Global Entrepreneurship Monitor

1999 2024 25TH ANNIVERSARY

2023/24 Women's Entrepreneurship Report

Reshaping Economies and Communities

Cartier WOMEN'S INITIATIVE

HAUTE ÉCOLE DE GESTION
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Fribourg
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Frank & Eileen™ Center for Women's Entrepreneurial Leadership

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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. Cartier Women's Initiative has partnered with GEM to generate evidence on the global state of women's entrepreneurship. This is critical for driving collaboration and enrolling more support for women entrepreneurs.

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).

THE FRANK & EILEEN™ CENTER FOR WOMEN'S ENTREPRENEURIAL LEADERSHIP

As the first center focused on women entrepreneurial leaders at a business school, the Frank & Eileen™ Center for Women's Entrepreneurial Leadership is the premier source for business acceleration, global entrepreneurship research, and entrepreneurial leadership. The Center's mission is to educate, convene, and champion Babson students, alumni, and the entrepreneurial ecosystem guided by the principles of Babson's Entrepreneurial Thought & Action. Since F&E CWEL's inception 23 years ago, the center has continued to innovate its programs to align with the ever-changing entrepreneurial landscape to ensure its learners receive the education, mentorship, and support they need to be truly inclusive entrepreneurial leaders.

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Note: W/M ratio
Throughout the report, the gender gap is defined as the difference between the number of women (W) and the number of men (M), either below or above the level of parity (1.0). For instance, a W/M ratio of 0.68 signifies that there are 0.68 women for every 1.0 man.

Acknowledgements

We sincerely thank our valued sponsors for the essential support that they provide to GEM, allowing us to produce this 25th anniversary edition of our iconic Women's Entrepreneurship Report. GEM is proud to have strategic partnerships with the sponsors that contribute to this report; this means that GEM has identified complementary synergies with these partners to ensure that our GEM research contributes to our partner organizations achieving their own targets and objectives.

We thank the Cartier Women's Initiative (CWI), the School of Management, HEG-Fribourg, Switzerland and the Frank & Eileen™ Center for Women's Entrepreneurial Leadership at Babson College, USA. Warm appreciation to CWI Global Program Director Wingee Sin and her team at CWI, who operate at the grassroots level, driving change by empowering women impact entrepreneurs that aim to have a strong and sustainable social and/or environmental impact.
We are especially grateful for invaluable support and insights from Professor Emeritus Rico Baldegger and Raphael Gaudart at the School of Management, HEG-Fribourg, an institution with an objective of educating entrepreneurs who will make positive contributions to a sustainable world. Finally, Babson College has strongly supported the GEM Women's Entrepreneurship Report for many years in the past, and currently the Frank & Eileen™ Center for Women's Entrepreneurial Leadership at Babson College sponsors this important report. We particularly thank Professor Shakenna K. Williams, its Executive Director, for her support and passionate interest in furthering the women's entrepreneurship research agenda.

Warm thanks also to our primary authors, Amanda Elam (Lead Author), Research Fellow at the Diana International Research Institute (DIRI) of Babson College, Karen Hughes of GEM Canada and Mahsa Samsami of GEM South Africa, and to our GEM contributors, Fatima Boutaleb, Maribel Guerrero and Natanya Meyer, as well as Galiba Zahid of the University of Alberta for research assistance.

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Last but never least, sincere thanks to members of our GEM National Teams for their contributions of country data, particularly those that took time to review report drafts and add valuable content. Without our sponsors and the efforts of all these researchers, GEM's valuable work in women's entrepreneurship could not be leveraged in the way it currently is and will be in the future.

Warm accolades to all.

Global Entrepreneurship Research Association (GEM-GERA) Board Chair, Professor Jeffrey Shay, (Babson College, USA)
GEM Executive Director, Aileen Ionescu-Somers, Ph.D

Foreword

The GEM Women's Entrepreneurship Report, published annually, focuses on an essential topic that is of key strategic interest to the GEM consortium of National Teams and the sponsors that support them. This is because 25 years of GEM research reveals that promoting and investing in women's entrepreneurship brings considerable benefit to society, builds communities and economies, promotes social equality by helping to overcome disparities between males and females, and creates wealth. GEM data over the last quarter of a century has tracked how women have been grasping ever-increasing entrepreneurial opportunities. This has impact; it leads to reinvestment in communities, better health and education services, and an improved quality of life for all. GEM lives up to its name by carefully monitoring, not only how women are thinking about entrepreneurship and their nascent businesses, but also how they are moving through the phases of entrepreneurship towards higher growth businesses. The picture GEM data paints in this report shows that women entrepreneurs are increasingly creating and running successful businesses, but that they still face a range of barriers that are specific to women. Policymakers and other stakeholders, such as educators and the media, have roles to play in breaking down stereotypes by also removing obstacles that prevent women from succeeding with creating higher growth businesses. It is inspiring to observe, for example, the positive impact on women's entrepreneurship in Middle Eastern countries such as Saudi Arabia, once traditional barriers are tackled head-on by policymakers. The effects are immediate and will be long-lasting.

Throughout this report, there are examples of inspiring women entrepreneurs that are essential role models for other women. Celebrating successful women entrepreneurs is a necessary part of promoting women's entrepreneurship, since showcasing real-life stories, and showing how successful women have overcome their challenges, provides knowledge, know-how and inspiration to other women.

This 2023/24 report not only celebrates 25 years of monitoring women's entrepreneurship but also GEM's contribution to alleviating the burdens traditionally carried by women entrepreneurs. GEM research serves a vital function of filling in gaps in awareness and knowledge about the state of the art of women's entrepreneurship. Because of the work and passion of the over 350 researchers involved in GEM globally, fewer policymakers worldwide "don't know what they don't know". Because of GEM, more policymakers can go forward with significantly better informed decision-making that is sensitive to the particular needs of women entrepreneurs.

Global Entrepreneurship Monitor

WOMEN'S ENTREPRENEURSHIP AT GEM

SILVER ANNIVERSARY

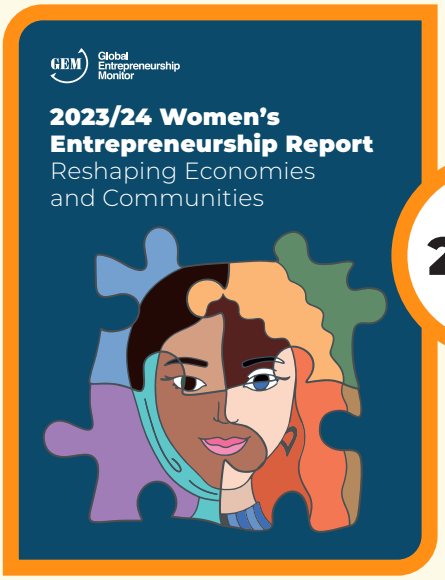
SHORT HISTORY

1999

Women's entrepreneurship was studied from the very outset in GEM's first Global Report.

2005

First GEM Women's report (using data from the 2004 survey year). The report was later translated into Arabic.

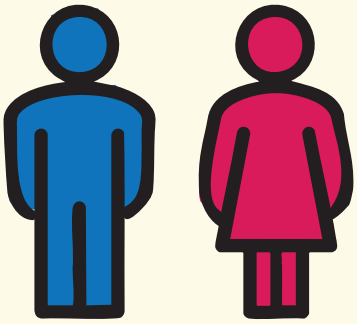


2024

12th GEM Women's Entrepreneurship Report.

TOPICS

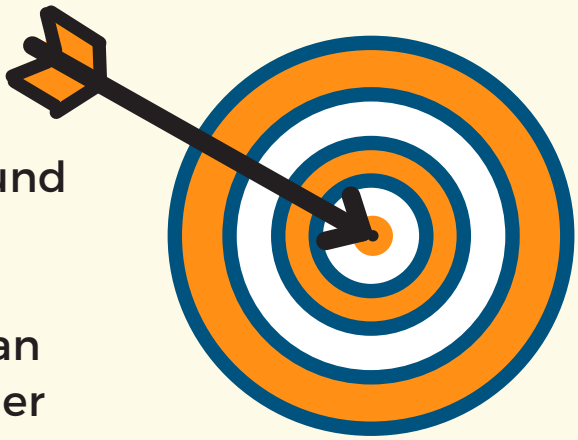
STUDIES FOCUSED ON:



- Gender patterns in entrepreneurial activity intentions, perceptions, motivations and aspirations

- The importance of national and regional context for women's participation in different types of ventures

IMPACT



- Leveraged by policymakers around the world.
- GEM Women's Reports seeded an extensive list of studies on gender and entrepreneurship:
  - Over **4,000 journal articles** with a combination of "Global Entrepreneurship Monitor"and "gender" in the title or abstract.
  - Inspired a significant and growing body of research on women's entrepreneurship in countries around the world.
  - The GEM 2022/2023 Women's report has generated over **20,000 downloads**.

Executive Summary

What are the trends and lessons about women's entrepreneurship over the past 25 years? We address this question in this GEM Women's Entrepreneurship Report.

This report marks the 12th publication of a GEM report on women's entrepreneurship. Over the years, the report has profoundly influenced how researchers, policymakers, and entrepreneurial ecosystems view women entrepreneurs.

A few key findings stand out in 2023, including:

STARTUP ACTIVITY

One in ten women compared to one in eight men were starting new businesses in 2023.

In fact, women's startup activity rates increased from 6.1% to 10.4%, on average, for the 30 GEM participating countries in 2001-2005 and 2021-2023 surveys.

Several countries like France, the Netherlands, and Hungary have more than doubled startup rates over the past two decades, while several countries showed a heavy drop in rates, like Jordan, Morocco, and Poland.

High-income countries show the lowest rates of women's startup activity and the largest gender gap.

HIGH POTENTIAL STARTUP ACTIVITY

In 2023, women represented one in three high growth-oriented entrepreneurs and almost two in five startups with high export activity. These rates are similar across countries in recent years.

Women represent the majority of startups bringing new innovations to market in China, Colombia, Iran, Lithuania, Netherlands, and Venezuela.

Women represent more than one-third of high-growth entrepreneurs in low-income countries and also lead women globally on other high potential measures.

ESTABLISHED BUSINESS OWNERSHIP (MORE THAN 42 MONTHS OLD)

In 2023, one in 16 women owned an established business compared to one in 10 men.

Established business rates for women increased from 4.2% to 5.9%, on average, for the 30 countries participating in the 2001-2005 and 2021-2023 surveys.

Five countries showed high established business rates for women of 10% or more in 2023: South Korea, Saudi Arabia, Lithuania, Puerto Rico, and Thailand.

BUSINESS EXITS AND EXIT/ENTRY RATIOS

Women were 21% less likely to report a business exit than men on average, with higher rates in low-income countries and the lowest rates in middle-income countries.

The global average exit/entry ratio is 35% less for women than for men, suggesting that women are creating new sustainable businesses at a much higher rate than men.

The highest exit/entry rates for women in 2023 were found in Poland, South Africa, China, and Canada.

INTENTIONS, PERCEPTIONS, MOTIVATIONS

Across all countries in 2023, startup intentions average 16.9% for women and 20% for men. Over half of women in Oman (65%), Qatar (51%), and Ecuador (57%) reported startup intentions, leading the other countries surveyed in 2023.

Women in middle-income countries tend to have more favourable perceptions of ease of starting a new business (49.6%), seeing new business opportunities (65.1%), and having startup skills (69.2%) compared to those in other countries.

Over the past two decades, entrepreneurial perceptions have improved for women, including a 79% increase in seeing new business opportunities and a 27% increase in having startup skills. However, fear of failure rates have also increased by over half for women, raising new questions for researchers.

DEMOGRAPHIC TRENDS

Women of all ages start businesses, though they tend to be younger than men. More than half are less than 35 years old in low-income countries, similar to their male counterparts.

High-potential women entrepreneurs tend to be younger than other women starting businesses in high-income countries, but more often in the 35-55 age range in low-income countries.

Women entrepreneurs are less likely to have less than a secondary school education compared to men but are about 40% more likely to report living in a low-income household.

EMERGING TRENDS

Following the mass uptake of digital technologies following the COVID-19 pandemic, over half of women reported the intention to adopt new digital technologies for their startups and were 4% more likely than men to report immediate plans to improve digitalization.

Women were generally more likely than men to report sustainability strategies and practices in high- and middle-income countries, while women in low-income countries were slightly less likely to do so than men.

Compared to men, women globally are about 10% less likely to know an entrepreneur and over 30% less likely to have recently invested in a business. Remarkably, informal business investment rates for women have increased by almost three times in Morocco and have more than doubled in Venezuela.

IMPLICATIONS FOR RESEARCH, POLICY, AND PRACTICE

Times series analyses (averages from the same countries at multiple points in time) show that women have been inspired by the support and recognition received from policymakers and educators around the world.

- As cultural support and targeted programming for women in business has increased, so have the rates for women's startup activity and established business ownership.
- Women globally are noticing more new opportunities and are expressing more confidence in their skills to start a business globally.
- Fear of business failure has also trended upwards for the past two decades, which poses new research questions.

Countries in the Middle East have made a particularly strong showing, with Saudi Arabia, United Arab Emirates, Qatar, and others showing remarkable progress in the rates of startup activity over time. Other countries, however, have seen a decline in positive entrepreneurial perceptions and attitudes. For some, it has led to a drop in startup rates.

The implications are more complicated than quick conclusions allow. Entrepreneurial perceptions remain high in many cultures, while startup activity rates remain low and is evidence of the disproportionate impact of the COVID-19 pandemic on women.

Public policy can play a critical role in supporting women entrepreneurs by addressing structural barriers and fostering an inclusive ecosystem. At the same time, policies and interventions must be tailored to specific contexts. Based on the analysis presented in this report, we make the following general recommendations to advance women's entrepreneurship:

1. **Highlight Successful Women Entrepreneurs:** This approach is particularly important in high-growth sectors and contexts where women are under-represented and face negative stereotypes that distract attention from high-potential market-based solutions. For example, trade associations, incubators, and accelerator programs have launched entrepreneurship awards specifically for women, celebrating their innovations, leadership, and impact.

2. **Support Research and Data Collection:**
   The resulting data can transform misleading narratives and reveal the structural barriers that hold women back. Understanding how opportunities and challenges vary for women across key sectors, business segments, and countries offers important insight for policy and practice. The distinction between opportunity and necessity entrepreneurship is one example of how narratives on women's entrepreneurship have been shaped by the GEM data.

3. **Facilitate Inclusive Education and Training:**
   Programs specifically for women entrepreneurs in male-dominated contexts can overcome the challenges of network exclusion and provide better access to resources and experienced mentors. STEM programs for young women provide hands-on, project-based learning that encourages innovation, creativity, and problem-solving skills essential to entrepreneurship in the ICT sector.

4. **Expand Access to Capital:**
   Anti-discrimination laws, government-backed lending and procurement programs, and networking events can help women entrepreneurs who face challenges in securing venture capital and business loans. Women's angel groups, for example, often focus on educating members on how to evaluate business plans, financials, market potential, and leadership teams. Such initiatives encourage women to invest in businesses that help create the world they want to live in.

Carry out GEM research. Join us!

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 of the entrepreneurial activity of a country."

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

For more information, visit www.gemconsortium.org or write info@gemconsortium.org

CHAPTER 1

Introduction

1

Introduction

Women's entrepreneurship plays a critical role in economic growth and social development. By starting and running businesses, women create jobs, stimulate innovation, and drive economic activity in all sectors. Importantly, women bring different perspectives and approaches to business. This can lead to new ideas, products, and services, especially in areas where women are underrepresented. Furthermore, women tend to place a higher priority on social goals and often invest back into their communities, supporting local economies and social initiatives.

For these reasons, international development agencies have broadly pursued the support of women's entrepreneurship as a key strategy to promote gender equality and economic empowerment. Entrepreneurship provides women with the opportunity to achieve financial independence and leadership roles, challenging traditional gender norms and contributing to more equitable societies. Year after year, research on women's entrepreneurship has demonstrated the central role that women play in local, national, and global economies.

This year marks 25 years of Global Entrepreneurship Monitor (GEM) data collection, the world's largest study on entrepreneurship. Over 4 million individuals across 120 countries have been surveyed. An additional 50,000 experts have provided analysis. GEM data has been key in shaping scholarship and policy, especially around women entrepreneurs.

THIS REPORT ANSWERS THE FOLLOWING:

What have we learned about women's entrepreneurship from the GEM program?
What do key indicators of entrepreneurial activity look like for women entrepreneurs in 2023?
What has changed for women's entrepreneurship over the years?

HISTORY AND IMPACT OF THE GEM WOMEN'S REPORT

The GEM program was launched in 1999 around the same time that Babson established the first-ever Center for women's leadership at a business school, now called the Frank & Eileen Center for Women's Entrepreneurial Leadership (F&E CWEL). Fortuitously, the individuals involved with both GEM and CWEL founding activities shared a vision for thought leadership on women's business leadership and entrepreneurial activity.

The idea for the first GEM Women's Report was proposed by Professor Maria Minniti, a founding member of GEM and an advisor for CWEL's launch. After pitching the idea to the GEM board and receiving approval, she joined with Professor Nan Langowitz and fellow GEM scholar Professor Pia Arenius to co-author a first publication using GEM data for gender analysis. The first GEM Women's report was launched in 2005 using data from the 2004 survey year. The report was later translated into Arabic, an early indicator of the changing attitudes toward women business leaders in the Middle East region.

This year marks the 12th GEM Women's report. Importantly, the GEM reports and data have seeded an extensive list of studies on gender and entrepreneurship, including at least three books presenting empirical analysis of women's entrepreneurship globally, regionally in Europe, and in a single country (Iran). There are currently over 4,000 journal articles with a combination of "Global Entrepreneurship Monitor" and "gender" in the title. These numbers are representative of the rapidly

growing literature on gender patterns of entrepreneurship emerging across a number of different disciplines.

A quick snapshot of 80 refereed journal articles using "gender" and "Global Entrepreneurship Monitor" in the title and/or abstract (see Appendix I) reveals studies focused on a variety of gender patterns in entrepreneurial activity, from intentions, perceptions, motivations and aspirations to the importance of national and regional context for participation rates of different types of ventures (e.g., high-potential startups, social ventures, opportunity- and necessity-motivated ventures).

It is particularly exciting to see longitudinal analysis (tracking the same sample at different points in time) emerge for individual countries and several studies focused on specific industries.

In addition, there are book chapters in edited volumes and an increasing number of doctoral dissertations investigating gender patterns of entrepreneurial participation. Without doubt, GEM Women's Reports and early research studies have inspired a significant and growing body of research on women's entrepreneurship in countries around the world.

GEM DATA ANALYSED IN THIS REPORT

We examine key entrepreneurship indicators for 2023 as well as long-term trends for a subset of measures in 43 countries participating from 2001-2023. A subset analysis was also performed for countries in the early GEM survey years (2001-2005) compared to those in more recent years (2021-2023) in order to estimate global change in rates for five key measures. We highlight trends observed for key indicators in specific countries throughout the report.

As shown in Figure 1, a total of 46 countries participated in the GEM 2023 program year – 45 countries in the GEM Adult Population Survey (APS) plus Argentina in the National Expert Survey (NES). Participating countries vary from year to year, so longitudinal analysis at the global level can be misleading and must be restricted to individual countries.

TABLE 1: Countries featured in the 2023/2024 GEM Women's Report by region and income Level

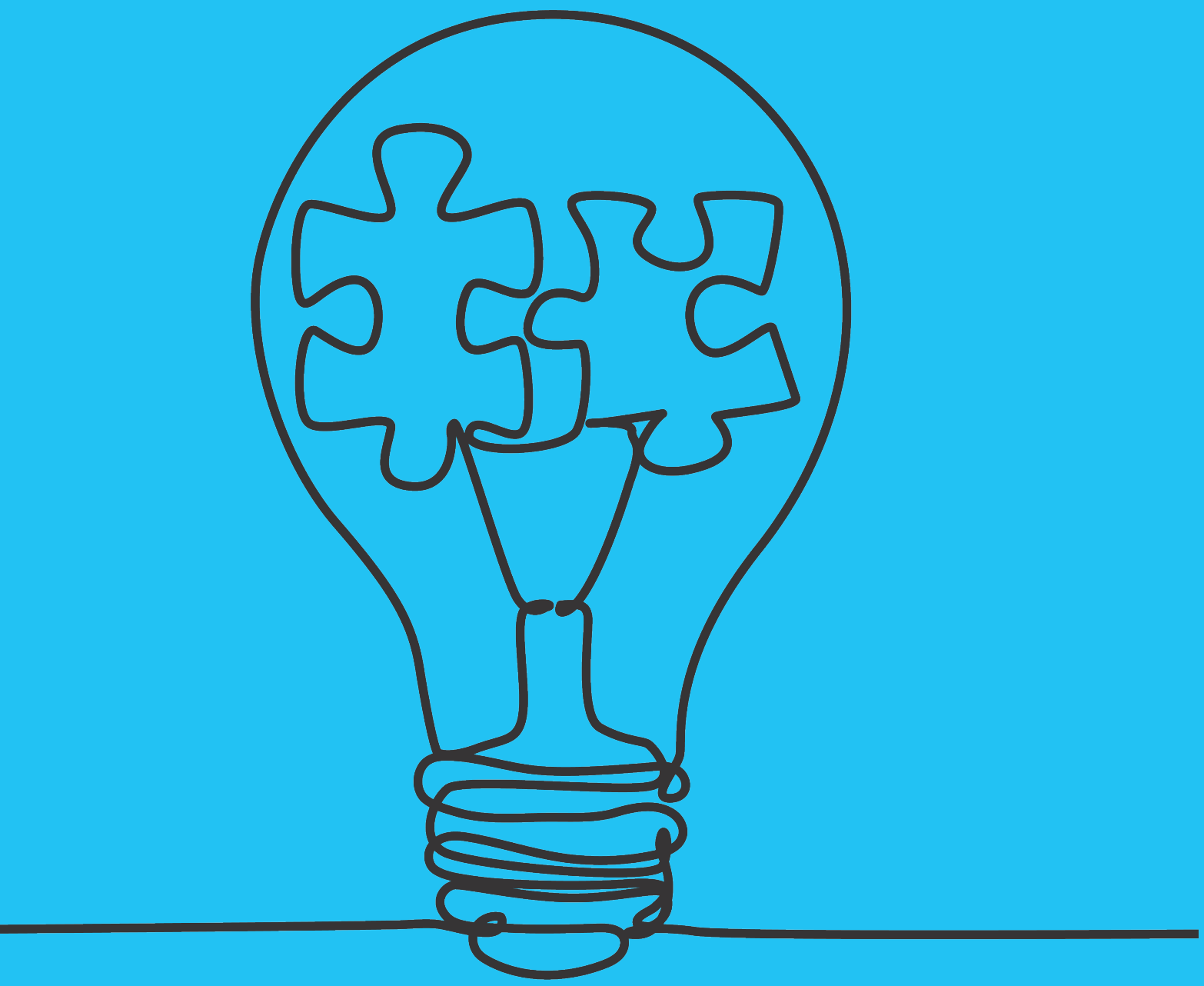
REGIONS	High income Level A >$50,000 GDP per capita	Middle income Level B $25,000–$50,000 GDP per capita	Low income Level C <$25,000 GDP per capita
Asia Pacific	South Korea		China India Thailand
Europe & UK	France Germany Italy Luxembourg Netherlands Norway Slovenia Sweden Switzerland United Kingdom	Croatia Cyprus Estonia Greece Hungary Latvia Lithuania Poland Romania Slovak Republic Spain	

REGIONS	High income Level A >$50,000 GDP per capita	Middle income Level B $25,000–$50,000 GDP per capita	Low income Level C <$25,000 GDP per capita
Latin America and Caribbean		Chile Panama Puerto Rico Uruguay	Brazil Colombia Ecuador Guatemala Mexico Venezuela
Middle East and Africa	Qatar Saudi Arabia	Israel Oman	Iran Jordan Morocco SouthAfrica
North America	Canada United States		

Note: Four additional countries not shown participated in the 2023 National Expert Survey, including Argentina, Japan, Ukraine, and United Arab Emirates.

CHAPTER 2

Startup activities and business stages



2

Startup Intentions, Activity & Business Stage

Historically, women have participated throughout the entrepreneurial life cycle at lower rates than men[1]. This chapter considers trends in women's startup activity as well as rates of entrepreneurial intentions through startup, growth stage, and business exit.

HOW ACTIVE ARE WOMEN IN STARTUP ACTIVITY?

Across all the GEM-participating countries in 2023, about 10.9% of women compared to 13.8% of men were starting new businesses (W/M 0.79). No matter which countries participate from year to year, the highest average rates of entrepreneurial activity for women are found among low-income countries (16% in 2023). This happens, in large part, because these countries tend to be small market economies with few other employment options beyond government services and agriculture sectors. However, that's not the whole story.

As economies develop, businesses get larger, and where possible, women play an important role in this process of economic development, exemplified by a gender gap of less than 15 points in middle-income countries (W/M 0.86). In contrast, the largest gender gap in total entrepreneurial activity was in high-income countries (W/M 0.73) where working age adults have multiple alternatives for income generation and wage employment. In addition to "push" factors like job scarcity or cultural restrictions limiting women's access to traditionally male job sectors, a number of "pull" factors draw women to start businesses, including personal preferences for autonomy and flexible family care arrangements and public and private programs that encourage women's entrepreneurship through legitimation of entrepreneurship, capacity building, financial assistance, and strong business networks that facilitate resource acquisition, industry connections, and social support.

Globally in 2023, startup activity rates for women met or exceeded one in five adults, 18-64 years old, in 10 countries. By rank, they are Ecuador, Chile, Guatemala, Panama, Columbia, Thailand, Uruguay, Saudi Arabia, Venezuela, and Puerto Rico (see Figure 2). Among these countries, only Saudi Arabia is in the high-income group. Five are in the low-income group and four in the middle-income group (Figure 2). Startup rates for women met or exceeded those for men in only five countries: China, Colombia, Ecuador, Lithuania and Thailand. The rest were all below parity with the largest gaps (<0.60 W/M) in Cyprus, Hungary, Jordan, Morocco, Norway, and Slovenia.

Importantly, women's startup rates tend to vary in line with men's rates across countries, highlighting the significant role that context plays in business startup activity. Average rates of total entrepreneurial activity (including nascent activity and new businesses) are generally lowest in high-income countries, where wage employment in large firms provides a favourable alternative for many working-age adults. The lowest startup rates for women can be seen across various income groups and regions. In 2023, five countries – Poland, Morocco, Slovenia, Romania, and Norway – reported women's startup rates below 5%.

1 See Roper, S., & Scott, J. M. (2009). Perceived financial barriers and the start-up decision: An econometric analysis of gender differences using GEM data. International Small Business Journal, 27(2), 149-171

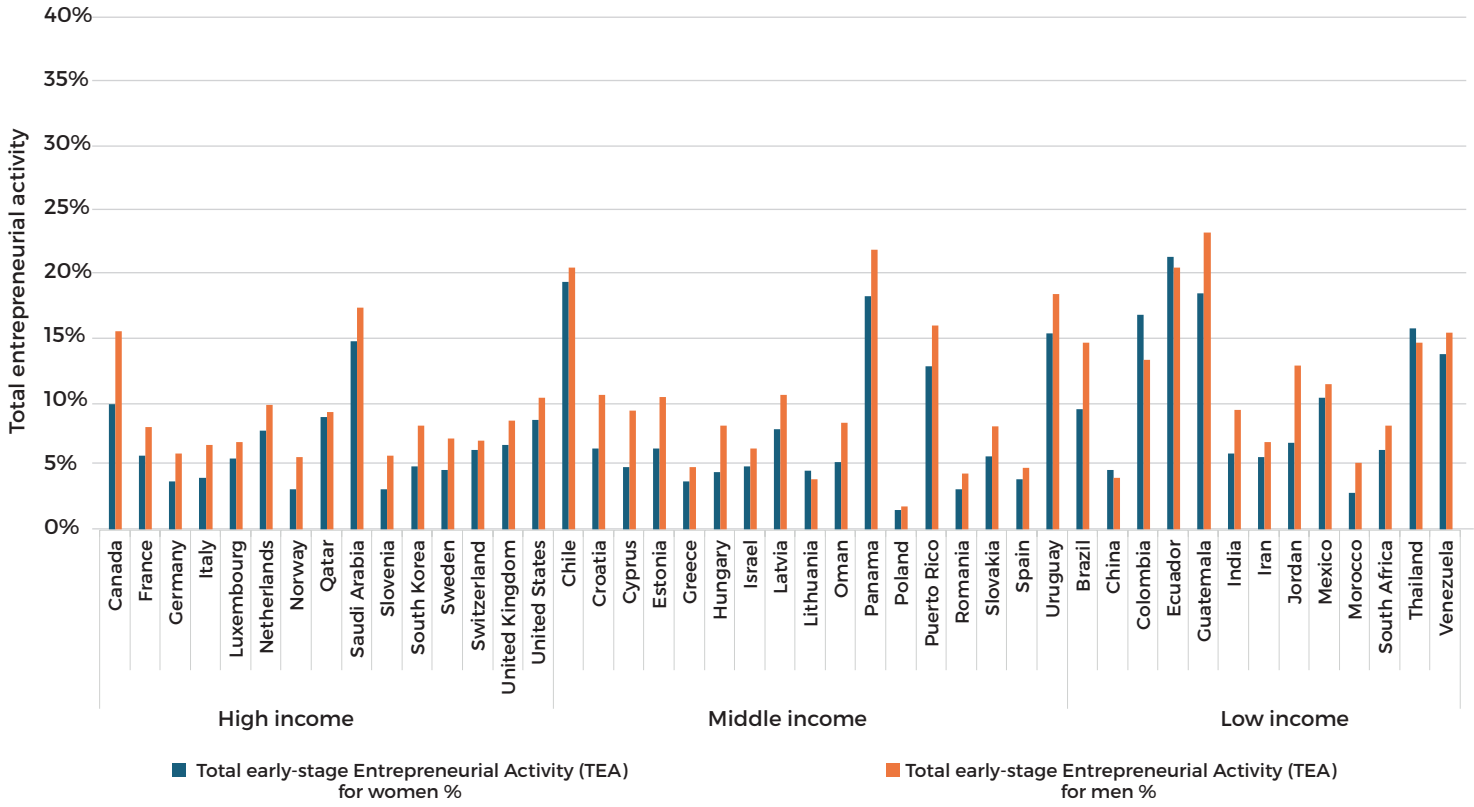


FIGURE 2: Startup activity by gender and country, GEM 2023

HAVE WOMEN INCREASED THEIR STARTUP ACTIVITY OVER THE YEARS?

To gauge how much women's participation has changed over the years, we analysed startup trends for women from 2001-2023 for 43 countries with high participation rates in at least three of the five time periods estimated[2]. Comparing the 30 countries that participated in 2001-2005 and 2021-2023 showed a rise in startup activity from 6/1% to 10.4% on average. This change represents a 76% increase in startup activity for women globally. Many public policies or support programs have emerged over the past two decades in several of these countries. These programs are designed to encourage women's business ownership and to reduce the gender gap. Other factors encouraging increased startup rates for women include the emergence of women business angel networks, and NGO support for women through training, legal advice, or mentoring.

