

Founder, Unsmudgeable (United States)

The role of education in launching a company

Over the years, we have consistently seen that access to quality education varies considerably across the globe.

A great example of someone who used an educational experience to start a new business is Swarna Shiv. She founded Unsmudgeable, a permanent anti-smudge eyewear lens coating for a lifetime of clear vision. The idea for the company came to fruition in October 2021 during the first entrepreneurship class Swarna took as an undergraduate at Babson College.

> *"We were tasked with generating 10 startup ideas and pitching our best one. Unsmudgeable ended up being my favourite because it solves a personal issue."*

After a semester of customer discovery through constructing preliminary market and feasibility assessments in the class, Swarna decided to pursue the idea as a startup. From there, she received access to the best entrepreneurship programs, pitch competitions and (most importantly) people that Babson could offer. In its early phases, Unsmudgeable is becoming a materials development company that is building its MVP coating, expanding its team, and identifying further

vertical market integrations.

> *"An education can be essential to conglomerate the resources and community necessary for an entrepreneur to execute their venture. Essentially, without my educational experiences at Babson, my startup would not exist."*

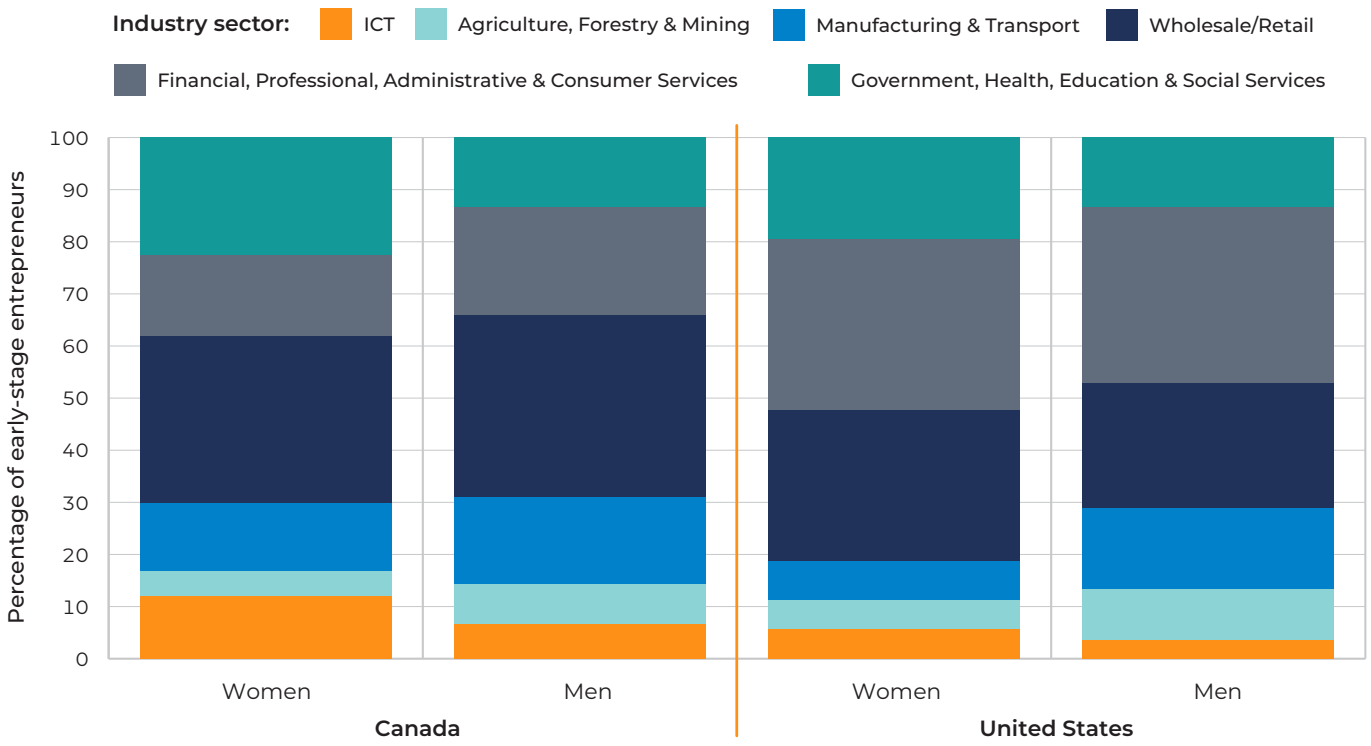


FIGURE 41
Industry distribution of early-stage entrepreneurs by gender and country in North America
Source: GEM 2021

from men, with sectoral location shaping many important business outcomes. With respect to industry sector, in North America some shared patterns were evident for women's early-stage businesses in 2021. Wholesale/Retail was the most common sector for women, accounting for roughly one-third of firms. Another 20% of women in both countries operated in Government, Health, Education & Social Services. A smaller proportion of women were in Agriculture, Forestry & Mining (around 5%) (see Figure 41).

Beyond these commonalties, women in the United States were twice as active as women in Canada in the Financial, Professional, Administrative & Consumer Services sector (32.7%). In Canada, women were active in ICT and Manufacturing & Transport — with these two latter sectors (combined) accounting for 25% of Canadian women but just 13% of women in the United States. With respect to gendered patterns, women continued to be over-represented relative to men in a number of traditionally "female" sectors, most notably in Government, Health, Education & Social Services. Compared to the global average for women entrepreneurs, women in North America are less likely to operate in Wholesale/Retail.

In both countries, roughly 40% of women started with 1–5 employees. Another sizeable group comprised solopreneurs, accounting for 40% of women in the United States and one-quarter of women in Canada. Despite the relatively small size of many women-led businesses, over one in 10 women in both countries had 20+ employees, far above the global average (2.8%). Women in Canada are also three times more likely than women in the United States to have 6–19 employees. These trends confirm an expanding segment of growth-oriented women entrepreneurs, with US women showing an especially strong presence in the 20+ employee band. That said, women in Canada are far more likely than men to be solopreneurs (2.21 female–male ratio).

ENABLING ENVIRONMENT FOR WOMEN ENTREPRENEURS

Cultural perceptions supportive of women's entrepreneurs were very evident in North America in 2021. In the United States, nearly four of five women saw entrepreneurship as a good career choice, having high status, and with good media representations. While these questions were not

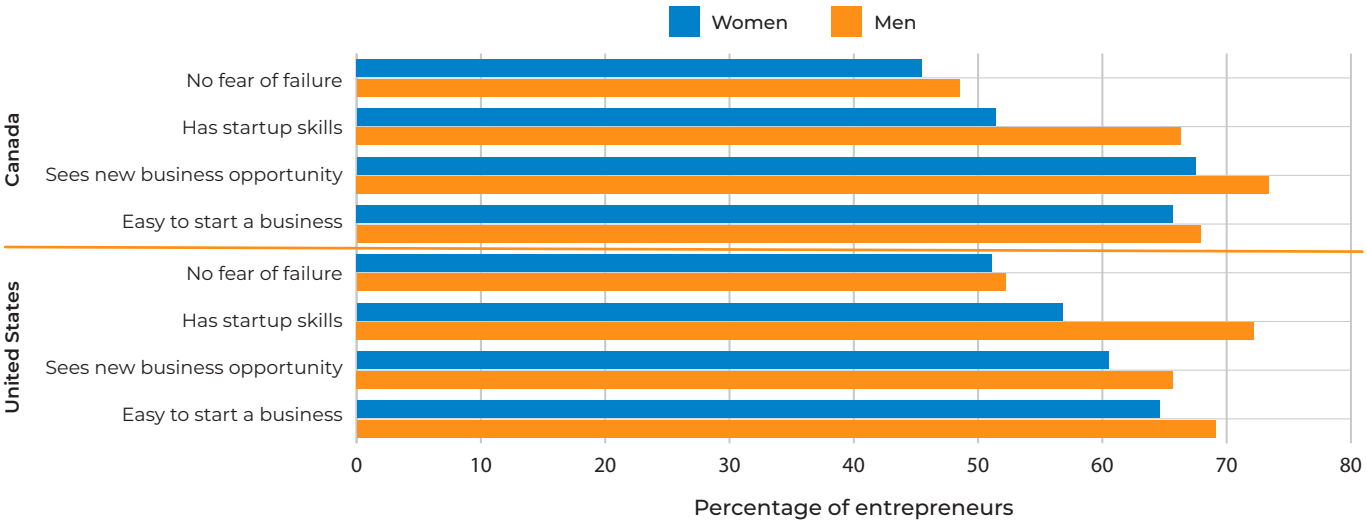


FIGURE 42
Entrepreneurial perceptions by gender and country in North America
Source: GEM 2021

asked on the GEM Canada survey in 2021, past GEM Women's Entrepreneurship Reports, and GEM Canada Women's Reports, show similarly higher levels of supportive attitudes.

Enabling environments were also evident, with two-thirds of women noting the ease of starting a business. Many women also perceived good opportunities in the United States (60.5%) and especially in Canada (67.5%) (see Figure 42). Of note, women's and men's responses to many of these questions were close to parity. The same is true for the fear of business failure, reported by 45.5% of women in Canada and 51% in the United States, with only a slight gender gap. While concerns of business failure were high, these can be read as reasonable, despite strong economic growth, given the ongoing pandemic and continued uncertainty.

Two indicators on which women trailed men in both countries were perceived startup skills and knowing other entrepreneurs. Just over half of women in both countries perceived that they had the skills to start a business, far lower than men (0.78–0.79 female–male ratio). Women in Canada were about 10% less likely than women in the United States to know other entrepreneurs. Women also trailed men somewhat more in social capital in Canada (0.89 female–male ratio) than in the United States (0.94 female–male ratio).

In Canada, women are more likely to have made a business investment in the prior 12 months, with 12.4% reporting such activity compared to 7.1% of women in the United States. Women in Canada also appeared to make larger investments, reporting a median investment of US $3,519 versus US $2,000 for women in the United States. Across the North America region, men were more active as investors than women (0.68–0.69 female–male ratio). Men also made larger investments both in Canada (0.7 female–male ratio) and especially in the United States (0.4 female–male ratio).

Results from the 2021 GEM National Expert Survey (NES) suggest some shared patterns in cultural support for women's entrepreneurship in the North America region. For instance, experts identified concerns around sufficient family support services for women entrepreneurs in both countries, equal access to finance, favourable regulations and procurement. In the United States, national experts were somewhat more optimistic than those in Canada about cultural support for women entrepreneurs and were also more optimistic that pandemic telework could help women manage family responsibilities.

HIGHLIGHTS

Women's entrepreneurship remained strong in 2021 in the North America region, notwithstanding the ongoing COVID-19 pandemic. Amid many commonalities, however, there were also divergent trends for women in the United States and Canada with respect to perceptions,

sectoral location, views on government effectiveness and pandemic-related impacts, and the reasons for business closures.

- Entrepreneurial intentions for women were below the global average in 2021 and at lower rates than men, especially in Canada, with one in seven women in the United States and one in eight in Canada reporting the intention to start a business.
- Women's TEA rate was 15.2% in the United States and 15.8% in Canada, up from 13.6% and 13.9%, respectively, in 2020. However, women were much less active than men in the United States (0.85 female–male ratio) and more so in Canada (0.65 female–male ratio).
- In 2021, business closures impacted 4.4% of women in Canada and 3.4% in the United States. In the United States, women were twice as likely as men in Canada to cite pandemic-related reasons for business exit and nearly four times as likely to report family reasons. In Canada, women were more likely to cite a lack of finance (15.2% vs. 0%) and the opportunity to sell a business (16.7% vs. 2.9%).
- Canadian women had more favourable views of the government economic response to the pandemic, with nearly one-quarter of early-stage and one-third of established owners in agreement. In contrast, just 16.4% of early-stage and 12.5% of established women owners in the United States agreed that the government economic response was effective.
- Women in the United States represented over 40% of entrepreneurs offering innovative products to local, national and international markets. In Canada, there were similar proportions for local and national markets, while women represented less than one-quarter of innovative offerings internationally.
- In 2021, new technologies were adopted by nearly one in five early-stage women entrepreneurs in the United States and over one-third of women in Canada. Early-stage women owners in the United States are 84% more likely than men to adopt new technologies, while in Canada established women are about half as likely than men to do so.
- In Canada, women entrepreneurs showed a strong footprint in ICT and Manufacturing & Transport sectors — together accounting for 25% of Canadian women but just 13% of women in the United States. Conversely, women in the United States were twice as active as women in Canada in the Financial, Professional, Administrative & Consumer Services sector.
- Just over half of women in both countries perceived that they had the skills to start a business, far lower than men (0.78–0.79 female–male ratio). Women in Canada are about 10% less likely than women in the United States to know other entrepreneurs.
- Women in the United States were less active as investors than women in Canada, as well as less active than men in the United States. The gender gaps in rate of investment activity and level of investment were also larger in the United States compared to Canada.
- National experts in Canada and the United States rated the enabling environment for women entrepreneurs in similar ways. Three particular concerns were: equal access to finance; favourable regulations for women entrepreneurs; and sufficient family support services. Experts were more positive about equal cultural support for women entrepreneurs in the United States.

Women entrepreneurs in Canada and the United States continue to face challenges in startup and growth compared to men. Importantly, there has been a recent shift in focus from encouraging women to start more new businesses to focusing on how to better support women entrepreneurs as they grow their firms. Some of the most difficult barriers to growth for women-owned and women-led businesses in North America occur in the growth phase of business startup. Several trends have emerged that will hopefully address some of these concerns, including the rise of women's angel investment groups, women-focused investment firms, and gender-smart impact investing. Women-focused incubators and accelerators are also emerging to provide a supportive environment for women founders with models that attempt to overcome network barriers and attract more investment capital to support innovation in women's markets.

Implications for Research and Policy

Much of the dominant narrative around entrepreneurship has focused on the innovative leadership of male entrepreneurs and the over-representation of women among the poorest, most vulnerable businesses in a given economy. While there is evidence to support both of these stereotypes of entrepreneurship, the key role that women play at both ends of the spectrum gets lost in the conversation. As such, the stereotypes of males as successful, high-growth entrepreneurs and females as the poorest, most vulnerable entrepreneurs represent a false dichotomy, much like the necessity versus opportunity entrepreneurship opposition.

Although simple dichotomies are useful in some ways, the risk of defaulting to them contributes to the reproduction of gender inequality in entrepreneurship by reinforcing misleading stereotypes. The truth is that both men and women start businesses in the formal and informal sectors and both male and female founders are involved in high-growth as well as subsistence entrepreneurship in different countries and different cultural contexts. In fact, research shows that opportunity motivations are also strong among the most vulnerable entrepreneurs, who are often described as necessity entrepreneurs.[31]

The findings presented in this special report on women and entrepreneurship suggests that significant work remains to be done to encourage and support women entrepreneurs as they create businesses that advance both economic and social development for themselves, their families, their communities and their countries. As researchers reveal a clearer understanding of how and why women entrepreneurs start and grow new businesses, the evidence points policymakers and program leaders towards more effective solutions to address the barriers to business startup and growth that women face in different industry sectors and countries. Inspired by the findings in this report, four main recommendations are offered.

- **Support high-potential women entrepreneurs in all sectors and at all levels of income.** Women are starting high-growth businesses in all sectors and all economies across the world. However, their efforts are too often stymied by negative stereotypes reinforced by the narrative that women entrepreneurs are less capable and more disadvantaged by poverty, low education and younger age. We all need

31 Calderon, G., Iacovone, L., & Juarez, L. (2017). Opportunity versus necessity: Understanding the heterogeneity of female micro-entrepreneurs. *World Bank Economic Review*, 30(Supplement 1), S86–S96.

to move past the false narrative of the successful male entrepreneur and the disadvantaged woman entrepreneur, to acknowledge and support high-potential women entrepreneurs.

- **Develop policy that underpins a mobilization of financing and support in the sectors in which women are active.** Policy responses to the pandemic have failed to consider the plight of women entrepreneurs and established business owners in many parts of the world. In those cases where the needs of women entrepreneurs have been well addressed, such successful policy interventions did the following: directly addressed the industry sectors in which these women were operating; offered provision and support for the smallest businesses, including the self-employed; and focused on supporting families during the pandemic crisis. Applying a gender lens in economic policymaking in the normal course of business, as well as during times of crisis, helps not only women but also those men who share their circumstances.
- **Address structural barriers by debunking gender norms in entrepreneurship.** Business characteristics and market conditions are much more important predictors of business success than the gender of the founder. Contrary to many of the negative stereotypes about women entrepreneurs, academic research suggests that women are just as likely as men to succeed in business *ceteris paribus*, i.e. when starting similar businesses in similar industry sectors. However, this reality is often lost in the presentation of research and statistics by researchers, policymakers and the media. A clearer view of structural inequality and barriers to financing, for example, will result in better policy solutions and program support for women entrepreneurs.
- **Celebrate successful women founders as important role models that show younger women what is possible.** Not only are entrepreneurial perceptions lower for women compared to men globally, but national experts tend to concur that there is little cultural support for women entrepreneurs in most countries. Perhaps lower rates of startup confidence and opportunity recognition for women result from a rational assessment of the odds of their personal success as entrepreneurs and investors. Instead of warning young women that the odds are stacked against them, provide them with examples of women founders and business leaders who have effectively navigated the system to start and grow a successful business.

PART 3

Appendix Tables

GEM Indicators

Knowing a Startup Entrepreneur	Percentage of adults aged 18–64 who personally know someone who has started a business in the past two years.
Perceived Opportunities	Percentage of adults aged 18–64 who agree that they see good opportunities to start a business within the next six months in the area in which they live.
Ease of Starting a Business	Percentage of adults aged 18–64 who agree that it is easy to start a business in their country.
Perceived Capabilities	Percentage of adults aged 18–64 who agree that they have the required knowledge, skills and experience to start a business.
Fear of Failure Rate	Percentage of adults aged 18–64 who agree that they see good opportunities but would not start a business for fear it might fail.
Nascent Entrepreneurship Rate	Percentage of adults aged 18–64 who are currently nascent entrepreneurs, i.e. are actively involved in setting up a business they will own or co-own; this business has not yet paid salaries, wages or made any other payments to the owners for more than three months.
New Business Ownership Rate	Percentage of adults aged 18–64 who are currently owner-managers of a new business, i.e. who own and manage a running business that has paid salaries, wages or made any other payments to the owners for more than three months, but not more than 42 months (3.5 years).
Total early-stage Entrepreneurial Activity (TEA)	Percentage of adults aged 18–64 who are either a nascent entrepreneurs or owner-managers of a new business, i.e. the proportion of the adult population who are either starting or running a new business.
Established Business Ownership Rate (EBO)	Percentage of adults aged 18–64 who are currently owner-managers of an established business, i.e. who are owning and managing a running business that has paid salaries, wages or made any other payments to the owners for over 42 months (3.5 years).
Business Services	Percentage of TEA respondents involved in business services.
Consumer Services	Percentage of TEA respondents involved in consumer services.
Entrepreneurial Employee Activity (EEA)	Percentage of adults aged 18–64 who, as employees, have been involved in entrepreneurial activities such as developing or launching new goods or services, or setting up a new business unit, a new establishment, or a subsidiary in the last three years.
Sponsored	Percentage of adults aged 18–64 who are involved in TEA and that business is part-owned with their employer.
Independent	Percentage of adults aged 18–64 who are involved in TEA and that business is independently owned.
Motive for Starting a Business: “To make a difference in the world”	Percentage of TEA respondents who agree that a reason for starting their business is “to make a difference in the world”.

Motive for Starting a Business: "To build great wealth or very high income"	Percentage of TEA respondents who agree that a reason for starting their business is "to build great wealth or a very high income".
Motive for Starting a Business: "To continue a family tradition"	Percentage of TEA respondents who agree that a reason for starting their business is "to continue a family tradition".
Motive for Starting a Business: "To earn a living because jobs are scarce"	Percentage of TEA respondents who agree that a reason for starting their business is "to earn a living because jobs are scarce".
High Growth Expectation Entrepreneurial Activity	Percentage of adults aged 18–64 involved in TEA who expect to employ six or more people five years from now.
Internationally Oriented Entrepreneurial Activity	Percentage of adults aged 18–64 involved in TEA who anticipate 25% or more revenue coming from outside their country.
Scope (local/national/international)	Percentage of adults aged 18–64 involved in TEA having customers only within their local area, only within their country, or those having international customers.
Product/Services Impact (local/national/global)	Percentage adults aged 18–64 involved in TEA having products or services that are either new to the area, new to their country or new to the world.
Technology/Procedures Impact (local/national/global)	Percentage of adults aged 18–64 involved in TEA having technology or procedures that are either new to the area, new to their country or new to the world.
Informal Investment	Percentage of adults aged 18–64 investing in someone else's new business in the last three years.
Business Exit Rate	Percentage of adults aged 18–64 who have exited a business in the past 12 months, either by selling, shutting down or otherwise discontinuing an owner/management relationship with that business.
Exit, Business Continues	Percentage of adults aged 18–64 who have exited a business in the past 12 months and that business has continued.
Exit, Business Does Not Continue	Percentage of adults aged 18–64 who have exited a business in the past 12 months and that business has not continued.

PANDEMIC-RELATED INDICATORS

Household Income Impact	Percentage of adults aged 18–64 who consider that the pandemic has led their household income to somewhat or strongly decrease.
Knowing an Entrepreneur Who Stopped a Business	Percentage of adults aged 18–64 who know someone who has stopped a business because of the pandemic.
Knowing an Entrepreneur Who Started a Business	Percentage of adults aged 18–64 who know someone who has started a business because of the pandemic.
Pandemic Opportunities	Percentage of TEA respondents who agree or strongly agree that the pandemic has provided new opportunities they wish to pursue.

Appendix A: Full Indicators Data

Table A1. Total Entrepreneurial Activity and Motivations, Rates and Gender Ratios (GEM 2021)

	Total early-stage Entrepreneurial Activity			To make a difference		
	Women (%)	Men (%)	W/M ratio	TEA women (%)	TEA men (%)	W/M ratio
Belarus	12.8	14.2	0.9	23.6	26.9	0.9
Brazil	18.7	23.3	0.8	80.0	72.1	1.1
Canada	15.8	24.4	0.7	75.8	66.8	1.1
Chile	25.3	34.7	0.7	57.0	56.3	1.0
Colombia	14.1	17.4	0.8	64.0	65.3	1.0
Croatia	9.2	15.5	0.6	44.0	35.8	1.2
Cyprus	6.2	10.7	0.6	32.3	32.3	1.0
Dominican Republic	43.7	40.1	1.1	75.8	68.3	1.1
Egypt	5.7	12.5	0.5	55.8	66.7	0.8
Finland	6.4	9.4	0.7	37.7	41.5	0.9
France	7.1	8.4	0.9	26.1	25.8	1.0
Germany	5.3	8.4	0.6	47.4	33.8	1.4
Greece	4.6	6.5	0.7	28.9	30.2	1.0
Guatemala	23.9	32.9	0.7	78.8	82.2	1.0
Hungary	7.5	12.1	0.6	60.5	62.5	1.0
India	12.3	16.3	0.8	80.3	72.4	1.1
Iran	7.1	10.4	0.7	40.7	34.2	1.2
Ireland	11.3	13.7	0.8	54.4	60.7	0.9
Israel	8.8	10.4	0.9	47.0	28.7	1.6
Italy	3.5	6.2	0.6	17.1	24.2	0.7
Japan	4.0	8.4	0.5	38.5	36.5	1.1
Kazakhstan	21.3	18.4	1.1	0.5	–	–
Latvia	12.0	18.2	0.7	46.3	30.5	1.5
Luxembourg	5.1	9.3	0.6	72.5	47.7	1.5
Morocco	6.3	5.9	1.1	10.2	25.6	0.4
Netherlands	13.0	15.4	0.8	56.4	49.6	1.1

To build wealth			To continue family tradition			Because jobs are scarce		
TEA women (%)	TEA men (%)	W/M ratio	TEA women (%)	TEA men (%)	W/M ratio	TEA women (%)	TEA men (%)	W/M ratio
71.1	81.0	0.9	16.3	14.4	1.1	71.3	71.6	1.0
55.0	57.7	1.0	31.9	32.0	1.0	81.2	73.1	1.1
69.5	68.0	1.0	43.8	54.3	0.8	67.9	72.5	0.9
49.2	56.7	0.9	35.6	32.1	1.1	82.4	67.6	1.2
66.2	62.6	1.1	39.1	47.6	0.8	82.1	76.0	1.9
45.7	54.8	0.8	27.2	29.8	0.9	75.0	59.7	1.3
76.9	83.7	0.9	14.3	13.1	1.1	78.1	70.0	1.1
61.6	67.5	0.9	41.1	33.5	1.2	74.0	71.8	1.0
62.4	76.7	0.8	38.8	54.0	0.7	87.1	87.1	1.0
16.1	44.7	0.4	18.0	28.3	0.6	48.4	47.3	1.0
37.0	41.3	0.9	23.9	21.8	1.1	49.6	52.6	0.9
44.3	43.5	1.0	24.2	24.5	1.0	46.4	38.1	1.2
50.0	50.8	1.0	42.2	37.5	1.1	72.1	56.9	1.3
73.7	77.4	1.0	49.9	48.6	1.0	92.4	91.2	1.0
36.8	29.4	1.3	10.5	27.5	0.4	67.1	66.7	1.0
71.3	75.2	1.0	74.9	73.8	1.0	89.7	93.0	1.0
91.9	93.8	1.0	9.8	22.7	0.4	58.6	68.1	0.9
56.5	61.5	0.9	28.9	28.9	1.0	56.5	55.6	1.0
69.8	79.2	0.9	12.9	16.8	0.8	47.7	51.5	0.9
45.7	58.1	0.8	20.0	24.6	0.8	68.6	57.4	1.2
25.0	50.0	0.5	31.7	32.5	1.0	47.5	36.5	1.3
90.6	92.0	1.0	10.8	6.0	1.8	39.4	40.4	1.0
36.2	37.8	1.0	31.6	19.6	1.6	64.2	66.0	1.0
27.5	44.3	0.6	13.7	35.5	0.4	25.5	36.1	0.7
39.8	54.0	0.7	18.4	26.2	0.7	85.7	87.6	1.0
40.4	42.9	0.9	23.6	25.6	0.9	43.6	44.4	1.0

Table A1 (continued)

	Total early-stage Entrepreneurial Activity			To make a difference		
	Women (%)	Men (%)	W/M ratio	TEA women (%)	TEA men (%)	W/M ratio
Norway	1.7	4.4	0.4	47.1	37.8	1.3
Oman	11.9	13.5	0.9	41.1	45.8	0.9
Panama	20.3	23.2	0.9	63.4	67.1	0.9
Poland	1.6	2.4	0.7	24.6	9.9	2.5
Qatar	10.5	17.2	0.6	41.9	47.2	0.9
Romania	9.6	9.8	1.0	71.6	60.3	1.2
Russian Federation	6.6	10.2	0.7	24.6	29.5	0.8
Saudi Arabia	19.0	20.1	1.0	63.9	63.6	1.0
Slovak Republic	5.0	7.8	0.6	14.0	21.1	0.7
Slovenia	6.2	7.2	0.9	62.2	62.1	1.0
South Africa	16.2	18.9	0.9	78.7	83.9	0.9
South Korea	10.7	16.0	0.7	5.7	11.0	0.5
Spain	5.6	5.4	1.0	44.5	41.9	1.1
Sudan	26.4	40.8	0.7	61.1	41.8	1.5
Sweden	6.0	11.8	0.5	50.5	42.8	1.2
Switzerland	7.2	12.4	0.6	53.8	60.4	0.9
Turkey	10.3	21.0	0.5	36.4	33.3	1.1
United Arab Emirates	8.1	20.1	0.4	70.0	65.3	1.1
United Kingdom	11.0	14.2	0.8	55.7	50.9	1.1
United States	15.2	17.8	0.9	70.5	71.5	1.0
Uruguay	19.5	25.9	0.8	39.1	38.5	1.0
Global average	**10.4**	**13.6**	**0.7**	**52.9**	**51.0**	**1.0**
Region average						
Central & East Asia	11.7	16.2	0.7	33.8	35.3	1.0
Europe	6.1	7.8	0.8	43.8	40.4	1.1
Latin America & Caribbean	24.1	30.4	0.8	63.5	62.3	1.0
Middle East & Africa	12.0	16.6	0.7	56.8	54.8	1.0
North America	15.5	21.1	0.7	73.2	68.8	1.1
Income level average						
Low income	10.5	15.4	0.7	55.7	51.6	1.1
Upper–middle income	18.0	21.4	0.8	59.6	60.2	1.0
High income	8.7	11.8	0.74	49.7	47.8	1.0

To build wealth			To continue family tradition			Because jobs are scarce		
TEA women (%)	TEA men (%)	W/M ratio	TEA women (%)	TEA men (%)	W/M ratio	TEA women (%)	TEA men (%)	W/M ratio
23.5	43.2	0.5	29.4	20.0	1.5	29.4	25.0	1.2
74.6	81.3	0.9	16.0	34.1	0.5	90.7	88.8	1.0
44.1	55.4	0.8	36.6	41.0	0.9	82.2	75.2	1.1
69.7	57.4	1.2	12.1	12.8	1.05	54.5	52.7	1.0
74.6	77.6	1.0	24.2	39.4	0.6	61.9	53.7	1.2
61.8	67.9	0.9	26.7	35.5	0.8	77.0	73.1	1.0
68.6	62.9	1.1	18.8	21.9	0.9	75.4	64.6	1.2
76.5	80.1	1.0	65.6	65.5	1.0	80.1	84.7	1.0
12.0	28.2	0.4	24.0	26.9	0.9	98.0	84.2	1.7
26.7	55.2	0.5	21.7	32.2	0.7	68.9	60.3	1.1
82.8	83.7	1.0	61.3	65.1	0.9	85.0	84.1	1.0
67.6	73.3	0.9	2.9	4.9	0.6	39.4	30.9	1.3
31.6	44.6	0.7	18.1	21.3	0.9	73.5	71.1	1.0
87.1	86.6	1.0	57.3	56.6	1.0	90.2	86.2	1.1
47.7	58.4	0.8	20.0	21.0	1.0	25.5	29.2	0.9
45.5	55.2	0.8	14.8	13.7	1.1	54.5	41.8	1.3
36.2	41.8	0.9	38.8	43.3	0.9	57.3	54.0	1.1
72.0	79.8	0.9	38.0	51.8	0.7	69.4	68.9	1.0
46.0	62.3	0.7	21.6	21.9	1.0	72.1	57.5	1.3
71.9	76.2	0.9	46.2	37.7	1.2	45.7	46.0	1.0
33.7	43.0	0.8	22.0	27.4	0.8	75.3	67.8	1.1
56.0	**63.3**	**0.9**	**32.9**	**35.7**	**0.9**	**72.5**	**67.2**	**1.1**
67.6	66.8	1.0	34.6	37.7	0.9	58.0	57.3	1.0
41.8	50.9	0.8	20.6	23.1	0.9	64.4	58.5	1.1
54.0	60.0	0.9	37.3	36.0	1.0	82.4	73.0	1.1
76.6	80.8	1.0	44.5	49.5	0.9	79.7	76.1	1.1
70.5	71.3	1.0	44.8	47.0	1.0	56.9	61.1	0.9
74.8	80.6	0.9	47.6	53.1	0.9	84.4	85.4	1.0
66.8	68.6	1.0	37.4	39.3	1.0	76.3	73.5	1.0
48.3	58.5	0.8	28.5	31.6	0.9	68.9	61.9	1.1

Table A2. Intentions, established business activity, discontinuance and discontinuance reasons: rates and gender ratios (GEM 2021)

	Startup intentions			Nascent activity			Early-stage business			Established business			Business discontinued		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Belarus	23.4	24.9	0.9	12.4	15.7	0.8	3.9	5.6	0.7	3.7	7.4	0.5	5.1	6.3	0.8
Brazil	52.1	54.1	1.0	15.1	15.9	1.0	9.4	12.8	0.7	6.1	14.0	0.4	10.8	7.5	1.4
Canada	12.4	14.7	0.8	16.2	23.9	0.7	7.9	14.3	0.6	6.6	9.7	0.7	4.4	6.8	0.7
Chile	45.0	56.9	0.8	21.8	30.9	0.7	7.0	13.7	0.5	4.5	9.8	0.5	6.8	7.0	1.0
Colombia	20.0	21.9	0.9	13.4	16.4	0.8	5.2	6.7	0.8	1.5	2.3	0.7	5.4	5.4	1.0
Croatia	19.0	24.7	0.8	9.6	17.2	0.6	2.6	4.8	0.5	2.9	5.1	0.6	1.7	2.9	0.6
Cyprus	13.3	17.1	0.8	5.7	10.0	0.6	2.5	4.9	0.5	6.7	10.6	0.6	2.8	4.1	0.7
Dominican Republic	53.6	55.9	1.0	52.1	51.9	1.0	13.8	12.9	1.1	3.4	4.3	0.8	11.3	8.8	1.3
Egypt	47.4	63.6	0.8	3.0	8.4	0.4	3.4	7.2	0.5	1.0	6.0	0.2	6.9	10.4	0.7
Finland	7.5	12.1	0.6	1.8	3.1	0.6	2.8	3.5	0.8	6.3	11.4	0.6	1.4	1.5	0.9
France	12.3	16.7	0.7	5.8	6.8	0.9	1.8	2.1	0.9	2.9	4.2	0.7	1.9	1.4	1.4
Germany	5.1	6.5	0.8	4.1	6.2	0.7	2.1	3.3	0.6	3.0	6.8	0.4	1.6	2.7	0.6
Greece	8.5	10.7	0.8	3.9	5.4	0.7	2.4	2.4	1.0	12.4	17.0	0.7	1.5	1.8	0.8
Guatemala	40.2	51.2	0.8	11.7	17.0	0.7	14.1	19.2	0.7	10.2	15.3	0.7	8.7	5.8	1.5
Hungary	6.4	10.1	0.6	4.0	9.5	0.4	4.1	5.7	0.7	5.7	11.1	0.5	1.5	1.9	0.8
India	18.2	18.2	1.0	14.1	16.5	0.9	5.4	8.8	0.6	7.3	9.7	0.8	3.3	4.0	0.8
Iran	22.4	31.1	0.7	6.8	9.7	0.7	2.7	5.1	0.5	3.8	13.7	0.3	2.8	6.5	0.4
Ireland	12.9	17.8	0.7	11.7	13.3	0.9	4.0	5.8	0.7	4.8	9.1	0.5	3.4	5.3	0.6
Israel	15.9	19.2	0.8	7.1	8.7	0.8	3.1	4.0	0.8	2.6	4.1	0.6	2.9	3.8	0.7
Italy	7.3	11.6	0.6	1.9	5.0	0.4	1.7	3.2	0.5	2.9	6.1	0.5	0.6	1.3	0.5
Japan	2.2	4.2	0.5	3.4	8.4	0.4	1.3	3.6	0.4	2.3	7.2	0.3	0.8	1.3	0.6
Kazakhstan	56.5	54.1	1.0	13.0	10.0	1.3	7.8	6.4	1.2	10.8	13.5	0.8	15.1	18.3	0.8
Latvia	15.7	20.5	0.8	8.3	14.6	0.6	4.5	7.4	0.6	6.3	13.6	0.5	2.0	2.8	0.7
Luxembourg	12.7	13.6	0.9	5.9	8.9	0.7	0.8	3.7	0.2	4.1	3.1	1.3	2.0	2.5	0.8
Morocco	38.7	48.2	0.8	3.3	2.8	1.2	3.2	3.4	0.9	3.9	6.0	0.7	3.5	4.9	0.7
Netherlands	16.4	18.9	0.9	10.4	12.8	0.8	4.0	6.4	0.6	4.0	8.8	0.5	2.8	4.1	0.7
Norway	4.2	5.5	0.7	0.6	2.0	0.3	0.6	1.6	0.4	2.1	4.9	0.4	0.5	0.6	0.8
Oman	48.4	58.1	0.8	12.4	17.5	0.7	2.8	4.5	0.6	1.1	4.6	0.2	8.6	11.8	0.7
Panama	42.0	46.3	0.9	19.9	23.4	0.9	5.4	7.8	0.7	2.7	4.8	0.6	9.2	8.9	1.0
Poland	3.1	2.6	1.2	1.1	1.1	1.0	0.6	1.3	0.5	10.6	11.5	0.2	2.6	3.0	0.8
Qatar	57.7	48.4	1.2	9.3	15.0	0.6	3.2	6.7	0.5	3.0	6.8	0.4	7.9	8.9	0.9
Romania	8.7	10.8	0.8	9.0	9.1	1.0	5.6	4.9	1.1	4.2	3.9	1.1	2.0	1.6	1.3

Discontinued pandemic crisis			Discontinued family reasons			Discontinued not profitable			Discontinued lack of finance			Discontinued opportunity to sell		
Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
12.2	8.6	1.4	21.6	14.3	1.5	31.1	28.6	1.1	9.5	11.4	0.8	8.1	4.3	1.9
49.1	42.9	1.1	10.5	16.9	0.6	20.2	13.0	1.6	7.0	5.2	1.4	1.8	2.6	0.7
18.2	15.3	1.2	4.5	9.0	0.5	16.7	18.0	0.9	15.2	13.5	1.1	16.7	26.1	0.6
33.9	35.5	1.0	18.1	13.2	1.4	14.2	14.8	1.0	15.6	8.8	1.8	0.6	3.4	0.2
49.3	50.8	1.0	8.5	9.8	0.9	19.7	24.6	0.8	9.9	6.6	1.5	5.6	1.6	3.5
21.4	25.0	0.9	17.9	17.9	1.0	35.7	12.5	2.9	–	1.8	–	–	7.1	–
29.3	15.2	1.9	14.6	7.6	1.9	29.3	30.3	1.0	7.3	10.6	0.7	2.4	3.0	0.8
36.0	32.2	1.1	12.7	6.8	1.9	26.7	26.3	1.0	4.0	8.5	0.5	5.3	12.7	0.4
38.9	38.6	1.0	18.5	8.5	2.2	31.5	38.1	0.8	8.3	5.3	1.6	–	1.1	–
28.6	20.0	1.4	–	6.7	–	14.3	20.0	0.7	–	–	–	–	–	–
15.7	23.7	0.7	17.6	13.2	1.3	21.6	13.2	1.6	3.9	10.5	0.4	7.8	5.3	1.5
12.5	11.3	1.1	22.5	11.3	2.0	17.5	23.8	0.7	7.5	10.0	0.8	15.0	16.3	0.9
5.9	4.5	1.3	5.9	4.5	1.3	41.2	22.7	1.8	23.5	13.6	1.7	–	9.1	–
37.3	37.9	1.0	13.1	10.5	1.3	25.5	18.9	1.4	9.8	14.7	0.7	–	3.2	–
29.4	15.8	1.9	5.9	15.8	0.4	35.3	26.3	1.3	5.9	10.5	0.6	–	–	–
26.2	39.7	0.7	4.7	4.8	1.0	18.7	13.0	1.4	25.2	21.2	1.2	8.4	11.6	0.7
23.2	11.3	2.1	23.2	7.8	3.0	42.9	39.1	1.1	10.7	33.0	0.3	–	0.9	–
22.0	27.8	0.8	10.0	19.0	0.5	16.0	16.5	1.0	14.0	6.3	2.2	6.0	11.4	0.5
21.6	31.9	0.7	13.5	8.5	1.6	29.7	25.5	1.2	8.1	2.1	3.9	2.7	4.3	0.6
–	11.8	–	28.6	11.8	2.4	42.9	29.4	1.5	–	5.9	–	–	–	–
27.3	23.5	1.2	18.2	11.8	1.5	–	11.8	–	9.1	11.8	0.8	9.1	5.9	1.5
30.6	28.1	1.1	7.1	5.6	1.3	48.2	53.9	0.9	2.4	2.2	1.1	–	3.4	–
33.3	10.0	3.3	11.1	10.0	1.1	33.3	6.7	5.0	–	13.3	–	–	6.7	–
18.8	6.5	2.9	12.5	34.8	0.4	34.4	23.9	1.4	3.1	6.5	0.5	12.5	–	–
15.0	8.9	1.7	11.7	12.7	0.9	55.0	64.6	0.9	13.3	6.3	2.1	1.7	6.3	0.3
10.3	13.1	0.8	12.8	14.8	0.9	33.3	21.3	1.6	20.5	11.5	1.8	2.6	18.0	0.1
75.0	–	–	–	20.0	–	–	40.0	–	–	–	–	–	20.0	–
33.3	54.7	0.6	24.8	2.7	9.2	23.8	16.2	1.5	3.8	6.1	0.6	–	2.7	–
51.0	51.6	1.0	15.4	6.5	2.4	18.3	21.8	0.8	8.7	6.5	1.3	1.0	0.8	1.3
42.3	59.6	0.7	15.4	7.1	2.2	5.7	3.8	1.5	1.1	2.7	0.4	1.1	2.2	0.5
48.1	59.0	0.8	23.1	11.1	2.1	11.5	13.4	0.9	7.7	5.7	1.4	3.8	1.5	2.5
60.0	36.8	1.6	20.0	15.8	1.3	5.0	26.3	0.2	10.0	10.5	1.0	5.0	–	–

Table A2 (continued)