The time series analysis was extended to include an additional 13 countries that joined the GEM research program in later years. As shown in Figure 3, all but six of these countries showed an increase in average startup rates over the past 23 years. The exceptions include Egypt, Jordan, Morocco, Norway, Poland, and Taiwan. The most pronounced upward trends in women's startup activity rates were found in Chile, Guatemala, Panama, Saudi Arabia, the United Arab Emirates, and Uruguay. Women's startup activity increased by at least 10 percentage points on average in these countries.

2 In order to include as many countries as possible in the time series analysis, we calculated 5 year averages for all GEM participating countries from 2001-2023. The last group from 2021-2023 included only 3 years.

HUMAN FACES BEHIND THE DATA . . .

NOTABLE ORGANIZATIONS ADVANCING WOMEN'S ENTREPRENEURSHIP

There are many organizations advancing women's entrepreneurship globally through education, mentorship, financial resources, and market access. Our report sponsor 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.

Here is a list of other organizations to follow.

1. UN Women's Empower Women

A global movement promoting women's economic empowerment through programs, networks, and resources for female entrepreneurs.

2. Cherie Blair Foundation for Women

Provides women entrepreneurs with mentorship, training, and access to financial services to help them start and grow businesses.

3. Global Banking Alliance for Women (GBA)

A global consortium of financial institutions dedicated to supporting female entrepreneurs through financial products, education, and networking.

4. WEConnect International

Connects women-owned businesses with multinational corporations to provide opportunities for market access and business growth.

5. Goldman Sachs 10,000 Women

A global initiative offering women entrepreneurs access to business education, networks, and capital.

6. Vital Voices

Invests in women leaders worldwide, providing them with the tools, skills, and networks to advance women's entrepreneurship and leadership.

7. SheTrades (International Trade Centre)

Aims to connect three million women to market by 2025, offering training, mentorship, and networking to women entrepreneurs globally.

8. Women's World Banking

Works to provide women entrepreneurs in developing countries with access to financial services, including credit, savings, and insurance.

9. Female Founders Alliance (FFA)

A community that provides support, mentorship, and access to funding for women founders of scalable, venture-backed businesses.

10. Ashoka Women's Initiative for Social Entrepreneurship

Focuses on supporting female social entrepreneurs who are creating change in their communities and solving global issues.

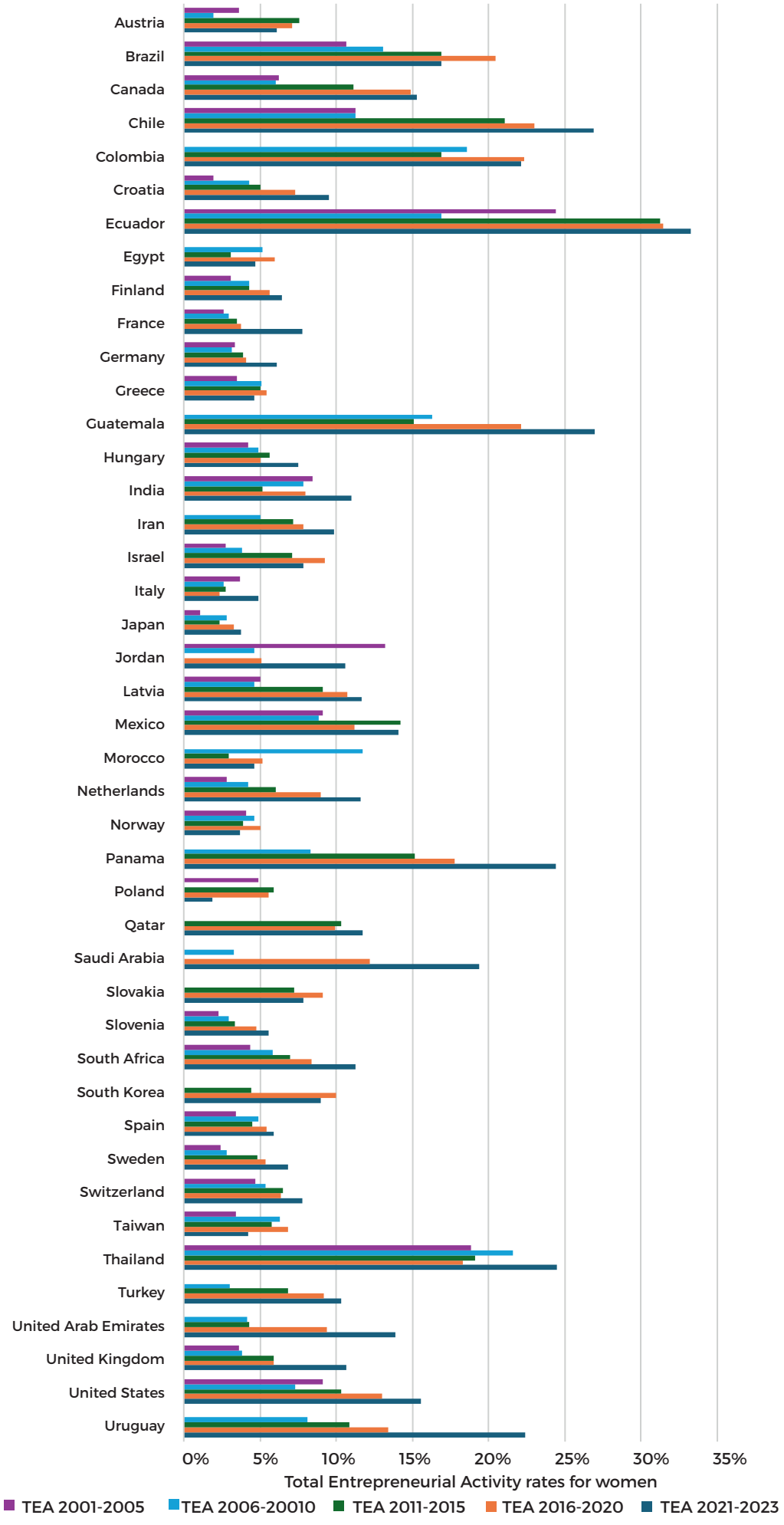


FIGURE 3: Five-year average startup rates for women in 43 selected countries, GEM 2001-2023

HUMAN FACES BEHIND THE DATA . . .

MAKING A DIFFERENCE THROUGH SUSTAINABLE INNOVATION

To foster sustainable entrepreneurship, policymakers need to understand the motivations of individuals who want to start a business. GEM's Adult Population sheds light on such motivations, one of which is to make a difference in the world (see Chapter 4).

An example of someone who started a business to impact the world is **Aya Laraki**, Founder of the Morocco-based startup Cuimer. She started Cuimer in 2016 to address environmental waste. The company transforms discarded fish skins into high-quality marine leather, offering the fashion industry a sustainable alternative to exotic reptile leathers.

Cuimer's approach challenges traditional fashion industry norms, demonstrating that sustainability and style can coexist. Aya believes that by embracing innovative materials like fish leather, the fashion industry can take a major step towards ethical consumption and environmental responsibility. Among the company's achievements are:

- Recycled over 40 tons of fish skins, transforming potential waste into a sustainable, high-quality material.
- Offered an eco-friendly alternative to exotic leathers, reducing the demand for reptile skins in fashion.
- Collaborated with local fisheries to source fish skins responsibly, ensuring our supply chain supports sustainable practices.

"We have the power to shift the narrative and inspire others to adopt solutions that prioritize the planet," she says.

Through Cuimer, Laraki is proving that fashion can drive meaningful change while promoting a healthier world.

As for how policymakers can support entrepreneurs in sustainable fashion, Laraki believes a few measures would be especially impactful.

"Streamlining administrative processes, simplifying regulations, and making them clearer would help us navigate requirements more efficiently," she said. "Financial support, such as grants or incentives for companies reducing waste and promoting eco-innovation, would also be beneficial. Additionally, fostering education around sustainable sourcing practices could create a stronger ecosystem for businesses like ours."

It is encouraging to see improvements in startup rates in so many countries where governments have worked hard to inspire and support women to pursue entrepreneurial opportunities. While startup rates are often low in many European countries, Saudi Arabia has seen more than a stunning six-fold increase in startup rates for women, followed by Croatia and the Netherlands with five-fold and four-fold increases, respectively.

Another four countries have seen startup rates for women triple or more over the past 20 years, including France, Japan, Turkey and the United Arab Emirates. These impressive gains were seen mostly in high-income countries and, hopefully, represent increased rates of opportunity-motivated entrepreneurship in these and other countries where women's start-up rates have increased over time.

HOW MANY WOMEN ASPIRE TO START BUSINESSES?

Globally, startup intentions are 16.9% for women and 20% for men. Unsurprisingly, intentions are highest for women in low-income countries (25%) and lowest in middle-income countries (14.2%), where we see the smallest gender difference (W/M 0.92). This trend tracks the patterns seen with startup activity rates, as shown in Figure 4.

Women's intentions were highest in Latin America and in the Middle East and Africa regions. Three countries reported startup intentions over 50% for women: Oman (65%), Qatar (51%), and Ecuador (57%). Moreover, startup intentions were higher for women than for men in six countries: Colombia, Greece, Panama, Qatar, Saudi Arabia, and South Africa. Countries with the largest gender differences in startup intentions included Iran (W/M 0.49), Norway (W/M 0.50), Germany (W/M 0.52), and Hungary (W/M 0.58). The lowest rates of startup intentions for women were Poland at only 2.4%, China at 5%, Germany at 5.3%, and Romania at 5.6%. These countries represent very different kinds of economies which suggests that variations in rates and gender ratios are due to a variety of factors.

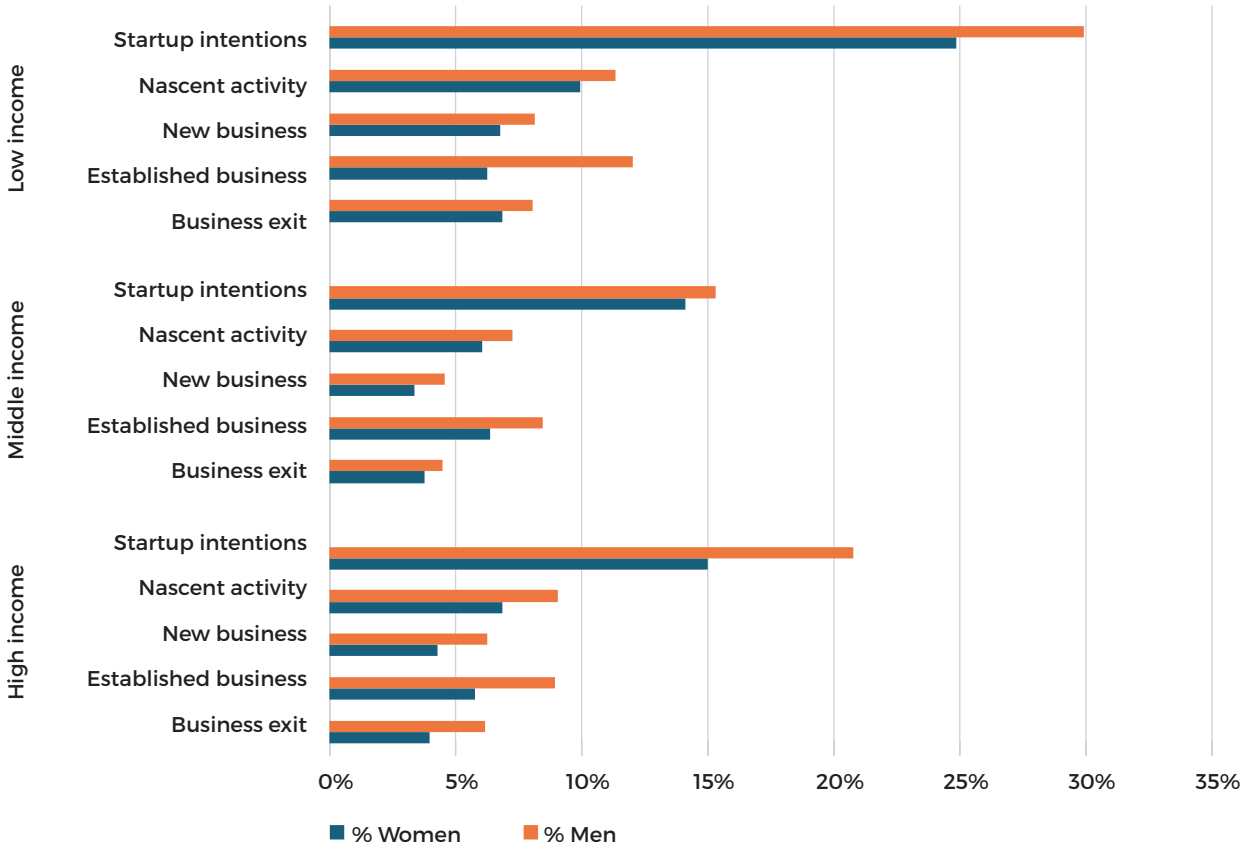


FIGURE 4: Business stage by gender and national income, GEM 2023

A big challenge for all entrepreneurs is to convert intentions into an actual business. As Figure 4 illustrates, the challenge exists at all levels of national income, with larger relative gaps between intentions and startup activity for women compared to men. The gender gap actually increases from 15 points for intentions to 17 points for nascent startup activity and 25 points for a new business. Finally, when it comes to established businesses, the gender gap reaches a 35-point gap (W/M 0.65) globally, suggesting that women struggle more than men to establish sustainable businesses. This is a consistent trend observed throughout the years.

A recent GEM Special Report on Women's Entrepreneurship in South Africa[3] summarized a number of the barriers faced by women entrepreneurs in the growth process, including access to funding, networking opportunities, work-life balance, perception of risk and confidence, market barriers, gender bias, resource limitations, and regulatory obstacles. The barriers are particularly pronounced in low-income contexts where women are most likely to start businesses in sectors and markets marked by low barriers to entry and low profits, on average.

Gender bias can impact their growth potential by limiting their ability to obtain bank loans or venture capital. Market barriers may hinder their ability to compete and access markets. Social censure can impact the willingness of women entrepreneurs to take risks and compete for necessary resources, like skilled labour, digital technologies, and market expertise. Finally, in the absence of supportive institutional arrangements at home or in the marketplace, women may also struggle with work-life balance, which can limit their time and energy to focus on business growth[4].

HOW ACTIVE ARE WOMEN AT DIFFERENT STAGES OF THE ENTREPRENEURIAL LIFE CYCLE?

In 2023, 6.2% of women surveyed owned an established business compared to 9.5% of men. The smallest gender gap in business ownership was found in middle-income countries (W/M 0.76) and the largest in low-income countries, where men were twice as likely to report owning an established firm (W/M 0.52). As observed over the years, countries in Central and East Asia showed some of the highest rates of established business ownership for women (8.6%) though a little more than half the rate of men (15.7%).

Leading the 2023 survey, five countries showed established business rates for women of 10% or more: South Korea (14.8%), Saudi Arabia (13.5%), Lithuania (12.7%), Puerto Rico (10.9%), and Thailand (10.4%). The lowest rates of established business ownership for women were Luxembourg (2.6%), Mexico (2.7%), Oman (2.5%), Sweden (2.8%), and Venezuela (2.9%). Gender gaps were largest in ten countries with W/M ratios below 50%: Germany, India, Iran, Italy, Jordan, Luxembourg, Morocco, Puerto Rico, Slovenia, and Sweden. Notably, Israel reported gender parity in established business ownership, followed closely by Saudi Arabia, near parity with a one point gap and Chile with a nine point gender gap.

HAS ESTABLISHED BUSINESS OWNERSHIP CHANGED FOR WOMEN OVER THE YEARS?

Among the 30 countries participating in both the 2001-2005 and 2021-2023 surveys, established business ownership rates increased from 4.2% to 5.9%, representing a more modest change than seen with startup rates. However, this change is encouraging and indicates improved success rates for women's startups. Many countries have shown immense strides in the development of policies and support programs to support women entrepreneurs in recent years. Although there is still room for improvement, the increased established business ownership rate is a reflection of these efforts.

3 Meyer, N., Samsami, M. and Bowmaker-Falconer, A. 2024. Women Entrepreneurship in South Africa: What does the future hold? Stellenbosch University: Stellenbosch, South Africa.

4 See Hechavarría, D. M., Guerrero, M., Terjesen, S., & Grady, A. (2024). The implications of economic freedom and gender ideologies on women's opportunity-to-necessity entrepreneurship. International Journal of Entrepreneurial Behavior & Research. Vol. 30 No. 7, pp. 1614-1651. https://doi.org/10.1108/IJEBR-04-2023-0429

HUMAN FACES BEHIND THE DATA . . .

THE POWER OF DYNAMIC ENTREPRENEURSHIP EDUCATION PROGRAMS

As noted in this report, education plays an important role in supporting women entrepreneurs. Women with higher levels of education typically experience higher returns with their startup activity, while women with lower levels of education are more likely to start businesses out of necessity.

Babson College's Black Women's Entrepreneurial Leadership Program (BWEL) is a great example of an effective entrepreneurship program at a university. The first program of its kind at a four-year institution, BWEL is dedicated specifically to Black women entrepreneurs. Founded by **Dr. Shakenna K. Williams**, Executive Director of the Frank & Eileen Center for Women's Entrepreneurial Leadership at Babson, BWEL addresses key barriers Black women founders face, such as limited access to capital, networks, and growth opportunities.

Through BWEL, participants benefit from Babson's world-renowned pedagogy, expert mentorship, and strategies to grow their businesses. The program provides tailored support, including leadership development, connections, and guidance in areas like capital raising and procurement.

Shennice Cleckley, Founder & CEO of Melanin Innovations, said, *"The BWEL program was more than just a learning experience; it was a catalyst for growth. The mentors opened doors in procurement I hadn't encountered in 20+ years of entrepreneurship. The women I met became a support system, driving me to go bigger and better."*

Dr. Sadie Burton-Goss, Chief Diversity & Inclusion Officer at Babson College, remarked, *"The success of BWEL is a testament to the impact of prioritising equity and opportunity. As BWEL nears its fifth anniversary, we celebrate not just the program's success, but the resilience and achievements of the women it has empowered. This program shows what's possible when we invest in inclusive entrepreneurial leadership."*

To continue expanding its impact, BWEL is inviting mentors, donors, and advocates to support its mission. By partnering with BWEL, you help close the racial wealth gap and enable more Black women entrepreneurs to scale their businesses and build generational wealth. Join us in supporting BWEL's mission to foster the next generation of Black women entrepreneurial leaders and create a more equitable future.
Visit https://www.babson.edu/womens-leadership-institute/ for more information.

We thank the Frank & Eileen Center for Women's Entrepreneurial Leadership at Babson College, one of our report sponsors, for providing this material and helping to put our data in a real-world context.

BABSON COLLEGE Frank & Eileen™ Center for Women's Entrepreneurial Leadership

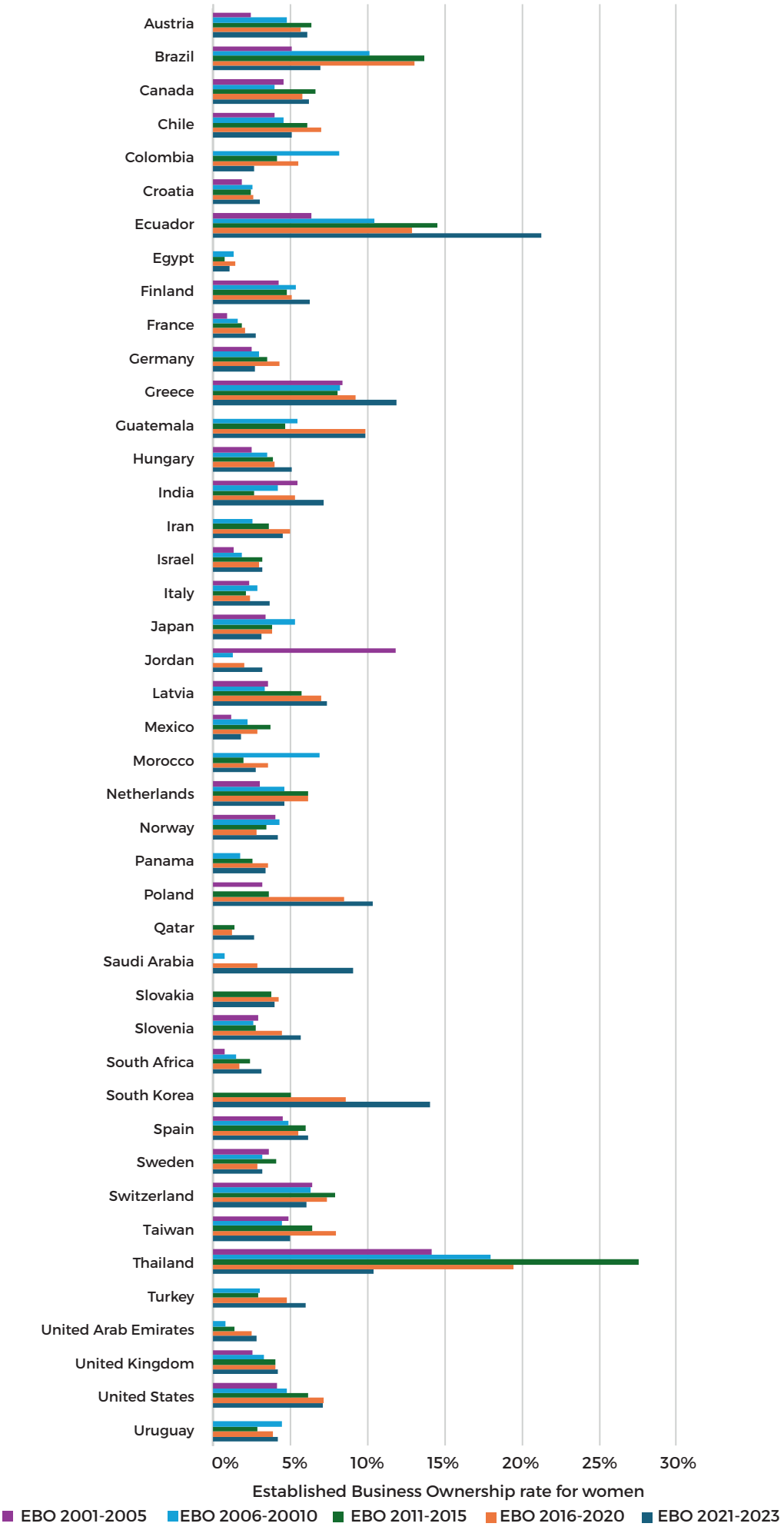


FIGURE 5: Five-year average established business rates for women in 43 countries, GEM 2001-2023

Among the 43 countries analysed in the full time series analysis, established business ownership rates increased over the past two decades by three times or more in five countries. Saudi Arabia has seen an eleven-fold increase in women's established business ownership, while rates have also increased by three to four times in Ecuador, Poland, South Africa, and the United Arab Emirates. Another six countries have seen women's established business rates increase by two to three times between 2001 and 2023: Austria, France, Hungary, Israel, Israel, Latvia, and South Korea. Still, women's established business rates have dropped in nine countries over this period, including Colombia, Egypt, Japan, Jordan, Morocco, Sweden, Switzerland, Thailand, and Uruguay.

If efforts to encourage women's entrepreneurship are to succeed, we need to see increases in established ownership as well as increases in startup activity. There are a number of different reasons why established business ownership may drop, including external economic shocks as experienced during the COVID-19 pandemic in 2020 and in periods of global recession as seen in 2008. It can take a while for economic impacts to play out.

One way to determine whether the increase in rates indicates a shift in gender patterns rather than external shocks is to consider changes in the gender ratios. Indeed, gender gaps in established business ownership have shrunk in the majority of countries examined. The biggest changes occurred in Saudi Arabia, where the gender gap decreased by well over six times, and in the United Arab Emirates, where it decreased by about three times. However, we find that gender gaps in established business ownership activity have actually increased in seven countries—Guatemala, Hungary, Iran, Japan, Jordan, Latvia, Taiwan and Thailand--and remained flat in three others—Brazil, Croatia, and Italy.

WHAT ARE THE BUSINESS EXIT RATES FOR WOMEN?

Women tend to have lower business exit rates than men from year to year in the GEM data. In 2023, women were 21% less likely to report a business exit than men (4.6% vs 5.8%). The exit rate is lowest for women in middle-income countries (3.8%) and highest in low-income countries (6.9%). The largest gender difference was found in high-income countries, where women were 35% less likely to report a business closure in the prior 12 months. These numbers should not be interpreted without considering the reasons for business exit and the corresponding startup rates. We consider exit/entry rates in this section and address the reasons for business exit in a later chapter.

In a given year, women are creating far more businesses than they are exiting across all countries. The global average exit/entry ratio is 35% less for women than for men, suggesting that women are creating new sustainable businesses at a much higher rate than men. As shown in Figure 6, these rates vary considerably by level of national income, at gender parity in low-income countries but lower for women in high-income countries and higher for women in middle-income countries compared to men.

Importantly, exit/entry rates vary considerably by industry, which explains much of the extensive variation in exit/entry rates by gender across countries and levels of national income. In fact, research suggests that culture and other ecosystem factors influence the types of business and sectors in which women and men pursue business activity[5].

Exit/entry ratios are higher for women than for men in nine countries: Canada, Colombia, Germany, Guatemala, Hungary, Latvia, Poland, South Africa, Switzerland, and the United Kingdom. Germany stands out with a large gender and high exit/entry rates for women compared to men (0.49 vs 0.30). However, the highest exit/entry rates for women were found in Poland (1.33), South Africa (0.83), China (0.62), and Canada (0.62). High exit/entry rates suggest economic volatility and potential political instability, especially in cases where exit/entry ratios exceed parity, as in Poland.

5 Samsami, M., Peña-Legazkue, I., & Barakat, S. (2024). The role of entrepreneurial ecosystems in reducing the gender gap of entrepreneurial intention and exit rates. European Journal of International Management, 22(4), 576-591.

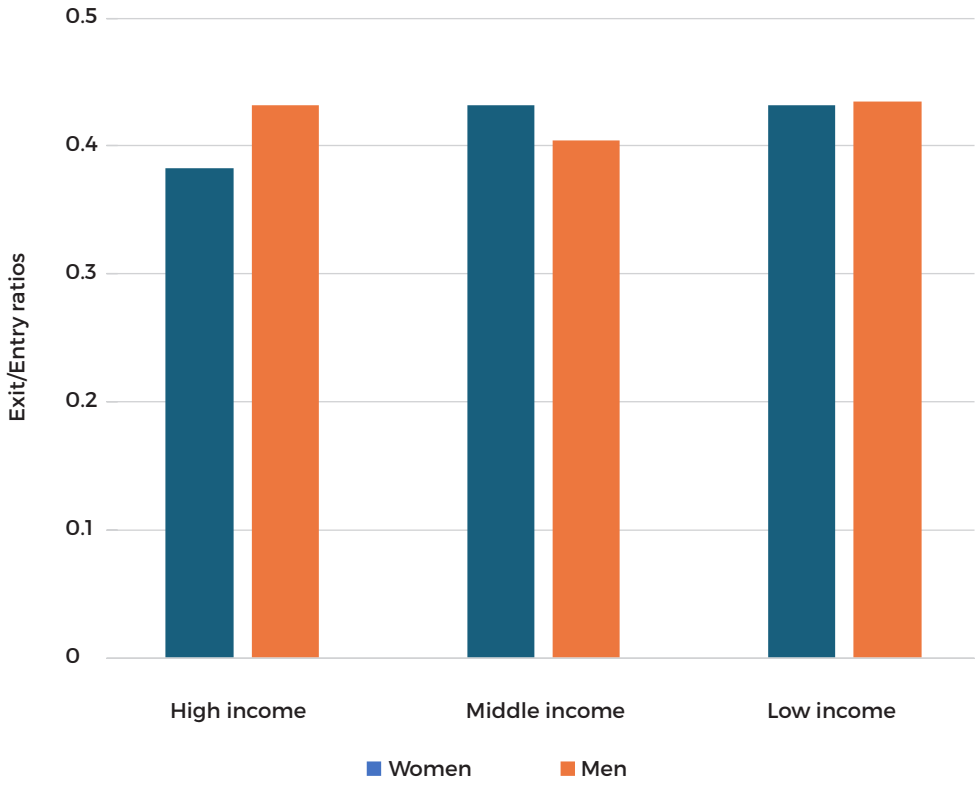


FIGURE 6: Business exit/entry ratios by gender and national income, GEM 2023

CHAPTER 3

High Potential Activities, Industry & Business Size

3

High Potential Activities, Industry & Business Size

Women participate in all types of business ventures, from high-potential, industry-disrupting innovations to self-employment and subsistence-level business activity. This gets overlooked in much of the studies published. We compare average rates more often than we do the representation of women in different industry sectors, market segments, and supply chain locations.

In this chapter, we examine the gender composition of high-potential entrepreneurs, the industry distribution of women entrepreneurs, and the size of business in the startup phase of the entrepreneurial life cycle. Industry and business size are two of the most important factors that explain gender differences in business startup and growth, influencing who participates in high-potential entrepreneurship.

WHAT INDUSTRY SECTORS ARE WOMEN ENTREPRENEURS MOST ACTIVE IN?

Almost half of all women entrepreneurs in the GEM 2023 survey were active in the Wholesale/Retail sector, with a higher concentration than men (W/M 1.09). Women entrepreneurs were much more concentrated in Government and Social Services (GSS) than men (W/M 1.76), with almost one in five women-led startups in that sector. In contrast, women were about half as likely to start businesses in the Information and Communication Technology (ICT) sector as men and three times less likely to run a startup in Agriculture & Mining. These industry locations have important consequences for the business size and growth across the entrepreneurial life cycle and should play a key role in policy and programming designs for entrepreneurs of all kinds.

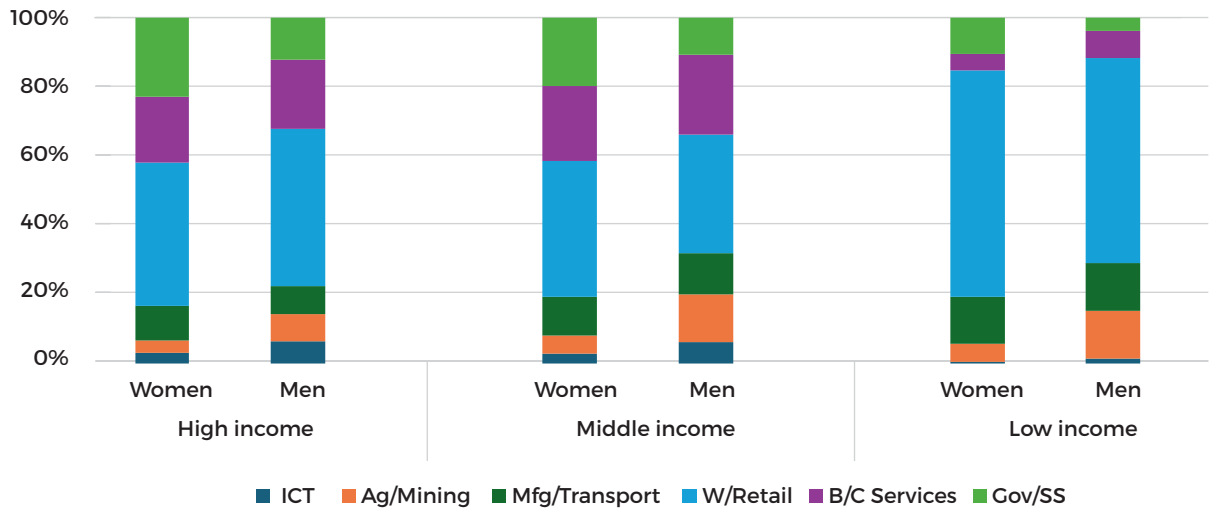


FIGURE 7: Industry segmentation of startups by gender and national income, GEM 2023

HUMAN FACES BEHIND THE DATA . . .

AN ENTREPRENEURIAL VISION FOR CLEAN ENERGY CITIES

Entrepreneurial sparks and a commitment to environmental sustainability can serve as a powerful means to unleash change. **Ariana Martín** can attest to this. In the quaint town of Portugalete, Bizkaia in Basque Country (northern Spain), Ariana co-founded Roseo Eólica Urbana in 2020 with a vision to transform urban energy consumption.

After years of professional experience, Ariana enrolled in a Master's program in Entrepreneurship and Business Management at the University of the Basque Country (UPV/EHU). It was there, amidst like-minded individuals and innovative discussions, that she found her calling. A project presented by a colleague in the renewable energy sector piqued her interest, leading to the formation of a dynamic team, which included engineers who shared her vision. This collaboration blossomed into the creation of Roseo, aiming to provide small-scale wind power solutions for urban environments.

Innovating for a Sustainable Future

At the heart of Roseo's approach lies a commitment to harnessing wind energy in urban settings. The startup's offerings, the Anemoi service and the Rosbi wind turbine, are designed to allow cities to generate their own clean energy.

Ariana, CEO of the company, emphasizes the importance of doing what you love: *"It's about pushing the potential of both myself and my team to the limit. Contributing to society with a new way to generate energy is a significant challenge."*

This passion is evident in Roseo's innovative solutions that integrate seamlessly into urban landscapes without causing noise or disruption. With society increasingly aware of environmental challenges,

Ariana recognizes that clean energy solutions are no longer optional but essential.

"Today, public awareness of environmental issues is growing, evidenced by increasing social movements demanding improvements in this area," she notes.

This societal shift, coupled with favorable European policies, has paved the way for Roseo to carve out a niche in the burgeoning market of urban wind energy.

While Roseo's technological innovations focus on renewable energy, the company also faces the modern challenges of digitalization. By storing information in the cloud, Roseo can streamline decision-making and enhance communication, enabling rapid responses in the fast-paced startup environment.

"Digitalization is now indispensable," she adds, recognizing its role in reaching a wider client base and establishing effective operational processes.

As Roseo Eólica Urbana continues to grow, its story highlights the intersection of entrepreneurship, innovation, and sustainability. The founders remain dedicated to their vision of empowering urban areas with clean energy, ensuring that their community not only meets today's energy demands but also paves the way for a more sustainable future.

Learn more about Roseo Eólica Urbana at https://roseo.es. We thank GEM Spain, host of the GEM 2024/2025 Global Report Launch in Bilbao, for providing this material and helping to put our data in a real-world context.

Importantly, industry segmentation patterns vary considerably across countries and levels of national development, as well as in terms of gender. Globally, the majority of venture capital is invested in software and technology sectors, where women tend to be underrepresented[6]. Women start businesses at about half the rate of men in the ICT sector. The biggest gender gap was found in low-income countries, where startup activity in the ICT sector was 0.5% for women, compared to 1.5% for men (Figure 7).

The industry distribution of startup activity varies significantly across all income levels. Women entrepreneurs in high-income countries have a 19% higher concentration in the manufacturing and transportation sector than men. Similarly, while the concentration of all startups in Government and Social Services (GSS) increases from low to high national income, the concentration for women increases more rapidly than for men.

Gender role stereotypes shape the occupational and industry choices and aspirations of entrepreneurs in profound ways, not necessarily related to family roles. Importantly, these industry patterns result from a combination of cultural and structural factors that can vary widely across countries. The United States and Iran lead the world in ICT startup activity for women, at concentrations of 7.9% and 7.4%, respectively. At the other end of the spectrum, 10 countries showed no women entrepreneurs active in the ICT startup sector: Brazil, Colombia, Greece, India, Mexico, Morocco, Saudi Arabia, South Africa, Thailand, and Venezuela.

Gender patterns also vary significantly in Government and Social Services (GSS), with women in Latvia five times more likely to be involved in startup activity than men in 2023. Similarly, women were over three times more likely than men to be involved in GSS in Croatia, Hungary, Netherlands, Slovenia, and Uruguay. Some economies show high concentrations of both women and men entrepreneurs. Over one-third of women's startup activity in Israel was concentrated in GSS compared to only one in five for men. Women were less likely to be involved in GSS startup activity in four countries: Colombia, Greece, Italy, and Oman.

HOW ACTIVE ARE WOMEN IN EMPLOYER FIRMS VERSUS SELF-EMPLOYMENT?

A second key predictor of business activity and outcomes for women and men is business size. Most businesses start small, with more than half reporting one to five employees (see Figure 8). Where we find the most gender difference is among those with no employees and those with six or more employees. One-third of women were solopreneurs globally in 2023, compared to one in five men. Here is a breakdown by country income level:

- High-income: Women were 50% more likely to start with no employees than men.
- Middle- and low-income: Two in five women and one in three men reported no employees.

The highest concentrations of solopreneurs were found in Europe and Latin American regions. Notably, women start businesses with six or more employees at about two thirds the rate of men. North America leads the world in the proportion of women leading startups with more than six employees (27.5%), followed by the Middle East and Africa (18.4%). Unsurprisingly, high-income countries show some of the highest rates of large employer startups, with a 20-point gender gap. While women were less likely overall to lead large startups, women were at parity with men (16.4% and 16.3%, respectively) leading startups with 20 or more employees in the US, and surpassed only by women in Canada, where 19.2% reported 20 or more employees.

6 Brush, C. G., & Elam, A. B. (2024). Clearing the hurdles: Revisiting the under-performance hypothesis for women-led VC funded firms. Journal of Small Business Management, 62(5), 2287-2321; SP Global (2024). Global venture capital investment value, volume down in Q1 2024. Accessed 10-15-2024. https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/global-venture-capital-investment-value-volume-down-in-q1-2024-81180407.

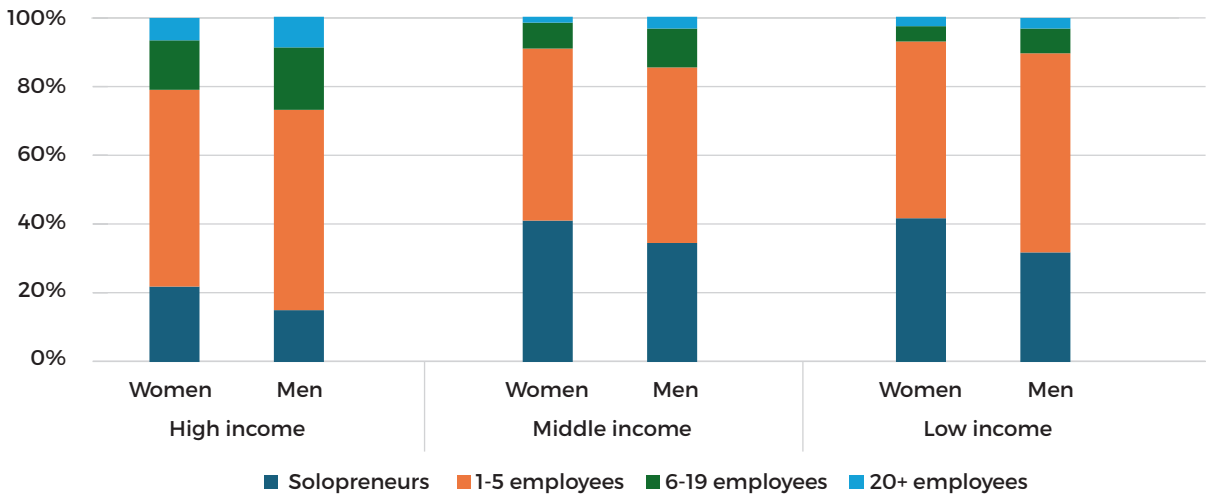


FIGURE 8: Startup business size by gender and national income, GEM 2023

The number of employees needed in a new business depends heavily on the type of business, as well as other factors like level of startup funding, industry sector, and business model automation. As a result, policymakers and program leaders need to understand these factors when interpreting the data for their particular country and region. As it relates to job creation, patterns of self-employment can be more complicated than meets the eye.

On the one hand, we might expect solopreneur rates to be high in subsistence economies, especially for women who face considerable constraints on mobility and security due to family and cultural factors, as well as the infrastructure and market economy factors that also constrain men in developing contexts. On the other hand, we might expect the opposite: low solopreneur rates in countries where women enjoy a lot more freedom of occupational choice and potentially higher returns to self-employment.

Yet we find cases that challenge both scenarios in the startup data. For example, solopreneur rates over 60% were reported by women in Ecuador, Estonia, Guatemala, and Slovenia. At the same time, Israel reported a solo startup rate of 58.8% for women and, in Germany and Qatar, women were almost three times more likely to start new businesses with no employees compared to men.

HOW INVOLVED ARE WOMEN IN HIGH-POTENTIAL ENTREPRENEURSHIP?

High-potential startups are those with high aspirations for job creation, innovation, and international markets. On all of these measures, women tend to be less likely to report high potential activity compared to men. About 30% of women reported bringing a new innovation to market compared to 32% of men, for example. Also, about 8% of women reported more than 25% of customers in another country compared to 11% of men in 2023. Unfortunately, these comparative rates tend to reinforce stereotypes that women entrepreneurs are less involved in innovation and internationalisation than men.

Instead, we can consider the composition of women in different types of high-potential entrepreneurship for a better picture of how women and men are working together to advance economic growth, social development, and environmental stewardship in their respective regions. While many argue that women entrepreneurs require more support because they tend to be more vulnerable, many leading economic development agencies argue that investing in women entrepreneurs offers a high potential return on investment, equal to or better than their male peers[7].

In 2023, women represented one in three high growth-oriented entrepreneurs and almost two in five startups with high export activity (see Figure 9). Similarly, women represent about two-fifths of the high-potential startups

7 Mehta, K. (2023). Why Women Entrepreneurs Outperform Men. Forbes. Accessed 10-21-2024. https://www.

HUMAN FACES BEHIND THE DATA . . .

TRANSFORMING ADVERSITY INTO OPPORTUNITY: HOW NECESSITY FUELS ENTREPRENEURIAL SUCCESS

At times, individuals pursue entrepreneurship to meet basic needs or survive in challenging economic conditions. Necessity entrepreneurship can help reduce poverty. It can contribute to decent work and economic growth and create opportunities for women.

María-José Ibáñez, Professor at the Centrum PUCP Business School in Peru and a member of the new GEM Peru Team, is intrigued to understand necessity entrepreneurship from a research perspective because at one time she was an entrepreneur herself due to necessity.

María-José was let go from her job in 2015. She entered the job market with a plethora of experiences and a number of academic titles. However, as a woman and a young person, she wasn't able to identify the type of role that aligned with her aspirations. She therefore founded a construction company focused on energy efficiency projects in sustainable building.

"I decided if nobody was going to make me a CEO, I needed to become my own CEO," she said.

A few years later, María-José's entrepreneurial journey continued through her involvement with a craft beer company in the south of Chile. Coincidentally, this came about as María-José was interviewing the founder of the company while conducting research for an academic paper.

Based on her experiences, María-José's advice to entrepreneurs who feel they must start a business out of necessity is as follows:

- Leverage your skills and experience. Even if you feel that you are starting out of necessity, focus on the skills and experience you already possess. Use them to differentiate your business and add value to your offerings.
- Stay resilient and flexible. The entrepreneurial journey can be unpredictable, especially when driven by necessity. It's important to adapt to changes, and be willing to pivot when needed.
- Stay alert to opportunities for improvement. Even if you start a business out of necessity, it's important to keep an eye out for opportunities to optimise or adjust your business to make it more profitable. Don't get too attached to the original idea if it's not working, and be willing to change when needed.
- Your original dream doesn't always define your path. María-José always wanted to work in academia, but circumstances pushed her into entrepreneurship. It ended up being a great experience, and it made her a better professional, teacher, and researcher.

"Sometimes, life takes you in unexpected directions, and those turns can help you grow in ways you never thought possible."

focused on large markets. This debunks the stereotype that women entrepreneurs do not think big.

Finally, women are also close to parity with men in bringing innovative products and processes to market.

Gender composition of high-potential entrepreneurs varies in significant ways by level of national income.

While women represented a little over one-quarter of the entrepreneurs with high growth aspirations in high- and middle-income countries, they represented more than one-third of those in low-income countries. Similar patterns were found for all high-potential measures, suggesting that women in low-income countries play a huge role in innovation, job creation, and internationalisation. At the same time, women are closest to parity with men when it comes to a focus on local markets, as opposed to national and international markets, especially in low-income countries. Women's role in innovation is particularly critical when considered in the context of the different industries and markets where women's startup activity tends to concentrate. In fact, women are the only entrepreneurs addressing problems that are not of interest or appear to offer low profit opportunities for men.

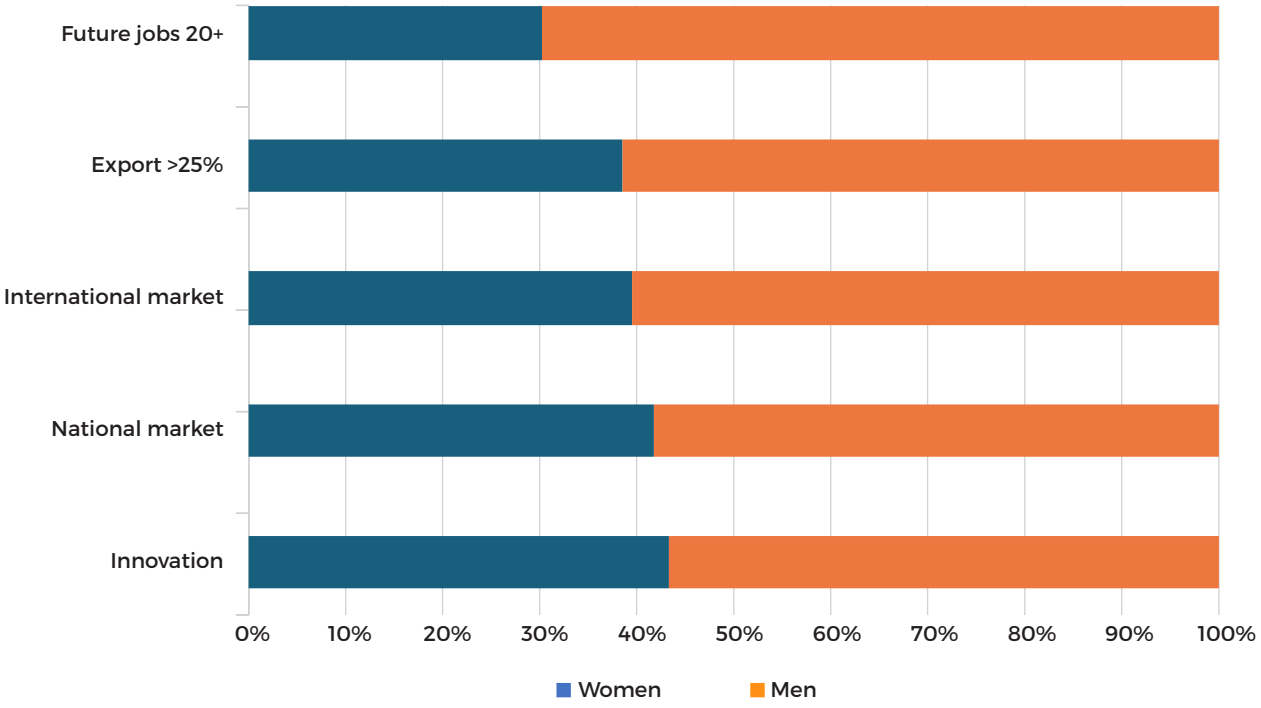


FIGURE 9: Gender composition of high job expectations, nnovation, and export-focused startups, GEM 2023

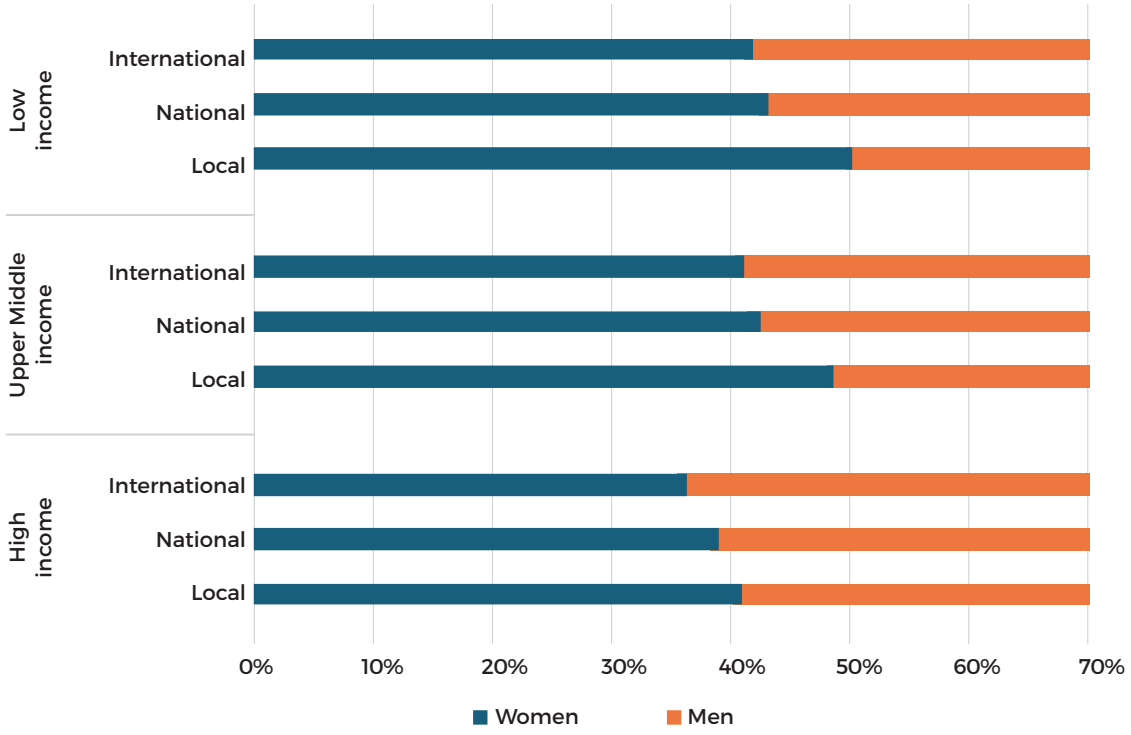


FIGURE 10: Gender composition of market focus by national income, GEM 2023

The variation in gender composition across countries is also striking. Women represent the majority of high-export startups in China (80%), Colombia (77%), Greece (61.5%), India (60%), Lithuania (83.3%), Poland (60%), Puerto Rico (60.5%), Thailand (52.5%), and the UK (51.5%), but zero in South Korea. Women also represent the majority of high-growth startups in China (64.3%), Colombia (54.3%), Romania (62.5%), and Thailand (50.8%) but none in Hungary, Slovakia, and South Korea. Women represent the majority of startups bringing new innovations to market in China (57.7%), Colombia (56.5%), Iran (53.5%), Lithuania (75%), Netherlands (52.9%), and Venezuela (53.6%).

HUMAN FACES BEHIND THE DATA . . .

BREAKING GENDER BARRIERS IN THE TRANSPORT INDUSTRY

So many women entrepreneurs are defying stereotypes. South African entrepreneur **Hester Huysamen** is doing just that in the transport sector. Inspired by her late husband, Hester embarked on a journey that not only paved her path to success, but also set an example for other women to follow.

Hester initially gained experience working as a transport broker for an established company. After her husband's passing, she courageously founded Premier Transport, a family-owned business. Despite the challenges of entering a competitive, male-dominated industry, Hester was determined to build a company from the ground up. She began her venture with just four truck-and-trailer combinations, and today, her fleet has grown to nine.

"My vision is to leave a lasting legacy for the next generation and to inspire more women to break barriers in male-dominated industries," she said.

Financing the business was one of Hester's biggest hurdles. She initially used her personal funds and had to take out loans to expand her fleet. But through hard work and strategic marketing, she built a solid clientele. Her son also joined the company, receiving training to broker transport contracts. Together, they relied on referrals and word-of-mouth to grow their business over the past 13 years.

One of the toughest challenges Premier Transport faced was during the COVID-19 lockdown. Like many other businesses, it was a difficult time. But Hester's perseverance and strong management skills helped her company stay afloat. Family support has been the backbone of the business, with each member playing a critical role in overcoming obstacles.

As more women enter the transport industry, Hester has noticed a shift in acceptance, with female participation becoming the norm. Hester's advice for aspiring entrepreneurs is simple:

"Do your homework beforehand, and bring your specialised knowledge into the field you are pursuing."

HUMAN FACES BEHIND THE DATA . . .

SUPPORTING ENTREPRENEURS IN THE ARTS

The contemporary art industry is a vibrant but complex landscape, often marked by high entry barriers and unique challenges that blend creative vision with entrepreneurial demands. While many artists excel at creating work that captivates audiences, they often feel unprepared to navigate the industry's commercial and operational aspects.

Usha Seejarim is a contemporary artist in South Africa who produces sculptural artworks as director of Usha Seejarim Pty Ltd. Her message to policymakers is to *"create supportive ecosystems that acknowledge the unique challenges that artists face."*

Usha Seejarim Pty Ltd is a micro enterprise based in Johannesburg with five staff members. Usha has numerous career highlights that include large public art commissions, over nine solo exhibitions, and participation in various renowned group exhibitions and art fairs. The artist has received multiple awards, including the Dignitas Award from University of Johannesburg (2022) and the SEED Award from the Southern African Foundation for Contemporary Art (2019).

Usha believes that many artists thrive in environments that value innovation and experimentation, yet encounter barriers related to funding, accessibility, sustainability, and visibility.

"It would be helpful for policymakers to implement financial support mechanisms, such as grants, tax incentives, and subsidized spaces for studios," she said. *"Such initiatives encourage local economies and enhance cultural and community engagement."*

Demand patterns are unpredictable, and it is difficult to successfully marry artistic and commercial logic, according to Usha. Her studio generates inconsistent revenue through public art commissions and sales of artworks.

"Holistic approaches to arts education that integrate business acumen with creative practice

© Alexander Smith

is severely lacking in many current art education courses, both at undergraduate and postgraduate levels," said Usha. *"Contemporary artists often juggle multiple roles, including marketing, management, and production, without any training around the commercial aspects of their work."*

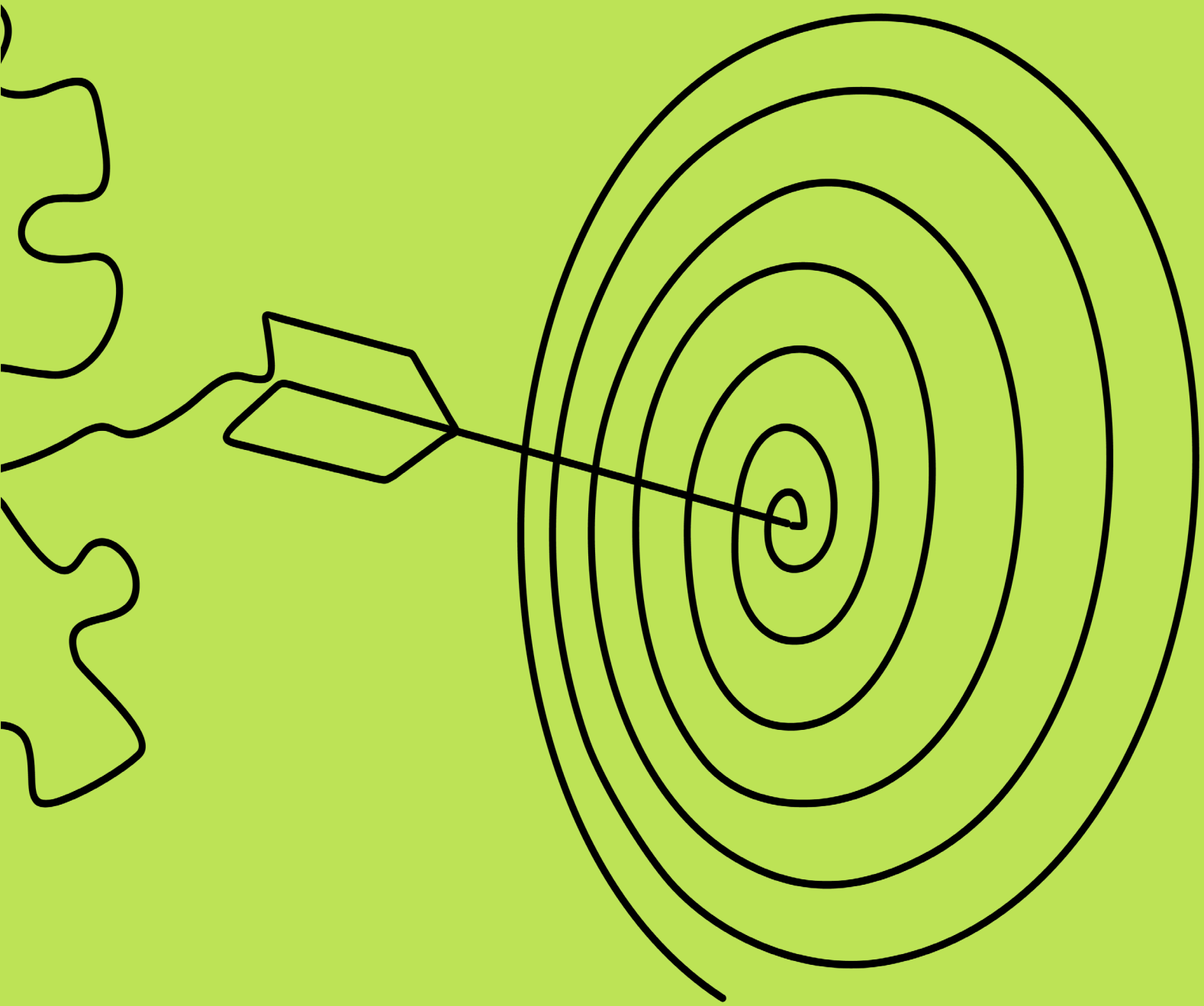
Usha is an MBA student at Henley Business School, UK. She began this course to bridge the gap between creative training and entrepreneurial understanding, which she now sees as even wider than she initially thought.

In addition to formal training, Usha recommends providing artists with access to workshops, mentorship programs, and resources that address the intersection of creativity and entrepreneurship.

She also sees a role for policymakers to promote diversity and inclusivity by supporting initiatives that uplift underrepresented voices and communities, ensuring that funding and resources are equitably distributed.

CHAPTER 4

Perceptions & Motivations



4

Perceptions & Motivations

Entrepreneurial perceptions are the most important predictors of business startup activity, according to GEM studies[8]. Research suggests that these perceptions correlate in important ways with entrepreneurial intentions and startup motivations[9]. Research further suggests that perceptions of self and the environment are malleable and can be influenced through entrepreneurship education, startup experience, and other common program offerings for budding entrepreneurs[10]. Thus, gender differences in key perceptions and motivations are of great interest to policymakers and program leaders.

HOW DO ENTREPRENEURIAL PERCEPTIONS DIFFER FOR WOMEN?

When it comes to entrepreneurial perceptions, women entrepreneurs were:

- 11% less likely than men to report that starting a business is easy (45.9% vs 51.3%).
- about 6% less likely to report seeing a new business opportunity within the past 6 months.
- less likely to believe they have the skills to start a business compared to men (around 50% for women; almost two-thirds of men).
- about 10% less likely than men to report that they were undeterred from starting a business by the fear of failure.

There are a few notable variations by level of national income for these four entrepreneurial perceptions. Women in middle-income countries tend to have more favourable perceptions of ease of startup (49.6%), new business opportunities (65.1%), and having startup skills (69.2%) compared to those in high-income and low-income countries. This pattern represents a change from last year when low-income countries showed more favourable perceptions. This change is most likely due to a change in the low-income countries participating in the 2023 survey.

8 Arenius, P., & Minniti, M. (2005). Perceptual variables and nascent entrepreneurship. Small Business Economics, 24, 233-247.

9 Wannamakok, W., & Chang, Y. (2020). Understanding nascent women entrepreneurs: an exploratory investigation into their entrepreneurial intentions. Gender in Management an International Journal, 35(6), 553–566. https://doi.org/10.1108/gm-12-2019-0250 Ali, J., Shabir, S., & Shaikh, A. (2021). Exploring antecedents of entrepreneurial intentions among females in an emerging economy. International Journal of Social Economics, 48(7), 1044–1059. https://doi.org/10.1108/ijse-07-2020-0488

10 Samsami, M., Kolaly, H. E., González-Pernía, J. L., & Boutaleb, F. (2024). Gender roles shaping the entrepreneurial mindset: embedded in the entrepreneurial ecosystem and impacted by the pandemic. European Journal of International Management, 22(4), 551-575.