	Startup intentions			Nascent activity			Early-stage business			Established business			Business discontinued		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Russian Federation	8.1	11.6	0.7	4.8	8.1	0.6	3.9	5.5	0.7	3.1	3.8	0.8	2.2	3.6	0.6
Saudi Arabia	15.4	20.0	0.8	13.9	13.4	1.0	10.3	13.0	0.8	3.7	6.6	0.6	5.3	6.0	0.9
Slovak Republic	4.3	6.4	0.7	4.9	7.1	0.7	1.3	3.1	0.4	4.6	8.4	0.6	2.4	3.3	0.7
Slovenia	12.1	18.7	0.7	3.2	4.1	0.8	3.5	3.2	1.1	6.3	10.5	0.6	2.0	2.3	0.9
South Africa	18.2	22.0	0.8	14.5	19.7	0.7	7.0	7.7	0.9	3.7	6.8	0.5	10.5	10.5	1.0
South Korea	24.6	29.1	0.9	8.7	12.7	0.7	3.9	6.8	0.6	12.0	20.6	0.6	2.6	2.5	1.0
Spain	6.6	8.9	0.7	3.1	3.1	1.0	2.8	2.5	1.1	6.0	8.3	0.7	1.4	1.7	0.8
Sudan	39.2	49.8	0.8	22.7	42.1	0.5	9.0	15.4	0.6	6.5	9.8	0.7	4.5	6.4	0.7
Sweden	8.7	17.8	0.5	3.9	7.5	0.5	2.0	4.1	0.5	3.5	5.1	0.7	1.6	3.7	0.4
Switzerland	12.1	14.9	0.8	6.2	10.4	0.6	2.5	4.1	0.6	5.1	9.0	0.6	1.7	2.1	0.8
Turkey	24.8	40.0	0.6	10.7	22.6	0.5	3.8	6.9	0.6	6.0	16.0	0.4	5.6	7.1	0.8
United Arab Emirates	25.6	41.3	0.6	7.5	19.1	0.4	3.0	9.6	0.3	2.5	8.1	0.3	2.8	8.4	0.3
United Kingdom	8.3	10.4	0.8	8.4	11.4	0.7	4.5	3.4	1.3	3.4	7.3	0.5	1.6	2.6	0.6
United States	14.3	15.3	0.9	13.6	16.6	0.8	5.3	6.8	0.8	7.6	10.1	0.8	3.4	5.3	0.6
Uruguay	30.4	37.0	0.8	17.7	22.6	0.8	6.4	9.3	0.7	3.4	4.7	0.7	8.8	6.2	1.4
Global average	**17.3**	**21.8**	**0.8**	**8.5**	**11.5**	**0.7**	**4.1**	**5.9**	**0.7**	**5.3**	**8.5**	**0.6**	**3.6**	**4.4**	**0.8**
Region average															
Central & East Asia	20.5	24.4	0.8	10.4	14.7	0.7	4.5	6.8	0.7	7.6	13.1	0.6	4.3	5.1	0.8
Europe	8.3	10.9	0.8	4.4	5.8	0.8	2.5	3.2	0.8	5.6	8.2	0.7	1.8	2.4	0.8
Latin America & Caribbean	41.0	48.5	0.9	21.3	26.9	0.8	8.4	12.7	0.7	4.8	8.8	0.6	8.1	7.0	1.2
Middle East & Africa	31.0	39.6	0.8	9.8	14.7	0.7	5.1	7.8	0.7	3.2	7.3	0.4	5.6	7.8	0.7
North America	13.4	15.1	0.9	14.9	20.2	0.7	6.5	10.5	0.6	7.1	9.9	0.7	3.9	6.0	0.7
Income level average															
Low income	32.6	41.5	0.8	9.1	13.9	0.7	4.4	7.5	0.6	4.4	9.0	0.5	4.2	6.4	0.7
Upper–middle income	28.8	33.4	0.9	15.8	19.3	0.8	7.5	9.1	0.8	5.1	8.7	0.6	7.7	7.3	1.1
High income	12.9	17.3	0.8	6.8	9.6	0.7	3.3	5.0	0.7	5.4	8.4	0.6	2.7	3.6	0.8

Discontinued pandemic crisis			Discontinued family reasons			Discontinued not profitable			Discontinued lack of finance			Discontinued opportunity to sell		
Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
15.6	18.8	0.8	25.0	4.2	6.0	34.4	22.9	1.5	3.1	12.5	0.3	3.1	10.4	0.3
21.6	29.8	0.7	18.0	17.6	1.0	18.7	16.1	1.2	12.9	14.6	0.9	3.6	4.4	0.8
53.3	41.2	1.3	3.3	8.8	0.4	10.0	20.6	0.5	–	2.9	–	3.3	–	–
33.3	30.4	1.1	–	8.7	–	19.0	13.0	1.5	–	8.7	–	–	4.3	–
25.9	28.6	0.9	5.3	5.3	1.0	26.5	20.6	1.3	18.0	25.4	0.7	7.4	4.8	1.5
9.1	2.4	3.8	12.1	26.8	0.5	33.3	46.3	0.7	24.2	12.2	2.0	3.0	–	–
26.6	18.0	1.5	7.2	9.8	0.7	27.0	40.3	0.7	4.8	6.0	0.8	9.2	8.4	1.1
2.1	3.7	0.6	30.9	16.0	1.9	22.3	30.2	0.7	28.7	16.0	1.8	4.3	9.9	0.4
9.1	–	–	21.2	18.3	1.2	30.3	22.0	1.4	3.0	4.9	0.6	6.1	14.6	–
27.8	15.0	1.9	16.7	15.0	1.1	11.1	20.0	0.6	16.7	–	–	5.6	10.0	0.6
33.3	23.2	1.4	18.2	8.4	2.2	10.6	14.7	0.7	31.8	36.8	0.9	–	1.1	–
33.3	35.7	0.9	12.5	7.1	1.8	25.0	20.1	1.2	12.5	22.7	0.6	8.3	3.9	2.1
22.2	12.5	1.8	27.8	25.0	1.1	5.6	33.3	0.2	–	4.2	–	–	4.2	–
40.0	18.0	2.2	17.1	22.0	0.8	20.0	14.0	1.4	–	4.0	–	2.9	–	–
27.5	11.8	2.3	17.5	32.4	0.5	16.3	14.7	1.1	20.0	8.8	2.3	1.3	1.5	0.9
30.1	**29.5**	**1.0**	**14.3**	**11.3**	**1.3**	**23.0**	**23.2**	**1.0**	**10.7**	**11.0**	**1.0**	**3.9**	**5.6**	**0.7**
27.1	28.2	1.0	9.9	8.5	1.2	26.1	26.4	1.0	19.5	19.4	1.0	3.6	5.4	0.7
26.6	22.0	1.2	13.2	12.3	1.1	22.5	24.2	0.9	5.4	7.0	0.8	5.4	7.5	0.7
38.7	37.1	1.0	14.8	12.6	1.2	19.2	18.1	1.1	11.4	8.7	1.3	1.7	4.0	0.4
25.5	33.5	0.8	17.2	10.1	1.7	27.3	25.3	1.1	13.5	13.9	1.0	3.4	3.7	0.9
25.7	16.0	1.6	7.9	13.6	0.6	17.8	16.7	1.1	9.9	10.5	0.9	11.9	17.9	0.7
22.2	22.8	1.0	17.3	9.9	1.8	30.9	34.3	0.9	18.0	15.8	1.1	3.3	5.8	0.6
35.7	32.8	1.1	12.2	8.4	1.5	25.4	24.3	1.1	10.7	14.4	0.7	3.4	4.5	0.8
28.6	30.1	1.0	14.7	12.6	1.2	19.8	20.1	1.0	9.1	8.5	1.1	4.1	6.0	0.7

Table A3. COVID-19 Impacts on opportunities, government responses and digital technology: rates and gender ratios (GEM 2021)

	Pandemic provided new opportunity						Government economic response effective					
	TEA			Established business			TEA			Established business		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Belarus	35.9	25.2	1.4	14.7	22.2	0.7	30.7	23.4	1.3	21.3	38.8	0.6
Brazil	55.3	52.2	1.1	56.4	46.3	1.2	28.2	29.9	0.9	43.3	37.1	1.2
Canada	67.1	67.0	1.0	38.2	44.4	0.9	67.6	65.5	1.0	62.3	57.2	1.1
Chile	63.0	67.3	0.9	41.8	46.7	0.9	39.7	35.8	1.1	35.2	37.3	0.9
Colombia	57.1	55.3	1.0	56.3	40.9	1.4	22.6	17.0	1.3	37.5	17.3	2.2
Croatia	27.5	35.4	0.8	27.5	26.0	1.1	26.4	30.5	0.9	36.7	51.0	0.7
Cyprus	30.3	44.9	0.7	16.6	21.0	0.8	32.3	36.2	0.9	27.7	42.3	0.7
Dominican Republic	53.9	49.8	1.1	56.2	48.8	1.2	25.7	22.6	1.1	54.8	60.5	0.9
Egypt	43.6	43.6	1.0	35.7	34.4	1.0	–	–	–	–	–	–
Finland	31.0	28.3	1.1	22.1	22.1	1.0	36.6	35.6	1.0	35.0	39.5	0.9
France	40.7	39.1	1.0	26.7	34.2	0.8	39.6	45.4	0.9	57.4	52.0	1.1
Germany	35.7	36.9	1.0	30.9	30.3	1.0	–	–	–	–	–	–
Greece	26.2	30.0	0.9	18.6	11.9	1.6	31.7	28.3	1.1	40.5	33.8	1.2
Guatemala	54.8	48.9	1.1	40.4	37.5	1.1	25.6	22.0	1.2	17.9	25.0	0.7
Hungary	20.0	25.9	0.8	6.9	14.7	0.5	23.7	30.5	0.8	27.6	30.2	0.9
India	75.0	79.2	1.0	63.4	71.7	0.9	67.5	71.7	0.9	51.8	44.5	1.2
Iran	51.8	21.4	2.4	18.3	5.6	3.3	5.5	2.4	–	0.0	2.5	–
Ireland	56.5	63.3	0.9	41.7	58.3	0.7	–	–	–	–	–	–
Israel	45.5	53.6	0.9	15.4	32.5	0.5	24.1	35.4	0.7	50.0	27.5	1.8
Italy	48.6	45.2	1.1	27.6	21.6	1.3	27.3	25.0	1.1	27.6	24.6	1.1
Japan	22.5	30.6	0.7	8.7	19.5	0.5	20.0	18.7	1.1	18.2	13.6	
Kazakhstan	31.9	33.5	1.0	19.2	19.2	1.0	73.4	69.6	1.1	90.5	89.0	1.0
Latvia	39.2	32.2	1.2	20.0	16.3	1.2	15.3	16.1	1.0	14.0	23.0	0.6
Luxembourg	43.2	50.0	0.9	34.2	26.6	1.3	60.8	56.7	1.1	73.2	75.8	1.0
Morocco	25.6	27.5	0.9	21.3	14.4	1.5	41.9	34.5	1.2	42.1	31.0	1.4
Netherlands	62.1	53.4	1.2	20.5	50.0	0.4	44.9	50.8	0.9	48.5	63.7	0.8
Norway	23.5	34.1	0.7	65.0	32.0	2.0	42.9	56.4	0.8	50.0	51.0	1.0
Oman	36.3	38.5	0.9	18.2	23.9	0.8	–	–	–	–	–	–
Panama	47.0	59.4	0.8	48.1	41.7	1.2	16.8	25.2	0.7	14.8	29.2	0.5
Poland	30.2	21.3	1.4	23.0	20.3	1.1	22.2	9.0	2.5	18.5	17.1	1.1
Qatar	45.1	40.7	1.1	52.6	29.6	1.8	75.0	82.0	0.9	68.4	70.2	1.0

Pandemic prompted use of digital technologies						Using more digital technologies within 6 months					
TEA			Established business			TEA			Established business		
Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
35.9	25.2	1.4	14.7	22.2	0.7	30.7	23.4	1.3	21.3	38.8	0.6
55.3	52.2	1.1	56.4	46.3	1.2	28.2	29.9	0.9	43.3	37.1	1.2
67.1	67.0	1.0	38.2	44.4	0.9	67.6	65.5	1.0	62.3	57.2	1.1
63.0	67.3	0.9	41.8	46.7	0.9	39.7	35.8	1.1	35.2	37.3	0.9
57.1	55.3	1.0	56.3	40.9	1.4	22.6	17.0	1.3	37.5	17.3	2.2
27.5	35.4	0.8	27.5	26.0	1.1	26.4	30.5	0.9	36.7	51.0	0.7
30.3	44.9	0.7	16.6	21.0	0.8	32.3	36.2	0.9	27.7	42.3	0.7
53.9	49.8	1.1	56.2	48.8	1.2	25.7	22.6	1.1	54.8	60.5	0.9
43.6	43.6	1.0	35.7	34.4	1.0	–	–	–	–	–	–
31.0	28.3	1.1	22.1	22.1	1.0	36.6	35.6	1.0	35.0	39.5	0.9
40.7	39.1	1.0	26.7	34.2	0.8	39.6	45.4	0.9	57.4	52.0	1.1
35.7	36.9	1.0	30.9	30.3	1.0	–	–	–	–	–	–
26.2	30.0	0.9	18.6	11.9	1.6	31.7	28.3	1.1	40.5	33.8	1.2
54.8	48.9	1.1	40.4	37.5	1.1	25.6	22.0	1.2	17.9	25.0	0.7
20.0	25.9	0.8	6.9	14.7	0.5	23.7	30.5	0.8	27.6	30.2	0.9
75.0	79.2	1.0	63.4	71.7	0.9	67.5	71.7	0.9	51.8	44.5	1.2
51.8	21.4	2.4	18.3	5.6	3.3	5.5	2.4	–	0.0	2.5	–
56.5	63.3	0.9	41.7	58.3	0.7	–	–	–	–	–	–
45.5	53.6	0.9	15.4	32.5	0.5	24.1	35.4	0.7	50.0	27.5	1.8
48.6	45.2	1.1	27.6	21.6	1.3	27.3	25.0	1.1	27.6	24.6	1.1
22.5	30.6	0.7	8.7	19.5	0.5	20.0	18.7	1.1	18.2	13.6	
31.9	33.5	1.0	19.2	19.2	1.0	73.4	69.6	1.1	90.5	89.0	1.0
39.2	32.2	1.2	20.0	16.3	1.2	15.3	16.1	1.0	14.0	23.0	0.6
43.2	50.0	0.9	34.2	26.6	1.3	60.8	56.7	1.1	73.2	75.8	1.0
25.6	27.5	0.9	21.3	14.4	1.5	41.9	34.5	1.2	42.1	31.0	1.4
62.1	53.4	1.2	20.5	50.0	0.4	44.9	50.8	0.9	48.5	63.7	0.8
23.5	34.1	0.7	65.0	32.0	2.0	42.9	56.4	0.8	50.0	51.0	1.0
36.3	38.5	0.9	18.2	23.9	0.8	–	–	–	–	–	–
47.0	59.4	0.8	48.1	41.7	1.2	16.8	25.2	0.7	14.8	29.2	0.5
30.2	21.3	1.4	23.0	20.3	1.1	22.2	9.0	2.5	18.5	17.1	1.1
45.1	40.7	1.1	52.6	29.6	1.8	75.0	82.0	0.9	68.4	70.2	1.0

Table A3 (continued)

	Pandemic provided new opportunity						Government economic response effective					
	TEA			Established business			TEA			Established business		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Romania	50.0	44.2	1.1	50.0	35.5	1.4	23.9	25.3	0.9	34.4	25.9	1.3
Russian Federation	25.7	17.5	1.5	15.7	8.1	1.9	28.6	32.3	0.9	31.2	30.5	1.0
Saudi Arabia	43.2	55.4	0.8	42.9	25.0	1.7	–	–	–	–	–	–
Slovak Republic	36.2	50.7	0.7	13.3	13.2	1.0	12.5	14.1	0.9	17.3	13.4	1.3
Slovenia	27.2	58.7	0.5	27.1	34.1	0.8	34.9	50.9	0.7	24.5	44.0	0.6
South Africa	46.5	51.0	0.9	50.0	57.0	0.9	51.5	61.2	0.8	41.9	64.2	0.7
South Korea	6.7	9.2	0.7	–	1.9	–	20.0	22.1	0.9	8.6	13.8	0.6
Spain	37.5	44.2	0.9	23.6	25.1	0.9	19.1	22.9	0.8	25.5	24.9	1.0
Sudan	53.6	38.9	1.4	58.3	38.1	1.5	48.5	31.9	1.5	41.6	33.3	1.3
Sweden	30.5	42.4	0.7	23.5	28.7	0.8	38.8	42.3	0.9	41.7	36.1	1.2
Switzerland	36.3	37.9	1.0	48.8	35.3	1.4	51.0	59.5	0.9	61.5	66.6	0.9
Turkey	33.6	32.8	1.0	31.9	40.5	0.8	23.4	37.5	0.6	30.4	38.0	0.8
United Arab Emirates	56.2	60.5	0.9	66.7	63.1	1.1	81.7	86.4	0.9	85.7	85.9	1.0
United Kingdom	57.5	57.0	1.0	29.6	42.1	0.7	43.2	52.2	0.8	62.9	51.8	1.2
United States	56.1	50.0	1.1	40.0	40.0	1.0	46.9	38.9	1.2	50.0	41.0	1.2
Uruguay	45.4	39.4	1.2	25.8	27.5	0.9	49.4	51.4	1.0	55.1	70.2	0.8
Global average	**47.0**	**48.1**	**1.0**	**29.0**	**29.7**	**1.0**	**35.3**	**38.5**	**0.9**	**32.6**	**34.6**	**0.9**
Region average												
Central & East Asia	40.6	42.2	1.0	27.3	31.1	0.9	50.8	48.4	1.0	41.7	37.5	1.1
Europe	38.3	40.8	0.9	24.1	25.2	1.0	28.0	32.3	0.9	29.0	30.7	0.9
Latin America & Caribbean	57.3	58.8	1.0	43.8	43.5	1.0	32.5	31.1	1.0	32.6	35.7	0.9
Middle East & Africa	45.3	45.6	1.0	37.1	29.8	1.2	44.8	55.0	0.8	38.1	43.4	0.9
North America	61.8	59.6	1.0	39.7	42.2	0.9	57.2	54.0	1.1	54.6	48.5	1.1
Income level average												
Low income	54.4	46.4	1.2	43.5	31.6	1.4	46.2	38.7	1.2	37.6	24.5	1.5
Upper–middle income	47.0	45.5	1.0	37.5	37.7	1.0	32.2	32.0	1.0	38.8	42.4	0.9
High income	45.7	49.3	0.9	25.5	27.8	0.9	35.2	41.3	0.9	30.7	34.0	0.9

Pandemic prompted use of digital technologies						Using more digital technologies within 6 months					
TEA			Established business			TEA			Established business		
Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
50.0	44.2	1.1	50.0	35.5	1.4	23.9	25.3	0.9	34.4	25.9	1.3
25.7	17.5	1.5	15.7	8.1	1.9	28.6	32.3	0.9	31.2	30.5	1.0
43.2	55.4	0.8	42.9	25.0	1.7	–	–	–	–	–	–
36.2	50.7	0.7	13.3	13.2	1.0	12.5	14.1	0.9	17.3	13.4	1.3
27.2	58.7	0.5	27.1	34.1	0.8	34.9	50.9	0.7	24.5	44.0	0.6
46.5	51.0	0.9	50.0	57.0	0.9	51.5	61.2	0.8	41.9	64.2	0.7
6.7	9.2	0.7	–	1.9	–	20.0	22.1	0.9	8.6	13.8	0.6
37.5	44.2	0.9	23.6	25.1	0.9	19.1	22.9	0.8	25.5	24.9	1.0
53.6	38.9	1.4	58.3	38.1	1.5	48.5	31.9	1.5	41.6	33.3	1.3
30.5	42.4	0.7	23.5	28.7	0.8	38.8	42.3	0.9	41.7	36.1	1.2
36.3	37.9	1.0	48.8	35.3	1.4	51.0	59.5	0.9	61.5	66.6	0.9
33.6	32.8	1.0	31.9	40.5	0.8	23.4	37.5	0.6	30.4	38.0	0.8
56.2	60.5	0.9	66.7	63.1	1.1	81.7	86.4	0.9	85.7	85.9	1.0
57.5	57.0	1.0	29.6	42.1	0.7	43.2	52.2	0.8	62.9	51.8	1.2
56.1	50.0	1.1	40.0	40.0	1.0	46.9	38.9	1.2	50.0	41.0	1.2
45.4	39.4	1.2	25.8	27.5	0.9	49.4	51.4	1.0	55.1	70.2	0.8
25.3	**25.2**	**1.0**	**17.7**	**17.2**	**1.0**	**58.1**	**59.4**	**0.98**	**35.6**	**37.9**	**0.9**
30.4	26.3	1.2	31.5	27.9	1.1	58.9	55.9	1.05	51.6	48.6	1.1
22.1	20.1	1.1	12.6	12.6	1.0	41.8	44.9	0.93	26.8	28.3	1.0
20.8	19.8	1.1	21.7	12.9	1.7	76.2	76.1	1.00	55.6	57.2	1.0
37.8	40.0	1.0	31.8	28.9	1.1	56.4	59.8	0.94	45.3	45.3	1.0
26.2	22.1	1.2	11.9	16.7	0.7	56.5	58.9	0.96	33.3	38.0	0.9
39.6	33.9	1.2	29.6	25.9	1.1	62.0	60.6	1.02	47.1	42.4	1.1
26.6	24.3	1.1	24.0	17.3	1.4	64.7	65.2	0.99	51.1	51.1	1.0
22.7	24.3	0.9	15.2	16.1	0.9	54.6	57.2	0.95	31.0	34.6	0.9

Table A4. Gender composition of high-potential businesses: growth expectations, innovation, market focus, internationalization (GEM 2021)