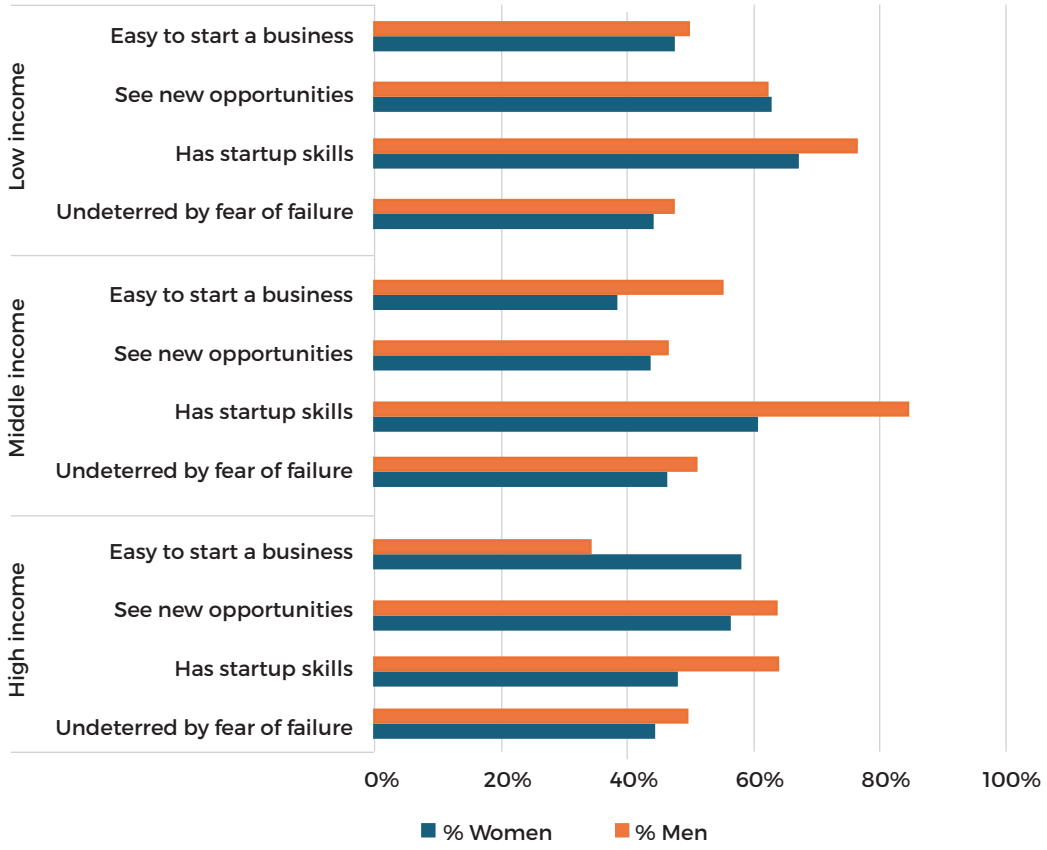


FIGURE 11: Entrepreneurial perceptions by gender and national income, GEM 2023

For opportunity recognition, women in one-third of the countries were at parity with men or better. In fact, women in Jordan were 34% more likely to report recently seeing new business opportunities (55.3% vs 41.3%). The highest rates of opportunity recognition for women were in Saudi Arabia (93%) and the lowest in Hungary (27.5%) and Iran (27.7%). After Jordan, the largest gender gaps were found in South Korea (W/M 0.70), and Switzerland (W/M 0.71).

The largest gender gap in startup skills was in Germany, where women were 43% less likely than men to report having the skills to start a business (30.5% vs 53.5%). Hungary also showed low confidence in startup skills among women at 30.7%. Meanwhile, more than four of five women in Saudi Arabia (88.9%) and Venezuela (81.7%) reported having the skills to start a business. Women were slightly above parity with men in only two countries: Oman (74.1% vs 71.6%) and Romania (53.1% vs 52.2%).

Regarding the ease of starting a business:

- Women were at parity or better than men in six countries: Israel, Jordan, Poland, Puerto Rico, Romania, South Africa, and Sweden.
- More than three-quarters of the women agreed in India (77.6%), Netherlands (79.1%), Norway (75.3%) and Poland (83.7%), Saudi Arabia (91.6%), Sweden (79.9%), and Thailand (77.4%).
- Less than 20% agreed in Iran (12.6%), Israel (15.7%), Italy (15.3%), and Slovakia (19.6%).

Finally, women were at parity or less deterred by fear of failure than men in five countries: India, Iran, Norway, Panama, and South Korea. Women in China (62.7%) were twice as likely as those in Oman (31.4%) and Venezuela (30.1%) to say they were undeterred by a fear of failure. The largest gender gaps in fear of failure were found in Latvia, Guatemala, and Germany, where women were about one-quarter less likely to report no fear of failure.

HOW HAVE ENTREPRENEURIAL PERCEPTIONS FOR WOMEN ENTREPRENEURS CHANGED OVER TIME?

Over the past two decades, opportunity recognition (i.e., seeing new business opportunities) has increased globally by almost four-fifths for women, from an average of 29.2% in 2001-2005 to 51.9% in 2021-2023. This upward trend suggests that women are paying attention to markets and new business opportunities in ways never before seen in most of the world.

Across the 43 countries in the full time series analysis, rates for women's opportunity recognition have increased in all but four countries analysed: Colombia, Iran, Spain, and Turkey. Just like measures of consumer and business confidence, perceptions will vary year to year, depending on what is happening in the economy and society around the individuals surveyed. France and Poland have seen opportunity recognition increase by a factor of four or more, followed by South Korea and Taiwan, where the five year average trends increased by three to four times over the past two decades. Countries with the highest levels today include Saudi Arabia, India and Thailand.

Importantly, the gender gap in opportunity recognition has also shrunk in most countries. In fact, Jordan, Egypt, France, and the United Kingdom have seen their gender gaps in opportunity recognition shrink by over 40%.

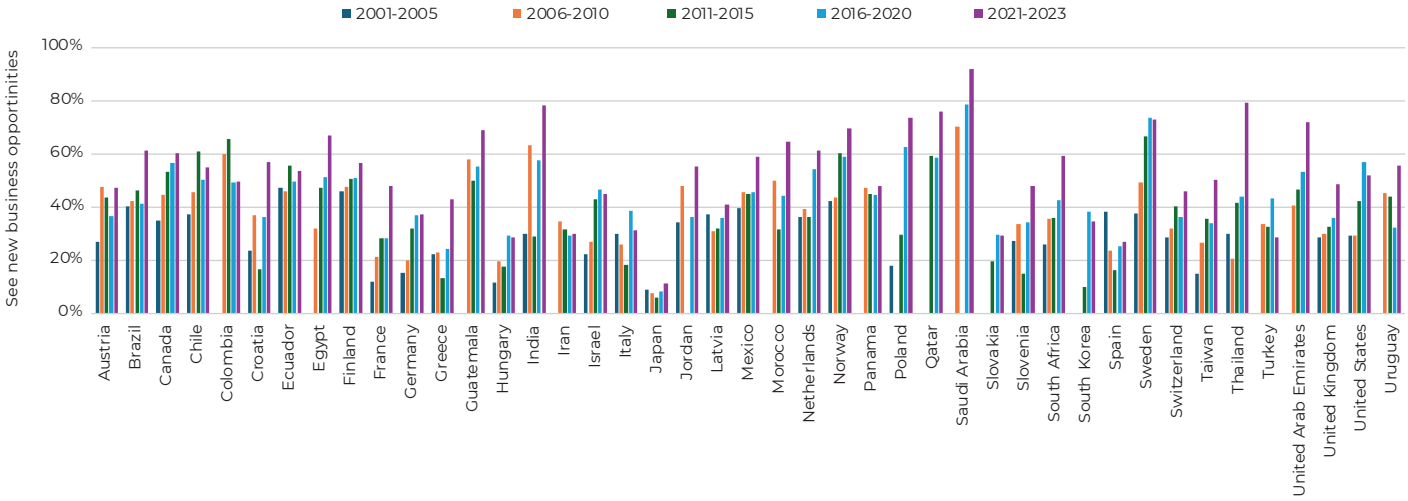


FIGURE 12: Five-year average new business opportunity perceptions for early-stage entrepreneurs in 43 selected countries, GEM 2001-2023

Self-assessments of startup skills have also increased globally for women over the past two decades. Across 30 countries, an average of 48.8% of women reported having startup skills in 2021-2023, compared to only 38.5% in 2001-2005. In the full time series analysis of 43 GEM-participating countries, women in all but seven countries reported increasingly higher rates of startup skills over the past two decades. The biggest gains have been made in India, South Africa, and South Korea, where trends suggest more than a two-fold increase in perceptions of startup skills for women.

Historically, research has shown lower entrepreneurial self-efficacy and confidence in startup skills for women entrepreneurs compared to men[11]. Most countries examined also showed a drop in the gender gap in self-reported startup skills. India, Qatar, Slovakia, South Korea, and Taiwan showed the largest decrease in the gender disparity in startup skills, while Austria, Ecuador, Finland, Hungary, Latvia, and Morocco showed increases. These are areas where targeted entrepreneurship education, especially programs that address personal agency and initiative, can have a big impact[12].

11 Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, entrepreneurial self–efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education. Entrepreneurship Theory and Practice, 31(3), 387-406.

12 Frese, M., Hass, L., & Friedrich, C. (2016). Personal initiative training for small business owners. Journal of Business Venturing Insights, 5, 27-36. Shankar, A. V., Onyura, M., & Alderman, J. (2015). Agency-based empowerment training enhances sales capacity of female energy entrepreneurs in Kenya. Journal of Health Communication, 20(sup1), 67-75.

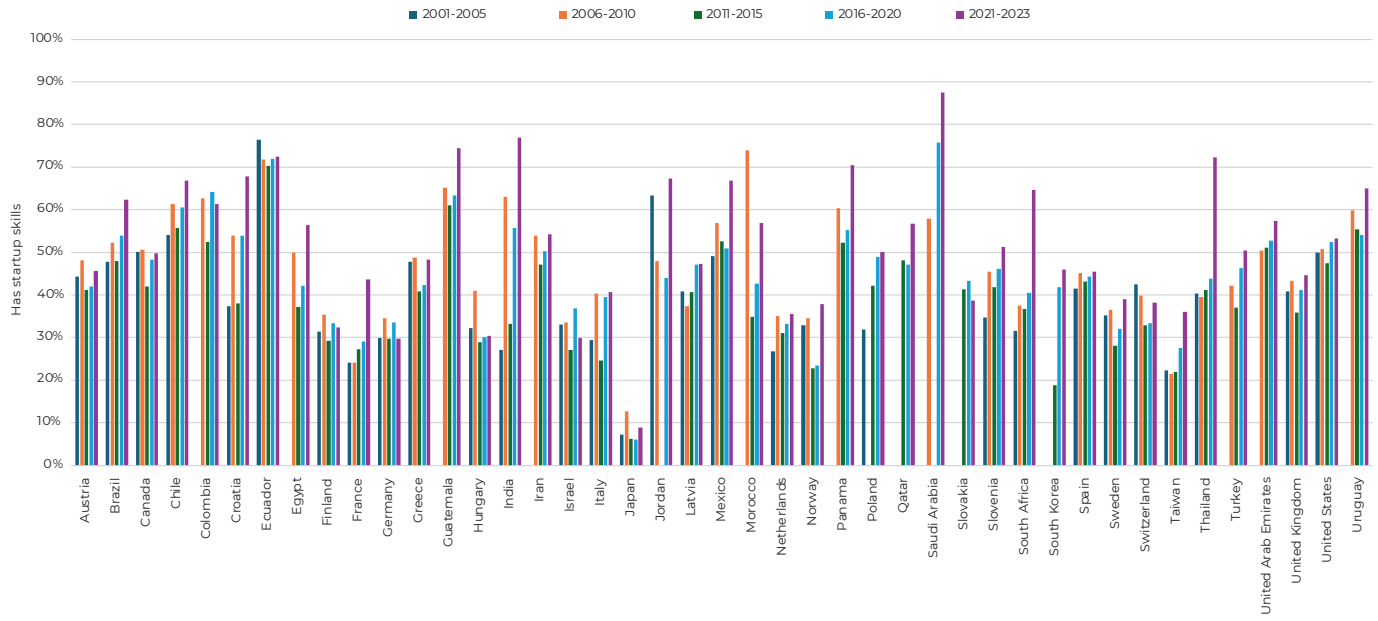


FIGURE 13: Five- year average startup skills perceptions for early-stage entrepreneurs in 43 selected countries, GEM 2001-2023

Risk aversion, also known as fear of failure, is another area where gender disparities have historically been reported. Fear of failure may limit startup activity for women, especially in contexts where they have other choices for paid work or where the consequences of failure may be extremely high. Unfortunately, the general trend for fear of failure is an upward trend. Instead of feeling less deterred by fear of failure, women are showing more concerns across all of the countries analysed, with the exception of Ecuador, Germany, Latvia, Poland, South Korea, and Taiwan. Fear of business failure has historically been below 50% for most countries. However, trends suggest that has changed in a number of countries, including Canada, Greece, India, Israel, Jordan, Poland, Saudi Arabia, Spain, and the United Kingdom. The biggest increases in fear of business failure for women have emerged in Canada, South Africa, and the United States where these rates have doubled.

Increased rates of fear of business failure may be a product of increased interest in business startups among women, especially high-potential aspirations. The gender gap data certainly supports this idea as the gender disparities in fear of failure have actually narrowed in all but six countries. The gender gap has widened in Finland, Guatemala, Israel, Japan, Latvia, Norway, and the United Kingdom over the past two decades. Meanwhile, the biggest closure in the gender gap in fear of business failure has occurred in Egypt and Jordan, followed by Saudi Arabia and the United Arab Emirates.

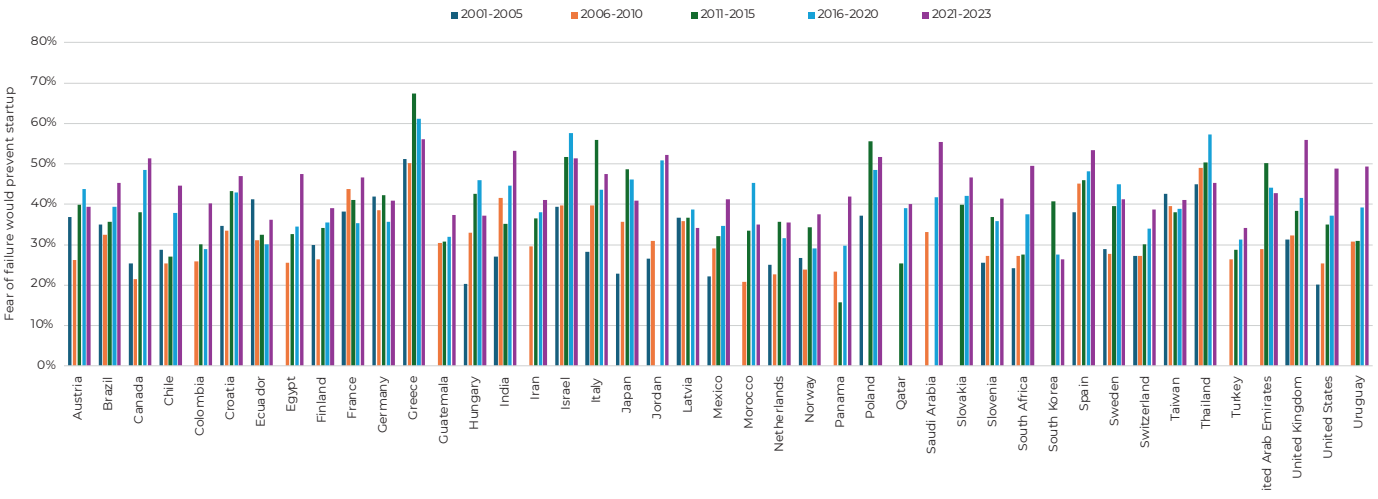


FIGURE 14: Five-year average fear of failure perceptions for early-stage entrepreneurs in 43 selected countries, GEM 2001-2023

WHY DO WOMEN START BUSINESSES?

Women start businesses for very similar reasons to men. In 2023, women were slightly more likely to report starting a business because jobs were scarce or to make a difference in the world. At the same time, women were slightly less likely to report starting a business to build wealth and to continue a family tradition than men. In spite of very small margins of difference, these findings reinforce stereotypes that women are not as capable of starting and growing profitable businesses as men and that men rarely struggle to start and grow businesses. In other words, the resulting stereotypes from these aggregate data patterns can be damaging to both women and men. It is important to acknowledge that, like men, many women start businesses to create wealth and to continue a family tradition, and that, like women, many men start businesses to make a difference in the world and due to job scarcity.

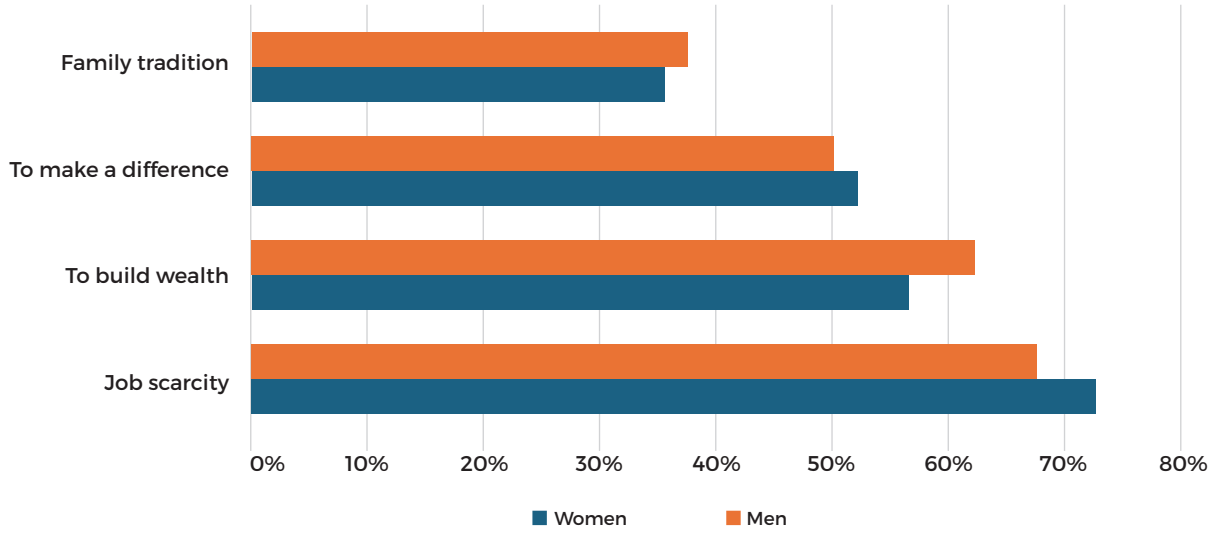


FIGURE 15: Startup motivations by gender, GEM 2023

These patterns in startup motivations vary in some interesting ways by national income. For example, in low-income countries, women are very close to parity with men to build wealth (W/M 0.98), to continue a family tradition (W/M 0.98), and to make a difference (W/M 1.02). Of course, subsistence entrepreneurship is more common in low-income economies. It is not surprising that more than four in five entrepreneurs in low-income countries cited job scarcity as a startup motivation, with women about 5% more likely than men to do so.

Wealth building (60.6%) was the most-cited startup motivation for women in high-income countries, followed by job scarcity (58.8%). In middle-income countries, women reported job scarcity (69.2%) more often than other reasons for starting a business; continuing a family tradition (27%) was the least frequent. The largest gender gaps were found in high-income (W.M 0.88) and middle-income countries (W.M 0.87), where men were much more likely to cite wealth-building as a key startup motivation.

These patterns stand out across global regions as well, explained largely by the distribution of countries at different levels of national income in each region. Job scarcity was more often cited by women than men in Central and East Asia, Europe and the UK, and Latin America and the Caribbean (see Figure 16). The largest gender gap was found in Central and East Asia, where women were 16% more likely than men to cite job scarcity as a reason for business startup. However, women were less likely than men to report job scarcity as a reason for business startup in North America and the Middle East and Africa.

FIGURE 16: Startup motivations by gender and region, GEM 2023

Understanding the factors that shape motivations for business startup is similar to understanding occupational choices, and is context specific. Too often, researchers and policymakers make assumptions about the factors driving these motivations. For example, gender role theory is an overwhelmingly popular theoretical frame for gender differences in entrepreneurial behaviour, yet fails to explain heterogeneity in startup activity, goals, and outcomes. As supported by recent evidence, cultural definitions of what it means to be a successful man or successful woman are context-dependent, and dynamic across time and place. Still, small differences in perceptions and motivations can contribute to gross differences in the types of business models, industries, and markets that entrepreneurs pursue.

In many countries, wealth building as a key startup motivation is highly gendered, as evidenced by the large gender gaps found in Morocco (W/M 0.63) and France (W/M 0.63), where about one-third of women compared to over half of men cited wealth building as a key reason for starting their business. Notably, women in 12 countries (about one-third of those surveyed) were at parity or higher than men, in reporting wealth building as a key startup motivation: Estonia, Greece, Guatemala, India, Jordan, Oman, Qatar, Romania, Saudi Arabia, Slovenia, and Thailand.

Women were at parity or above in all but eleven countries when reporting job scarcity as a key motivation: Germany, Greece, Iran, Israel, Lithuania, Oman, Poland, Qatar, Sweden, United States, and Venezuela. The largest gender differences were observed in Norway (W/M 1.41) and South Korea (W/M 1.61). Over 90% of women in seven countries reported job scarcity as the reason they started the business, including Ecuador, Guatemala, Hungary, India, Jordan, Romania, and Saudi Arabia.

When it comes to continuing a family tradition, a number of countries showed large gender gaps. Women were about twice as likely to cite this motivation for starting a business in Germany, Poland, Morocco, and Switzerland, likely indicating a more traditional gender culture. In contrast, women in Latvia and the United Kingdom were about one-third more likely to report continuing a family tradition as a reason for starting their business.

Finally, when citing making a difference as a key startup motivation, women in about half the countries surveyed were at parity with men, or above. Women were two-thirds or more likely than men to cite making a difference as a reason they started a business in Iran, Israel, and Jordan, reinforcing stereotypes of women as social entrepreneurs. Making a difference as a startup motivation ranged from a high of over four in five women in India and Guatemala to a low of 2.7% in South Korea. This sort of variation in agreement and in gender gaps strongly illustrates that common stereotypes about women entrepreneurs are flawed and under-represent the complexity of motivations and circumstances in which women start businesses.

WHY DO WOMEN EXIT THEIR BUSINESSES?

Business exits can occur for a number of different reasons, most often lack of profitability – a reason more often reported by women in 2023 (29.4% vs 28.4%). Women are much more likely to report business exit for personal or family reasons than men, on the order of 36% more often globally, and less likely to report exit due to sale of the business (W/M 0.84). Lack of financing is another reason for business discontinuation. Despite the disproportionate access to business financing challenges reported for women, they were actually about 6% less likely than men to report business closure due to lack of financing.

These response rates vary considerably by national income level. Lack of profitability is a more common reason for business exit in low-income countries, but less so for women compared to men (32.5% vs 38.2%). The opposite is true in high-income and middle-income countries, with the largest gender gap in high-income countries (W/M 1.18), where over a quarter of women report lack of profitability as the reason for closing. Business exit due to family or personal reasons is a more common explanation for women across all national income levels, but it does vary by country. Men cited this reason for exit more often than women in five countries: China, Colombia, India, Latvia, and South Korea.

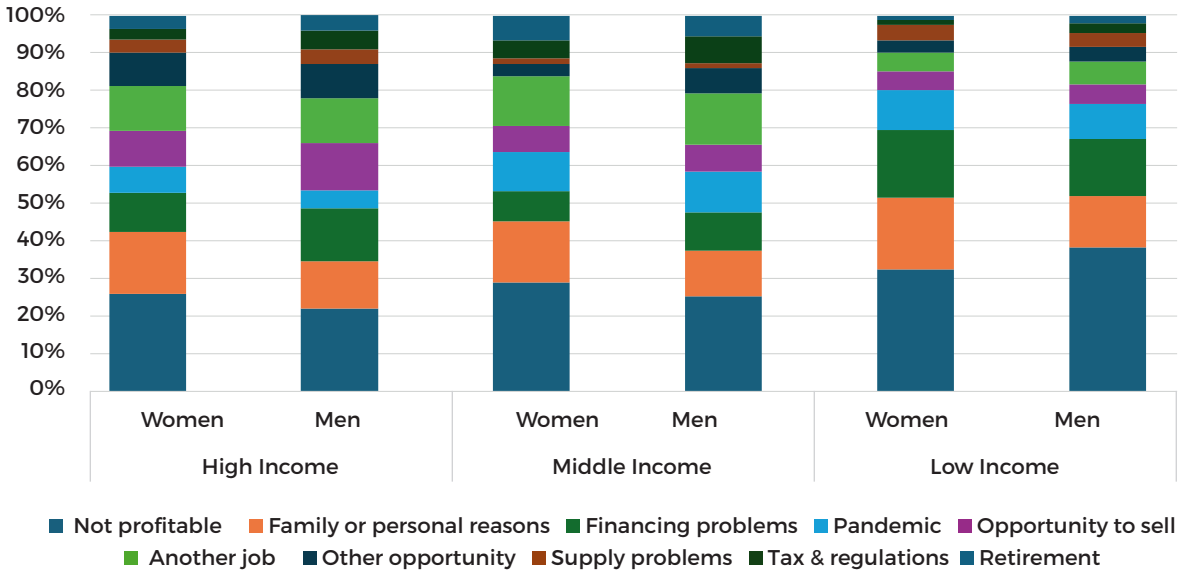


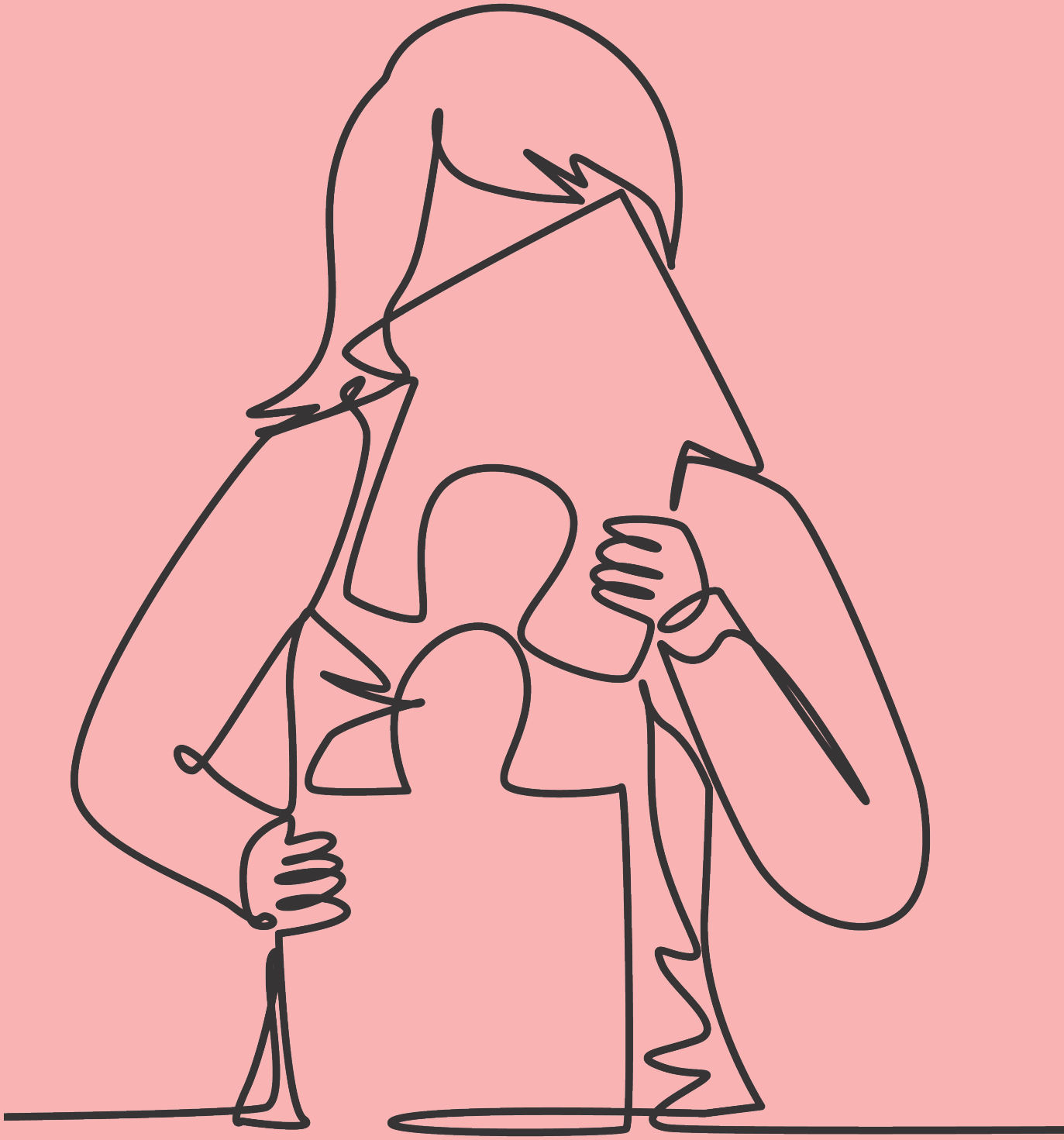
FIGURE 17: Reasons for business exit by gender and national income, GEM 2023

Notably, women in middle-income countries were just as likely as men to sell their business (7% vs 7.1%), while women in high-income countries were about one-quarter less likely to do so (9.5% vs 12.6%). Also of note, is that business exit in order to pursue another job was more than twice as common for women in high-income and middle-income countries, compared to those in low-income countries. This finding is consistent with the job scarcity motivations for business startup and the understanding that business ownership is the primary option for income generation in low-income contexts.

Finally, pandemic closures persist three years after the global COVID-19 pandemic. Women remain more impacted than men globally (9.8% vs 8.6%), and more so in low-income countries (10.7% vs 9.4%). The largest gender gap is found in high-income countries, where women are almost 50% more likely to report the pandemic as a reason for business closure. Men more often cite closure due to the pandemic in over one-third of the countries surveyed. However, women are more than twice as likely to cite this reason in four countries, including Jordan, Morocco and the US, followed by Switzerland, where women had almost six times the rate as men (21.7% vs 3.7%).

CHAPTER 5

Demographic Indicators: Age, Education, and Household Income



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Demographic Indicators: Age, Education, and Household Income

In this chapter, we examine the demographic factors of women entrepreneurs across contexts and countries, in particular with reference to high-potential entrepreneurship. To fully comprehend the diversity of women's profiles, experiences, and contexts, a demographic analysis examining age, education level, and household income among women entrepreneurs throughout the various stages of the entrepreneurial process is essential. Such an analysis provides valuable insights into the unique challenges and opportunities faced by women entrepreneurs at different points in their careers and informs the development of targeted support programs and policies[13].

HOW OLD ARE WOMEN ENTREPRENEURS?

Women of all ages start businesses in a similar pattern as men. As a matter of fact, 45% of both women and men starting businesses were aged 18-35, 44% were aged 35-54, and about 10% were aged 55-64. This age trend was significantly more prevalent in high-income countries (see Figure 18), where gender parity was common.

In low-income countries, women entrepreneurs tend to be younger, with over 50% under the age of 35, similar to their male peers. The largest gender gap (W/M 1.08) was found among the oldest age group of entrepreneurs in middle-income countries, where senior entrepreneurship appears to be the most common for women (11.8%).

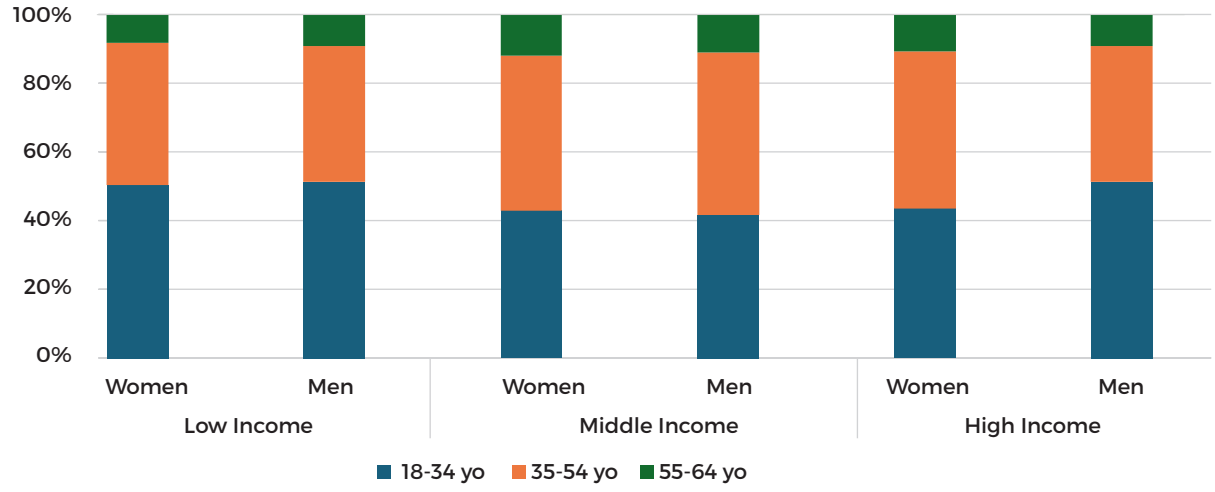


FIGURE 18: Age distribution of early-stage entrepreneurs by gender and national income, GEM 2023

13 Age and education are included as controls in almost every quantitative analysis of gender and entrepreneurship; household income is rarely included.

While there are gender differences in age at startup, there is quite a bit of variation across countries. Youth entrepreneurship is most common for women in the Middle East and African region (50.3%). In Guatemala, Iran, Jordan, Oman, and Poland, over 60% of women entrepreneurs are under the age of 35. In contrast, the highest rates of senior women starting businesses are found in Cyprus (18.2%), South Korea (17.3%), and Switzerland (18.9%). Strikingly, women in Hungary, Poland, Romania, and the United States are twice as likely as men to be 55 or older, while those in Morocco and Iran are more than two-thirds less likely to be seniors.

Notably, high-growth women entrepreneurs (expecting 20+ new jobs in 5 years) tend to be younger than other women starting businesses. Over half of women high-growth entrepreneurs are aged 18-34 compared to 45.6% of all women. As shown in Figure 19, this pattern is most pronounced in high-income countries, where high-growth startups are 15% more likely to be run by young women than young men. In low-income countries, one-half of women high-growth entrepreneurs are in the middle age category (35-54). Meanwhile, senior women aged 55-64 represent a sizable 16.7% of high-growth women entrepreneurs in middle-income countries.

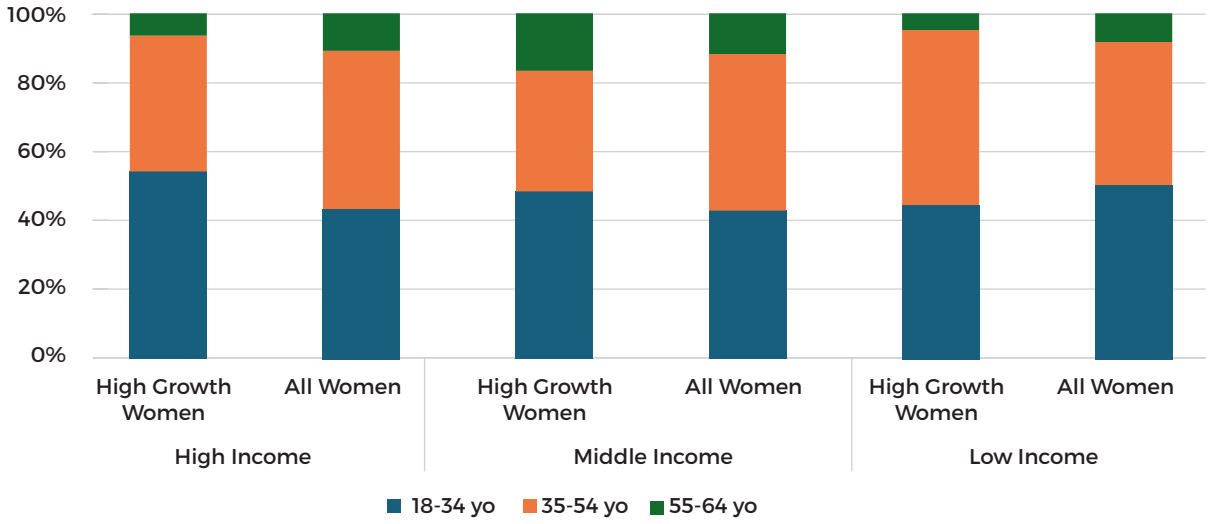


FIGURE 19: Age distribution of high-potential early-stage entrepreneurs by gender and national income, GEM 2023

These age-related trends influence the types of businesses and industry sectors in which women are active. Further research is needed to understand these patterns, and the implications for policymaking and programming.

WHAT IS THE EDUCATIONAL BACKGROUND OF WOMEN ENTREPRENEURS?

Education is an important predictor of entrepreneurial activity and perceptions, especially for women[14]. Women with higher levels of education typically experience higher returns to the startup activity, while women with lower levels of education are more likely to start businesses out of necessity. In 2023, 41.9% of women entrepreneurs globally reported having post-secondary education, slightly surpassing the 40.8% of men. While women were close to parity with men at higher levels of education (including a college degree or graduate level education), women entrepreneurs were about 15% less likely to report lower levels of education.

14 Dilli, S., & Westerhuis, G. (2018). How institutions and gender differences in education shape entrepreneurial activity: a cross-national perspective. Small Business Economics, 51, 371-392.

Educational patterns vary widely by level of national income and, to some extent, by gender, as shown in Figure 20. In high-income countries, women entrepreneurs are 20% more likely than men to have a graduate level education (18.5% vs 15.3%). There is gender parity in middle-income countries, and a 19-point gender difference in low-income countries (W/M 0.81), where graduate education is about nine times less common among women entrepreneurs. Post-secondary education level was most common for women entrepreneurs in middle-income (43.3%) and high-income (49%) countries.

Low-income countries have the most women entrepreneurs with less than secondary education. This observation can be explained by a complex interplay of economic, sociocultural, and institutional factors that may differ significantly across diverse contexts. Limited job prospects, restricted access to resources, and societal pressures to engage in informal work, especially in regions with lower levels of formal education, are common contributing factors.

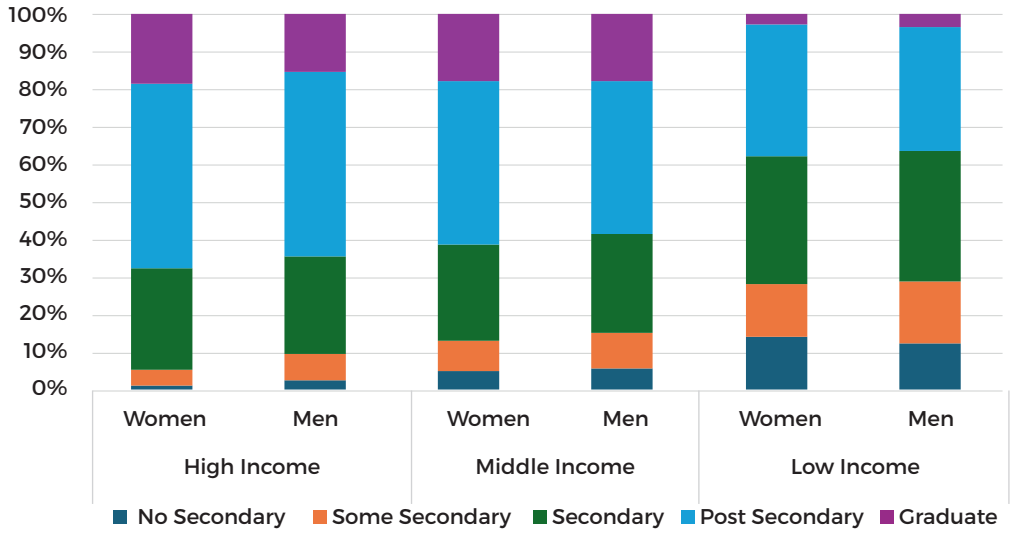


FIGURE 20: Education for early-stage entrepreneurs by gender and national income, GEM 2023

Graduate levels of education may be associated with high-potential entrepreneurship, especially in innovation-oriented sectors. Four countries had graduate level education rates of over 50% for women entrepreneurs: Luxembourg (50.6%), Poland (52.6%), Romania (63.3%), and the UK (65%). In these countries, women were more likely to have graduate education than their male peers. Five countries reported no women entrepreneurs with a graduate education: Ecuador, Germany, Guatemala, Lithuania, and Oman.

At the other end of the spectrum, five countries had more than one-quarter of women entrepreneurs with some secondary education: Jordan (44.5%), Morocco (27.5%), Panama (26.5%), and South Africa (27.2%). This indicates high levels of subsistence entrepreneurship for women. One-third of the countries surveyed showed no women entrepreneurs with only some secondary education. In most countries, men entrepreneurs were much more likely to report less than a secondary education compared to women. In fact, women were less likely to report low education than men in nine countries: Brazil, China, Columbia, Jordan, Mexico, Puerto Rico, Qatar, Slovenia, and South Korea.

WHAT TYPES OF HOUSEHOLDS DO ENTREPRENEURS COME FROM?

The context in which a woman pursues entrepreneurship influences the type, industry, and market focus of the business. It is of paramount importance to understand that women's experiences are shaped by the intersection of various social categories. In many countries, women entrepreneurs are at a disadvantage in terms of poverty as well as education and age. Compared to men, women entrepreneurs globally were much more likely to report having a low-income household (30.8% vs 21.5%) and much less likely to be in a high-income household (36.4% vs 44.9%). The disadvantage of poor women starting businesses is tied more to household income than to either age or education.

Gender gaps in household income are most pronounced in low- and middle-income countries. Women entrepreneurs were 61% more likely than men to report a low-income household and 29% less likely to report being part of an upper-income household in middle-income countries. In low-income countries, women reported having a lower-income household 40% more often than men and an upper-income household about 18% less often than men. A similar pattern was seen among women in high-income countries but with over 90% parity with men in middle third and upper third categories. While poor women are still more likely to start a business than poor men in high-income countries, these women entrepreneurs are generally much more likely to enjoy a higher level of relative affluence compared to women in other countries.

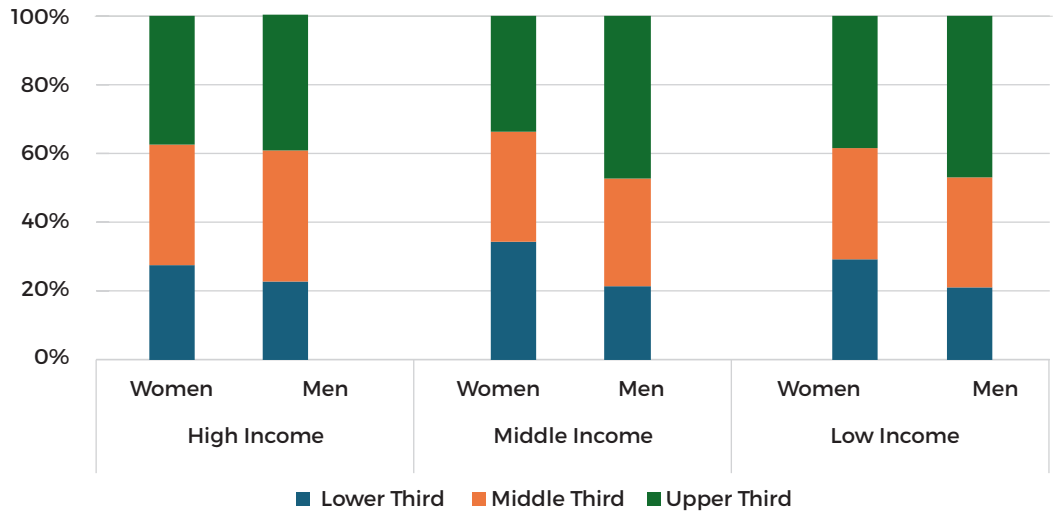


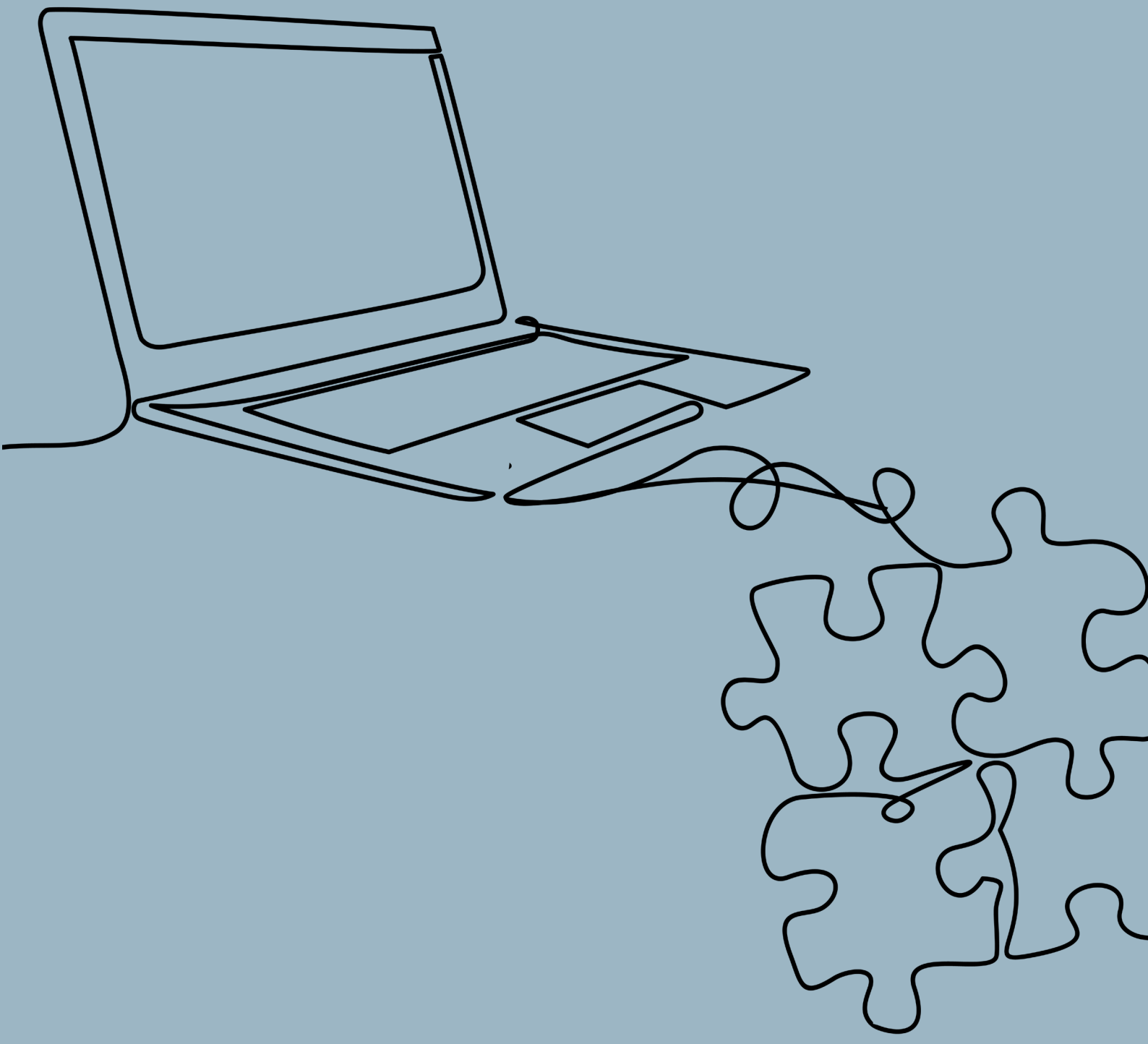
FIGURE 21: Household Income category of early-stage entrepreneurs by gender and national income, GEM 2023

Women entrepreneurs were two to three times more likely than men to report lower third household income in Brazil, Chile, Cyprus, Guatemala, Norway, and the United Kingdom. Only seven countries showed lower rates of low household income for women compared to men: Greece, Iran, Netherlands, Oman, Poland, Saudi Arabia, and Sweden. The reason for these patterns are complicated by traditional culture in many countries, where women are not expected to work outside the home or where women's income generating activities are invisible, or treated as contributions to the family business led by a male head of household.

Women entrepreneurs are much less likely than men to report upper third household income in all but seven countries surveyed in 2023: Greece, India, Luxembourg, Poland, Saudi Arabia, Sweden, and Thailand. The highest rates of women entrepreneurs from wealthy households were reported in Latvia (62.1%) and Thailand (65.4%). Meanwhile, no entrepreneurs in Iran or in Qatar report upper third household income, regardless of gender. Aside from those two countries, the lower rates of women entrepreneurs with upper third household income were reported in Slovakia (18.1%) and Uruguay (19.9%).

CHAPTER 6

Emerging Trends: Digitalization, Sustainability and Access to Finance



6

Emerging Trends: Digitalization, Sustainability and Access to Finance

In this chapter, we look at gender differences in three key areas of competitive advantage in entrepreneurship: digitalization, sustainability, and business financing. Women entrepreneurs often face disadvantages in these areas, especially in the context of high-potential entrepreneurship. Gender differences in industry sector, market focus, and business aspirations matter a lot for all three of these forward indicators of business success.

TO WHAT EXTENT ARE WOMEN DEPLOYING DIGITAL TOOLS TO ADVANCE THEIR BUSINESSES?

Digitalization is vital today for most businesses to compete effectively. Digital tools can help new businesses reduce operational costs, improve data capture and tracking of key metrics, facilitate remote engagement of employees and customers, and reach larger audiences. The three reasons often put forth to explain the lower rates of digital tool use for women business owners include the access and affordability challenges for small business owners, wide range of digitalization needs in different industry sectors, and the discomfort or disinterest that women may have with digital technology.

While women entrepreneurs globally were about 10% less likely than men to report having adopted a digital technology before the COVID-19 pandemic, they were close to parity on other key digitalization measures. A little over one-quarter of women and men entrepreneurs adopted at least one digital tool during the pandemic, while 19.6% of women and 21.6% of men reported adopting new digital tools prior to the pandemic.

The pandemic pushed a lot of small businesses to adopt new digital tools, especially for marketing communications, ecommerce, and remote operation management during the pandemic[15]. Following this mass uptake of digital technologies, women were slightly more likely than men to report plans to improve digitalization (20.2% vs 19.4%; W/M 1.04), and at parity with men in reporting the intention to adopt new digital technologies for their startups (58% vs 57.5%; W/M 1.01). About one in three women globally also reported that digital tools are not necessary for their businesses, about 4% more often than men.

As shown in Figure 22, some gender variation in responses to digitalization questions emerge at different levels of national income. The largest gender gap appeared in low-income countries, where women were 14% less likely to report using digital tools prior to the pandemic. In high- and low-income countries, women were 10% more likely than men to report plans to improve their use of digital tools. Women in high-income countries were also 5% less likely to report plans to adopt new digital technologies compared to men (50.8% vs 53.7%).

15 Manolova, T. S., Brush, C. G., Edelman, L. F., & Elam, A. (2020). Pivoting to stay the course: How women entrepreneurs take advantage of opportunities created by the COVID-19 pandemic. International Small Business Journal, 38(6), 481-491.

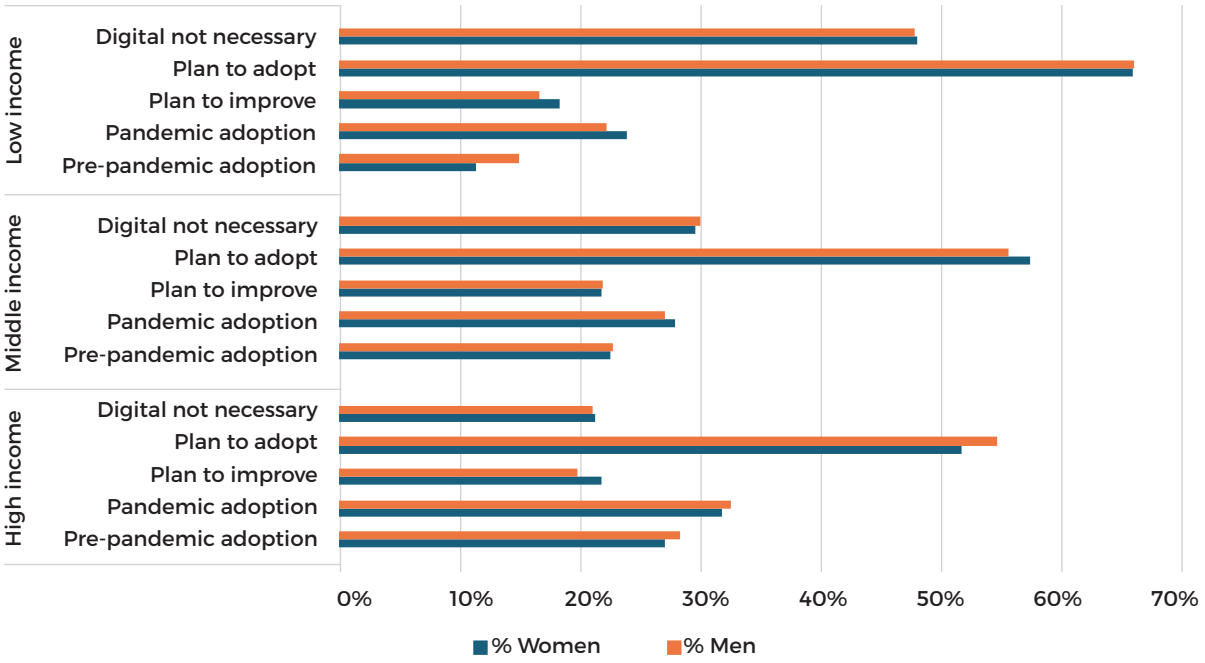


FIGURE 22: Digitalization for early-stage entrepreneurs by gender and national income, GEM 2023

A large percentage of women entrepreneurs in Ecuador (72.6%), Guatemala (61.7%), and Morocco (60.3%) believed that digital tools are not necessary for their particular business. While men in the countries also reported high rates of agreement on this question, the biggest gender disparities were found in India (64% more likely than men) and in Sweden (42% more likely than men) to report digital tools as unnecessary for business. While some may view the necessity of digital tools as critical in low-income countries, these data suggest that other factors may be at work in high-income and middle-income countries.

Women in several countries in Latin America showed extremely high rates of plans to adopt digital tools for their business: Brazil (93.2%), Chile (73.3%), Guatemala (75.2%), Panama (79.7%), Puerto Rico (78%), and Venezuela (80.2%). More than four in five women in Saudi Arabia also reported plans to adopt new digital tools. The lowest rates of plans to adopt digital tools for women were found in South Korea (13%) and Lithuania (20.8%), which could indicate an already high level of adoption.

Interpretation of these digitalization measures can be tricky. For example, women in Germany and Luxembourg were about one-third less likely than men to report plans to adopt digital tools in 2023, but were 40-50% more likely to report plans to improve digital tools use. Some patterns were more predictable: in Oman and Saudi Arabia, women reported very low rates of digital tool necessity (3.4% and 6.6%) and pre-pandemic digital usage (8.6% and 15.1%), but significantly higher rates of pandemic adoption (74.1% and 62.8%) and plans for further adoption (62.5% and 82.5%).

HOW IMPORTANT ARE SUSTAINABILITY STRATEGIES AND PRACTICES FOR WOMEN-LED STARTUPS?

Sustainability practices set businesses up for long-term success and good corporate citizenship. Sustainable practices can help businesses gain efficiencies, lead to new innovations, and draw attention of potential employees, customers, and investors. Previous GEM research suggests that women are more likely than men to pursue social goals over economic goals when starting a business[16]. However, social and environmental goals are context-dependent and can be expressed in the choice of industry sector, target market segments, and business models, as well as in sustainability strategies and practices.

Women globally are about 5% less aware than men of the UN Sustainable Development Goals. However, women entrepreneurs are slightly more likely to report having sustainability strategies and practices. Globally, 75.9% of women compared to 73.2% of men said they considered social sustainability in their business strategy. Almost half of both women and men took action. Similarly, 74% of women and 72.7% of men considered environmental sustainability in their business strategy; over half reporting environmental sustainability practices in their businesses. More than three in five entrepreneurs also reported prioritizing sustainability goals over economic goals in 2023, women slightly more often than men.

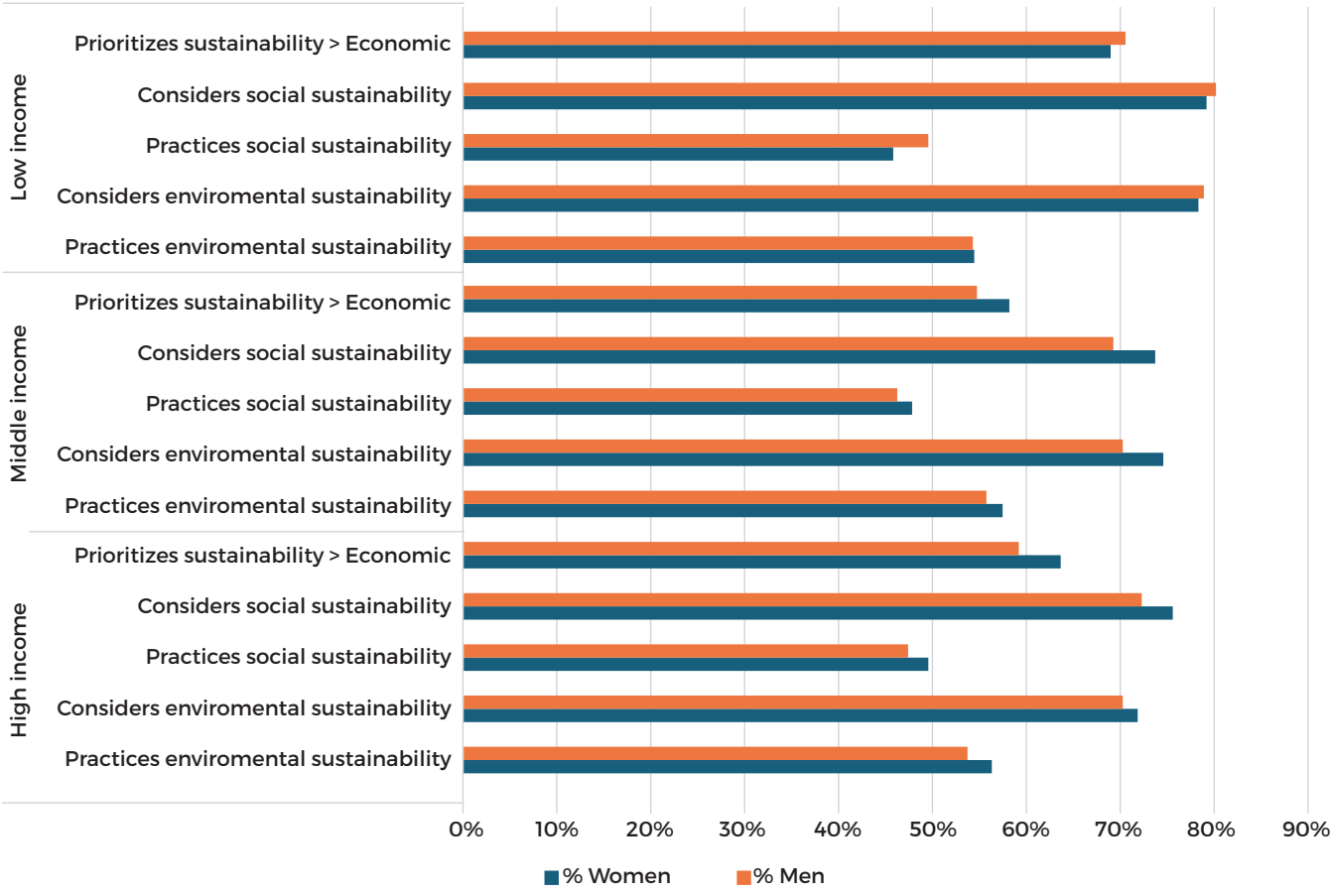


FIGURE 23: Sustainability for early-stage entrepreneurs by gender and national income, GEM 2023

16 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, 225-257.

Women were generally more likely than men to report sustainability strategies and practices in high- and middle-income countries, while women in low-income countries were slightly less likely to do so than men. Notably, both men and women in low-income countries were more likely to report sustainability strategies than their peers in other countries, but less likely to report sustainability practices. The largest gender disparity was found in high-income countries, where women were 8% more likely than men to report prioritizing sustainability over economic goals. SDG awareness is lowest in low-income countries, especially for women starting new businesses. More data is needed from low-income countries to better understand how new business owners approach sustainability in their business strategy and practices.

SDG awareness was highest for women in China (41.7%), Luxembourg (41.3%), and Netherlands (41.3%). Awareness was higher for women than men in Romania, Lithuania, Slovenia, and China, but much lower in others, like India, Jordan, and Morocco. When it comes to business priorities, more than four in five women in India, Saudi Arabia, Brazil, Guatemala, and Thailand reported prioritizing sustainability over economic goals. In contrast, less than one in three women in Cyprus, Israel, Poland, and Estonia reported prioritizing sustainability over economic goals.

A number of factors contribute to sustainability priorities, particularly in the start-up phase: awareness, corporate ethics, cultural expectations, regulatory requirements, stakeholder pressure, resource scarcity, and social or environmental crises.

Generally, there is high correspondence in rates of social and environmental sustainability strategies and practices across countries, with some notable variation in gender disparities. For example, women in Iran were 78% more likely than men to prioritize sustainability over economic goals, while women in China were 18% less likely than men to do so. Moreover, women in Estonia were 12% more likely than men to report social sustainability in their business strategy, but only half as likely to report social sustainability practices. In contrast, women in Estonia were half as likely as men to report considering environmental sustainability in their business strategy, yet 27% more likely to report environmental sustainability practices. As with other measures of business outcomes, sustainability strategies, practices, and priorities very likely reflect the industries, markets, and business models of these new businesses. More research is needed to understand how these factors may explain gender differences in sustainability in particular cultural and economic contexts.

HOW ACTIVE ARE WOMEN AS INFORMAL BUSINESS INVESTORS?

Access to finance is another way in which new businesses can gain competitive advantage in the earliest stages of commercialization, whether the focus is on introducing new product or business model innovations, tapping or developing new markets, or scaling rapidly for maximum market impact. This is a hot topic in international development, especially for high-potential businesses, which typically require external capital for rapid scale and maximum impact.