	Local Innovative offering		National Innovative offering		International innovative offering		Local market	
	% TEA women	% TEA men	% TEA women	% TEA men	% TEA women	% TEA men	% TEA women	% TEA men
Belarus	44.1	55.9	60.0	40.0	–	100.0	52.2	47.8
Brazil	48.0	52.0	–	100.0	40.0	60.0	50.4	49.6
Canada	33.0	67.0	33.3	66.7	23.8	76.2	43.5	56.5
Chile	50.3	49.7	32.7	67.3	36.3	63.7	48.2	51.8
Colombia	47.1	52.9	42.1	57.9	25.0	75.0	51.8	48.2
Croatia	50.0	50.0	28.2	71.8	31.6	68.4	52.2	47.8
Cyprus	41.4	58.6	27.3	72.7	–	100.0	25.0	75.0
Dominican Republic	51.4	48.6	54.2	45.8	60.0	40.0	54.1	45.9
Egypt	19.7	80.3	23.5	76.5	–	100.0	38.1	61.9
Finland	70.0	30.0	68.8	31.3	7.7	92.3	67.6	32.4
France	51.0	49.0	60.6	39.4	31.3	68.8	46.5	53.5
Germany	33.3	66.7	37.0	63.0	7.7	92.3	48.7	51.3
Greece	53.3	46.7	42.9	57.1	40.0	60.0	47.2	52.8
Guatemala	38.0	62.0	50.0	50.0	38.5	61.5	45.7	54.3
Hungary	50.0	50.0	23.1	76.9	33.3	66.7	44.9	55.1
India	43.6	56.4	42.9	57.1	60.0	40.0	44.5	55.5
Iran	57.1	42.9	85.7	14.3	33.3	66.7	37.5	62.5
Ireland	40.0	60.0	54.2	45.8	46.7	53.3	50.0	50.0
Israel	42.9	57.1	42.9	57.1	–	100.0	60.0	40.0
Italy	36.4	63.6	40.0	60.0	0	100.0	39.5	60.5
Japan	47.8	52.2	17.4	82.6	25.0	75.0	44.1	55.9
Kazakhstan	28.6	71.4	100.0	–	50.0	50.0	55.7	44.3
Latvia	26.7	73.3	46.2	53.8	33.3	66.7	50.0	50.0
Luxembourg	38.1	61.9	29.3	70.7	5.3	94.7	28.6	71.4
Morocco	55.6	44.4	57.1	42.9	–	–	52.7	47.3
Netherlands	44.7	55.3	44.4	55.6	33.3	66.7	53.7	46.3
Norway	45.5	54.5	50.0	50.0	–	100.0	30.4	69.6
Oman	57.1	42.9	33.3	66.7	50.0	50.0	44.6	55.4
Panama	47.6	52.4	35.5	64.5	42.9	57.1	54.5	45.5
Poland	57.9	42.1	37.5	62.5	100	–	42.1	57.9
Qatar	13.5	86.5	19.2	80.8	12.5	87.5	7.1	92.9

National market		International market		Export >25%		20+ current employees		Expecting 20+ hires in next 5 years	
% TEA women	% TEA men	% TEA women	% TEA men	% TEA women	% TEA men	% TEA women	% TEA men	% TEA women	% TEA men
55.6	44.4	46.8	53.2	46.3	53.7	50.0	50.0	38.5	61.5
38.7	61.3	52.9	47.1	25.0	75.0	–	100.0	27.5	72.5
38.1	61.9	38.7	61.3	41.2	58.8	23.8	76.2	23.3	76.7
33.0	67.0	28.3	71.7	26.3	73.7	24.2	75.8	15.8	84.2
42.3	57.7	48.4	51.6	63.2	36.8	85.7	14.3	44.1	55.9
29.0	71.0	27.6	72.4	25.0	75.0	–	100.0	17.5	82.5
43.2	56.8	39.5	60.5	28.0	72.0	–	100.0	–	100.0
51.6	48.4	55.1	44.9	52.8	47.2	–	100.0	30.4	69.6
20.2	79.8	28.1	71.9	26.3	73.7	–	100.0	18.2	81.8
34.3	65.7	30.6	69.4	28.6	71.4	–	100.0	–	100.0
51.9	48.1	43.8	56.2	40.5	59.5	66.7	33.3	48.5	51.5
33.0	67.0	34.1	65.9	23.3	76.7	30.0	70.0	26.1	73.9
27.3	72.7	48.8	51.2	57.1	42.9	100.0	–	55.6	44.4
41.1	58.9	31.6	68.4	0.0	100.0	–	100.0	20.6	79.4
33.0	67.0	45.2	54.8	43.8	56.3	–	100.0	40.0	60.0
37.7	62.3	20.0	80.0		100.0	100.0	–	37.5	62.5
36.5	63.5	65.1	34.9	33.3	66.7	12.5	87.5	35.6	64.4
43.6	56.4	46.4	53.6	46.7	53.3	50.0	50.0	30.8	69.2
43.2	56.8	43.3	56.7	43.3	56.7	33.3	66.7	34.8	65.2
31.0	69.0	36.0	64.0	22.2	77.8	25.0	75.0	–	100.0
33.9	66.1	21.7	78.3		100.0	–	100.0	21.1	78.9
49.5	50.5	63.6	36.4	25.0	75.0	–	100.0	66.7	33.3
36.3	63.7	38.3	61.7	40.0	60.0	20.0	80.0	20.5	79.5
48.4	51.6	32.2	67.8	32.4	67.6	33.3	66.7	45.5	54.5
43.9	56.1	75.0	25.0	81.8	18.2	50.0	50.0	58.1	41.9
46.5	53.5	39.8	60.2	32.0	68.0	38.5	61.5	36.4	63.6
15.8	84.2	38.5	61.5	20.0	80.0	–	100.0	16.7	83.3
48.4	51.6	41.9	58.1	10.0	90.0	–	100.0	23.5	76.5
43.2	56.8	34.1	65.9	50.0	50.0	–	100.0	28.0	72.0
42.6	57.4	33.3	66.7	20.0	80.0	–	–	42.9	57.1
13.7	86.3	10.9	89.1	8.9	91.1	–	100.0	8.0	92.0

Table A4 (continued)

	Local Innovative offering		National Innovative offering		International innovative offering		Local market	
	% TEA women	% TEA men	% TEA women	% TEA men	% TEA women	% TEA men	% TEA women	% TEA men
Romania	57.9	42.1	46.2	53.8	100	–	51.7	48.3
Russian Federation	47.6	52.4	–	100.0	50.0	50.0	41.2	58.8
Saudi Arabia	44.6	55.4	31.3	68.8	75.0	25.0	42.9	57.1
Slovak Republic	21.4	78.6	25.0	75.0	–	–	50.8	49.2
Slovenia	66.7	33.3	31.3	68.8	14.3	85.7	59.1	40.9
South Africa	45.9	54.1	42.3	57.7	44.4	55.6	47.4	52.6
South Korea	50.0	50.0	36.8	63.2	28.6	71.4	60.6	39.4
Spain	40.2	59.8	43.7	56.3	37.5	62.5	58.6	41.4
Sudan	36.4	63.6	11.1	88.9	–	–	46.3	53.7
Sweden	29.7	70.3	40.7	59.3	28.6	71.4	34.6	65.4
Switzerland	32.0	68.0	35.0	65.0	17.6	82.4	54.8	45.2
Turkey	39.1	60.9	28.4	71.6	28.6	71.4	38.9	61.1
United Arab Emirates	11.7	88.3	11.1	88.9	19.2	80.8	11.3	88.7
United Kingdom	43.8	56.3	75.0	25.0	36.8	63.2	40.0	60.0
United States	42.4	57.6	64.7	35.3	44.4	55.6	40.9	59.1
Uruguay	50.0	50.0	39.3	60.7	9.1	90.9	49.4	50.6
Global average	**43.8**	**56.2**	**36.8**	**63.2**	**32.2**	**67.8**	**47.9**	**52.1**
Region average								
Central & East Asia	42.7	57.3	30.3	69.7	31.6	68.4	47.9	52.1
Europe	42.4	57.6	42.0	58.0	29.5	70.5	50.7	49.3
Latin America & Caribbean	47.9	52.1	37.8	62.2	35.9	64.1	48.9	51.1
Middle East & Africa	36.6	63.4	26.6	73.4	25.0	75.0	43.0	57.0
North America	35.3	64.7	40.6	59.4	36.7	63.3	42.1	57.9
Income level average								
Low income	38.9	61.1	44.6	55.4	35.7	64.3	44.6	55.4
Upper–middle income	44.5	55.5	41.3	58.7	38.3	61.7	49.4	50.6
High income	44.0	56.0	35.0	65.0	30.8	69.2	47.9	52.1

National market		International market		Export >25%		20+ current employees		Expecting 20+ hires in next 5 years	
% TEA women	% TEA men	% TEA women	% TEA men	% TEA women	% TEA men	% TEA women	% TEA men	% TEA women	% TEA men
39.0	61.0	60.0	40.0	42.9	57.1	80.0	20.0	52.9	47.1
35.3	64.7	53.3	46.7	57.1	42.9	50.0	50.0	35.7	64.3
39.0	61.0	40.0	60.0	28.6	71.4	33.3	66.7	42.9	57.1
31.6	68.4	23.1	76.9	50.0	50.0	66.7	33.3	25.0	75.0
41.7	58.3	34.4	65.6	25.0	75.0	–	100.0	25.0	75.0
52.9	47.1	36.3	63.7	36.4	63.6	–	100.0	21.6	78.4
33.7	66.3	44.7	55.3	14.3	85.7	50.0	50.0	30.0	70.0
46.2	53.8	45.7	54.3	48.5	51.5	19.4	80.6	31.6	68.4
30.9	69.1	28.6	71.4	20.0	80.0	8.3	91.7	9.8	90.2
29.6	70.4	31.9	68.1	31.4	68.6	28.6	71.4	34.8	65.2
26.3	73.7	31.4	68.6	15.6	84.4	50.0	50.0	16.7	83.3
31.3	68.7	25.2	74.8	27.1	72.9	14.3	85.7	23.4	76.6
18.0	82.0	12.2	87.8	12.5	87.5	8.6	91.4	9.2	90.8
47.4	52.6	42.9	57.1	50.0	50.0	100.0	–	31.3	68.8
43.6	56.4	52.6	47.4	46.7	53.3	85.7	14.3	38.1	61.9
41.4	58.6	36.1	63.9	18.8	81.3	50.0	50.0	30.3	69.7
37.9	**62.1**	**38.9**	**61.1**	**36.3**	**63.7**	**23.7**	**76.3**	**24.8**	**75.2**
36.4	63.6	30.7	69.3	21.1	78.9	15.0	85.0	27.9	72.1
40.4	59.6	41.0	59.0	39.5	60.5	33.1	66.9	32.2	67.8
39.6	60.4	45.1	54.9	45.8	54.2	27.5	72.5	23.6	76.4
33.0	67.0	29.4	70.6	23.8	76.2	8.9	91.1	19.0	81.0
41.3	58.7	42.5	57.5	42.5	57.5	40.7	59.3	30.6	69.4
32.5	67.5	44.6	55.4	31.4	68.6	9.7	90.3	28.1	71.9
44.4	55.6	44.1	55.9	43.7	56.3	31.4	68.6	31.0	69.0
36.0	64.0	36.9	63.1	34.3	65.7	23.1	76.9	22.0	78.0

Table A5. Entrepreneur demographics by country, income level and region: rates and gender ratios (GEM 2021)

	Aged 18–34			Aged 35–54			Aged 55–64			Some secondary education			Secondary education		
	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio
Belarus	45.7	38.1	1.2	38.4	45.3	0.9	15.9	16.5	1.0	2.2	1.5	1.5	28.5	37.8	0.8
Brazil	44.8	46.1	1.0	49.0	46.1	1.1	6.3	7.9	0.8	13.7	13.4	1.0	45.8	48.2	1.0
Canada	53.8	54.2	1.0	37.9	34.8	1.1	8.3	10.9	0.8	1.5	4.5	0.3	16.2	18.0	0.9
Chile	45.6	45.2	1.0	44.5	43.7	1.0	9.9	11.1	0.9	4.1	2.8	1.5	29.6	21.5	1.4
Colombia	43.4	51.2	0.9	46.7	38.2	1.2	9.9	10.6	0.9	6.6	6.5	1.0	19.7	29.0	0.7
Croatia	52.2	49.7	1.1	41.3	40.0	1.0	6.5	10.3	0.6	1.1	0.6	1.8	41.3	50.0	0.8
Cyprus	43.9	38.5	1.1	51.5	49.5	1.0	4.5	11.9	0.4	1.5	1.0	1.5	16.4	21.2	0.8
Dominican Republic	48.8	45.0	1.1	42.6	45.5	0.9	8.6	9.5	0.9	12.7	14.1	0.9	29.5	31.7	0.9
Egypt	59.3	67.2	0.9	31.4	28.9	1.1	9.3	4.0	2.3	32.5	35.5	0.9	16.9	17.7	1.0
Finland	34.9	39.4	0.9	44.4	47.9	0.9	20.6	12.8	1.6	1.6	1.1	1.5	29.5	54.3	0.5
France	46.3	38.5	1.2	44.9	53.8	0.8	8.8	7.7	1.1	5.1	10.9	0.5	21.3	14.1	1.5
Germany	37.4	48.1	0.8	51.5	41.4	1.2	11.1	10.5	1.1	8.2	9.4	0.9	42.3	28.3	1.5
Greece	58.7	43.1	1.4	37.0	43.1	0.9	4.3	13.8	0.3	27.3	35.9	0.8	4.5	14.1	0.3
Guatemala	65.2	58.5	1.1	31.7	36.5	0.9	3.1	5.1	0.6	15.9	17.8	0.9	46.5	51.4	0.9
Hungary	37.7	43.7	0.9	53.2	47.9	1.1	9.1	8.4	1.1	19.5	24.4	0.8	44.2	33.6	1.3
India	48.5	52.6	0.9	43.4	40.8	1.1	8.2	6.6	1.2	2.6	0.4	6.5	21.5	17.9	1.2
Iran	59.8	42.9	1.4	38.4	49.1	0.8	1.8	8.0	0.2	0.9	7.4	0.1	26.8	35.6	0.8
Ireland	50.4	44.1	1.1	44.3	40.4	1.1	5.2	15.4	0.3	1.8	4.7	0.4	12.6	21.9	0.6
Israel	41.1	39.6	1.0	42.2	44.6	1.0	16.7	15.8	1.1	–	–	–	–	1.2	–
Italy	57.1	45.2	1.3	40.0	35.5	1.1	2.9	19.4	0.2	5.9	9.7	0.6	50.0	48.4	1.0
Japan	25.0	30.2	0.8	55.0	47.7	1.2	20.0	22.1	0.9	5.1	7.0	0.7	43.6	37.2	1.2
Kazakhstan	46.3	41.6	1.1	34.0	39.2	0.9	19.7	19.3	1.0	–	–	–	8.2	13.2	0.6
Latvia	49.0	44.1	1.1	44.8	49.7	0.9	6.3	6.2	1.0	–	–	–	40.9	42.7	1.0
Luxembourg	51.9	44.9	1.2	40.4	52.0	0.8	7.7	3.1	2.5	6.0	2.2	2.7	4.0	4.4	0.9
Morocco	54.1	60.7	0.9	37.8	33.7	1.1	8.2	5.6	1.5	13.4	25.8	0.5	28.9	20.2	1.4
Netherlands	34.8	41.0	0.9	54.5	45.5	1.2	10.7	13.4	0.8	15.3	17.4	0.9	39.6	44.7	0.9
Norway	29.4	22.2	1.3	47.1	62.2	0.8	23.5	15.6	1.5	–	–	–	11.8	50.0	0.2
Oman	72.3	67.2	1.1	25.2	29.9	0.8	2.5	3.0	0.8	–	–	–	15.1	45.9	0.3
Panama	44.6	46.6	1.0	49.0	44.4	1.1	6.4	9.0	0.7	8.4	8.2	1.0	19.3	24.9	0.8
Poland	50.0	48.9	1.0	47.0	48.9	1.0	3.0	2.1	1.4	12.1	8.5	1.4	19.7	21.3	0.9
Qatar	61.9	55.4	1.1	34.9	40.0	0.9	3.2	4.6	0.7	17.5	18.8	0.9	–	–	–
Romania	37.7	38.8	1.0	58.4	50.0	1.2	3.9	11.3	0.4	2.6	2.5	1.0	6.6	13.9	0.5

Post-secondary education			Graduate education			Lower third income			Middle income			Upper third income		
% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio
56.2	45.2	1.2	13.1	15.6	0.8	41.5	39.2	1.1	12.7	12.5	1.0	45.8	48.3	1.0
29.5	24.1	1.2	2.1	1.8	1.2	22.9	12.3	1.9	42.9	36.9	1.2	34.1	50.8	0.7
66.2	63.0	1.1	16.2	14.5	1.1	36.0	33.8	1.1	32.0	36.9	0.9	32.0	29.3	1.1
56.5	63.1	0.9	4.9	10.8	0.5	35.4	10.4	3.4	41.6	46.1	0.9	23.0	43.4	0.5
57.2	49.1	1.2	10.5	10.1	1.0	10.0	11.5	0.9	54.0	33.1	1.6	36.0	55.4	0.7
35.9	40.4	0.9	21.7	8.3	2.6	31.6	22.6	1.4	25.0	25.5	1.0	43.4	51.8	0.8
62.7	60.6	1.0	19.4	16.3	1.2	20.8	14.3	1.5	35.4	44.2	0.8	43.8	41.6	1.1
50.3	45.8	1.1	5.9	5.5	1.1	26.4	17.4	1.5	32.9	30.2	1.1	40.7	52.4	0.8
37.7	37.6	1.0	–	–	–	37.0	30.7	1.2	16.7	21.1	0.8	46.3	48.2	1.0
62.3	39.4	1.6	6.6	4.3	1.5	41.4	27.8	1.5	17.2	18.9	0.9	41.4	53.3	0.8
42.6	42.9	1.0	30.9	32.1	1.0	25.6	23.1	1.1	40.0	33.3	1.2	34.4	43.5	0.8
49.5	61.6	0.8				39.3	36.2	1.1	27.0	29.0	0.9	33.7	34.8	1.0
59.1	35.9	1.7	2.3	9.4	0.2	45.7	36.5	1.3	25.7	36.5	0.7	28.6	26.9	1.1
5.1	9.5	0.5				38.0	20.0	1.9	35.0	41.1	0.9	27.0	38.9	0.7
11.7	18.5	0.6	15.6	16.8	0.9	12.0	11.4	1.1	26.0	26.1	1.0	62.0	62.5	1.0
68.1	79.5	0.9	1.6	1.9	0.8	16.5	18.3	0.9	34.0	25.7	1.3	49.5	56.0	0.9
41.1	44.8	0.9	31.3	11.7	2.7	17.1	10.3	1.7	82.9	89.7	0.9	–	–	–
59.5	51.6	1.2	26.1	20.3	1.3	34.3	40.3	0.9	31.3	18.5	1.7	34.3	41.1	0.8
50.6	55.8	0.9	49.4	43.0	1.2	32.9	28.4	1.2	35.3	30.7	1.2	31.8	40.9	0.8
44.1	41.9	1.1	–	–	–	41.7	25.6	1.6	33.3	41.9	0.8	25.0	32.6	0.8
48.7	51.2	1.0	2.6	4.7	0.6	51.4	32.1	1.6	22.9	35.9	0.6	25.7	32.1	0.8
38.7	36.2	1.1	53.1	50.7	1.1	34.7	36.1	1.0	21.8	33.0	0.7	43.6	30.9	1.4
59.1	57.3	1.0	–	–	–	7.1	5.7	1.3	47.1	34.0	1.4	45.7	60.4	0.8
28.0	60.0	0.5	60.0	32.2	1.9	20.0	38.3	0.5	50.0	38.3	1.3	30.0	23.5	1.3
34.0	25.8	1.3	7.2	6.7	1.1	11.1	14.5	0.8	34.6	31.6	1.1	54.3	53.9	1.0
28.8	25.0	1.2	16.2	11.4	1.4	38.2	32.5	1.2	30.4	29.3	1.0	31.4	38.2	0.8
58.8	31.8	1.9	29.4	6.8	4.3	54.5	31.4	1.7	18.2	28.6	0.6	27.3	40.0	0.7
45.4	24.4	1.9	32.8	23.7	1.4	17.8	24.7	0.7	24.7	27.0	0.9	57.5	48.3	1.2
59.4	54.9	1.1	10.4	9.4	1.1	43.1	24.4	1.8	27.7	27.4	1.0	29.2	48.3	0.6
19.7	9.6	2.1	47.0	60.6	0.8	55.4	47.0	1.2	28.6	25.8	1.1	16.1	27.3	0.6
69.8	66.2	1.1	12.7	13.3	1.0	32.6	16.5	2.0	7.0	4.9	1.4	60.5	78.7	0.8
27.6	43.0	0.6	63.2	40.5	1.6	11.9	5.6	2.1	45.8	50.0	0.9	42.4	44.4	1.0

Table A5 (continued)