Women business owners face several disadvantages in access to business financing, especially equity financing where discretion is high and network access is critical. Investment networks are exclusive and heavily male-dominated and investments decisions are heavily influenced by the opinions of trusted others. In this context, women face persistent stereotypes and barriers to funding access. One trend which may help bridge the gap for women entrepreneurs is the rise and organization of female investors[17].

Compared to men, women globally are about 10% less likely to know an entrepreneur and one-third less likely to have recently invested in a business. When women do invest, it is on average about 30% less than men. These gender patterns are consistent across national income levels, with two exceptions. First, women in high-income countries are about 40% more likely than women in middle- and low-income countries to have recently invested in a business. The gender gap in average investment sizes is largest in high-income countries, where women invested one-third less on average than men.

Over 10% of women in four countries made recent business investments: Canada (10.8%), Chile (23%), Oman (10.7%), and Saudi Arabia (18.2%). This reflects some of the most active informal angel investing for women globally (see Figure 22). Importantly, the average size of informal business investments varied widely for women across countries, ranging from a high of $19,123 USD in South Africa to $76 USD in Uruguay. Cyprus, Germany, Iran, Israel, Lithuania, and Saudi Arabia were the six countries with average investment size over $10,000 for women. Previous GEM reports have also shown that women are more likely to invest in family members than in others,

17 Brush, C.G. and Greene, P.G. (2020). Catalyzing Change in Equity Investing: Disruptive Models for Financing Women's Entrepreneurship. Diana International Impact Report. Babson College.

especially strangers. These are important indicators to watch as women angel groups organize and inspire more women to invest in businesses that reflect their values and vision for an equitable world.

In terms of gender differences in investment activity, women were more active than men in informal business investment in only three countries: China (6.8% vs 4.8%), Poland (2.9% vs 2.3%), and Romania (1.1% vs 0.7%). Women were more than 50% less likely to be informal investors than men in seven countries: Hungary, India, Latvia, Panama, Slovenia, South Africa, and the UK. Policies like the Jobs Act in the US reduce barriers to equity investment for unaccredited investors, which may help encourage more women to consider startup investing[18]. However, other research suggests that women are much less comfortable with angel investing for a number of reasons related to gender stereotypes[19].

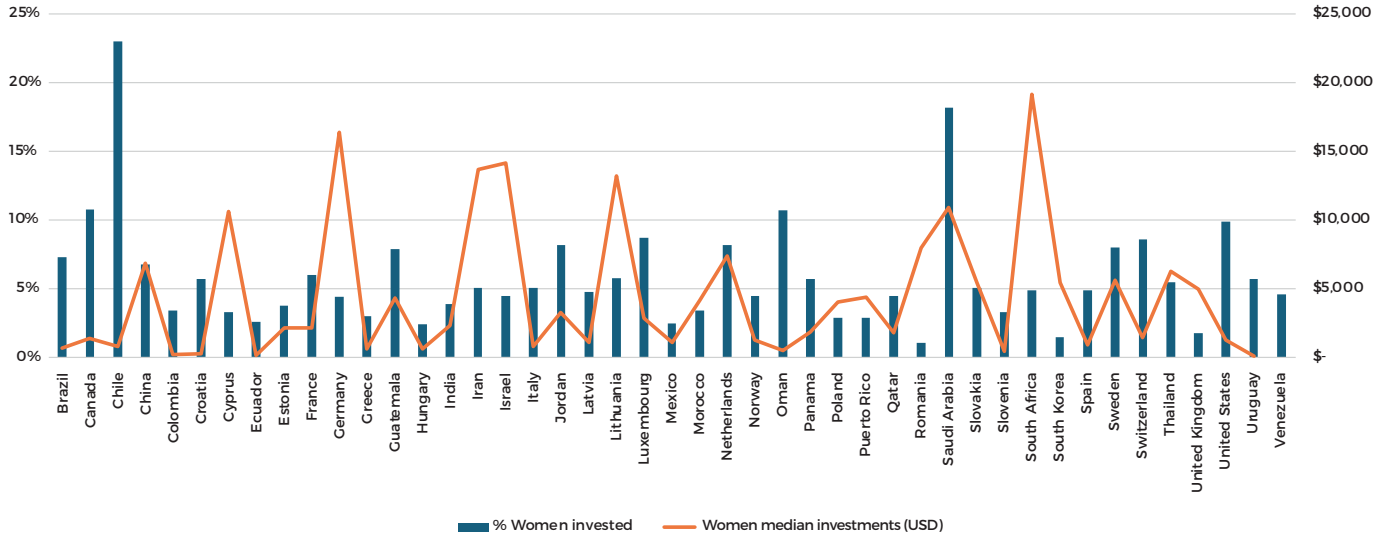


FIGURE 24: Investment activity and average size for early-stage entrepreneurs by country, GEM 2023

18 https://www.cato.org/policy-analysis/walk-through-jobs-act-2012-deregulation-wake-financial-crisis
19 Harrison, R. T., Botelho, T., & Mason, C. M. (2020). Women on the edge of a breakthrough? A stereotype threat theory of women's angel investing. International Small Business Journal, 38(8), 768-797.

HUMAN FACES BEHIND THE DATA . . .

INTEGRATING SUSTAINABILITY INTO BUSINESS MODELS

As noted in Chapter 6 of this report, women entrepreneurs are slightly more likely to report having sustainability strategies and practices than men.

Entrepreneurs shouldn't view sustainability as merely a box to check. It should be seamlessly integrated into every aspect of business operations.

WEO SAS, launched in 2020, provides continuous, affordable environmental analytics to municipalities, and regional and national governments, using satellite imagery enhanced by proprietary technology. Co-founders **Imeshi Weerasinghe** and **Charlotte Wairion** have integrated sustainability principles into the business in a number of ways.

1. Address a societal problem

The co-founders met at VUB University in Brussels, driven by a shared commitment to creating positive environmental change. They aimed to apply innovative research for the benefit of communities. During their studies, they recognized the crucial need for timely, affordable, and high-quality environmental analytics.

"Our motivation was about making an impact in cities and countries," said Imeshi. "We both have children, and contributing to a sustainable future for them is a key driver for us."

2. Monitor sustainability progress

WEO Water uses Vested Impact, an AI-driven platform, to review its progress on key sustainability metrics. The platform highlights both the company's strengths and areas for improvement.

Imeshi advises new entrepreneurs to *"think about infrastructure-related sustainability issues from the outset because it's much harder to implement them later."*

3. Create a culture by leading through example

At WEO Water, all eight employees are deeply committed to sustainability. This focus extends beyond the company's mission and is embedded in daily practices. For instance, the team avoids flying to events, opting for train travel instead. Employees either use public transport or walk to work, and plastic bottles are not used in the office.

"These aren't formal rules, but they're ingrained in our culture," Imeshi explained. "Charlotte and I lead by example, and because our employees share our values, it's easier to embed sustainability throughout the company."

Imeshi also believes that having a co-founder is a significant advantage. *"Two brains are better than one. In sustainability, having multiple perspectives can lead to even better ideas."*

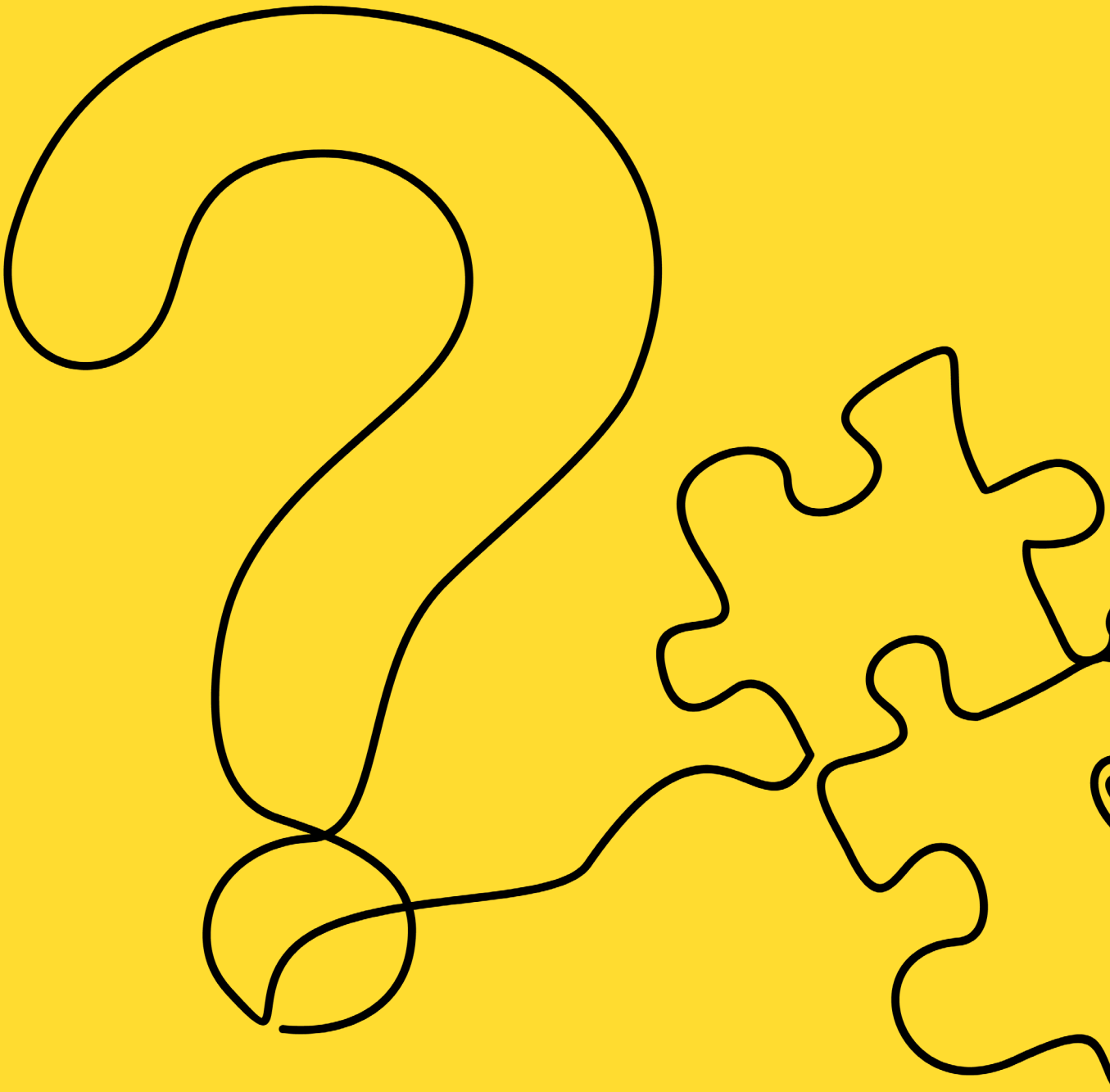
4. Leverage programs

Imeshi encourages startups to explore accelerators that focus on sustainability. *"These programs help you integrate sustainability into your company's culture, systems, and processes."*

Imeshi also has advice for policymakers. Governments should incentivize startups to adopt sustainable practices. Additionally, they should explore new models for supporting social and impact-driven businesses, potentially through funding mechanisms beyond traditional grants.

CHAPTER 7

Conclusions and Policy Implications



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Conclusions and Policy Implications

Enhancing women's entrepreneurship is not only economically beneficial but also essential for fostering open, cohesive, and supportive societies. Beyond economic gains, reducing the gender gap in entrepreneurship is a fundamental pillar of sustainable development, as outlined in the Sustainable Development Goals, particularly Goals 5 and 8.

In this report, we explored two sets of data in order to answer key questions about what we have learned about women's entrepreneurship following 25 years of GEM data. We presented findings from the 2023 GEM APS survey as well as time series data for a select number of countries that have participated heavily in the GEM program over more than two decades.

WHAT HAVE WE LEARNED ABOUT WOMEN'S ENTREPRENEURSHIP FROM 25 YEARS OF GEM RESEARCH?

Over the past 25 years, GEM research has been instrumental in illuminating trends in the attitudes, perceptions, and aspirations of women entrepreneurs across a wide range of economic settings, enabling spatial and temporal comparisons. The diversity of women's material and cultural conditions is undeniable. Nevertheless, previous research on women's entrepreneurship has often overlooked the data of women from certain groups and regions, which has inadequately represented the global landscape. The annual GEM Women's report addresses this gap by comparing data from diverse contexts and shedding light on the contrasting dynamics of women's entrepreneurship and gender relations across cultures and economies.

A significant insight over the years is that policymakers are very interested in how entrepreneurial perceptions and intentions influence women to start a business. This is particularly the case given the tendency for women to report lower rates of perceived opportunities, startup skills, and no fear of failure. Findings from this report suggest that, in countries where governments and other stakeholders in the advance of entrepreneurship and innovation have strongly advocated for women entrepreneurs, women are adopting promising perceptions of themselves and the opportunities around them. The needle is moving in important ways.

As cultural support for women entrepreneurs has increased globally, women are noticing more new opportunities and are expressing more confidence in their skills to start a business. Soberly, fear of business failure has also trended upwards for the past two decades for women. These upward trends are particularly pronounced in the Middle East, where governments, NGOs, and gender advocates are working hard to dispel misguided notions about the limitations of women's business leadership and redirect attention to the benefits and promise of women's economic empowerment.

Gender gaps in key entrepreneurial indicators are narrowing in the majority of countries surveyed in the GEM program. Not only are entrepreneurial perceptions rising in many countries, but so are the rates of startup activity and established business ownership for women. These are exciting results which demonstrate the power of advocacy and support. For two people navigating similar contexts, entrepreneurial perceptions are the most powerful predictors of business startup. In other words, if we can change people's minds about any fears of starting a business, they will change their own behaviours in ways that can power a nation. This was exemplified during the COVID-19 pandemic, the most multifaceted crisis the GEM program has ever encountered, highlighting the characteristics and resilience factors of women entrepreneurs. Despite facing significant challenges, many women-owned businesses demonstrated remarkable adaptability and innovation, underscoring the importance of supporting women's entrepreneurship.

HUMAN FACES BEHIND THE DATA . . .

WHAT DO EDUCATION ENTREPRENEURS NEED FROM POLICYMAKERS?

Founded in 2006, the Cartier Women's Initiative (CWI) is an annual international entrepreneurship program. Since its creation, the Cartier Women's Initiative has supported 330 women changemakers and entrepreneurs hailing from 66 countries. As part of a special series, we asked select fellows across different sectors to share their perspectives on how policymakers can best support their impact.

Komal Dadlani, 2015 CWI Fellow (Chile), Co-founder of Lab4U, a company that develops web and mobile technologies to turn smartphones and tablets into science instruments

Adopt a long-term vision that supports educational innovation: Impact in education takes time, and a commitment to sustainable investment is essential.

Champion proven pedagogical solutions, even if they haven't yet scaled: Many educational technologies have demonstrated efficacy through rigorous studies, yet they remain stuck in pilot phases. By embracing these innovations, policymakers can empower education entrepreneurs to foster lasting change and equip students with the skills necessary for the future workforce.

Nathalie Lesselin, 2023 CWI Fellow (Switzerland), Founder & CEO of KOKORO lingua, a language platform where children can learn foreign languages through videos, games, and songs taught by other kids

Collaboration between public and private sectors is essential in education: It's not a competition but a team effort to improve learning outcomes. Quality education requires investment, and every dollar spent on early childhood education can yield a significant return over a lifetime. Policymakers and entrepreneurs need to create efficient pathways for innovative education solutions to thrive and benefit all children.

Research shows that investing in early childhood education can boost a country's GDP by 10% over a 40-year period.

Dora Palfi, 2023 CWI Fellow (Sweden), Co-founder and CEO of imagi, a company that fosters a love for tech in all kids through fun, inclusive coding. Their AI-powered platform enables any educator, without prior computer science knowledge to deliver engaging lessons.

Create flexible regulatory frameworks that scale compliance requirements to fit small providers: Small providers offer educators and administrators personalised support and genuine care. However, we often struggle to access the spaces where decisions are made, missing procurement opportunities due to overly complex privacy, data security policies, and lengthy procurement processes. These challenges favour larger companies over smaller, more innovative providers that might deliver better outcomes for learners.

Access to capital, capacity-building programs, and streamlined public procurement processes would help education entrepreneurs meet regulatory standards and scale impact. Additionally, policies that promote collaboration with public institutions and prioritize equity in education will ensure that innovation benefits all learners. With the right support, education entrepreneurs can focus on delivering the best outcomes, not just meeting administrative requirements.

Thank you to the Cartier Women's Initiative (CWI), one of our report sponsors, for providing this material and helping to put our data in a real-world context.

Cartier WOMEN'S INITIATIVE

HUMAN FACES BEHIND THE DATA . . .

WHAT DO HEALTH ENTREPRENEURS NEED FROM POLICYMAKERS?

Founded in 2006, the Cartier Women's Initiative (CWI) is an annual international entrepreneurship program. Since its creation, the Cartier Women's Initiative has supported 330 women changemakers and entrepreneurs hailing from 66 countries. As part of a special series, we asked select fellows across different sectors to share their perspectives on how policymakers can best support them.

Cécile Réal, 2012 CWI Fellow (France), CEO and co-founder of Endodiag, a company that develops non-invasive diagnosis and advanced biopsy tools to fight endometriosis

Support faster adoption of emerging technologies: Health entrepreneurs strive to deliver innovative solutions that improve the lives of patients. However, their path is fraught with challenges beyond typical business hurdles like R&D, funding, and industrialization. Two major obstacles we face are regulation and reimbursement.

In Europe, regulatory processes have become excessively focused on safety, often neglecting patient interests. As a result, many medical devices have either failed to reach the market or been withdrawn due to the costly and time-consuming requirements of the new Medical Device Regulation (MDR).

Harmonise reimbursement systems: Moreover, reimbursement systems vary across countries, with each nation having its own lengthy approval process. We need harmonised and updated systems that accommodate new innovations as well as patient needs.

To address the growing challenges posed by an aging population and shrinking healthcare resources, policymakers must adapt regulations to be more innovation-friendly and support faster adoption of emerging technologies.

Dimple Parmar, 2023 CWI Fellow (India), Co-founder and CEO of ZenOnco.io, the world's first integrative oncology healthtech platform, created with the vision to save millions of lives from cancer

The healthcare industry, especially in areas like cancer care, has been traditional and slow-moving.

It takes time for new entrepreneurs to build trust with patients and the public. While significant innovations have occurred in treatments, pharmaceuticals, diagnostics, and vaccines, care delivery models have seen little progress. Support from policymakers is essential to drive impactful change.

Incentivize entrepreneurs to develop innovative care models that make healthcare more affordable and accessible, especially in underserved markets: Simplifying licensing processes and regulatory standards can enable entrepreneurs to launch their ventures more swiftly without compromising quality. Public insurance schemes should be more inclusive of new healthcare providers.

Improve public-private collaborations: Grant-based support and public-private partnerships (PPP) can also help bridge the gap between urban and rural healthcare access. Additionally, allowing private sector involvement in traditionally public activities can enhance efficiency and save more lives in a timely manner.

Thank you to the Cartier Women's Initiative (CWI), one of our report sponsors, for providing this material and helping to put our data in a real-world context.

Cartier WOMEN'S INITIATIVE

While the upward trends in perceptions, startup activity, and established business ownership for women are exciting, women still face considerable barriers due to structural barriers like industry segregation and the ways in which structural biases reinforce negative stereotypes about women in business. This underscores the importance of a systemic view and implies the need to consider the interconnectedness of all factors and constructs. Other cautions are also important to consider given the heterogeneity of the patterns observed. Some countries showed strong entrepreneurial perceptions, while startup activity rates remain low. Moreover, evidence of the disproportionate impact of the COVID-19 pandemic on women persists as well.

WHAT EMERGING TRENDS HOLD PROMISE GOING FORWARD?

Several findings suggest important areas of promise. Women are taking up digital tools and technologies at similar rates as men, or better. As barriers to adoption of digital tools are lowered for small businesses, more and more women founders will find important competitive advantages in the marketplace. Younger women are leading this trend in high-potential business, pursuing ever more aspirational business models, industry sectors, and large markets.

Women already have a tendency to prioritize social impact when it comes to entrepreneurship. They are about 10% more likely than men to prioritize sustainability goals over economic goals, especially in high-income countries, where SDG awareness is high and sustainability practices are increasingly valued and regulated. Here again, the younger generations of entrepreneurs are driving market solutions to compelling global problems, like climate change, health disparities, and economic inequality.

Access to capital for women entrepreneurs remains problematic. Women continue to face significant challenges in accessing seed and growth financing for their businesses. Again, structural bias contributes to business funding challenges in the form of social networks and the low representation of women among informal and formal investors. Not only are women about 10% less likely than men, on average, to know an entrepreneur, but they are also about 30% less likely to have recently invested in a business. Anecdotal reports suggest that these numbers will change as women angel investors organise, venture capital firms purposefully seek out women-led companies, and impact investing demonstrates that social ventures can produce good returns on investment in both profit and social good.

WHAT ARE THE CONCLUSIONS AND POLICY IMPLICATIONS INSPIRED BY THE DATA PRESENTED?

Despite over 30 years of policy for the advancement of women's entrepreneurship, research suggests that the same recommendations are made over and over again[20]. Of particular concern to scholars are the limitations of "one size" policies that ignore the heterogeneity of contexts, businesses, and entrepreneurs. Scholars have also long made calls for more attention to ecosystem factors and institutions rather than focusing all recommendations on "fixing" women.

The diverse ways in which public action, private initiatives, and society interact are at the forefront of discussions about how to foster women's entrepreneurship. By taking a holistic and idiosyncratic approach, ecosystem analysis reveals the underlying factors that shape entrepreneurial dynamics.

Indeed, a recent study on entrepreneurial ecosystems defined entrepreneurship as a collective achievement that involves the participation of individual entrepreneurs and public and private sector actors to develop an effective industrial infrastructure to support and sustain innovation[21]. In this sense, an entrepreneurial ecosystem is a collection of actors and interconnected factors that support and nurture entrepreneurial activities within a specific region.

SO, HOW DO WE BUILD BETTER ENTREPRENEURIAL ECOSYSTEMS FOR WOMEN ENTREPRENEURS?

One key problem with entrepreneurial ecosystems is that they are not equitable. They are built more for those who design them than for those who navigate them. This is especially true for women. Policy recommendations designed to address the inequities inherent in this system come in a number of different flavours with underlying assumptions and a general disregard for specific needs and challenges found in a single context.

Do women need equal access to resources? Or should systems be better-designed to support the unique experiences and interests of women entrepreneurs? Or do we need to fundamentally revisit the construction of gender and social structures that are detrimental to women but may suit the interests of other sectors of the economy?

These are important questions from a policy perspective. GEM research has shown, for example, that countries with the highest rates of women's entrepreneurship typically have low barriers to entry, supportive government policy, minimal commercial and legal infrastructure, and strong cultural support for entrepreneurship[22]. However, men's entrepreneurship thrives more in contexts with supportive government policy but weak government programs for business creation. Importantly, high-growth entrepreneurship and opportunity-focused venture creation may require very different systems of support than other types of business startup and growth[23].

Public policy can play a critical role in supporting women entrepreneurs by addressing structural barriers and fostering an inclusive ecosystem. Still it can be challenging to offer policy solutions because of the importance of tailoring policies and interventions to specific contexts and social groups. In this respect, it is critical to deconstruct the universal stereotype of "woman entrepreneur" to identify diverse segments of women founders and tailor programs to their specific needs and aspirations. To fully grasp the complexities of women's entrepreneurial journeys, an intersectional lens is essential.

The intersectionality perspective allows for a more nuanced understanding of the challenges and opportunities facing women entrepreneurs, especially those from marginalised communities. By examining how demographic factors intersect with other social identities, we can uncover the multifaceted barriers (and advantages) that shape women's entrepreneurial experiences. It's important to recognize that, in many contexts, these demographic factors are not isolated but intersect with other social identities, creating intricate patterns of discrimination (and privilege).

20 Foss, L., Henry, C., Ahl, H., & Mikalsen, G. H. (2019). Women's entrepreneurship policy research: a 30-year review of the evidence. Small Business Economics, 53, 409-429.
21 Stam, E., & Van de Ven, A. (2021). Entrepreneurial ecosystem elements. Small business economics, 56(2), 809-832.
22 Hechavarría, D. M., & Ingram, A. E. (2019). Entrepreneurial ecosystem conditions and gendered national-level entrepreneurial activity: a 14-year panel study of GEM. Small Business Economics, 53, 431-458.
23 Hechavarria, D., Bullough, A., Brush, C., & Edelman, L. (2019). High□growth women's entrepreneurship: Fueling social and economic development. Journal of Small Business Management, 57(1), 5-13.

With these understandings in mind, we offer the following recommendations based on the findings shared in this report:

1. **Highlight Successful Women Entrepreneurs:** Promote role models and success stories of female founders. Public campaigns that showcase successful women can inspire others and normalise women in leadership positions. Awards and recognition platforms for women entrepreneurs can raise their profiles and increase credibility in the business community. This approach is particularly important in sectors and contexts where women are underrepresented and face negative stereotypes that distract attentionfrom high-potential market-based solutions.

2. **Support Research and Data Collection:** Fund experienced researchers and track gender-disaggregated data on entrepreneurship to understand the challenges women face and measure the impact of support programs. Implement performance-based evaluations of policies and programs to refine strategies that help women entrepreneurs scale. The resulting data can transform misleading narratives and reveal the structural barriers that hold women back, particularly in the context of the weak implementation of gender mainstreaming that still characterizes some economies and regions worldwide.

3. **Facilitate Inclusive Education and Training:** Develop programs focused on building business acumen, financial literacy, and personal agency for women entrepreneurs. Establish public-private partnerships to pair aspiring women entrepreneurs with experienced mentors, offering ongoing guidance. Incubators, accelerators, and co-working spaces specifically for women entrepreneurs in male-dominated contexts can foster collaboration, mentoring, and access to resources. Tailor programs to the specific needs and aspirations of women entrepreneurs of all kinds. Early exposure to business environments and mentoring through youth entrepreneurship programs can also fuel trends among young women with high aspirations for business startup and growth.

4. **Expand Access to Capital:** Strengthen enforcement of anti-discrimination laws in lending and business opportunities to ensure women have equal access to capital and resources. Support dedicated funding programs, grants, or government-backed loans aimed at women-led businesses. Promote events and networks that facilitate access to high-level industry connections and investors. Large, nationally driven networks may not always be as successful as smaller, comparable network opportunities, such as industry-specific networks and business-size-related networks. Small, female-led entrepreneurship groups run by accomplished female entrepreneurs can boost confidence and facilitate high-quality introductions to investors and non-dilutable funding sources. These types of interventions can help women entrepreneurs who face challenges in securing venture capital and business loans.

HUMAN FACES BEHIND THE DATA . . .

WHAT DO CLIMATE ENTREPRENEURS NEED FROM POLICYMAKERS

Founded in 2006, the Cartier Women's Initiative (CWI) is an annual international entrepreneurship program. Since its creation, the Cartier Women's Initiative has supported 330 women changemakers and entrepreneurs hailing from 66 countries. As part of a special series, we asked select fellows across different sectors to share their perspectives on how policymakers can best support them.

Wendy Owens, 2023 CWI Fellow (USA), CEO of Hexas Biomass Inc, a company that uses low-cost, sustainable, plant-based materials to replace wood and fossil fuel-based raw materials in multiple applications.

Stop supporting fossil fuel-based materials by phasing out subsidies for oil production: The ages of human existence are marked by materials: iron, bronze, steel, and lately fossil fuels. To move to the next materials age, climate entrepreneurs need policymakers to understand that the new bioeconomy is built on sustainable materials produced from land and air.

Encourage investment in renewable biomaterials: Policymakers can support climate entrepreneurs through regulations that encourage investment in renewable biomaterials that do not require subsidies for economic viability.

Include innovators in policymaking: We need policymakers to make it easy for us to be part of policymaking efforts so the voices of young companies without lobbyists are heard over the status quo.

Policymakers hold the key to success for climate entrepreneurs. We need to work with them to ensure the next age of human existence brings material value to the world.

(continued on next page)

Tracy O'Rourke, 2019 CWI Fellow (Ireland), CEO of Vivid Edge, a company that supplies energy efficiency as a service for large organisations

Support infrastructure investment especially in national grids: It is crucial for supporting the growing demand and enabling the transition to renewables. Without a solid infrastructure foundation, innovation cannot thrive. Connecting national grids across Europe would allow for the transmission of excess wind and solar energy to where it's needed most. This requires not only investment but also political cooperation.

Incentivize innovative entrepreneurs: Policymakers play a vital role by creating financial incentives like grants, subsidies, tax credits, and low-interest loans. It's also essential to raise limits on tax relief for private investors, a key funding source for many entrepreneurs. Policies such as renewable energy mandates and green procurement practices can further support sustainable solutions.

A clear regulatory framework would reduce uncertainty, giving entrepreneurs the confidence to plan long-term, while collaboration between startups and established businesses can accelerate innovation. With the right support from policymakers, we can build a cleaner, more efficient future.

Kristin Kagetsu, 2018 CWI Fellow (India), Co-founder and CEO of Saathi, a company that produces 100% all-natural sanitary pads offering positive impacts on health, the environment and society.

As a climate entrepreneur, I advocate for regulations that prioritize eco-friendly materials and sustainable business practices.

Financial incentives: To scale our efforts, we need access to financial incentives like tax reductions on sustainable raw materials and low-interest loans for businesses focused on sustainability. Carbon and plastic reduction incentives would further promote responsible manufacturing.

Promote educational campaigns that highlight the benefits of eco-friendly alternatives: Government support is essential for distributing eco-friendly products. We must also address the intersection of gender, health, and sustainability by promoting educational campaigns that highlight the benefits of eco-friendly alternatives. Implementing procurement policies that prioritize locally produced, sustainable menstrual hygiene products for government institutions is a necessary step.