	Aged 18–34			Aged 35–54			Aged 55–64			Some secondary education			Secondary education		
	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio
Russian Federation	42.0	45.9	0.9	50.7	42.9	1.2	7.2	11.2	0.6	–	2.1	–	13.0	17.5	0.7
Saudi Arabia	39.9	42.8	0.9	52.8	47.5	1.1	7.4	9.7	0.8	–	–	–	34.2	24.1	1.4
Slovak Republic	33.3	48.7	0.7	49.0	48.7	1.0	17.6	2.6	6.8	10.0	24.4	0.4	54.0	44.9	1.2
Slovenia	52.2	57.9	0.9	37.0	35.1	1.1	10.9	7.0	1.6	2.2	5.2	0.4	37.8	39.7	1.0
South Africa	56.3	66.7	0.8	28.7	26.9	1.1	15.0	6.5	2.3	13.4	12.0	1.1	43.7	43.4	1.0
South Korea	27.6	23.3	1.2	52.4	47.2	1.1	20.0	29.4	0.7	2.0	6.3	0.3	34.3	31.4	1.1
Spain	32.0	24.3	1.3	58.1	56.9	1.0	10.0	18.8	0.5	7.7	10.7	0.7	29.5	30.0	1.0
Sudan	57.9	57.5	1.0	36.5	38.8	0.9	5.6	3.7	1.5	40.1	43.6	0.9	–	2.1	–
Sweden	42.7	35.8	1.2	44.5	47.3	0.9	12.7	16.8	0.8	1.8	0.4	4.5	36.4	40.8	0.9
Switzerland	34.5	28.4	1.2	47.3	57.9	0.8	18.2	13.7	1.3	–	2.2	–	25.5	21.5	1.2
Turkey	50.4	50.6	1.0	43.9	40.4	1.1	5.7	9.0	0.6	16.0	19.4	0.8	52.0	52.8	1.0
United Arab Emirates	66.0	52.8	1.3	32.0	44.0	0.7	2.0	3.2	0.6	–	0.7	–	12.0	11.4	1.1
United Kingdom	46.0	46.5	1.0	41.4	39.5	1.1	12.6	14.0	0.9	11.6	13.5	0.9	26.7	32.4	0.8
United States	41.5	44.7	0.9	52.3	44.7	1.2	6.2	10.5	0.6	3.8	4.0	1.0	18.5	24.5	0.8
Uruguay	44.5	46.6	1.0	49.1	46.6	1.1	6.4	6.8	0.9	19.0	22.4	0.9	35.6	31.8	1.1
Global average	**46.2**	**45.8**	**1.0**	**44.7**	**43.9**	**1.0**	**9.1**	**10.3**	**0.9**	**8.4**	**9.9**	**0.9**	**27.7**	**26.9**	**1.0**
Region average															
Central & East Asia	43.5	43.0	1.0	42.7	42.1	1.0	13.8	14.9	0.9	3.1	4.9	0.6	23.4	26.8	0.9
Europe	40.0	37.7	1.1	50.2	49.1	1.0	9.8	13.2	0.7	6.8	8.4	0.8	28.4	31.3	0.9
Latin America & Caribbean	48.4	47.7	1.0	43.5	43.0	1.0	8.0	9.3	0.9	9.3	9.1	1.0	32.1	30.4	1.1
Middle East & Africa	54.2	54.7	1.0	37.9	39.3	1.0	7.9	6.0	1.3	13.1	15.4	0.9	22.0	17.9	1.2
North America	47.7	50.1	1.0	45.0	39.1	1.2	7.3	10.8	0.7	2.7	4.5	0.6	17.3	20.7	0.8
Income level average															
Low income	55.6	56.2	1.0	38.2	38.5	1.0	6.2	5.3	1.2	20.1	24.7	0.8	15.1	15.1	1.0
Upper–middle income	50.2	50.4	1.0	40.6	40.3	1.0	9.2	9.3	1.0	10.0	11.1	0.9	30.9	36.6	0.8
High income	42.8	42.4	1.0	47.8	46.1	1.0	9.4	11.5	0.8	5.9	7.1	0.8	28.2	25.5	1.1

Post-secondary education			Graduate education			Lower third income			Middle income			Upper third income		
% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio
87.0	80.4	1.1	–	–	–	22.4	17.6	1.3	22.4	22.4	1.0	55.2	60.0	0.9
61.5	67.2	0.9	4.3	8.0	0.5	33.3	32.3	1.0	26.9	25.6	1.1	39.8	42.2	0.9
22.0	16.7	1.3	12.0	14.1	0.9	10.3	11.1	0.9	44.8	40.7	1.1	44.8	48.1	0.9
51.1	46.6	1.1	6.7	6.9	1.0	27.8	17.6	1.6	36.1	43.1	0.8	36.1	39.2	0.9
32.4	32.8	1.0	8.9	11.3	0.8	31.6	30.1	1.1	29.2	26.5	1.1	39.1	43.4	0.9
53.9	52.8	1.0	9.8	8.2	1.2	8.7	15.3	0.6	42.4	49.3	0.9	48.9	35.4	1.4
42.0	39.3	1.1	20.2	19.4	1.0	36.5	24.5	1.5	23.4	21.8	1.1	40.1	53.6	0.8
36.6	33.8	1.1	2.7	4.7	0.6	15.3	21.1	0.7	63.2	44.5	1.4	21.5	34.4	0.6
60.0	58.3	1.0	1.8	0.4	4.5	21.0	11.9	1.8	33.0	17.3	1.9	46.0	70.8	0.7
70.9	71.0	1.0	3.6	5.4	0.7	23.1	15.7	1.5	44.2	28.9	1.5	32.7	55.4	0.6
28.0	25.9	1.1	4.0	1.9	2.1	27.6	19.3	1.4	36.8	33.7	1.1	35.6	47.0	0.8
56.0	52.0	1.1	32.0	34.9	0.9	26.1	24.6	1.1	60.9	39.8	1.5	13.0	35.5	0.4
38.4	36.0	1.1	23.3	16.2	1.4	36.6	33.3	1.1	38.0	26.9	1.4	25.4	39.8	0.6
61.5	56.3	1.1	16.2	13.9	1.2	37.6	21.8	1.7	29.6	38.0	0.8	32.8	40.1	0.8
20.1	12.1	1.7	2.3	2.3	1.0	59.9	45.1	1.3	16.8	17.6	1.0	23.4	37.3	0.6
45.9	**46.9**	**1.0**	**13.0**	**12.1**	**1.1**	**31.4**	**21.9**	**1.4**	**34.0**	**32.3**	**1.1**	**34.6**	**45.8**	**0.8**
50.8	54.9	0.9	20.6	13.0	1.6	23.1	21.7	1.1	32.9	34.1	1.0	44.0	44.3	1.0
44.7	43.7	1.0	19.3	15.6	1.2	32.0	24.7	1.3	29.2	26.6	1.1	38.8	48.7	0.8
44.3	45.5	1.0	4.8	7.2	0.7	34.1	16.3	2.1	37.2	38.6	1.0	28.7	45.0	0.6
45.5	48.4	0.9	13.1	13.4	1.0	27.0	25.0	1.1	36.7	29.6	1.2	36.2	45.5	0.8
63.8	59.9	1.1	16.2	14.2	1.1	36.9	28.9	1.3	30.9	37.2	0.8	32.1	33.9	1.0
45.2	46.7	1.0	7.2	4.4	1.6	17.5	20.3	0.9	47.5	38.2	1.2	35.1	41.6	0.8
39.3	35.9	1.1	12.3	9.8	1.3	30.1	21.2	1.4	33.2	31.9	1.0	36.7	46.9	0.8
49.0	50.8	1.0	14.2	14.3	1.0	34.0	22.3	1.5	32.6	31.6	1.0	33.4	46.0	0.7

Table A6. industry sector and business size for early-stage entrepreneurs: rates and gender ratios (GEM 2021)

	ICT			Agriculture, Forestry & Mining			Manufacturing & Transport			Wholesale/Retail			Fin./Prof./Admin./ Consumer Services		
	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio
Belarus	4.1	7.9	0.5	8.2	14.9	0.6	23.0	25.4	0.9	27.9	27.2	1.0	14.8	18.4	0.8
Brazil	0.5	3.1	0.2	2.6	17.1	0.2	9.9	16.7	0.6	51.3	39.0	1.3	14.1	11.8	1.2
Canada	11.9	6.7	1.8	4.8	7.5	0.6	13.1	16.7	0.8	32.1	35.0	0.9	15.5	20.8	0.8
Chile	0.5	4.3	0.1	4.7	13.8	0.3	14.0	18.4	0.8	52.7	39.8	1.3	9.3	18.2	0.5
Colombia	2.0	2.4	0.8	1.3	3.7	0.4	20.1	15.2	1.3	49.7	54.3	0.9	11.4	19.5	0.6
Croatia	3.7	9.8	0.4	13.4	25.2	0.5	15.9	9.8	1.6	18.3	18.2	1.0	19.5	22.4	0.9
Cyprus	–	1.0	–	6.1	6.9	0.9	12.1	16.8	0.7	47.0	45.5	1.0	19.7	20.8	1.0
Dominican Republic	1.3	1.4	0.9	1.3	2.8	0.5	7.8	9.0	0.9	68.6	58.8	1.2	8.3	13.7	0.6
Egypt	1.2	1.1	1.1	11.0	13.2	0.8	14.6	27.9	0.5	48.8	45.8	1.1	12.2	5.3	2.3
Finland	–	10.0	–	8.5	31.1	0.3	6.8	12.2	0.6	11.9	11.1	1.1	30.5	28.9	1.1
France	5.5	12.8	0.4	6.3	14.8	0.4	11.8	10.1	1.2	31.5	18.8	1.7	20.5	33.6	0.6
Germany	1.4	11.0	0.1	5.5	3.4	1.6	8.2	17.8	0.5	20.5	20.3	1.0	20.5	32.2	0.6
Greece	2.3	1.6	1.4	9.1	19.4	0.5	11.4	17.7	0.6	45.5	35.5	1.3	20.5	12.9	1.6
Guatemala	0.9	0.7	1.3	2.3	14.3	0.2	6.8	11.8	0.6	81.8	56.6	1.5	3.1	6.8	0.5
Hungary	–	6.0	–	14.7	37.9	0.4	8.0	12.1	0.7	28.0	15.5	1.8	12.0	15.5	0.8
India	–	0.8	–	11.3	14.0	0.8	13.8	8.9	1.6	63.5	69.1	0.9	1.9	0.8	2.4
Iran	8.5	6.9	1.2	8.5	12.4	0.7	29.2	15.9	1.8	32.1	35.9	0.9	4.7	15.9	0.3
Ireland	2.0	7.2	0.3	7.0	10.8	0.7	8.0	10.8	0.7	38.0	42.3	0.9	23.0	19.8	1.2
Israel	10.5	7.2	1.5	1.2	1.0	1.2	10.5	8.2	1.3	22.1	28.9	0.8	34.9	37.1	0.9
Italy	11.4	3.3	3.5	2.9	10.0	0.3	5.7	18.3	0.3	20.0	23.3	0.9	40.0	35.0	1.1
Japan	2.6	4.8	0.5	5.1	9.6	0.5	2.6	6.0	0.4	43.6	41.0	1.1	17.9	27.7	0.7
Kazakhstan	1.8	1.4	1.3	10.0	3.5	2.9	12.4	13.9	0.9	37.6	45.8	0.8	13.5	13.2	1.0
Latvia	4.4	10.4	0.4	10.0	26.4	0.4	11.1	17.4	0.6	23.3	20.8	1.1	25.6	16.7	1.5
Luxembourg	10.0	6.0	1.7	6.0	7.2	0.8	10.0	6.0	1.7	18.0	39.8	0.5	40.0	38.6	1.0
Morocco	1.1	–	–	5.3	5.7	0.9	17.0	18.4	0.9	46.8	58.6	0.8	11.7	6.9	1.7
Netherlands	6.3	13.2	0.5	0	6.6	–	4.7	11.0	0.4	39.1	31.9	1.2	21.9	16.5	1.3
Norway	11.8	10.0	1.2	11.8	22.5	0.5	0	5.0	–	17.6	17.5	1.0	35.3	27.5	1.3
Oman	–	–	–	2.4	20.4	0.1	17.1	8.2	2.1	37.8	46.9	0.8	17.1	14.3	1.2
Panama	1.5	4.3	0.4	5.0	10.3	0.5	7.0	15.1	0.5	65.2	44.0	1.5	10.4	15.9	0.7
Poland	1.5	2.2	0.7	23.1	16.1	1.4	6.2	10.8	0.6	32.3	25.8	1.3	20.0	24.7	0.8
Qatar	–	2.7	–	3.4	12.8	0.3	15.5	16.0	1.0	48.3	44.3	1.1	8.6	18.1	0.5
Romania	2.7	2.7	1.0	10.8	27.4	0.4	16.2	21.9	0.7	25.7	20.5	1.3	18.9	15.1	1.3

Gov't/Health/ Education/Social Svcs			Solopreneurs			1–5 employees			6–19 employees			20+ current employees		
% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio
22.1	6.1	3.6	44.8	28.6	1.6	34.5	54.8	0.6	10.3	9.5	1.1	10.3	7.1	1.5
21.5	12.3	1.8	52.8	26.4	2.0	44.9	63.2	0.7	2.2	6.4	0.3	–	4.0	–
22.6	13.3	1.7	26.1	11.8	2.2	41.3	49.5	0.8	21.7	21.5	1.0	10.9	17.2	0.6
18.8	5.5	3.4	37.3	25.1	1.5	56.6	56.4	1.0	3.4	13.9	0.2	2.7	4.6	0.6
15.4	4.9	3.1	16.7	8.6	1.9	61.1	75.9	0.8	11.1	13.8	0.8	11.1	1.7	6.5
29.3	14.7	2.0	–	–	–	85.0	67.6	1.3	15.0	18.9	0.8	–	13.5	–
15.2	8.9	1.7	22.2	14.0	1.6	74.1	65.1	1.1	3.7	16.3	0.2	–	4.7	–
12.7	14.3	0.9	10.8	6.1	1.8	86.3	78.8	1.1	2.9	14.1	0.2	–	1.0	–
12.2	6.8	1.8	29.6	17.7	1.7	53.7	58.4	0.9	16.7	15.9	1.1	–	8.0	–
42.4	6.7	6.3	65.0	57.1	1.1	27.5	39.3	0.7	7.5	1.8	4.2	–	1.8	–
24.4	10.1	2.4	51.2	44.4	1.2	41.9	51.1	0.8	2.3	2.2	1.1	4.7	2.2	2.1
43.8	15.3	2.9	43.2	31.9	1.4	40.5	41.7	1.0	8.1	16.7	0.5	8.1	9.7	0.8
11.4	12.9	0.9	18.2	5.0	3.6	54.5	85.0	0.6	18.2	10.0	1.8	9.1	0	–
5.1	9.9	0.5	63.1	40.8	1.6	35.4	50.4	0.7	1.5	7.3	0.2	–	1.5	–
37.3	12.9	2.9	41.3	52.6	0.8	56.5	38.6	1.5	2.2	7.0	0.3	–	1.8	–
9.4	6.4	1.5	15.1	8.3	1.8	81.7	74.5	1.1	2.2	17.2	0.1	1.1	–	–
17.0	13.1	1.3	20.0	38.3	0.5	60.0	44.4	1.4	17.5	8.6	2.0	2.5	8.6	0.3
22.0	9.0	2.4	23.5	24.5	1.0	50.0	51.0	1.0	11.8	14.3	0.8	14.7	10.2	1.4
20.9	17.5	1.2	43.8	31.6	1.4	50.0	55.3	0.9	3.1	7.9	0.4	3.1	5.3	0.6
20.0	10.0	2.0	47.4	21.9	2.2	42.1	56.3	0.8	5.3	12.5	0.4	5.3	9.4	0.6
28.2	10.8	2.6	35.7	25.0	1.4	64.3	46.4	1.4	–	21.4	–	–	7.1	–
24.7	22.2	1.1	–	–	–	59.7	68.3	0.9	40.3	30.0	1.3	–	1.7	–
25.6	8.3	3.1	28.9	30.9	0.9	60.5	47.3	1.3	7.9	14.5	0.5	2.6	7.3	0.4
16.0	2.4	6.7	33.3	13.8	2.4	58.3	75.9	0.8	–	3.4	–	8.3	6.9	1.2
18.1	10.3	1.8	30.0	35.4	0.9	56.0	56.3	1.0	12.0	6.3	1.9	2.0	2.1	1.0
28.1	20.9	1.3	22.2	20.6	1.1	62.2	51.5	1.2	4.4	16.2	0.3	11.1	11.8	0.9
23.5	17.5	1.3	36.4	37.9	1.0	63.6	44.8	1.4	–	10.3	–	0	6.9	–
25.6	10.2	2.5	42.9	30.3	1.4	57.1	54.5	1.1	–	12.1	–	–	3.0	–
10.9	10.3	1.1	8.8	9.5	0.9	84.2	71.4	1.2	7.0	17.9	0.4	0	1.2	–
16.9	20.4	0.8	38.5	11.3	3.4	50.0	83.0	0.6	11.5	5.7	2.0	–	–	–
24.1	6.1	4.0	15.8	3.7	4.3	57.9	35.6	1.6	26.3	37.4	0.7	–	23.3	–
25.7	12.3	2.1	26.8	5.6	4.8	56.1	69.4	0.8	7.3	22.2	0.3	9.8	2.8	3.5

Table A6 (continued)

	ICT			Agriculture, Forestry & Mining			Manufacturing & Transport			Wholesale/Retail			Fin./Prof./Admin./ Consumer Services		
	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio
Russian Federation	3.0	3.3	0.9	1.5	18.5	0.1	13.4	25.0	0.5	38.8	27.2	1.4	17.9	10.9	1.6
Saudi Arabia	–	–	–	–	1.9	–	8.7	4.7	1.9	71.0	71.3	1.0	4.0	7.1	0.6
Slovak Republic	0	5.2	–	8.2	18.2	0.5	14.3	15.6	0.9	22.4	28.6	0.8	16.3	16.9	1.0
Slovenia	4.5	10.2	0.4	2.3	11.9	0.2	11.4	20.3	0.6	15.9	16.9	0.9	27.3	23.7	1.2
South Africa	2.5	4.1	0.6	5.0	10.2	0.5	8.8	13.5	0.7	66.9	47.4	1.4	2.9	9.0	0.3
South Korea	2.9	8.0	0.4	4.9	3.1	1.6	14.6	15.3	1.0	54.4	46.6	1.2	5.8	18.4	0.3
Spain	6.6	9.7	0.7	5.3	6.3	0.8	9.5	12.5	0.8	30.4	30.7	1.0	29.9	30.4	1.0
Sudan	0.4	0.7	0.6	9.8	28.8	0.3	17.8	11.4	1.6	54.9	51.1	1.1	3.8	5.5	0.7
Sweden	4.3	9.7	0.4	9.7	13.6	0.7	9.7	13.1	0.7	26.9	20.4	1.3	30.1	30.1	1.0
Switzerland	8.0	11.3	0.7	4.0	8.8	0.5	12.0	10.0	1.2	16.0	13.8	1.2	20.0	41.3	0.5
Turkey	6.1	4.5	1.4	9.1	19.7	0.5	24.2	19.7	1.2	33.3	40.9	0.8	12.1	6.1	2.0
United Arab Emirates	6.5	3.8	1.7	2.2	8.7	0.3	19.6	10.2	1.9	54.3	44.7	1.2	6.5	23.1	0.3
United Kingdom	4.5	10.8	0.4	–	8.1	–	10.2	3.6	2.8	35.2	35.1	1.0	26.1	34.2	0.8
United States	5.6	3.5	1.6	5.6	9.9	0.6	7.5	15.5	0.5	29.0	23.9	1.2	32.7	33.8	1.0
Uruguay	0.6	4.7	0.1	6.1	24.6	0.3	11.6	7.1	1.6	55.5	35.5	1.6	14.0	18.5	0.8
Global average	**2.7**	**4.7**	**0.6**	**5.4**	**12.6**	**0.4**	**11.8**	**13.7**	**0.9**	**46.8**	**40.7**	**1.2**	**14.8**	**18.2**	**0.8**
Region average															
Central & East Asia	1.8	3.3	0.6	8.7	9.3	0.9	13.3	12.2	1.1	49.5	53.0	0.9	8.5	11.3	0.8
Europe	4.7	8.5	0.6	6.9	13.7	0.5	10.7	13.5	0.8	29.0	26.6	1.1	25.1	26.2	1.0
Latin America & Caribbean	0.8	3.3	0.2	3.6	12.8	0.3	11.4	15.1	0.8	60.0	45.2	1.3	9.2	15.4	0.6
Middle East & Africa	2.1	2.2	1.0	4.9	12.2	0.4	14.2	12.5	1.1	54.8	50.7	1.1	7.9	12.4	0.6
North America	8.9	5.0	1.8	5.2	8.8	0.6	9.9	16.0	0.6	30.2	29.0	1.0	25.0	27.9	0.9
Income level average															
Low income	1.7	1.5	1.1	9.5	18.6	0.5	18.1	15.0	1.2	51.7	52.8	1.0	5.7	5.9	1.0
Upper–middle income	1.7	2.6	0.7	4.1	11.1	0.4	11.0	14.7	0.8	59.0	47.4	1.2	9.4	12.0	0.8
High income	3.3	6.0	0.6	5.4	12.0	0.5	11.2	13.2	0.9	40.4	36.3	1.11	18.7	22.4	0.8

Gov't/Health/ Education/Social Svcs			Solopreneurs			1–5 employees			6–19 employees			20+ current employees		
% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio	% TEA women	% TEA men	W/M ratio
25.4	15.2	1.7	11.4	18.5	0.6	77.3	53.7	1.4	6.8	24.1	0.3	4.5	3.7	1.2
16.2	14.9	1.1	–	–	–	74.0	79.9	0.9	23.7	17.4	1.4	2.3	2.7	0.9
38.8	15.6	2.5	17.6	28.1	0.6	70.6	65.6	1.1	–	3.1	–	11.8	3.1	3.8
38.6	16.9	2.3	58.6	58.8	1.0	27.6	38.2	0.7	13.8	–	–	–	2.9	–
13.8	15.8	0.9	–	–	–	92.4	80.6	1.2	7.6	16.5	0.5	–	2.9	–
17.5	8.6	2.0	13.3	21.3	0.6	77.8	52.5	1.5	6.7	25.0	0.3	2.2	1.3	1.7
18.3	10.4	1.8	46.5	41.5	1.1	47.1	40.6	1.2	5.0	11.8	0.4	1.4	6.2	0.2
13.3	2.5	5.3	7.3	7.8	0.9	91.5	63.6	1.4	–	21.4		1.2	7.1	0.2
19.4	13.1	1.5	65.3	53.5	1.2	26.5	35.6	0.7	4.1	5.9	0.7	4.1	5.0	0.8
40.0	15.0	2.7	43.5	27.8	1.6	47.8	47.2	1.0	4.3	22.2	0.2	4.3	2.8	1.5
15.2	9.1	1.7	7.3	1.5	4.9	73.2	61.2	1.2	14.6	19.4	0.8	4.9	17.9	0.3
10.9	9.5	1.2	–	7.2	–	42.1	29.7	1.4	42.1	39.9	1.1	15.8	23.2	0.7
23.9	8.1	3.0	47.1	60.6	0.8	47.1	39.4	1.2	2.9	–	–	2.9	–	–
19.6	13.4	1.5	39.6	30.5	1.3	41.7	59.3	0.7	6.3	8.5	0.7	12.5	1.7	7.4
12.2	9.5	1.3	33.9	58.4	0.6	58.9	27.3	2.2	5.4	13.0	0.4	1.8	1.3	1.4
18.5	**10.1**	**1.8**	**31.6**	**23.4**	**1.4**	**57.6**	**55.3**	**1.0**	**8.0**	**15.2**	**0.5**	**2.8**	**6.0**	**0.5**
18.1	10.9	1.7	10.6	9.4	1.1	73.1	64.8	1.1	15.2	21.4	0.7	1.1	4.3	0.3
23.5	11.6	2.0	41.2	34.8	1.2	49.4	48.4	1.0	6.0	11.2	0.5	3.4	5.6	0.6
14.9	8.3	1.8	38.2	27.4	1.4	56.4	57.7	1.0	3.8	12.0	0.3	1.6	3.0	0.5
16.0	9.9	1.6	11.8	10.0	1.2	71.8	58.6	1.2	14.5	21.7	0.7	1.8	9.7	0.2
20.8	13.4	1.6	33.0	19.2	1.7	41.5	53.6	0.8	13.8	16.6	0.8	11.7	10.6	1.1
13.3	6.1	2.2	18.5	16.5	1.1	72.7	62.3	1.2	7.8	16.1	0.5	0.9	5.1	0.2
14.9	12.1	1.2	27.4	18.7	1.5	62.1	64.0	1.0	8.5	13.7	0.6	1.9	3.5	0.5
21.0	10.0	2.1	35.7	26.4	1.4	53.1	51.1	1.0	8.0	15.6	0.5	3.3	7.0	0.5

Table A7. Cultural perceptions supporting entrepreneurs and investment activity: rates and gender ratios (GEM 2021)

	New business is good career			Business high status			Good media on new business			Easy to start a business			Opportunity recognition		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Belarus	73.5	73.0	1.0	71.6	69.9	1.0	50.9	42.7	1.2	30.9	37.9	0.8	23.8	26.3	0.9
Brazil	–	–	–	–	–	–	–	–	–	41.3	42.7	1.0	51.4	58.4	0.9
Canada	–	–	–	–	–	–	–	–	–	65.7	67.9	1.0	67.5	73.4	0.9
Chile	79.4	78.2	1.0	–	–	–	–	–	–	44.5	51.7	0.9	56.4	63.2	0.9
Colombia	53.3	51.0	1.1	59.1	64.8	0.9	59.3	58.7	1.0	28.3	29.7	1.0	38.2	38.0	1.0
Croatia	63.3	61.6	1.0	54.2	52.7	1.0	63.8	60.6	1.1	25.4	36.5	0.7	54.4	62.1	0.9
Cyprus	83.1	80.6	1.0	75.7	75.0	1.0	67.1	66.0	1.0	52.0	49.7	1.1	50.1	50.3	1.0
Dominican Republic	87.7	84.8	1.0	90.4	89.2	1.0	90.0	89.2	1.0	64.1	69.0	0.9	72.3	76.4	1.0
Egypt	75.8	75.5	1.0	80.9	82.9	1.0	79.6	77.4	1.0	70.0	74.6	0.9	71.0	75.3	0.9
Finland	–	–	–	–	–	–	–	–	–	66.1	72.5	0.9	56.6	65.0	0.9
France	70.1	66.8	1.1	54.5	56.3	1.0	76.5	75.4	1.0	50.4	53.5	0.9	47.9	56.4	0.9
Germany	52.5	49.0	1.1	86.6	78.9	1.1	60.5	55.6	1.1	37.7	38.8	1.0	40.3	55.7	0.7
Greece	68.1	61.6	1.1	65.1	63.1	1.0	58.3	54.8	1.1	32.2	38.1	0.9	47.5	49.8	1.0
Guatemala	96.0	92.2	1.0	79.3	80.4	1.0	67.7	59.0	1.2	47.7	50.1	1.0	67.7	70.6	1.0
Hungary	64.6	63.8	1.0	66.8	62.1	1.1	64.6	66.3	1.0	43.9	54.2	0.8	33.7	39.4	0.9
India	88.1	90.7	1.0	84.0	89.6	0.9	81.0	87.2	0.9	81.0	83.4	1.0	82.6	84.1	1.0
Iran	54.9	53.7	1.0	88.1	89.3	1.0	53.1	48.2	1.1	18.4	17.1	1.1	16.2	19.6	0.8
Ireland	67.7	66.3	1.0	83.2	82.8	1.0	82.7	82.4	1.0	54.3	63.3	0.9	50.9	63.8	0.8
Israel	62.4	64.4	1.0	84.0	81.2	1.0	48.8	57.7	0.9	11.6	16.2	0.7	41.3	50.1	0.8
Italy	60.8	61.4	1.0	55.9	56.8	1.0	62.2	68.8	0.9	17.2	15.9	1.1	31.9	37.5	0.9
Japan	27.4	21.1	1.3	63.6	61.2	1.0	56.9	53.3	1.1	26.7	32.5	0.8	11.0	12.6	0.9
Kazakhstan	90.4	91.5	1.0	93.0	90.5	1.0	62.5	62.4	1.0	51.2	53.6	1.0	53.6	49.0	1.1
Latvia	51.6	53.8	1.0	58.7	60.6	1.0	60.4	55.0	1.1	25.8	33.0	0.8	39.1	40.2	1.0
Luxembourg	–	–	–	–	–	–	–	–	–	65.0	63.5	1.0	51.1	56.8	0.9
Morocco	84.4	85.9	1.0	78.6	80.8	1.0	81.5	79.7	1.0	54.0	58.2	0.9	62.1	66.2	0.9
Netherlands	–	–	–	–	–	–	–	–	–	84.3	86.9	1.0	63.5	75.5	0.8
Norway	–	–	–	–	–	–	–	–	–	79.3	81.2	1.0	72.2	76.2	1.0
Oman	72.2	83.6	0.9	69.2	82.2	0.8	63.7	78.8	0.8	39.0	49.8	0.8	60.8	74.2	0.8
Panama	62.6	65.7	1.0	64.2	68.6	0.9	69.8	66.4	1.1	45.3	52.9	0.9	43.0	49.7	0.9
Poland	55.9	53.5	1.0	67.9	64.8	1.1	38.6	37.5	1.0	61.5	67.1	0.9	71.5	73.7	1.0
Qatar	81.5	79.0	1.0	89.8	87.2	1.0	83.4	80.0	1.0	60.0	65.2	0.9	75.2	73.5	1.0
Romania	70.0	65.7	1.1	75.5	69.1	1.1	70.9	65.3	1.1	22.9	31.0	0.7	52.3	46.1	1.1

Startup skills			Undeterred by fear of failure			Personally knows an entrepreneur			Invested			Median investment size		
Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women ($)	Men ($)	W/M ratio
45.2	59.5	0.8	45.8	48.4	1.0	61.1	61.4	1.0	4.1	8.4	0.5	991	1,983	0.5
62.2	71.3	0.9	49.1	54.2	0.9	68.2	73.2	0.9	10.1	14.4	0.7	386	964	0.4
51.4	66.3	0.8	45.5	48.5	0.9	48.6	54.9	0.9	12.4	18.0	0.7	3,519	4,853	0.7
62.6	79.1	0.8	44.9	55.9	0.8	68.8	72.7	1.0	19.4	28.4	0.7	1,347	2,290	0.6
51.8	61.1	0.9	51.3	53.6	1.0	55.3	61.4	0.9	6.5	5.5	1.2	1,057	1,321	0.8
66.0	76.1	0.9	48.9	51.2	1.0	64.7	71.2	0.9	3.5	7.8	0.5	477	477	1.0
61.8	66.4	0.9	45.7	48.2	1.0	69.8	76.3	0.9	3.5	4.8	0.7	5,973	15,049	0.4
87.0	90.5	1.0	60.8	64.3	1.0	79.0	86.4	0.9	16.9	22.7	0.7	1,754	939	1.9
57.1	73.6	0.8	53.5	50.2	1.1	15.6	44.9	0.4	1.8	3.9	0.5	1,224	1,275	1.0
32.4	53.0	0.6	41.1	60.9	0.7	62.7	65.5	1.0	3.4	5.7	0.6	3,969	4,710	0.8
42.3	54.9	0.8	46.9	53.7	0.9	44.1	48.5	0.9	4.8	7.2	0.7	1,195	2,389	0.5
29.2	45.0	0.7	49.3	59.5	0.8	37.5	42.2	0.9	4.6	7.2	0.6	5,973	5,839	1.0
47.6	58.5	0.8	40.4	47.9	0.8	30.2	35.0	0.9	4.0	4.7	0.9	11,946	13,087	0.9
73.2	79.6	0.9	54.9	64.9	0.9	67.8	74.5	0.9	11.8	16.2	0.7	388	647	0.6
29.4	42.9	0.7	56.5	67.3	0.8	45.2	54.4	0.8	1.8	3.9	0.5	5,193	3,383	1.5
81.5	90.2	0.9	54.8	48.9	1.1	55.9	70.0	0.8	5.1	5.6	0.9	–	–	–
56.5	76.4	0.7	57.6	62.5	0.9	37.9	45.8	0.8	3.7	8.4	0.4	2,400	1,200	2.0
49.4	66.2	0.8	42.9	49.7	0.9	54.8	60.3	0.9	5.5	12.5	0.4	3,584	5,973	0.6
28.3	47.4	0.6	42.8	49.8	0.9	62.0	65.1	1.0	3.8	6.4	0.6	6,150	30,749	0.2
36.2	53.1	0.7	45.5	52.6	0.9	34.2	47.9	0.7	1.3	3.3	0.4	5,981	5,973	1.0
7.5	17.4	0.4	62.4	58.6	1.1	16.4	23.6	0.7	2.0	2.5	0.8	9,104	5,429	1.7
63.4	67.5	0.9	87.7	86.3	1.0	53.2	53.6	1.0	22.3	18.7	1.2	2,341	2,275	1.0
47.5	59.2	0.8	55.4	66.4	0.8	41.6	40.7	1.0	3.8	6.8	0.6	2,389	2,389	1.0
42.7	62.6	0.7	49.7	53.0	0.9	39.5	46.3	0.9	4.5	6.8	0.7	2,389	5,551	0.4
55.3	67.9	0.8	57.0	67.3	0.9	38.9	49.2	0.8	2.1	3.4	0.6	2,152	3,369	0.6
35.1	55.7	0.6	63.9	65.3	1.0	52.2	61.2	0.9	5.4	12.5	0.4	5,201	11,946	0.4
34.2	49.3	0.7	64.2	66.8	1.0	35.9	40.0	0.9	3.0	4.7	0.6	4,978	11,650	0.4
47.3	70.7	0.7	78.7	75.2	1.1	65.1	73.7	0.9	6.3	9.9	0.6	1,299	7,046	0.2
64.2	75.3	0.9	58.1	58.9	1.0	45.0	45.7	1.0	6.7	11.8	0.6	600	2,000	0.3
59.2	61.1	1.0	55.4	55.3	1.0	54.5	53.4	1.0	2.3	2.2	1.1	3,158	3,948	0.8
62.8	72.9	0.9	54.6	61.9	0.9	50.5	57.2	0.9	6.8	10.5	0.7	10,288	16,473	0.6
48.7	51.3	1.0	40.4	48.2	0.8	38.9	36.5	1.1	2.7	2.5	1.1	2,695	2,426	1.1

Table A7 (continued)

	New business is good career			Business high status			Good media on new business			Easy to start a business			Opportunity recognition		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Russian Federation	73.5	70.0	1.1	71.2	68.2	1.0	65.2	56.9	1.2	30.7	34.3	0.9	32.1	35.0	0.9
Saudi Arabia	94.8	97.8	1.0	94.5	97.7	1.0	93.5	97.0	1.0	89.7	96.3	0.9	93.0	97.1	1.0
Slovak Republic	49.3	55.5	0.9	56.1	55.0	1.0	43.3	43.5	1.0	22.8	28.8	0.8	31.4	35.4	0.9
Slovenia	69.4	67.2	1.0	88.4	83.5	1.1	86.5	81.0	1.1	53.3	67.9	0.8	45.8	56.4	0.8
South Africa	81.5	82.1	1.0	81.6	82.3	1.0	84.2	82.9	1.0	65.2	70.1	0.9	54.1	61.9	0.9
South Korea	54.9	59.2	0.9	88.5	90.2	1.0	69.6	73.0	1.0	33.0	36.8	0.9	40.2	47.6	0.8
Spain	49.8	50.2	1.0	62.6	59.0	1.1	49.4	46.5	1.1	34.7	37.1	0.9	28.4	31.6	0.9
Sudan	87.3	91.4	1.0	95.0	95.9	1.0	87.4	79.5	1.1	66.5	66.9	1.0	73.6	70.6	1.0
Sweden	–	–	–	–	–	–	–	–	–	84.1	81.4	1.0	75.5	82.7	0.9
Switzerland	37.9	43.0	0.9	79.7	72.2	1.1	61.1	61.6	1.0	61.6	75.5	0.8	49.7	59.4	0.8
Turkey	66.1	67.5	1.0	77.5	72.7	1.1	–	–	–	20.5	29.7	0.7	28.5	34.9	0.8
United Arab Emirates	69.3	76.5	0.9	75.4	80.8	0.9	77.6	83.4	0.9	64.5	78.6	0.8	68.1	75.8	0.9
United Kingdom	71.4	69.3	1.0	82.6	84.4	1.0	82.2	82.5	1.0	66.6	74.6	0.9	58.2	64.2	0.9
United States	77.9	74.6	1.0	79.5	81.2	1.0	75.3	77.9	1.0	64.6	69.1	0.9	60.5	65.7	0.9
Uruguay	64.3	70.7	0.9	59.1	67.2	0.9	68.2	67.8	1.0	36.2	37.7	1.0	57.0	58.6	1.0
Global average	**70.8**	**71.1**	**1.0**	**76.0**	**77.1**	**1.0**	**67.8**	**68.2**	**1.0**	**46.6**	**52.3**	**0.9**	**48.8**	**54.7**	**0.9**
Region average															
Central & East Asia	69.7	70.2	1.0	81.9	82.0	1.0	69.1	71.9	1.0	45.4	51.1	0.9	47.7	51.4	0.9
Europe	62.6	60.7	1.0	69.6	67.3	1.0	60.8	58.9	1.0	43.6	48.0	0.9	41.9	46.8	0.9
Latin America & Caribbean	77.4	76.6	1.0	72.0	75.0	1.0	70.7	67.6	1.1	44.2	49.1	0.9	56.2	61.2	0.9
Middle East & Africa	77.7	80.3	1.0	84.3	86.8	1.0	76.7	78.4	1.0	56.0	63.8	0.9	62.1	69.5	0.9
North America	77.9	74.6	1.0	79.5	81.2	1.0	75.3	77.9	1.0	65.0	68.6	1.0	63.7	69.2	0.9
Income level average															
Low income	77.4	78.6	1.0	84.7	87.0	1.0	75.7	74.0	1.0	57.3	60.2	1.0	60.3	63.4	1.0
Upper–middle income	77.0	76.0	1.0	77.0	76.3	1.0	70.0	66.3	1.1	42.1	46.6	0.9	48.7	51.8	0.9
High income	66.8	67.8	1.0	72.8	74.4	1.0	64.7	67.3	1.0	46.0	52.4	0.9	47.2	54.1	0.9

Startup skills			Undeterred by fear of failure			Personally knows an entrepreneur			Invested			Median investment size		
Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women ($)	Men ($)	W/M ratio
29.9	39.8	0.8	45.1	53.5	0.8	58.7	61.0	1.0	3.3	5.5	0.6	1,041	1,719	0.6
85.3	94.4	0.9	46.6	47.2	1.0	53.7	61.1	0.9	12.4	13.5	0.9	4,000	4,000	1.0
34.1	49.5	0.7	40.5	50.8	0.8	50.6	57.1	0.9	3.7	3.9	1.0	5,973	5,973	1.0
49.5	67.1	0.7	47.9	61.7	0.8	50.1	58.8	0.9	3.4	7.3	0.5	8,362	7,167	1.2
65.0	74.7	0.9	49.4	52.1	1.0	35.7	39.7	0.9	9.6	11.4	0.8	140	168	0.8
45.4	61.9	0.7	78.1	78.4	1.0	35.3	45.4	0.8	2.2	3.5	0.6	26,381	26,381	1.0
45.8	53.6	0.9	39.5	43.6	0.9	36.3	39.9	0.9	4.0	5.4	0.7	5,973	5,973	1.0
83.5	92.8	0.9	56.3	60.8	0.9	59.1	74.5	0.8	7.3	16.1	0.5	48	275	0.2
40.3	59.0	0.7	54.1	57.7	0.9	50.2	59.6	0.8	8.7	15.9	0.6	1,175	1,762	0.7
38.9	59.9	0.7	57.6	65.9	0.9	50.6	58.7	0.9	8.7	10.0	0.9	4,874	16,472	0.3
50.4	67.5	0.8	62.3	65.9	1.0	33.9	51.4	0.7	5.1	10.0	0.5	143	1,173	0.1
50.1	71.5	0.7	56.6	51.1	1.1	47.4	57.7	0.8	4.3	10.6	0.4	3,997	16,335	0.2
42.9	59.3	0.7	37.6	45.7	0.8	49.9	49.6	1.0	2.7	4.5	0.6	3,057	6,962	0.4
56.8	72.2	0.8	51.1	52.2	1.0	57.1	60.5	0.9	7.1	10.4	0.7	2,000	5,000	0.4
65.3	71.4	0.9	48.7	49.9	1.0	50.9	57.1	0.9	4.3	7.7	0.6	967	1,144	0.9
51.5	**63.9**	**0.8**	**49.7**	**54.3**	**0.9**	**47.2**	**53.0**	**0.9**	**6.1**	**8.9**	**0.7**	**1,600**	**2,986**	**0.5**
52.1	64.7	0.8	67.2	65.1	1.0	39.0	49.7	0.8	7.0	7.6	0.9	2,454	2,347	1.1
44.5	55.5	0.8	45.8	51.3	0.9	44.3	48.3	0.9	4.0	6.1	0.7	3,948	5,825	0.7
65.7	76.9	0.9	50.3	57.3	0.9	64.6	69.3	0.9	13.6	19.5	0.7	675	1,347	0.5
61.4	76.1	0.8	54.6	57.1	1.0	44.3	55.5	0.8	5.9	9.5	0.6	2,400	4,000	0.6
54.4	69.5	0.8	48.3	50.4	1.0	52.9	57.8	0.9	9.7	14.1	0.7	2,000	5,000	0.4
65.3	79.2	0.8	55.8	57.5	1.0	39.8	54.9	0.7	3.8	6.8	0.6	720	779	0.9
59.5	68.6	0.9	54.8	59.1	0.9	54.1	58.6	0.9	9.1	11.8	0.8	517	793	0.7
47.8	60.9	0.8	47.7	52.9	0.9	46.6	51.7	0.9	5.7	8.6	0.7	2,437	4,041	0.6

Table A8. Enabling conditions for women entrepreneurs: composite index scores, GEM National Expert Survey 2021

	Equal cultural support for women entrepreneurs	Favourable regulations for women entrepreneurs	Equal access to finance	Equal access to procurement
Belarus	−1.8	−2.8	1.7	1.3
Brazil	−2.0	−3.1	−0.2	−0.6
Canada	−0.6	−2.0	−0.5	0.4
Chile	−0.9	−1.4	−0.4	0.2
Colombia	0.0	−2.1	0.7	0.1
Croatia	−1.8	−3.0	1.5	0.5
Cyprus	−1.8	−2.0	1.8	1.1
Dominican Republic	0.2	−2.0	1.3	0.8
Egypt	−1.3	−1.7	0.4	0.4
Finland	1.7	−0.6	3.4	3.1
France	−0.5	−1.9	0.8	1.1
Germany	0.3	−2.3	1.1	1.5
Greece	−1.1	−2.2	1.3	0.4
Guatemala	−0.9	−1.9	0.7	0.3
Hungary	−1.7	−2.7	3.0	2.4
India	−0.7	−0.6	0.6	0.3
Iran	−3.1	−3.8	−1.2	−1.9
Ireland	−1.0	−2.6	0.3	1.3
Israel	−1.6	−2.4	−0.7	−0.2
Italy	−1.5	−1.7	0.5	−0.1
Jamaica	0.4	−1.7	1.4	1.6
Japan	−2.3	−2.4	0.8	1.5
Kazakhstan	−0.4	−0.4	2.7	1.8
Latvia	−1.1	−0.6	1.9	0.8
Lithuania	1.4	0.9	3.0	2.7
Luxembourg	0.3	−2.4	2.0	2.4
Mexico	−0.9	−1.5	0.8	1.0
Morocco	−1.5	−2.6	0.9	0.4
Netherlands	0.2	−0.7	0.9	1.7
Norway	0.8	−1.3	1.6	2.3
Oman	1.4	−0.3	2.6	2.2
Panama	−0.1	−1.7	−0.2	−0.2