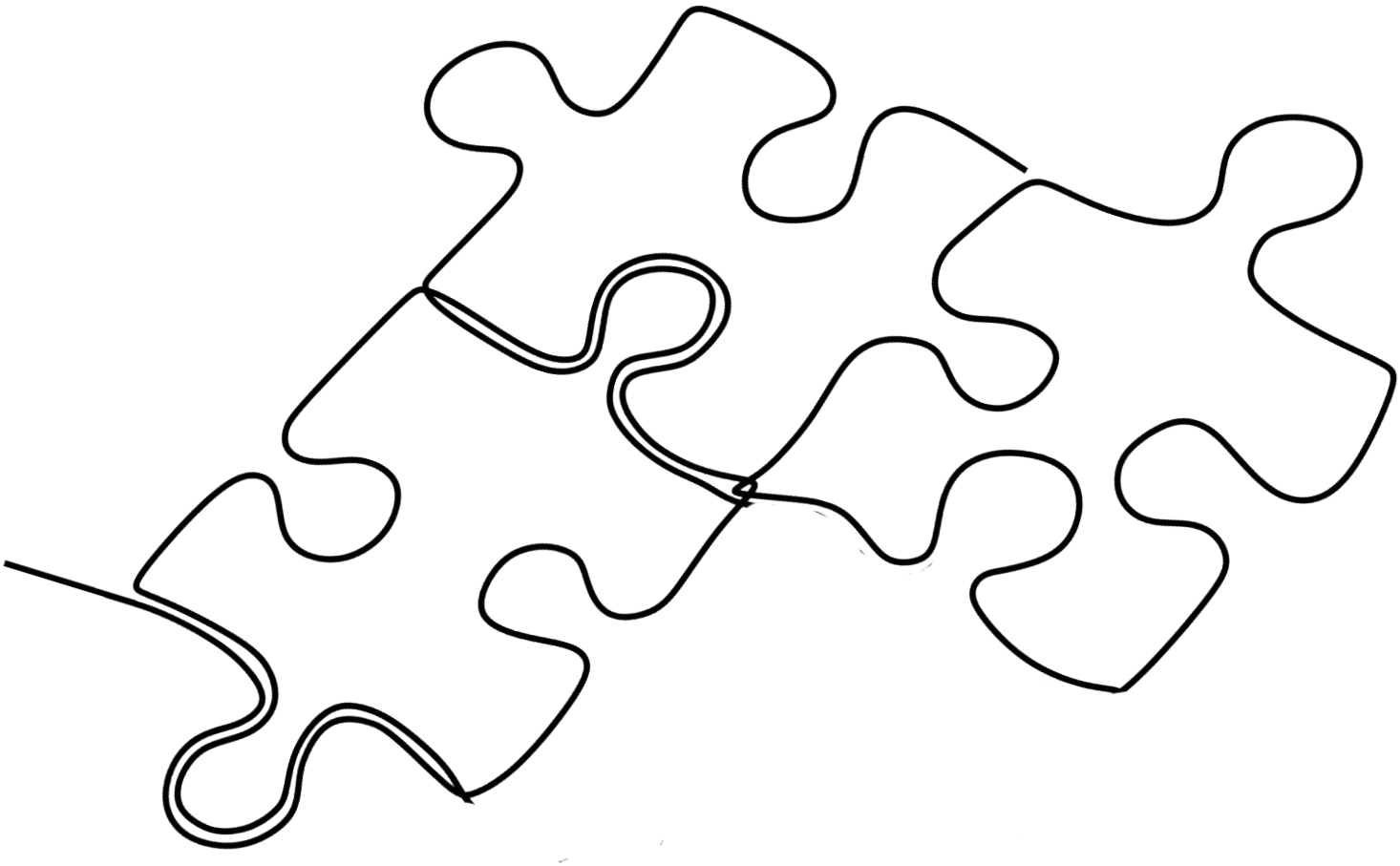
By prioritising long-term policies that support climate entrepreneurs, we can create a more equitable, sustainable future for all.

Thank you to the Cartier Women's Initiative (CWI), one of our report sponsors, for providing this material and helping to put our data in a real-world context.

Cartier WOMEN'S INITIATIVE

APPENDIX A

The GEM Conceptual Framework and Methodology



The GEM Conceptual Framework and Methodology

The Global Entrepreneurship Monitor (GEM) is a long-term multinational research study of entrepreneurship, conducted annually and using population-based data to carefully measure the level of entrepreneurship in each participating economy. GEM defines and measures entrepreneurship as the act of starting or running a new business. Note that it is the act of starting that is the key differentiator: simply thinking about starting a business, or planning to do so at some point in the future, is not counted according to the GEM measure of entrepreneurial activity.

The GEM Conceptual Framework is illustrated below, setting out the relationship between the decision to start a new business and the entrepreneurial environment that impacts on that decision and its implementation, both directly (via access to resources), and indirectly (via social priorities and values). The relevant environment can be local, regional or national or a mixture of all three, depending on the nature of the new business and its scale.

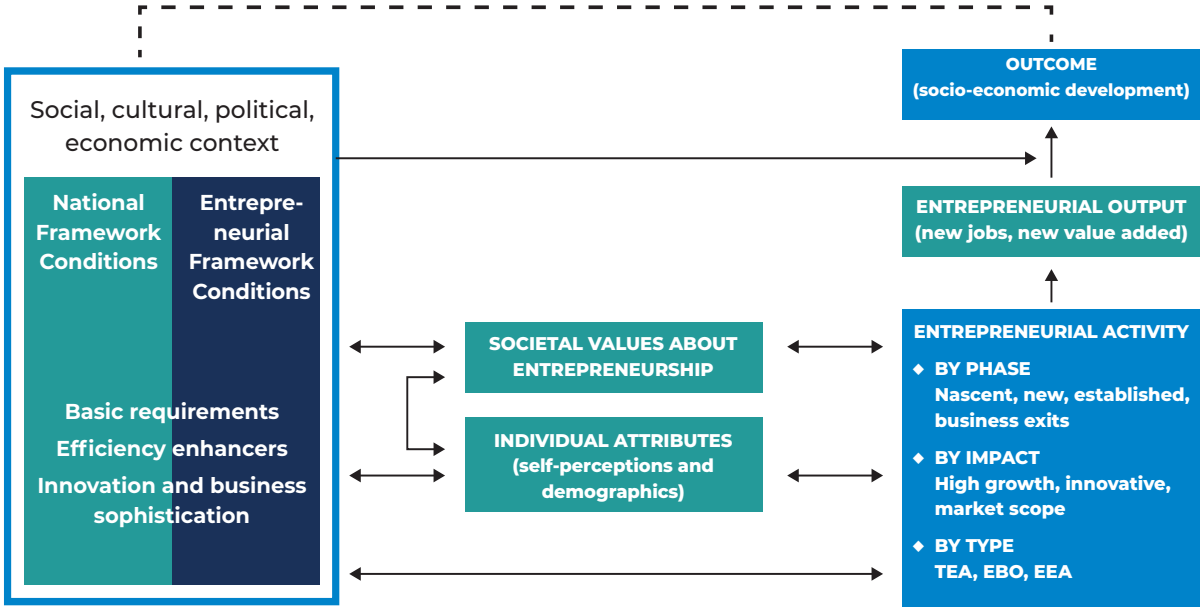


FIGURE A1.1 The GEM Conceptual Framework

The decision to start a business is then set within a social, economic and political context that conditions that decision in terms of variables, including choice of sector, scale of operations, and levels of ambition and innovation. These variables in turn influence the impacts of the new business on other factors, such as number of jobs, levels of value-addition and ultimately on economic development. At the same time multiple acts of starting new businesses may begin to shift social values, creating more positive attitudes to entrepreneurship, and in turn influencing potential new entrepreneurs.

The GEM Methodology and Measures of Entrepreneurship

GEM uses two principal research instruments: the Adult Population Survey (APS), a random sample of at least 2,000 adults, and a National Expert Survey (NES), of at least 36 national experts. The APS identifies the (usually small) proportion of adults who are starting or running new businesses. GEM refers to this as the level of Total early-stage Entrepreneurial Activity or TEA. However, although the majority of surveyed adults are not currently starting a business, they can still provide highly valuable information as a result of questions asked in GEM surveys. Their responses provide insights into their awareness of entrepreneurship and of local business opportunities, their view of their own competency to start a business, their perceptions of how easy it is to start a business and whether the fear of failure would stop them from doing so. They are also asked whether they intend to start a business in future.

In each participating economy, the APS is supervised by a GEM National Team, usually of academics at top universities, and sometimes by some other organization with interest and expertise in entrepreneurship. These organizations work closely with GEM to ensure that the same questions are asked in the same way in each participating economy, so that answers can be compared across economies, and for the same economy over time. After the Global Report is published each year, National Team usually produce and publish their own National Reports. These are customarily shared on the GEM main website (www.gemconsortium.org). Each year, new questions in the APS reflect a changing world; for example, by asking about the impacts of increasing energy prices or of the awareness of the United Nations Sustainable Development Goals (SDGs).

There are many ways to assess the level of entrepreneurial activity in an economy. Most official statistics count new firm businesses or tax registrations as a measure of entrepreneurial dynamics. These are certainly useful but only to the extent that all new businesses register. In many economies, especially, less-developed ones, new firm registrations can actually be a small proportion of new business starts. This can be due to several reasons; for example, a business may start off informally and very small, an owner may be waiting to see first if the business works, or as mentioned, the process of registration may be expensive, difficult or excessively bureaucratic. Another measure is the number of self-employed, but many self-employed people work only for themselves, and may not even perceive initially that they are actually running a business. Examples could include journalists, musicians or some taxi-drivers. The GEM approach circumvents the challenges of collecting comprehensive data both by being population-based, and by assuring anonymity, thus capturing activity in the informal economy where official statistics cannot. This is a major differentiating factor for GEM when compared to other studies.

The way GEM uses APS data to estimate key entrepreneurial variables is set out below. GEM defines an entrepreneur as an individual starting or running a new business. The APS includes a question about whether that individual has expended resources (including their own time) in trying to start that business, such as looking for premises, developing a business plan etc. If the answer is affirmative, a follow-up question asks whether that business has paid any wages or salaries, including to the owner, and if so, for how long. If those wages have not yet been paid for three months or more, then GEM classifies this as a nascent new business, and the individual as a nascent entrepreneur. If wages have been paid for three months or more, but for less than three and a half years, then GEM categorises this as a new business, and the individual as a new business owner. If wages have been paid for three and a half years or more, then according to GEM the business is no longer new but established, and the individual is an established business owner.

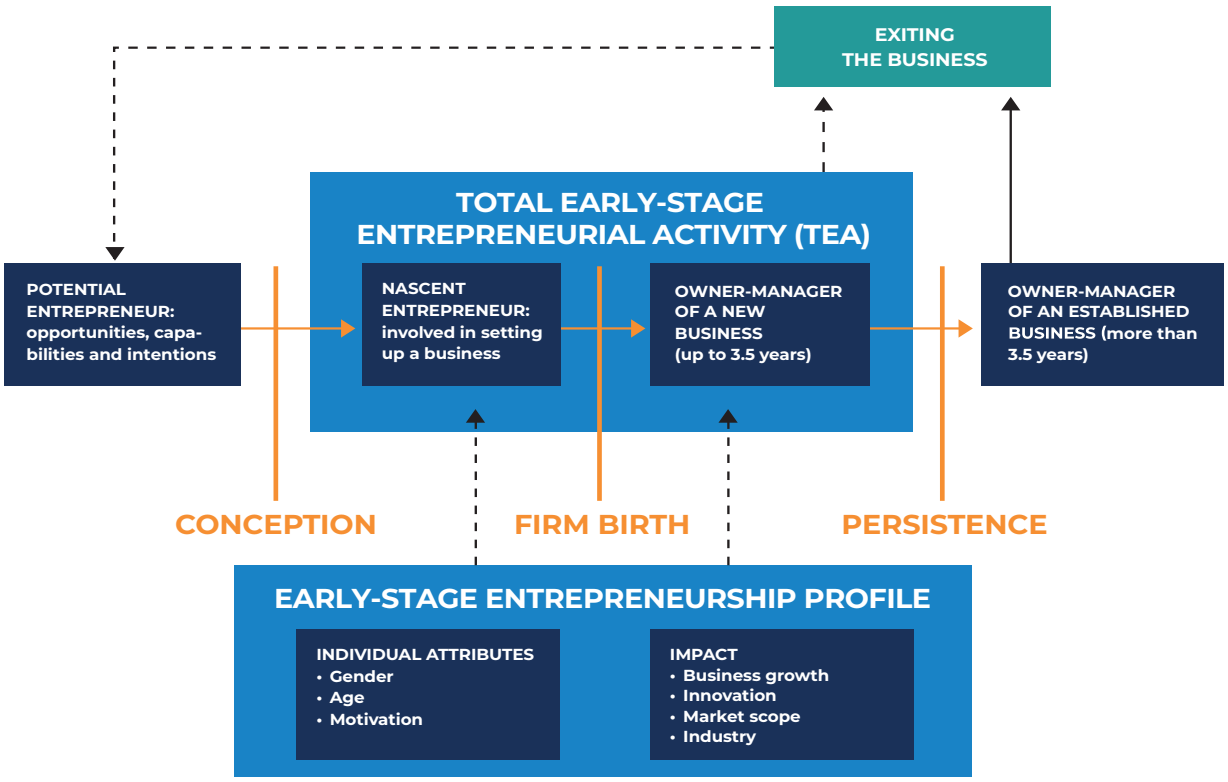


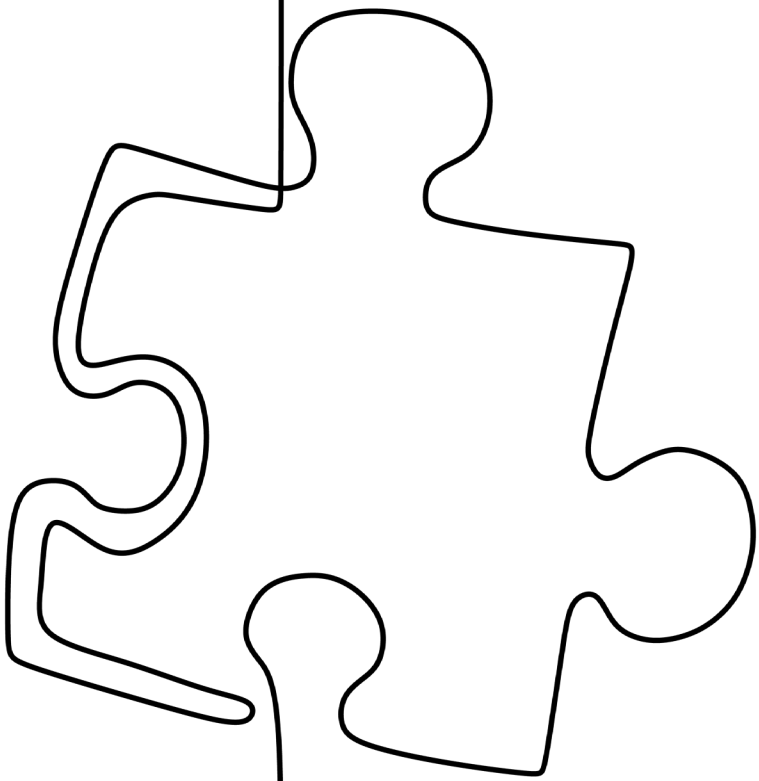
FIGURE A1.2 The Entrepreneurial Process and GEM Indicators

The figure above illustrates the entrepreneurial pipeline, beginning from the time that potential entrepreneurs perceive new opportunities that they consider they can grasp, then start expending resources to become nascent entrepreneurs. When the business has been paying wages or salaries for three months or more it is defined as a new business, only becoming an established business after paying wages for three and a half years or more. Of course, at any stage the entrepreneur can exit that business, which may or may not continue without them. The figure also shows the major GEM measures of entrepreneurial activity. At centre stage is Total early-stage Entrepreneurial Activity, TEA, or the proportion of adults in a participating economy who are starting or running a new business, seen in this figure as the sum of Nascent Entrepreneurs plus New Business Owners . Other relevant entrepreneurial variables include the level of Established Business Ownership (EBO), and the level of Business Exits, both expressed as a proportion of the adult population. Each is important, especially in relation to the level of TEA. For example, a high ratio of TEA to EBO may indicate difficulties in transitioning new businesses into established ones, sometimes because of an unsupportive entrepreneurial environment, while a high ratio of TEA to Business Exits may suggest a growing entrepreneurial base.

The decision to start a new business inevitably takes place within a context that can support or constrain the new start-up and its subsequent development. To assess the quality of each national entrepreneurial business context, GEM carefully specifies different dimensions of the entrepreneurial environment common to all contexts (referred to as the Entrepreneurial Framework Conditions or EFCs), and then surveys a group of national experts in each country to assess the quality of each framework condition. These assessments are then harmonized to provide a single figure for the quality of that entrepreneurial environment. This consistent qualitative data allows the comparison of national entrepreneurial environments at the same time, or for the evolution of a national entrepreneurial environment to be traced over time. These National Expert Surveys (NES) provide a crucial complement to the individual national Adult Population Surveys (APS). Taken together, these unique surveys provide a detailed assessment of both the level of entrepreneurial activity in each economy, and the quality of the entrepreneurial ecosystem within which that activity takes place.

APPENDIX B

GEM Women Reports



GEM Women Reports

GEM Women's Entrepreneurship Reports (2005-2023)

GEM 2005 REPORT ON WOMEN AND ENTREPRENEURSHIP (ALSO SEE ARABIC TRANSLATION)

- Maria Minniti, PhD, Babson College
- Pia Arenius, PhD, Turku University
- Nan Langowitz, DBA, Babson College

GEM 2006 REPORT ON WOMEN AND ENTREPRENEURSHIP

- Elaine Allen, PhD, Babson College
- Nan Langowitz, DBA Babson College
- Maria Minniti, PhD, Babson College

GEM 2007 REPORT ON WOMEN AND ENTREPRENEURSHIP

- Elaine Allen, MBA, Smith College
- Amanda Elam, PhD, Babson College
- Nan Langowitz, DBA, Babson College
- Monica Dean, MBA, Smith College

GEM 2010 WOMEN'S REPORT

- Donna J. Kelley, PhD, Babson College
- Candida G. Brush, PhD, Babson College
- Patricia G. Greene, PhD, Babson College
- Yana Litovsky, GEM Global

GEM 2012 WOMEN'S REPORT

- Donna J. Kelley, PhD, Babson College
- Candida G. Brush, PhD, Babson College
- Patricia G. Greene, PhD, Babson College
- Yana Litovsky, GEM Global

GEM 2014 WOMEN'S REPORT

- Donna J. Kelley, PhD, Babson College
- Candida G. Brush, PhD, Babson College
- Patricia G. Greene, PhD, Babson College
- Mike Herrington, PhD, University of Cape Town Abdul Ali, PhD, Babson College Penny Kew, MSc, GEM Global

GEM 2016/2017 WOMEN'S ENTREPRENEURSHIP REPORT

- Donna J. Kelley, PhD, Babson College
- Benjamin S. Baumer, PhD, Smith College
- Candida Brush, PhD, Babson College
- Patrica G. Greene, PhD, Babson College
- Mahnaz Mahdavi, PhD, Smith College
- Mahdi Majbouri, PhD, Babson College
- Marcia Cole, Babson College
- Monica Dean, MBA, Smith College
- René Heavlow, MA, Smith College

GEM 2018 / 2019 WOMEN'S ENTREPRENEURSHIP REPORT

- Amanda B. Elam, PhD, Babson College
- Candida Brush, PhD, Babson College
- Patrica G. Greene, PhD, Babson College

GEM 2020/21 WOMEN'S ENTREPRENEURSHIP REPORT: THRIVING THROUGH CRISIS

- Amanda B. Elam, PhD, Babson College (lead author)
- Ben Baumer, PhD, Smith College (data analysis)
- Karen D. Hughes, PhD, University of Alberta (coauthor)
- Candida Brush, PhD, Babson College
- René Heavlow, MA, Smith College
- Stephen Hill, PhD, GEM Global
- Maribel Guerrero, PhD, Universidad del Desarrollo
- Catharina Nawangpalupi, Parahyangan Catholic University
- María del Mar Fuentes, Universidad de Granada
- Juan Pablo Dianez González, Universidad de Cádiz
- Ana Fernández Laviada, Universidad de Cantabria
- Catalina Nicolas Martínez, Universidad de Murcia
- Alicia Rubio Bañón, Universidad de Murcia, Spain
- Nihel Chabrak, United Arab Emirates University

GEM 2021/22 WOMEN'S ENTREPRENEURSHIP REPORT: FROM CRISIS TO OPPORTUNITY

- Amanda B. Elam, PhD, Babson College (lead author)
- Benjamin S. Baumer, PhD, Smith College (data analysis)
- Karen D. Hughes, PhD, University of Alberta, DIRI Fellow at Babson College (coauthor)
- Thomas Schott, American University in Cairo
- Mahsa Samsami, University of Santiago de Compostela
- Amit Kumar Dwivedi, PhD, Entrepreneurship Development Institute of India (EDII)
- Rico J. Baldegger, PhD, University of Applied Sciences and Arts Western Switzerland
- Maribel Guerrero, PhD, Arizona State University; Universidad del Desarrollo
- Fatima Boutaleb, PhD, Hassan II University of Casablanca-Morocco

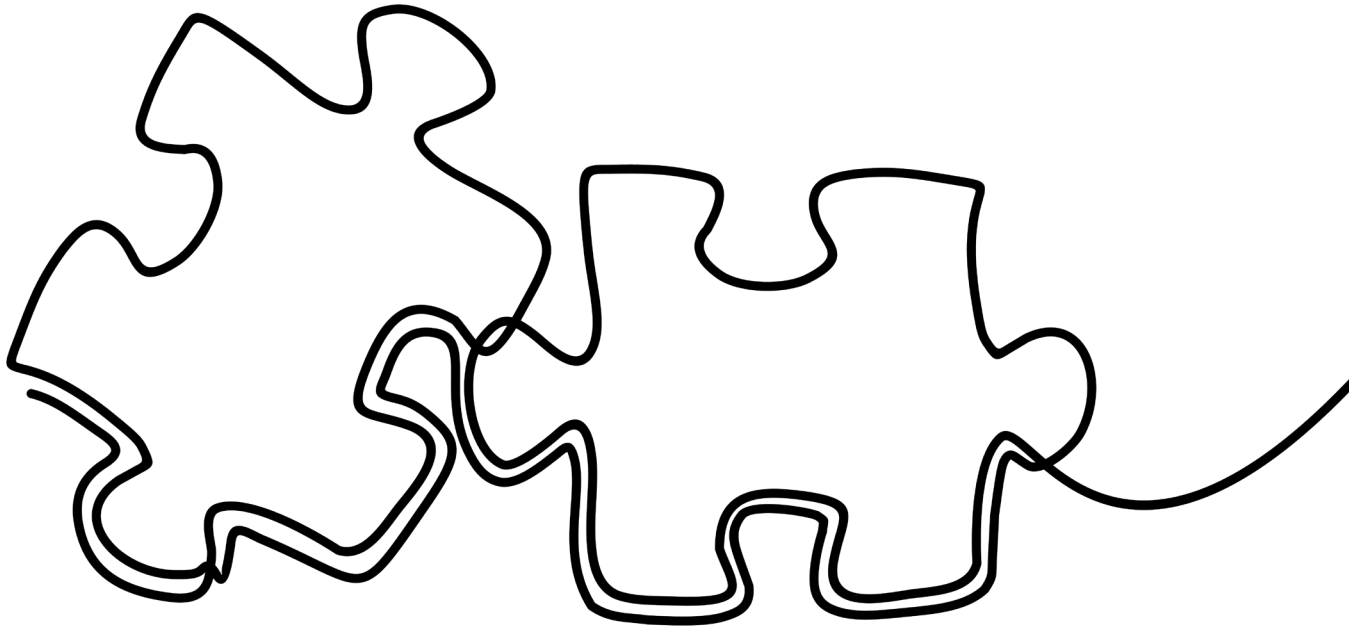
GEM 2022/2023 WOMEN'S ENTREPRENEURSHIP: CHALLENGING BIAS AND STEREOTYPES

- Amanda Elam, PhD, Babson College, GEM Global (lead author)
- Mahsa Samsami, PhD, University of Agder, GEM South Africa (data analysis)
- Karen D. Hughes, PhD, University of Alberta and DIRI Fellow, GEM Canada (coauthor)
- Fatima Boutaleb, PhD, Hassan II University of Casablanca-Morocco, GEM Morocco
- Abdullah Mohammed Alshukaili, University of Nizwa, GEM Oman
- Ulrike Guelich, Bangkok University, GEM Thailand
- Natanya Meyer, University of Johannesburg, GEM South Africa
- Maribel Guerrero, Arizona State University, GEM Chile (Universidad del Desarrollo)

C

APPENDIX

GEM Publications–Books and Journal Publications on Women Entrepreneurs



Appendix C – GEM Publications–Books and Journal Publications on Women Entrepreneurs

GEM Book and Publications

Elam, A. B. (2008). *Gender and entrepreneurship: A multilevel theory and analysis*. Edward Elgar Publishing.

Sarfaraz, L. (2016). *Women's entrepreneurship in Iran: Role Models of Growth-Oriented Iranian Women Entrepreneurs*. Springer.

Stroila, I. (2020). *Drivers and Barriers of Women Entrepreneurs: An Analysis of the National and Regional Context Using GEM Data*. Springer Nature.

Guerrero, M., Serey, T., Ibáñez, M. J., Romani, G., & Fernández, C. (2020). *Global Entrepreneurship Monitor: Mujeres y actividad emprendedora en Chile 2019*. Universidad del Desarrollo.

Journal Publications using GEM Data for Gender Analysis (2003-2024Q3)

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Eden, S., & Cruickshank, P. (2004). New Zealand women entrepreneurs. *International Journal of Entrepreneurship and Small Business*, *1*(3-4), 265-269.

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Elam, A., & Terjesen, S. A. (2007). Institutional logics: Gender and business creation across GEM countries. *Frontiers of Entrepreneurship Research*.

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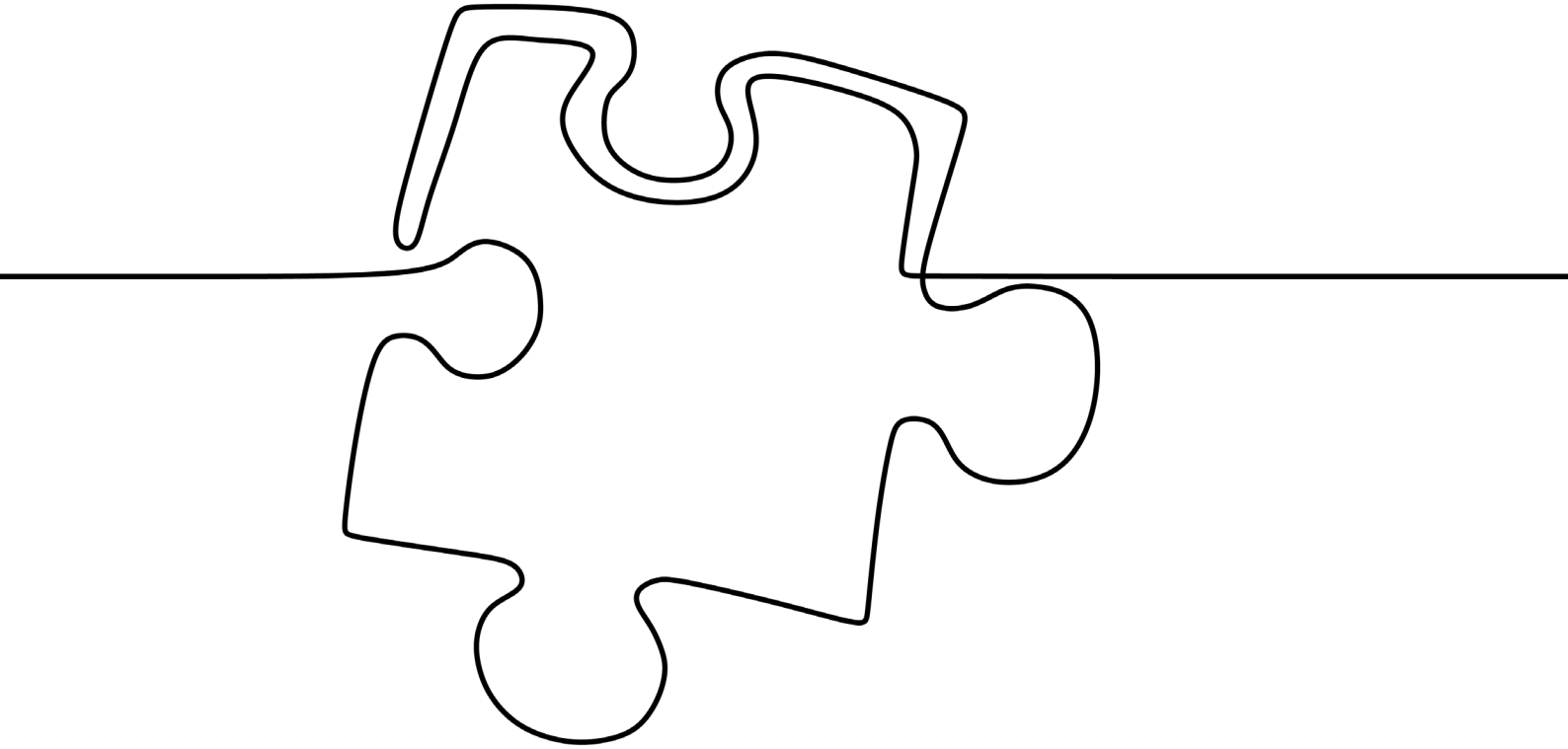
APPENDIX D
Tables



Appendix D: Full Indicators Data

Table C1. Total entrepreneurial activity and life cycle stages, rates and gender ratios, GEM 2023