Sufficient family support services for women entrepreneurs	Pandemic telework has helped women manage family
-1.7	-0.8
-2.8	-1.8
-1.3	0.0
-2.0	-1.6
-1.8	-1.3
-1.9	0.1
-1.7	0.2
-1.0	0.5
-0.6	1.0
3.1	2.1
0.0	-0.5
-0.2	0.1
-1.2	-0.2
-2.3	0.8
-1.0	-0.7
-0.7	1.3
-3.2	-0.7
-2.5	0.8
-2.2	-0.1
-1.8	0.3
-1.1	0.9
-2.1	1.5
0.3	1.1
-0.1	0.5
2.0	1.6
-0.1	0.4
-1.4	0.9
-1.9	-0.1
1.1	0.7
1.8	-0.8
-1.1	2.3
-1.5	0.1

Table A8 (continued)

	Equal cultural support for women entrepreneurs	Favourable regulations for women entrepreneurs	Equal access to finance	Equal access to procurement
Poland	−1.2	−2.6	1.9	2.1
Qatar	0.4	−0.4	1.7	1.3
Romania	−1.0	−1.8	2.9	2.3
Russia	−1.1	−1.7	3.1	2.7
Saudi Arabia	2.8	1.0	3.4	2.9
Slovak Republic	−0.7	−2.0	2.5	2.2
Slovenia	−0.2	−2.0	2.6	2.8
South Africa	−1.0	−2.5	−0.1	0.1
South Korea	0.1	−1.1	1.4	1.2
Spain	−0.8	−2.1	0.8	0.9
Sudan	−2.0	−1.8	0.9	−1.5
Sweden	0.0	−0.9	−0.4	0.9
Switzerland	−0.3	−2.5	1.1	1.4
Turkey	−2.4	−2.8	−0.6	−1.1
United Arab Emirates	3.2	2.2	3.0	3.1
United Kingdom	0.0	−1.8	−0.6	0.4
United States	0.1	−1.8	−0.3	0.6
Uruguay	−0.7	−2.3	0.7	0.4
Global average	**−0.5**	**−1.7**	**1.2**	**1.1**
Region average				
Central & East Asia	−1.1	−1.5	1.0	0.7
Europe	−0.6	−1.8	1.6	1.6
Latin America & Caribbean	−0.5	−2.0	0.5	0.4
Middle East & Africa	−0.3	−1.2	1.1	0.7
North America	−0.3	−1.9	−0.4	0.5
Income level average				
Low income	−1.7	−2.1	0.3	−0.5
Upper–middle income	−0.8	−2.0	1.1	0.8
High income	−0.2	−1.5	1.3	1.4

Sufficient family support services for women entrepreneurs	Pandemic telework has helped women manage family
−1.6	−0.3
0.7	1.5
−1.8	0.1
−0.2	0.7
0.8	3.0
−0.9	0.4
−0.4	0.0
−1.2	0.5
−0.3	0.6
−2.1	0.7
−2.9	0.7
2.7	0.9
−1.2	0.2
−1.9	−1.0
2.5	3.3
−1.4	0.6
−1.2	0.8
−1.2	0.2
−0.9	**0.4**
−0.9	0.7
−0.5	0.3
−1.7	−0.2
−0.9	1.2
−1.3	0.4
−1.9	0.5
−1.4	0.0
−0.5	0.6

Appendix B: Figures Data

Figure 2. Average Total early-stage Entrepreneurial Activity (TEA) rates by gender and country, grouped by national level

Income level		TEA women (%)	TEA men (%)
Low & lower–middle	Morocco	0.06	0.06
	Iran	0.07	0.10
	Egypt	0.06	0.13
	India	0.12	0.16
	Sudan	0.26	0.41
Upper–middle	Russian Federation	0.07	0.10
	Romania	0.10	0.10
	Belarus	0.13	0.14
	Turkey	0.10	0.21
	Colombia	0.14	0.17
	South Africa	0.16	0.19
	Kazakhstan	0.21	0.18
	Brazil	0.19	0.23
	Panama	0.20	0.23
	Guatemala	0.24	0.33
	Dominican Republic	0.44	0.40
High	Poland	0.02	0.02
	Norway	0.02	0.04
	Italy	0.04	0.06
	Spain	0.06	0.05
	Japan	0.04	0.08
	Greece	0.05	0.07
	Slovak Republic	0.05	0.08
	Slovenia	0.06	0.07

Income level		TEA women (%)	TEA men (%)
High (cont.)	Germany	0.05	0.08
	Luxembourg	0.05	0.09
	France	0.07	0.08
	Finland	0.06	0.09
	Cyprus	0.06	0.11
	Sweden	0.06	0.12
	Israel	0.09	0.10
	Switzerland	0.07	0.12
	Hungary	0.08	0.12
	Croatia	0.09	0.16
	Ireland	0.11	0.14
	United Kingdom	0.11	0.14
	Oman	0.12	0.14
	South Korea	0.11	0.16
	Qatar	0.11	0.17
	United Arab Emirates	0.08	0.20
	Netherlands	0.13	0.15
	Latvia	0.12	0.18
	United States	0.15	0.18
	Saudi Arabia	0.19	0.20
	Canada	0.16	0.24
	Uruguay	0.20	0.26
	Chile	0.25	0.35

Figure 3. Average Total early-stage Entrepreneurial Activity (TEA) motives by gender and region

Motivation: To continue a family tradition

	TEA women (%)	TEA men (%)
Central & East Asia	34.6	37.7
Europe	20.6	23.1
Latin America & Caribbean	37.3	36.0
Middle East & Africa	44.5	49.5
North America	44.8	47.0

Motivation: To make a difference in the world

	TEA women (%)	TEA men (%)
Central & East Asia	33.8	35.3
Europe	43.8	40.4
Latin America & Caribbean	63.5	62.3
Middle East & Africa	56.8	54.8
North America	73.2	68.8

Motivation: To build great wealth or a very high income

	TEA women (%)	TEA men (%)
Central & East Asia	67.6	66.8
Europe	41.8	50.9
Latin America & Caribbean	54.0	60.0
Middle East & Africa	76.6	80.8
North America	70.5	71.3

Motivation: To earn a living because jobs are scarce

	TEA women (%)	TEA men (%)
Central & East Asia	58.0	57.3
Europe	64.4	58.5
Latin America & Caribbean	82.4	73.0
Middle East & Africa	79.7	76.1
North America	56.9	61.1

Figure 4. Entrepreneurial intentions, nascent, baby business, established business and entrepreneurial exit rates by gender and national income level

Income level	Business stage	Women (%)	Men (%)
Low & lower–middle income	Startup intentions	32.6	41.5
	Nascent activity	9.1	13.9
	Baby business	4.4	7.5
	Established business	4.4	9.0
	Business exit	4.2	6.4
Upper–middle income	Startup intentions	28.8	33.4
	Nascent activity	15.8	19.3
	Baby business	7.5	9.1
	Established business	5.1	8.7
	Business exit	7.7	7.3
High income	Startup intentions	12.9	17.3
	Nascent activity	6.8	9.6
	Baby business	3.3	5.0
	Established business	5.4	8.4
	Business exit	2.7	3.6

Figure 5. Reasons for entrepreneurial exits by gender and national income level

Income level		Pandemic crisis	Family reasons	Not profitable	Lack of financing	Opportunity to sell	Other
Low & lower–middle income	Women (%)	22.2	17.3	30.9	18.0	3.3	8.3
	Men (%)	22.8	9.9	34.3	15.8	5.8	11.4
Upper–middle income	Women (%)	35.7	12.2	25.4	10.7	3.4	12.6
	Men (%)	32.8	8.4	24.3	14.4	4.5	15.6
High income	Women (%)	28.6	14.7	19.8	9.1	4.1	23.7
	Men (%)	30.1	12.6	20.1	8.5	6.0	22.7

Figure 6. Entrepreneurial intentions by gender, year and national income level

Income level	Year	Women (%)	Men (%)
Low & lower–middle income	2019	40.0	51.0
	2020	36.1	44.8
	2021	31.8	40.7
Upper–middle income	2019	30.3	37.4
	2020	29.3	35.5
	2021	31.4	35.6
High income	2019	15.8	20.5
	2020	13.9	19.1
	2021	13.2	17.5

Figure 7. Total early-stage Entrepreneurial Activity (TEA) by gender, year and national income level

Income level	Year	Women (%)	Men (%)
Low & lower–middle income	2019	8.5	14.2
	2020	4.1	11.2
	2021	7.9	11.4
Upper–middle income	2019	15.5	18.9
	2020	17.5	21.6
	2021	17.2	22.3
High income	2019	10.9	14.2
	2020	8.8	12.2
	2021	8.7	11.8

Figure 8. Established Business Ownership (EBO) by gender, year and national income level

Income level	Year	Women (%)	Men (%)
Low & lower–middle income	2019	5.1	10.1
	2020	3.0	9.0
	2021	4.4	9.0
Upper–middle income	2019	8.9	14.6
	2020	6.5	13.4
	2021	5.1	8.7
High income	2019	6.0	8.8
	2020	5.0	8.4
	2021	5.4	8.4

Figure 9. Business exits by gender, year and national income level

Income level	Year	Women (%)	Men (%)
Low & lower–middle income	2019	3.3	4.3
	2020	4.2	7.5
	2021	4.2	6.4
Upper–middle income	2019	4.2	4.5
	2020	5.4	5.3
	2021	7.7	7.3
High income	2019	2.8	3.3
	2020	2.9	3.4
	2021	2.7	3.6

Figure 10. Pandemic opportunity and government response by gender for early-stage entrepreneurs (TEA) and established business owners (EBO)

Income level		TEA women (%)	TEA men (%)	EBO women (%)	EBO men (%)
Low & lower–middle income	New opportunity	54.4	46.4	43.5	31.6
	Effective response	46.2	38.7	37.6	24.5
Upper–middle income	New opportunity	47.0	45.5	37.5	37.7
	Effective response	32.2	32	38.8	42.4
High income	New opportunity	45.7	49.3	25.5	27.8
	Effective response	35.2	41.3	30.7	34.0

Figure 11. Pandemic-engendered digital technology use and expected adoption for early-stage entrepreneurs (TEA) and established business owners (EBO) by gender

Income level		TEA women (%)	TEA men (%)	EBO women (%)	EBO men (%)
Low & lower–middle income	New digital tools	39.6	33.9	29.6	25.9
	More digital plans	62.0	60.6	47.1	42.4
Upper–middle income	New digital tools	26.6	24.3	24.0	17.3
	More digital plans	64.7	65.2	51.1	51.1
High income	New digital tools	22.7	24.3	15.2	16.1
	More digital plans	54.6	57.2	31.0	34.6

Figure 12. High-growth indicators by gender and national income level for early-stage entrepreneurs

Income level		TEA women (%)	TEA men (%)
Low & lower–middle income	20+ new hires expected	28.1	71.9
	20+ current employees	9.7	90.3
Upper–middle income	20+ new hires expected	31.0	69.0
	20+ current employees	31.4	68.6
High income	20+ new hires expected	22.0	78.0
	20+ current employees	23.1	76.9

Figure 13. Level of innovation by gender and national income for early-stage entrepreneurs

Income level		TEA women (%)	TEA men (%)
Low & lower–middle income	Local	38.9	61.1
	National	44.6	55.4
	International	35.7	64.3
Upper–middle income	Local	44.5	55.5
	National	41.3	58.7
	International	38.3	61.7
High income	Local	44.0	56.0
	National	35.0	65.0
	International	30.8	69.2

Figure 14. Market focus by gender and national income level for early-stage entrepreneurs

Income level		TEA women (%)	TEA men (%)
Low & lower–middle income	Local	47.9	52.1
	National	36.4	63.6
	International	30.7	69.3
Upper–middle income	Local	50.7	49.3
	National	40.4	59.6
	International	41.0	59.0
High income	Local	48.9	51.1
	National	39.6	60.4
	International	45.1	54.9

Figure 15. Education level by gender and national income level for early-stage entrepreneurs

Income level		No secondary	Some secondary	Secondary	Post-secondary	Graduate
Low & lower–middle income	Women (%)	12.4	20.1	15.1	45.2	7.2
	Men (%)	9.1	24.7	15.1	46.7	4.4
Upper–middle income	Women (%)	7.5	10.0	30.9	39.3	12.3
	Men (%)	6.6	11.1	36.6	35.9	9.8
High income	Women (%)	2.7	5.9	28.2	49.0	14.2
	Men (%)	2.3	7.1	25.5	50.8	14.3

Figure 16. Household income by gender and region for early-stage entrepreneurs

Income level		TEA women (%)	TEA men (%)
Low & lower–middle income	Lower third	17.5	20.3
	Middle third	47.5	38.2
	Upper third	35.1	41.6
Upper–middle income	Lower third	30.1	21.2
	Middle third	33.2	31.9
	Upper third	36.7	46.9
High income	Lower third	34.0	22.3
	Middle third	32.6	31.6
	Upper third	33.4	46.0

Figure 17. Industry sector by gender and national income level for early-stage entrepreneurs

Income level		ICT	Agriculture, Forestry & Mining	Manufacturing & Transport	Wholesale/ Retail	Financial, Professional, Administrative & Consumer Services	Government, Health, Education & Social Services
Low & lower–middle income	Women (%)	1.7	9.5	18.1	51.7	5.7	13.3
	Men (%)	1.5	18.6	15.0	52.8	5.9	6.1
Upper–middle income	Women (%)	1.7	4.1	11.0	59	9.4	14.9
	Men (%)	2.6	11.1	14.7	47.4	12.0	12.1
High income	Women (%)	3.3	5.4	11.2	40.4	18.7	21.0
	Men (%)	6.0	12.0	13.2	36.3	22.4	10.0

Figure 18. Business size by gender and national income level for early-stage entrepreneurs

Income level		No employees	1–5 employees	6–19 employees	20+ employees
Low & lower–middle income	Women (%)	18.5	72.7	7.8	0.9
	Men (%)	16.5	62.3	16.1	5.1
Upper–middle income	Women (%)	27.4	62.1	8.5	1.9
	Men (%)	18.7	64.0	13.7	3.5
High income	Women (%)	33.0	41.5	13.8	11.7
	Men (%)	19.2	53.6	16.6	10.6

Figure 19. Gender ratio (female–male) for entrepreneurial perceptions by national income level (1.0 = parity)

Income level	Undeterred by fear of failure	Has startup skills	See new opporutnities	Easy to start a business
Low & lower–middle income	0.97	0.82	0.95	0.95
Upper–middle income	0.93	0.87	0.94	0.90
High income	0.90	0.78	0.87	0.88

Figure 20. Entrepreneurial activity and investment activity by gender and national income level (average National Expert rating)

Income level	Knows entrepreneur	Recent investment	Investment amount
Low & lower–middle income	0.72	0.00	0.92
Upper–middle income	0.92	0.00	0.65
High income	0.90	0.00	0.60

Figure 21. National conditions supportive of women entrepreneurs by national income level (average National Expert rating)

Income level	Equal cultural support	Favourable regulations for women	Equal access to finance	Equal access to procurement	Sufficient family support services	Telework helps women manage family
Low & lower–middle income	−1.7	−2.1	0.3	−0.5	−1.9	0.5
	−0.8	−2.0	1.1	0.8	−1.4	0.0
Upper–middle income	−0.2	−1.5	1.3	1.4	−0.5	0.6
	11.1	6.6	11.1	36.6	35.9	9.8
High income	5.9	2.7	5.9	28.2	49.0	14.2
	7.1	2.3	7.1	25.5	50.8	14.3

Figure 22. Intentions, nascent, early-stage business, established business and business exit rates for women in Central & East Asia

		Women (%)	Men (%)
India	Startup intentions	18.2	18.2
	Nascent activity	14.1	16.5
	New business	5.4	8.8
	Established business	7.3	9.7
	Business exit	3.3	4.0
Japan	Startup intentions	2.2	4.2
	Nascent activity	3.4	8.4
	New business	1.3	3.6
	Established business	2.3	7.2
	Business exit	0.8	1.3
Kazakhstan	Startup intentions	56.5	54.1
	Nascent activity	13.0	10.0
	New business	7.8	6.4
	Established business	10.8	13.5
	Business exit	15.1	18.3
South Korea	Startup intentions	24.6	29.1
	Nascent activity	8.7	12.7
	New business	3.9	6.8
	Established business	12.0	20.6
	Business exit	2.6	2.5

Figure 23. Pandemic impacts for early-stage entrepreneurs by gender and country in Central & East Asia

		Women (%)	Men (%)	W/M ratio
India	Pandemic provided opportunities	75.0	79.2	0.95
	Effective government response	67.5	71.7	0.94
	Use of new digital technology	28.6	24.2	1.18
	Plans for new digital technology	53.7	63.2	0.85
Japan	Pandemic provided opportunities	22.5	30.6	0.74
	Effective government response	20.0	18.7	1.07
	Use of new digital technology	22.9	18.4	1.24
	Plans for new digital technology	66.7	60.8	1.10
Kazakhstan	Pandemic provided opportunities	31.9	33.5	0.95
	Effective government response	73.4	69.6	1.05
	Use of new digital technology	28.3	32.7	0.87
	Plans for new digital technology	64.2	52.9	1.21
South Korea	Pandemic provided opportunities	6.7	9.2	0.73
	Effective government response	20.0	22.1	0.90
	Use of new digital technology	50.5	41.1	1.23
	Plans for new digital technology	54.2	49.0	1.11

Figure 24. Gender composition of level of innovation by country in Central & East Asia

		Women (%)	Men (%)
India	Local	44	56
	National	43	57
	International	60	40
Japan	Local	48	52
	National	17	83
	International	25	75
Kazakhstan	Local	29	71
	National	100	–
	International	50	50
South Korea	Local	50	50
	National	37	63
	International	29	71

Figure 25. Entrepreneurial perceptions by gender and country in Central & East Asia

		Women (%)	Men (%)	W/M ratio
India	Easy to start a business	81.0	83.4	0.97
	Sees new business opportunity	82.6	84.1	0.98
	Has startup skills	81.5	90.2	0.90
	No fear of failure	54.8	48.9	1.12
Japan	Easy to start a business	26.7	32.5	0.82
	Sees new business opportunity	11.0	12.6	0.87
	Has startup skills	7.5	17.4	0.43
	No fear of failure	62.4	58.6	1.06
Kazakhstan	Easy to start a business	51.2	53.6	0.96
	Sees new business opportunity	53.6	49.0	1.09
	Has startup skills	63.4	67.5	0.94
	No fear of failure	87.7	86.3	1.02
South Korea	Easy to start a business	33.0	36.8	0.9
	Sees new business opportunity	40.2	47.6	0.84
	Has startup skills	45.4	61.9	0.73
	No fear of failure	78.1	78.4	1.00

Figure 26. Gender ratio (female–male) for Total early-stage Entrepreneurial Activity (TEA) rates by gender and country in Europe

	Women TEA (%)	Men TEA (%)	W/M ratio
Average Europe & UK	**6.1**	**7.8**	**0.78**
Spain	5.6	5.4	1.04
Romania	9.6	9.8	0.98
Belarus	12.8	14.2	0.90
Slovenia	6.2	7.2	0.86
France	7.1	8.4	0.85
Netherlands	13.0	15.4	0.84
Ireland	11.3	13.7	0.82
United Kingdom	11.0	14.2	0.77
Greece	4.6	6.5	0.71
Finland	6.4	9.4	0.68
Poland	1.6	2.4	0.67
Latvia	12.0	18.2	0.66
Russian Federation	6.6	10.2	0.65
Slovak Republic	5.0	7.8	0.64
Germany	5.3	8.4	0.63
Hungary	7.5	12.1	0.62
Croatia	9.2	15.5	0.59
Switzerland	7.2	12.4	0.58
Cyprus	6.2	10.7	0.58
Italy	3.5	6.2	0.56
Luxembourg	5.1	9.3	0.55
Sweden	6.0	11.8	0.51
Norway	1.7	4.4	0.39

Figure 27. Female–male ratio in motivations to start a business by gender and country in Europe (1.0 = parity)

	To make a difference	To build wealth	To continue family tradition	Because jobs are scarce
Belarus	0.88	0.88	1.13	1.00
Croatia	1.23	0.83	0.91	1.26
Cyprus	1.00	0.92	1.09	1.12
Finland	0.91	0.36	0.64	1.02
France	1.01	0.90	1.10	0.94
Germany	1.40	1.02	0.99	1.22
Greece	0.96	0.98	1.13	1.27
Hungary	0.97	1.25	0.38	1.01
Ireland	0.90	0.92	1.00	1.02
Italy	0.71	0.79	0.81	1.20
Latvia	1.52	0.96	1.61	0.97
Luxembourg	1.52	0.62	0.39	0.71
Netherlands	1.14	0.94	0.92	0.98
Norway	1.25	0.54	1.47	1.18
Poland	2.48	1.21	0.95	1.03
Romania	1.19	0.91	0.75	1.05
Russian Federation	0.83	1.09	0.86	1.17
Slovak Republic	0.66	0.43	0.89	1.16
Slovenia	1.00	0.48	0.67	1.14
Spain	1.06	0.71	0.85	1.03
Sweden	1.18	0.82	0.95	0.87
Switzerland	0.89	0.82	1.08	1.30
United Kingdom	1.09	0.74	0.99	1.25

Figure 28. Pandemic impacts on use of digital technology for early-stage entrepreneurs by gender and country in Europe

	Women new digital (%)	Men new digital (%)	Women digital plans (%)	Men digital plans (%)
Belarus	15.3	8.1	35.2	40.0
Croatia	31.1	18.6	52.8	60.1
Cyprus	31.3	37.9	56.1	51.9
Finland	3.4	3.5	33.9	30.8
France	18.5	18.8	4.4	12.8
Germany	26.1	27.5	44.7	40.5
Greece	46.2	34.5	64.1	53.6
Hungary	21.1	11.6	24.0	30.8
Ireland	21.1	24.8	62.3	69.9
Italy	38.7	32.3	45.5	54.8
Latvia	12.0	10.0	47.3	51.1
Luxembourg	10.6	30.8	51.0	47.4
Netherlands	10.1	20.3	42.9	39.1
Norway	11.8	12.8	47.1	42.9
Poland	16.7	10.8	22.0	18.8
Romania	22.7	20.3	22.1	33.3
Russian Federation	15.4	8.5	33.3	35.1
Slovak Republic	14.0	9.1	15.2	18.1
Slovenia	16.3	7.0	50.0	43.1
Spain	27.8	27.0	47.0	53.7
Sweden	10.1	6.9	36.9	32.9
Switzerland	16.3	21.5	29.6	51.0
United Kingdom	23.5	20.6	61.4	63.4

Figure 29. Gender composition of high-growth indicators by country in Europe

	Expecting 20+ hires		Innovative offering		Export >25%	
	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)
Belarus	38.5	61.5	46.2	53.8	46.3	53.7
Croatia	17.5	82.5	37.6	62.4	25.0	75.0
Cyprus	–	100.0	34.6	65.4	28.0	72.0
Finland	–	100.0	48.7	51.3	28.6	71.4
France	48.5	51.5	51.5	48.5	40.5	59.5
Germany	26.1	73.9	30.1	69.9	23.3	76.7
Greece	55.6	44.4	44.1	55.9	57.1	42.9
Hungary	40.0	60.0	41.5	58.5	43.8	56.3
Ireland	30.8	69.2	43.6	56.4	46.7	53.3
Italy	–	100.0	28.9	71.1	22.2	77.8
Latvia	20.5	79.5	34.8	65.2	40.0	60.0
Luxembourg	45.5	54.5	25.0	75.0	32.4	67.6
Netherlands	36.4	63.6	42.7	57.3	32.0	68.0
Norway	16.7	83.3	44.4	55.6	20.0	80.0
Poland	42.9	57.1	53.6	46.4	20.0	80.0
Romania	52.9	47.1	57.1	42.9	42.9	57.1
Russian Federation	35.7	64.3	42.3	57.7	57.1	42.9
Slovak Republic	25.0	75.0	21.9	78.1	50.0	50.0
Slovenia	25.0	75.0	42.1	57.9	25.0	75.0
Spain	31.6	68.4	40.7	59.3	48.5	51.5
Sweden	34.8	65.2	33.7	66.3	31.4	68.6
Switzerland	16.7	83.3	29.0	71.0.0	15.6	84.4
United Kingdom	31.3	68.8	47.6	52.4	50.0	50.0

Figure 30. Rates of startups with no employees by gender and country in Europe

	Women (%)	Men (%)	W/M ratio
Belarus	44.8	28.6	1.57
Croatia	–	–	–
Cyprus	22.2	14.0	1.59
Finland	65.0	57.1	1.14
France	51.2	44.4	1.15
Germany	43.2	31.9	1.35
Greece	18.2	5.0	3.64
Hungary	41.3	52.6	0.79
Ireland	23.5	24.5	0.96
Italy	47.4	21.9	2.16
Latvia	28.9	30.9	0.94
Luxembourg	33.3	13.8	2.41
Netherlands	22.2	20.6	1.08
Norway	36.4	37.9	0.96
Poland	38.5	11.3	3.41
Romania	26.8	5.6	4.79
Russian Federation	11.4	18.5	0.62
Slovak Republic	17.6	28.1	0.63
Slovenia	58.6	58.8	1.00
Spain	46.5	41.5	1.12
Sweden	65.3	53.5	1.22
Switzerland	43.5	27.8	1.56
United Kingdom	47.1	60.6	0.78

Figure 31. Perceptions of having startup skills by gender and country in Europe

	Women (%)	Men (%)	W/M ratio
Belarus	45.2	59.5	0.76
Croatia	66.0	76.1	0.87
Cyprus	61.8	66.4	0.93
Finland	32.4	53.0	0.61
France	42.3	54.9	0.77
Germany	29.2	45.0	0.65
Greece	47.6	58.5	0.81
Hungary	29.4	42.9	0.69
Ireland	49.4	66.2	0.75
Italy	36.2	53.1	0.68
Latvia	47.5	59.2	0.80
Luxembourg	42.7	62.6	0.68
Netherlands	35.1	55.7	0.63
Norway	34.2	49.3	0.69
Poland	59.2	61.1	0.97
Romania	48.7	51.3	0.95
Russian Federation	29.9	39.8	0.75
Slovak Republic	34.1	49.5	0.69
Slovenia	49.5	67.1	0.74
Spain	45.8	53.6	0.85
Sweden	40.3	59.0	0.68
Switzerland	38.9	59.9	0.65
United Kingdom	42.9	59.3	0.72

Figure 32. Female–male ratio (1.0 = parity) in pandemic impacts by country for entrepreneurs and established business owners in Latin America & Caribbean

		New opportunities	Government response	New digital technology	More digital technology
Brazil	New business	1.06	0.94	1.02	1.05
	Established business	1.22	1.17	1.93	1.29
Chile	New business	0.94	1.11	0.88	0.99
	Established business	0.90	0.94	1.59	0.92
Colombia	New business	1.03	1.33	1.16	1.09
	Established business	1.38	2.17	1.58	1.91
Dominican Republic	New business	1.08	1.14	0.89	0.99
	Established business	1.15	0.91	2.00	1.68
Guatemala	New business	1.12	1.16	1.14	0.98
	Established business	1.08	0.72	1.36	0.71
Panama	New business	0.79	0.67	1.22	0.91
	Established business	1.15	0.51	1.37	0.86
Uruguay	New business	1.15	0.96	1.58	1.15
	Established business	0.94	0.78	–	1.33

Figure 33. Industry distribution by gender and country in Latin America & Caribbean

		ICT	Agriculture, Forestry & Mining	Manufacturing & Transport	Wholesale/ Retail	Financial, Professional, Administrative & Consumer Services	Government, Health, Education & Social Services
Brazil	Women (%)	0.5	2.6	9.9	51.3	14.1	21.5
	Men (%)	3.1	17.1	16.7	39.0	11.8	12.3
Chile	Women (%)	0.5	4.7	14.0	52.7	9.3	18.8
	Men (%)	4.3	13.8	18.4	39.8	18.2	5.5
Colombia	Women (%)	2.0	1.3	20.1	49.7	11.4	15.4
	Men (%)	2.4	3.7	15.2	54.3	19.5	4.9
Dominican Republic	Women (%)	1.3	1.3	7.8	68.6	8.3	12.7
	Men (%)	1.4	2.8	9.0	58.8	13.7	14.3
Guatemala	Women (%)	0.9	2.3	6.8	81.8	3.1	5.1
	Men (%)	0.7	14.3	11.8	56.6	6.8	9.9
Panama	Women (%)	1.5	5.0	7.0	65.2	10.4	10.9
	Men (%)	4.3	10.3	15.1	44.0	15.9	10.3
Uruguay	Women (%)	0.6	6.1	11.6	55.5	14.0	12.2
	Men (%)	4.7	24.6	7.1	35.5	18.5	9.5

Figure 34. Entrepreneurial perceptions by gender and country in Latin America & Caribbean

		Easy to start business	Sees new oportunity	Has startup skills	No fear of failure
Brazil	Women (%)	41.3	51.4	62.2	49.1
	Men (%)	42.7	58.4	71.3	54.2
Chile	Women (%)	44.5	56.4	62.6	44.9
	Men (%)	51.7	63.2	79.1	55.9
Colombia	Women (%)	28.3	38.2	51.8	51.3
	Men (%)	29.7	38.0	61.1	53.6
Dominican Republic	Women (%)	64.1	72.3	87.0	60.8
	Men (%)	69.0	76.4	90.5	64.3
Guatemala	Women (%)	47.7	67.7	73.2	54.9
	Men (%)	50.1	70.6	79.6	64.9
Panama	Women (%)	45.3	43.0	64.2	58.1
	Men (%)	52.9	49.7	75.3	58.9
Uruguay	Women (%)	36.2	57.0	65.3	48.7
	Men (%)	37.7	58.6	71.4	49.9

Figure 35. Entrepreneurial lifecycle for adult women by country in Middle East & Africa

	Intentions (%)	Nascent activity (%)	New business (%)	Established business (%)	Business exit (%)
Egypt	47.4	3.0	3.4	1.0	6.9
Iran	22.4	6.8	2.7	3.8	2.8
Israel	15.9	7.1	3.1	2.6	2.9
Morocco	38.7	3.3	3.2	3.9	3.5
Oman	48.4	12.4	2.8	1.1	8.6
Qatar	57.7	9.3	3.2	3.0	7.9
Saudi Arabia	15.4	13.9	10.3	3.7	5.3
South Africa	18.2	14.5	7.0	3.7	10.5
Sudan	39.2	22.7	9.0	6.5	4.5
Turkey	24.8	10.7	3.8	6.0	5.6
United Arab Emirates	25.6	7.5	3.0	2.5	2.8

Figure 36. Digital technology use prompted by the pandemic for new business and established business owners by gender and country in Middle East & Africa

		Women (%)	Men (%)
Egypt	New business	31.9	33.0
	Established business	28.6	26.1
Iran	New business	25.9	17.9
	Established business	16.9	18.8
Israel	New business	32.0	37.0
	Established business	19.2	26.3
Morocco	New business	29.0	23.0
	Established business	20.0	16.4
Oman	New business	23.5	23.3
	Established business	10.0	16.2
Qatar	New business	41.8	43.9
	Established business	38.9	34.0
Saudi Arabia	New business	34.9	42.2
	Established business	21.0	22.0
South Africa	New business	37.9	37.1
	Established business	38.6	30.0
Sudan	New business	64.1	53.9
	Established business	70.2	66.3
Turkey	New business	19.8	16.2
	Established business	10.1	13.7
United Arab Emirates	New business	28.9	45.8
	Established business	40.0	34.8

Figure 37. Gender composition of job growth expectations and innovation (all levels) for early-stage entrepreneurs in Middle East & Africa countries compared to global average

	Innovative offering		20+ hires expected	
	Women (%)	Men (%)	Women (%)	Men (%)
Egypt	19.6	80.4	18.2	81.8
Iran	63.0	37.0	35.6	64.4
Israel	37.5	62.5	34.8	65.2
Morocco	55.9	44.1	58.1	41.9
Oman	52.2	47.8	23.5	76.5
Qatar	17.1	82.9	8.0	92.0
Saudi Arabia	43.0	57.0	42.9	57.1
South Africa	45.2	54.8	21.6	78.4
Sudan	31.0	69.0	9.8	90.2
Turkey	33.2	66.8	23.4	76.6
United Arab Emirates	12.9	87.1	9.2	90.8
Global	**40.3**	**59.7**	**24.8**	**75.2**

Figure 38. Enabling conditions for women entrepreneurs, composite index scores by country in Middle East & Africa

	Equal cultural support for women entrepreneurs	Equal access to finance	Equal access to procurement	Favuorable regulations for women entrepreneurs	Sufficient family support services for women entrepreneurs	Pandemic telework has helped women manage family
Egypt	−1.3	0.4	0.4	−1.7	−0.6	1.0
Iran	−3.1	−1.2	−1.9	−3.8	−3.2	−0.7
Israel	−1.6	−0.7	−0.2	−2.4	−2.2	−0.1
Morocco	−1.5	0.9	0.4	−2.6	−1.9	−0.1
Oman	1.4	2.6	2.2	−0.3	−1.1	2.3
Qatar	0.4	1.7	1.3	−0.4	0.7	1.5
Saudi Arabia	2.8	3.4	2.9	1.0	0.8	3.0
South Africa	−1.0	−0.1	0.1	−2.5	−1.2	0.5
Sudan	−2.0	0.9	−1.5	−1.8	−2.9	0.7
Turkey	−2.4	−0.6	−1.1	−2.8	−1.9	−1.0
United Arab Emirates	3.2	3.0	3.1	2.2	2.5	3.3

Figure 39. Reasons for business exit by gender and country in North America

		Women (%)	Men (%)
Canada	Due to pandemic	18.2	15.3
	Family/personal reasons	4.5	9.0
	Not profitable	16.7	18.0
	Lack of finance	15.2	13.5
	Opportunity to sell	16.7	26.1
United States	Due to pandemic	40.0	18.0
	Family/personal reasons	17.1	22.0
	Not profitable	20.0	14.0
	Lack of finance	0.0	4.0
	Opportunity to sell	2.9	0.0

Figure 40. Pandemic impacts for early-stage entrepreneurs by gender and country in North America

		Women (%)	Men (%)
Canada	Pandemic provided new opportunity	67.1	67.0
	Effective government economic response	67.6	65.5
	Pandemic use of digital technologies	33.3	30.9
	Planning more digital technologies	49.2	59.1
United States	Pandemic provided new opportunity	56.1	50.0
	Effective government economic response	46.9	38.9
	Pandemic use of digital technologies	19.0	10.3
	Planning more digital technologies	63.3	58.7

Figure 41. Industry distribution of early-stage entrepreneurs by gender and country in North America

		ICT	Agriculture, Forestry & Mining	Manufacturing & Transport	Wholesale/ Retail	Financial, Professional, Administrative & Consumer Services	Government, Health, Education & Social Services
Canada	Women (%)	11.9	4.8	13.1	32.1	15.5	22.6
	Men (%)	6.7	7.5	16.7	35.0	20.8	13.3
United States	Women (%)	5.6	5.6	7.5	29	32.7	19.6
	Men (%)	3.5	9.9	15.5	23.9	33.8	13.4

Figure 42. Entrepreneurial perceptions by gender and country in North America

		Women (%)	Men (%)
Canada	Easy to start a business	65.7	67.9
	Sees new business opportunity	67.5	73.4
	Has startup skills	51.4	66.3
	No fear of failure	45.5	48.5
United States	Easy to start a business	64.6	69.1
	Sees new business opportunity	60.5	65.7
	Has startup skills	56.8	72.2
	No fear of failure	51.1	52.2

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BABSON COLLEGE

BABSON COLLEGE

Babson College is a founding institution and sponsor of the Global Entrepreneurship Monitor (GEM).

Located in Wellesley, Massachusetts, USA, with hub locations in Boston and Miami, Babson is recognized internationally as a leader in entrepreneurship education.

Ranked No. 1 in entrepreneurship education for 26 consecutive years by US News & World Report, Babson is the first to understand that thinking and acting entrepreneurially is more than just an inclination. It can be taught. And Babson does it better than anyone.

Babson grants BS degrees through its innovative undergraduate programme, and offers MBA and MS degrees, as well as certificate programs through its F.W. Olin Graduate School of Business.

Babson Executive Education and the Babson Academy for the Advancement of Global Entrepreneurial Learning also help drive growth and innovation at organizations and other universities all around the world.

At Babson, we believe that entrepreneurship is the most powerful force in creating great economic and social value everywhere.

The College's student body is globally diverse, representing 77 countries and speaking more than 50 languages. Twenty-nine per cent of undergraduates and 39% of graduates are international. An additional 7% and 9% hold dual passports, respectively.

One hundred per cent of Babson students take entrepreneurship courses. A broad variety of entrepreneurship topics are taught by 25 tenured or tenure-track entrepreneurship faculty, all having practical startup experience, and by 22 highly accomplished entrepreneurs, investors and business leaders serving as adjunct faculty. In addition, entrepreneurship is integrated throughout the curriculum across all business and liberal arts disciplines.

As the educator, convener and thought leader for Entrepreneurship of All Kinds®, Babson College shapes the entrepreneurial leaders our world needs most: those with strong functional knowledge and the skills and vision to navigate change, accommodate ambiguity, surmount complexity, and motivate teams in a common purpose to create sustainable economic and social value in organizations of all types and sizes.

Besides GEM, Babson has co-founded and continues to sponsor the Babson College Entrepreneurship Research Conference (BCERC), the largest academic research conference focused exclusively on entrepreneurship, as well as the Successful Transgenerational Entrepreneurship Project (STEP) — a global family business research project. Babson is home to The Diana Project™, which engages in research activities, forums and scholarship focusing on women entrepreneurs and their growth.

For more information, visit www.babson.edu.

Report Sponsors

CARTIER WOMEN'S INITIATIVE

The Cartier Women's Initiative is an annual international entrepreneurship program which aims to drive change by empowering women impact entrepreneurs. Founded in 2006, the program is open to women-run and women-owned businesses from any country and sector that aim to have a strong and sustainable social and/or environmental impact.

At the heart of the Cartier Women's Initiative is the vision of a world where every woman impact entrepreneur can realize her full potential. To reach this vision, obtaining and monitoring hard data related to the state of women's entrepreneurship is critical in enrolling more support into the ecosystem and to drive collaboration. Cartier Women's Initiative partnered with GEM as it was in search of a partner to track, monitor and assess women entrepreneurship activities.

THE SCHOOL OF MANAGEMENT FRIBOURG

The School of Management Fribourg (HEG-FR) is a bilingual public business school located in Fribourg, Switzerland, and a member of the University of Applied Sciences and Arts of Western Switzerland (HES-SO). Its Institute of Small and Medium Enterprises houses the Swiss chapter of GEM research, which is headed by Professor Rico Baldegger, PhD, in collaboration with other colleagues such as SUPSI Manno in Ticino, Switzerland.

One of the forerunners in Switzerland for training and interdisciplinary research in the area of entrepreneurship and SMEs (small and medium enterprises), the School of Management Fribourg has a particular thematic interest in research on women's entrepreneurship and impacts of entrepreneurship on the UN Sustainable Development Goals (SDGs).

WOMEN ENTREPRENEURS FINANCE INITIATIVE (WE-FI)

The Women Entrepreneurs Finance Initiative (We-Fi), a financial intermediary facility (FIF) housed in the World Bank Group, is a groundbreaking partnership that aims to unlock financing for women-led/owned businesses (WSMEs) in developing countries. We-Fi's partners include 14 donor governments, six multilateral development banks as implementing partners, and numerous other stakeholders in the public and private sector around the world. Within five years of its launch in 2017, We-Fi has allocated $354 million to programs. These allocations are mobilizing an additional $3.5 billion, which far exceeds We-Fi's initial goal of mobilizing one billion dollars to support women entrepreneurs.

To date, the We-Fi portfolio encompassed activities in nearly 60 countries. We-Fi programs have benefitted over 50,000 WSMEs with financial and non-financial support. Financial service providers supported by We-Fi facilitated over $1.2 billion in financing to WSMEs. Sponsoring GEM research provides We-Fi with an overview of the gaps in the current entrepreneurial landscape.

Sponsor GEM

Most stakeholders want to advance entrepreneurial activity. But it is difficult to make informed decisions without having the right data. Global Entrepreneurship Monitor fills this void. Watch this short video to learn why many organizations — such as Babson College, Cartier Women's Initiative, Fribourg School of Management, Shopify and the Women Entrepreneurs Finance Initiative — sponsor GEM, the world's longest-running study of entrepreneurship. (Click on the image or go to https://www.youtube.com/watch?v=UAFWuMSUxJE.)

Global Entrepreneurship Monitor (GEM) is a consortium of national country teams, primarily associated with top academic institutions, that carries out survey-based research on entrepreneurship around the world. GEM is the only global research source that collects data on entrepreneurship directly from individual entrepreneurs. GEM's Adult Population Survey (APS) provides analysis on the characteristics, motivations and ambitions of individuals starting businesses, as well as social attitudes towards entrepreneurship. The National Expert Survey (NES) looks at the national context in which individuals start businesses. The unique GEM tools and data benefit numerous stakeholder groups:

- Academics are able to apply unique approaches to studying entrepreneurship at the national level;
- Policymakers are able to make better-informed decisions to help their entrepreneurial ecosystems thrive;
- Entrepreneurs have better knowledge on where to invest and influence;
- Sponsors collaborate with GEM to advance their organizational interests;
- International organizations leverage the entrepreneurial insights from GEM through reports and events.

In numbers, GEM is:

- 23 years of data;
- 150,000+ interviews a year;
- 110+ economies;
- 500+ specialists in entrepreneurship research;
- 300+ academic and research institutions;
- 200+ funding institutions.

GEM began in 1999 as a joint project between Babson College (USA) and London Business School (UK). The consortium has become the richest resource of information on entrepreneurship, publishing a range of global, national and "special topic" reports on an annual basis.

GEM Global Entrepreneurship Monitor