	TEA			Startup intentions			Nascent activity			New business		
Country	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Brazil	14.7%	22.8%	0.65	47.2%	50.7%	0.93	6.1%	9.4%	0.65	8.8%	13.6%	0.93
Canada	15.3%	24.2%	0.63	14.1%	14.5%	0.97	12.2%	18.1%	0.67	6.7%	12.0%	0.97
Chile	30.2%	32.0%	0.94	49.5%	57.0%	0.87	22.2%	22.1%	1.00	8.8%	10.6%	0.87
China	7.3%	6.3%	1.17	5.0%	6.2%	0.81	3.4%	2.4%	1.42	4.3%	4.5%	0.81
Colombia	26.2%	20.7%	1.26	18.9%	18.2%	1.04	18.2%	13.8%	1.32	8.7%	7.4%	1.04
Croatia	9.9%	16.4%	0.60	18.4%	25.0%	0.74	7.8%	13.0%	0.60	3.0%	5.0%	0.74
Cyprus	7.6%	14.5%	0.52	17.0%	26.1%	0.65	4.6%	9.0%	0.51	3.2%	6.1%	0.65
Ecuador	33.3%	32.0%	1.04	57.0%	58.0%	0.98	21.7%	20.0%	1.09	13.2%	12.7%	0.98
Estonia	9.9%	16.2%	0.61	12.9%	17.0%	0.76	8.2%	13.3%	0.62	2.0%	4.2%	0.76
France	9.0%	12.5%	0.72	12.1%	14.8%	0.82	6.1%	9.2%	0.66	3.2%	3.6%	0.82
Germany	5.9%	9.3%	0.64	5.3%	10.1%	0.52	3.9%	6.1%	0.64	2.2%	4.0%	0.52
Greece	5.9%	7.6%	0.78	9.3%	8.8%	1.06	3.9%	4.0%	0.98	2.4%	3.8%	1.06
Guatemala	28.8%	36.2%	0.80	40.0%	49.7%	0.80	16.9%	23.9%	0.71	13.5%	15.2%	0.80
Hungary	7.0%	12.7%	0.56	6.1%	10.6%	0.58	3.9%	7.2%	0.54	3.5%	6.2%	0.58
India	9.3%	14.6%	0.64	16.9%	22.5%	0.75	7.1%	10.6%	0.67	2.5%	4.4%	0.75
Iran	8.8%	10.7%	0.82	11.8%	24.3%	0.49	3.7%	5.4%	0.69	5.0%	5.4%	0.49
Israel	7.7%	9.9%	0.77	14.9%	15.4%	0.97	5.5%	6.9%	0.80	2.8%	3.6%	0.97
Italy	6.3%	10.3%	0.61	8.9%	12.0%	0.74	4.5%	7.1%	0.63	2.4%	4.1%	0.74
Jordan	10.6%	20.0%	0.53	44.5%	49.5%	0.90	6.6%	9.6%	0.69	4.4%	11.4%	0.90
Latvia	12.2%	16.4%	0.74	13.6%	22.8%	0.60	7.0%	11.4%	0.61	5.3%	5.4%	0.60
Lithuania	7.2%	6.1%	1.19	11.0%	12.5%	0.88	3.7%	3.6%	1.03	3.8%	2.5%	0.88
Luxembourg	8.7%	10.7%	0.81	9.4%	15.7%	0.60	6.7%	8.6%	0.78	3.6%	3.0%	0.60
Mexico	16.1%	17.7%	0.91	23.2%	26.1%	0.89	12.4%	12.6%	0.98	5.0%	5.8%	0.89
Morocco	4.5%	8.1%	0.56	18.1%	29.7%	0.61	2.3%	3.9%	0.59	2.2%	4.3%	0.61
Netherlands	12.1%	15.2%	0.80	13.9%	18.5%	0.75	7.9%	9.6%	0.82	5.3%	6.8%	0.75
Norway	4.9%	8.8%	0.56	6.2%	12.5%	0.50	2.7%	5.6%	0.48	2.3%	3.4%	0.50
Oman	8.2%	13.0%	0.63	65.0%	67.2%	0.97	5.3%	8.3%	0.64	3.6%	6.4%	0.97
Panama	28.5%	34.1%	0.84	45.6%	42.0%	1.09	21.6%	23.6%	0.92	7.9%	12.1%	1.09

Table C1 (continued)

Country	Established business			Discontinued business			Exit/Entry ratio		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Brazil	8.0%	15.8%	0.51	11.3%	11.5%	0.98	0.77	0.51	1.52
Canada	6.6%	9.0%	0.73	8.8%	11.8%	0.75	0.57	0.49	1.18
Chile	5.1%	5.6%	0.91	10.4%	10.4%	1.00	0.34	0.33	1.06
China	2.9%	5.4%	0.54	3.1%	4.3%	0.72	0.42	0.68	0.62
Colombia	2.5%	4.3%	0.58	5.6%	4.0%	1.40	0.21	0.19	1.11
Croatia	3.8%	6.6%	0.58	2.8%	5.5%	0.51	0.28	0.34	0.84
Cyprus	6.4%	9.9%	0.65	2.2%	2.8%	0.79	0.29	0.19	1.50
Ecuador	21.2%	26.9%	0.79	10.2%	9.3%	1.10	0.31	0.29	1.05
Estonia	6.1%	9.7%	0.63	2.6%	5.3%	0.49	0.26	0.33	0.80
France	3.3%	5.9%	0.56	2.8%	4.3%	0.65	0.31	0.34	0.90
Germany	2.7%	5.5%	0.49	2.6%	2.8%	0.93	0.44	0.30	1.46
Greece	13.0%	16.4%	0.79	2.3%	1.9%	1.21	0.39	0.25	1.56
Guatemala	9.8%	16.8%	0.58	8.7%	7.2%	1.21	0.30	0.20	1.52
Hungary	5.1%	9.7%	0.53	2.8%	4.2%	0.67	0.40	0.33	1.20
India	6.6%	18.0%	0.37	4.2%	4.7%	0.89	0.45	0.32	1.40
Iran	5.9%	13.8%	0.43	4.7%	5.8%	0.81	0.53	0.54	0.99
Israel	3.5%	3.5%	1.00	3.5%	3.9%	0.90	0.46	0.39	1.16
Italy	4.5%	11.0%	0.41	1.1%	4.3%	0.26	0.17	0.42	0.42
Jordan	3.2%	10.6%	0.30	5.7%	14.8%	0.39	0.54	0.74	0.72
Latvia	7.5%	13.8%	0.54	3.6%	3.8%	0.95	0.30	0.23	1.28
Lithuania	12.7%	16.5%	0.77	2.7%	3.2%	0.84	0.37	0.53	0.71
Luxembourg	2.6%	5.7%	0.46	2.7%	6.1%	0.44	0.31	0.57	0.54
Mexico	2.7%	3.7%	0.73	10.9%	12.3%	0.89	0.68	0.69	0.97
Morocco	3.0%	10.8%	0.28	3.8%	6.7%	0.57	0.84	0.83	1.01
Netherlands	4.6%	9.2%	0.50	4.8%	8.0%	0.60	0.40	0.53	0.75
Norway	7.0%	8.1%	0.86	2.3%	4.1%	0.56	0.47	0.47	1.01
Oman	2.5%	3.8%	0.66	10.7%	15.6%	0.69	1.30	1.20	1.09
Panama	3.9%	6.3%	0.62	8.5%	11.3%	0.75	0.30	0.33	0.90

Table D1 (continued)

Country	TEA			Startup intentions			Nascent activity			New business		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Poland	2.4%	2.8%	0.85	2.4%	2.8%	0.86	1.4%	1.5%	0.93	1.0%	1.3%	0.86
Puerto Rico	19.9%	24.9%	0.80	25.2%	29.1%	0.87	15.5%	17.9%	0.87	4.9%	7.3%	0.87
Qatar	13.7%	14.3%	0.96	51.1%	46.8%	1.09	10.2%	9.5%	1.07	4.4%	5.4%	1.09
Romania	4.9%	6.8%	0.72	5.6%	6.0%	0.93	2.6%	4.5%	0.58	2.6%	2.6%	0.93
Saudi Arabia	23.0%	27.1%	0.85	41.6%	36.0%	1.16	8.4%	8.9%	0.94	14.7%	18.6%	1.16
Slovakia	8.9%	12.6%	0.70	9.6%	10.2%	0.94	7.0%	10.0%	0.70	2.2%	3.0%	0.94
Slovenia	4.9%	9.0%	0.55	12.8%	18.2%	0.70	3.1%	5.7%	0.54	2.3%	3.4%	0.70
South Africa	9.7%	12.7%	0.76	8.2%	6.6%	1.24	6.9%	9.4%	0.73	4.5%	5.8%	1.24
South Korea	7.7%	12.7%	0.60	23.4%	26.6%	0.88	6.7%	10.5%	0.64	0.9%	2.3%	0.88
Spain	6.1%	7.5%	0.81	9.4%	9.8%	0.96	3.8%	4.2%	0.90	3.1%	4.1%	0.96
Sweden	7.3%	11.1%	0.66	9.1%	12.5%	0.73	5.6%	8.3%	0.67	2.3%	4.1%	0.73
Switzerland	9.7%	10.8%	0.90	8.7%	11.1%	0.78	7.6%	7.5%	1.01	2.5%	3.9%	0.78
Thailand	24.5%	22.8%	1.07	26.0%	34.4%	0.76	12.9%	12.5%	1.03	12.5%	10.9%	0.76
United Kingdom	10.3%	13.3%	0.77	10.0%	12.5%	0.80	7.3%	9.3%	0.78	3.3%	4.1%	0.80
United States	13.4%	16.1%	0.83	10.6%	13.6%	0.78	11.6%	13.0%	0.89	4.2%	5.4%	0.78
Uruguay	23.9%	28.7%	0.83	33.9%	38.2%	0.89	18.3%	22.0%	0.83	5.7%	7.5%	0.89
Venezuela	21.4%	24.0%	0.89	46.9%	52.5%	0.89	16.0%	17.1%	0.94	5.7%	7.7%	0.89
Sample Average	**10.9%**	**13.8%**	**0.79**	**16.9%**	**20.0%**	**0.85**	**7.2%**	**8.7%**	**0.83**	**4.4%**	**5.9%**	**0.85**
Ragion												
Central and East Asia	12.1%	14.2%	0.85	17.5%	21.5%	0.81	7.6%	9.3%	0.82	4.8%	5.3%	0.81
Europe & UK	6.7%	9.1%	0.73	9.2%	11.2%	0.82	4.4%	5.9%	0.75	2.8%	3.8%	0.82
Latin America and Caribbean	24.7%	27.9%	0.88	38.0%	41.7%	0.91	17.1%	18.6%	0.92	8.5%	10.3%	0.91
Middle East and Africa	11.1%	15.4%	0.72	28.5%	34.5%	0.83	5.9%	7.9%	0.75	5.7%	8.3%	0.83
North America	14.1%	19.1%	0.74	11.8%	13.9%	0.85	11.8%	14.9%	0.79	5.1%	7.8%	0.85
National Income												
High Income	10.5%	14.4%	0.73	15.1%	20.9%	0.72	6.9%	9.1%	0.76	4.3%	6.3%	0.72
Middle Income	8.8%	11.2%	0.79	14.2%	15.4%	0.92	6.1%	7.3%	0.84	3.4%	4.6%	0.92
Low Income	16.0%	18.7%	0.86	25.0%	30.1%	0.83	10.0%	11.4%	0.88	6.8%	8.2%	0.83

Table D1 (continued)

Country	Established business			Discontinued business			Exit/Entry ratio		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Poland	10.9%	12.4%	0.88	3.2%	3.7%	0.86	1.35	1.32	1.02
Puerto Rico	3.8%	8.4%	0.45	4.5%	4.9%	0.92	0.23	0.20	1.15
Qatar	3.0%	4.8%	0.63	8.4%	9.9%	0.85	0.61	0.69	0.88
Romania	3.8%	6.3%	0.60	1.3%	1.6%	0.81	0.27	0.23	1.13
Saudi Arabia	13.5%	13.7%	0.99	8.2%	8.5%	0.96	0.36	0.31	1.14
Slovakia	3.5%	4.5%	0.78	2.0%	4.2%	0.48	0.23	0.33	0.68
Slovenia	4.5%	12.8%	0.35	3.3%	3.8%	0.87	0.67	0.42	1.59
South Africa	4.1%	7.9%	0.52	6.8%	7.7%	0.88	0.70	0.61	1.16
South Korea	14.8%	24.4%	0.61	2.1%	2.8%	0.75	0.27	0.22	1.24
Spain	6.0%	7.4%	0.81	3.1%	3.3%	0.94	0.51	0.44	1.16
Sweden	2.8%	8.0%	0.35	3.1%	5.4%	0.57	0.42	0.49	0.87
Switzerland	5.0%	6.7%	0.75	3.3%	3.6%	0.92	0.34	0.33	1.02
Thailand	10.4%	13.3%	0.78	6.7%	7.0%	0.96	0.27	0.31	0.89
United Kingdom	4.9%	7.7%	0.64	3.5%	2.8%	1.25	0.34	0.21	1.62
United States	5.9%	7.6%	0.78	3.4%	9.5%	0.36	0.25	0.59	0.43
Uruguay	4.8%	10.0%	0.48	7.0%	8.8%	0.80	0.29	0.31	0.96
Venezuela	2.9%	6.0%	0.48	10.7%	12.6%	0.85	0.50	0.53	0.95
Sample Average	**6.2%**	**9.5%**	**0.65**	**4.6%**	**5.8%**	**0.79**	**0.42**	**0.42**	**1.00**
Ragion									
Central and East Asia	8.6%	15.7%	0.55	4.1%	4.7%	0.87	0.34	0.33	1.02
Europe & UK	6.1%	8.7%	0.70	2.9%	3.8%	0.76	0.43	0.42	1.04
Latin America and Caribbean	6.5%	10.5%	0.62	8.8%	9.2%	0.96	0.36	0.33	1.08
Middle East and Africa	5.4%	9.1%	0.59	6.3%	8.9%	0.71	0.57	0.58	0.99
North America	6.2%	8.1%	0.77	5.4%	10.4%	0.52	0.38	0.55	0.70
National Income									
High Income	5.8%	9.0%	0.64	4.0%	6.2%	0.65	0.38	0.43	0.88
Middle Income	6.4%	8.5%	0.75	3.8%	4.5%	0.84	0.43	0.40	1.07
Low Income	6.3%	12.1%	0.52	6.9%	8.1%	0.85	0.43	0.43	0.99

Table D2: Industry and business size, rates and gender ratios, GEM 2023

Country	Information and Communication Technology			Agriculture and Mining			Manufacturing and transportation			Wholesle retail			Business and Consumer Services		
	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
Brazil	-	3.7%	#ARG!	1.3%	14.7%	0.09	8.7%	16.1%	0.54	46.7%	40.8%	1.14	19.3%	16.1%	1.20
Canada	5.2%	9.7%	-	7.3%	6.2%	1.18	8.3%	10.3%	0.81	40.6%	35.9%	1.13	18.8%	26.9%	0.70
Chile	0.7%	2.4%	-	2.9%	12.0%	0.24	17.6%	13.3%	1.32	50.0%	39.7%	1.26	13.5%	21.4%	0.63
China	1.5%	3.4%	0.44	1.5%	15.3%	-	4.6%	5.1%	-	66.2%	59.3%	1.12	7.7%	6.8%	1.13
Colombia	-	0.5%	-	0.7%	3.9%	0.18	14.2%	11.3%	1.26	71.3%	59.6%	1.20	2.1%	8.4%	0.25
Croatia	4.3%	10.8%	-	7.6%	21.6%	-	9.8%	13.5%	0.73	25.0%	20.9%	1.20	32.6%	27.7%	1.18
Cyprus	2.9%	4.3%	0.67	5.7%	15.9%	0.36	4.3%	5.8%	0.74	37.1%	39.1%	0.95	24.3%	24.6%	0.99
Ecuador	0	0.6%	-	3.9%	11.8%	0.33	11.1%	11.1%	1.00	75.9%	63.7%	1.19	1.5%	6.4%	0.23
Estonia	4.3%	7.8%	0.55	8.7%	19.0%	0.46	22.8%	13.7%	1.66	13.0%	23.5%	0.55	19.6%	22.2%	0.88
France	5.7%	11.0%	0.52	7.4%	10.1%	0.73	10.9%	8.3%	1.31	24.0%	25.9%	0.93	21.7%	32.9%	0.66
Germany	1.5%	20.0%	0.08	4.5%	8.2%	0.55	1.5%	9.1%	0.16	38.8%	30.9%	1.26	22.4%	17.3%	1.29
Greece	-	6.8%	-	12.1%	8.1%	-	13.8%	10.8%	1.28	32.8%	35.1%	0.93	27.6%	16.2%	1.70
Guatemala	0.2%	1.1%	0.18	2.6%	7.0%	0.37	8.0%	12.9%	0.62	80.6%	67.7%	1.19	1.5%	6.1%	0.25
Hungary	1.8%	7.0%	0.26	8.9%	31.3%	0.28	7.1%	11.3%	0.63	25.0%	19.1%	1.31	23.2%	20.9%	1.11
India	-	-	-	16.7%	-	-	-	12.5%	-	66.7%	78.1%	0.85	-	3.1%	-
Iran	7.4%	7.1%	1.04	5.0%	9.3%	0.54	20.7%	14.3%	1.45	24.0%	43.6%	0.55	19.8%	12.9%	1.53
Israel	2.6%	6.5%	0.40	1.3%	3.3%	0.39	2.6%	6.5%	0.40	19.5%	29.3%	0.67	36.4%	32.6%	1.12
Italy	3.4%	8.7%	0.39	8.5%	9.8%	0.87	5.1%	10.9%	0.47	40.7%	30.4%	1.34	28.8%	25.0%	1.15
Jordan	0.9%	0.8%	1.13	1.8%	5.9%	0.31	28.4%	11.4%	2.49	39.4%	64.1%	0.61	3.7%	8.4%	0.44
Latvia	0.07	9.5%	0.76	4.1%	17.5%	0.23	10.3%	19.0%	0.54	20.6%	27.0%	0.76	18.6%	19.0%	0.98
Lithuania	1.4%	10.9%	0.13	9.9%	16.4%	0.60	12.7%	9.1%	1.40	16.9%	32.7%	0.52	32.4%	21.8%	1.49
Luxembourg	4.1%	6.5%	-	5.5%	7.6%	0.72	8.2%	7.6%	1.08	42.5%	51.1%	0.83	27.4%	21.7%	1.26
Mexico	-	-	-	1.8%	1.9%	0.95	37.7%	37.1%	1.02	45.5%	40.3%	1.13	4.8%	11.9%	0.40
Morocco	-	3.5%	-	1.4%	13.9%	0.10	7.2%	11.3%	0.64	63.8%	54.8%	1.16	2.9%	7.0%	0.41
Netherlands	2.0%	8.1%	0.25	7.8%	10.6%	0.74	10.8%	9.8%	1.10	34.3%	38.2%	0.90	14.7%	23.6%	0.62
Norway	2.1%	8.3%	-	4.3%	21.4%	0.20	6.4%	11.9%	0.54	19.1%	10.7%	1.79	38.3%	31.0%	1.24
Oman	0.01	-	-	-	8.7%	-	22.0%	17.5%	1.26	57.3%	44.4%	1.29	4.9%	8.7%	0.56
Panama	0.4%	1.9%	0.21	5.1%	14.3%	0.36	9.0%	12.5%	0.72	66.4%	50.8%	1.31	8.7%	16.8%	0.52
Poland	2.1%	2.7%	0.78	10.5%	11.6%	0.91	10.5%	12.5%	0.84	28.4%	32.1%	0.88	17.9%	24.1%	0.74
Puerto Rico	0.5%	2.5%	0.20	3.4%	8.8%	0.39	11.3%	12.6%	0.90	36.8%	37.0%	0.99	19.1%	24.4%	0.78
Qatar	1.2%	3.3%	0.36	2.4%	10.7%	0.22	9.4%	9.3%	1.01	38.8%	51.7%	0.75	25.9%	15.3%	1.69
Romania	0.02	2.9%	-	8.3%	22.1%	0.38	8.3%	22.1%	0.38	41.7%	29.4%	1.42	14.6%	11.8%	1.24
Saudi Arabia	-	0.2%	-	0.3%	1.4%	0.21	13.2%	4.5%	2.93	59.4%	73.2%	0.81	4.6%	8.6%	0.53

Table D2 (continued)

Country	Government and Social Services			No employees			1-5 employees			6-19 employees			20+ employees		
	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
Brazil	8.7%	2.76	58.0%	35.6%	1.63	35.2%	48.9%	0.72	4.5%	11.9%	0.38	2.3%	3.7%	0.62	1.20
Canada	11.0%	1.80	19.2%	15.9%	1.21	48.1%	35.4%	1.36	13.5%	22.0%	0.61	19.2%	26.8%	0.72	0.70
Chile	11.3%	1.35	45.9%	30.2%	1.52	48.4%	54.7%	0.88	4.9%	12.2%	0.40	0.8%	2.9%	0.28	0.63
China	10.2%	1.81	3.0%	-	-	75.8%	67.5%	1.12	9.1%	27.5%	0.33	0.12	5.0%	2.42	1.13
Colombia	16.3%	0.72	25.8%	10.0%	2.58	68.5%	85.7%	0.80	5.6%	2.9%	1.93	-	1.4%	-	0.25
Croatia	5.4%	3.83	-	5.4%	-	87.0%	75.7%	1.15	-	13.5%	-	13.0%	5.4%	2.41	1.18
Cyprus	10.1%	2.54	14.3%	12.1%	1.18	74.3%	60.6%	1.23	8.6%	19.7%	0.44	2.9%	7.6%	0.38	0.99
Ecuador	6.4%	1.13	63.6%	63.3%	1.00	35.6%	31.3%	1.14	-	3.9%	-	0.8%	1.6%	0.50	0.23
Estonia	13.7%	2.30	62.5%	51.7%	1.21	34.4%	35.0%	0.98	3.1%	10.0%	0.31	-	3.3%	-	0.88
France	11.8%	2.57	45.3%	35.7%	1.27	50.0%	53.6%	0.93	1.6%	7.1%	0.23	3.1%	3.6%	0.86	0.66
Germany	14.5%	2.16	33.3%	12.3%	2.71	33.3%	50.9%	0.65	12.1%	21.1%	0.57	0.21	15.8%	1.34	1.29
Greece	23.0%	0.60	18.2%	15.9%	1.14	59.1%	72.7%	0.81	18.2%	6.8%	2.68	0.05	4.5%	1.00	1.70
Guatemala	5.2%	1.37	62.3%	49.2%	1.27	36.4%	45.6%	0.80	0.9%	4.6%	0.20	0.00	0.5%	0.80	0.25
Hungary	10.4%	3.26	48.9%	38.8%	1.26	46.7%	41.8%	1.12	4.4%	14.9%	0.30	-	4.5%	-	1.11
India	6.3%	2.65	25.6%	24.7%	1.04	66.7%	72.8%	0.92	7.7%	1.2%	6.42	-	1.2%	-	-
Iran	12.9%	1.79	34.7%	37.0%	0.94	48.6%	50.6%	0.96	5.6%	9.9%	0.57	11.1%	2.5%	4.44	1.53
Israel	21.7%	1.74	58.8%	33.3%	1.77	26.5%	55.6%	0.48	11.8%	3.7%	3.19	2.9%	7.4%	0.39	1.12
Italy	15.2%	0.89	33.3%	23.8%	1.40	37.5%	66.7%	0.56	16.7%	4.8%	3.48	12.5%	4.8%	2.60	1.15
Jordan	9.3%	2.76	45.2%	30.6%	1.48	47.6%	65.3%	0.73	4.8%	2.1%	2.29	2.4%	-	-	0.44
Latvia	7.9%	4.96	50.0%	42.6%	1.17	43.5%	42.6%	1.02	6.5%	12.8%	0.51	-	2.1%	-	0.98
Lithuania	9.1%	2.95	23.9%	17.9%	1.34	54.3%	71.4%	0.76	15.2%	7.1%	2.14	6.5%	3.6%	1.81	1.49
Luxembourg	5.4%	2.28	27.3%	19.5%	1.40	51.5%	63.4%	0.81	12.1%	14.6%	0.83	9.1%	2.4%	3.79	1.26
Mexico	8.8%	1.16	7.4%	7.4%	1.00	74.1%	68.5%	1.08	13.0%	20.4%	0.64	0.06	3.7%	1.51	0.40
Morocco	9.6%	2.56	37.5%	42.5%	0.88	57.5%	52.1%	1.10	2.5%	2.7%	0.93	2.5%	2.7%	0.93	0.41
Netherlands	9.8%	3.10	24.4%	19.4%	1.26	60.0%	48.6%	1.23	8.9%	18.1%	0.49	6.7%	13.9%	0.48	0.62
Norway	16.7%	1.78	33.3%	30.8%	1.08	53.3%	51.9%	1.03	6.7%	9.6%	0.70	0.07	7.7%	0.87	1.24
Oman	20.6%	0.71	6.7%	-	-	86.7%	77.5%	1.12	-	20.0%	-	0.07	2.5%	2.68	0.56
Panama	3.7%	2.84	10.8%	6.4%	1.69	79.7%	80.0%	1.00	8.1%	12.7%	0.64	1.4%	0.9%	1.56	0.52
Poland	17.0%	1.79	20.5%	9.6%	2.14	74.4%	88.5%	0.84	5.1%	1.9%	2.68	-	-	-	0.74
Puerto Rico	14.7%	1.97	20.4%	18.1%	1.13	71.4%	50.0%	1.43	6.1%	20.8%	0.29	2.0%	11.1%	0.18	0.78
Qatar	9.7%	2.31	14.7%	5.2%	2.83	55.9%	37.0%	1.51	26.5%	32.6%	0.81	2.9%	25.2%	0.12	1.69
Romania	11.8%	2.12	17.4%	11.5%	1.51	60.9%	88.5%	0.69	21.7%	-	-	-	-	-	1.24
Saudi Arabia	12.1%	1.87	-	-	-	75.1%	77.6%	0.97	24.1%	20.5%	1.18	0.8%	1.8%	0.44	0.53

Table D2 (continued)

Country	Information and Communication Technology			Agriculture and Mining			Manufacturing and transportation			Wholesle retail			Business and Consumer Services		
	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
Slovakia	1.4%	8.3%	0.17	15.9%	22.9%	0.69	11.6%	10.1%	1.15	17.4%	22.9%	0.76	31.9%	23.9%	1.33
Slovenia	5.4%	7.1%	0.76	8.1%	11.4%	0.71	5.4%	14.3%	0.38	27.0%	27.1%	1.00	21.6%	30.0%	0.72
South Africa	-	0.6%	-	6.0%	14.7%	0.41	5.3%	9.6%	0.55	66.7%	63.8%	1.05	2.7%	4.5%	0.60
South Korea	2.7%	7.8%	-	4.1%	3.1%	1.32	11.0%	16.3%	0.67	60.3%	50.4%	1.20	6.8%	17.1%	0.40
Spain	5.7%	10.7%	0.53	4.2%	9.4%	0.45	6.2%	9.6%	0.65	36.6%	31.4%	1.17	32.0%	28.9%	1.11
Sweden	2.0%	10.2%	0.20	6.0%	12.5%	0.48	8.0%	5.7%	1.40	25.0%	33.0%	0.76	36.0%	23.9%	1.51
Switzerland	3.2%	8.0%	-	3.2%	9.3%	0.34	4.8%	8.0%	0.60	25.8%	17.3%	1.49	35.5%	40.0%	0.89
Thailand	-	0.5%	-	4.9%	13.1%	0.37	9.0%	12.6%	0.71	76.6%	64.9%	1.18	3.7%	5.0%	0.74
United Kingdom	3.8%	6.3%	0.60	-	8.3%	-	6.3%	6.3%	1.00	38.0%	27.1%	1.40	27.8%	34.4%	0.81
United States	7.9%	8.7%	-	1.2%	9.8%	0.12	13.9%	10.3%	1.35	43.0%	43.5%	0.99	18.8%	15.2%	1.24
Uruguay	0.5%	2.1%	-	7.8%	23.9%	-	16.6%	14.5%	1.14	50.7%	40.6%	1.25	6.8%	13.2%	0.52
Venezuela	-	0.9%	-	2.9%	9.3%	0.31	18.3%	14.7%	1.24	58.2%	59.1%	0.98	5.8%	6.7%	0.87
Sample Average	**2.1%**	**4.9%**	**0.43**	**4.1%**	**10.7%**	**0.38**	**11.6%**	**11.5%**	**1.01**	**48.8%**	**44.9%**	**1.09**	**15.3%**	**17.6%**	**0.87**
Region															
Central and East Asia	0.8%	2.9%	0.28	4.8%	9.5%	0.51	8.4%	12.5%	0.67	71.4%	61.0%	1.17	4.8%	8.6%	0.56
Europe & UK	4.2%	9.3%	0.45	6.1%	13.0%	0.47	8.3%	10.3%	0.81	31.2%	29.6%	1.05	27.8%	26.2%	1.06
Latin America and Caribbean	0.3%	1.6%	0.19	3.2%	10.9%	0.29	14.2%	14.4%	0.99	61.5%	51.5%	1.19	7.4%	13.0%	0.57
Middle East and Africa	1.3%	1.9%	0.68	2.0%	6.8%	0.29	13.7%	8.8%	1.56	50.2%	59.8%	0.84	9.8%	10.8%	0.91
North America	6.9%	9.5%	0.73	3.5%	7.9%	0.44	11.9%	10.1%	1.18	42.3%	40.2%	1.05	18.5%	20.4%	0.91
National Income															
High Income	3.0%	6.5%	0.46	3.7%	7.7%	0.48	9.9%	8.3%	1.19	41.5%	45.5%	0.91	19.0%	20.0%	0.95
Middle Income	2.9%	6.3%	0.46	5.3%	13.8%	0.38	11.0%	11.9%	0.92	39.5%	34.3%	1.15	21.7%	23.0%	0.94
Low Income	0.5%	1.5%	0.33	3.0%	9.3%	0.32	13.6%	13.8%	0.99	65.3%	59.3%	1.10	4.8%	7.9%	0.61

Table D2 (continued)

Country	Government and Social Services			No employees			1-5 employees			6-19 employees			20+ employees		
	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
Slovakia	21.7%	11.9%	1.82	30.8%	35.3%	0.87	34.6%	35.3%	0.98	34.6%	17.6%	1.97	-	11.8%	-
Slovenia	32.4%	10.0%	3.24	60.0%	38.7%	1.55	30.0%	41.9%	0.72	5.0%	19.4%	0.26	5.0%	-	
South Africa	19.3%	6.8%	2.84	4.9%	1.0%	4.90	84.1%	73.5%	1.14	6.1%	13.7%	0.45	4.9%	11.8%	0.42
South Korea	15.1%	5.4%	2.80	-	3.4%	-	91.7%	69.0%	1.33	8.3%	27.6%	0.30	-	-	-
Spain	15.3%	9.9%	1.55	51.2%	49.8%	1.03	41.3%	38.4%	1.08	6.5%	9.6%	0.68	1.0%	2.2%	0.45
Sweden	23.0%	14.8%	1.55	49.1%	34.9%	1.41	36.4%	54.7%	0.67	5.5%	5.8%	0.95	9.1%	4.7%	1.94
Switzerland	27.4%	17.3%	1.58	37.0%	35.9%	1.03	44.4%	46.2%	0.96	11.1%	15.4%	0.72	-	2.6%	-
Thailand	5.7%	4.1%	1.39	39.8%	25.5%	1.56	49.2%	60.4%	0.81	7.8%	8.5%	0.92	3.1%	5.7%	0.54
United Kingdom	24.1%	17.7%	1.36	44.4%	45.5%	0.98	48.1%	39.4%	1.22	7.4%	6.1%	1.21	-	9.1%	-
United States	15.2%	12.5%	1.22	26.9%	19.4%	1.39	49.3%	46.9%	1.05	7.5%	17.3%	0.43	16.4%	16.3%	1.01
Uruguay	17.6%	5.6%	3.14	46.8%	25.9%	1.81	44.7%	59.3%	0.75	8.5%	13.0%	0.65	-	1.9%	-
Venezuela	14.9%	9.3%	1.60	37.5%	25.8%	1.45	60.7%	68.2%	0.89	1.8%	4.5%	0.40	-	1.5%	-
Sample Average	**18.1%**	**10.3%**	**1.76**	**36.3%**	**27.4%**	**1.32**	**52.3%**	**55.3%**	**0.95**	**8.2%**	**12.3%**	**0.67**	**3.2%**	**4.9%**	**0.65**
Region															
Central and East Asia	9.9%	5.4%	1.83	29.2%	18.7%	1.56	59.0%	66.1%	0.89	8.0%	11.7%	0.68	3.8%	3.5%	1.09
Europe & UK	22.5%	11.6%	1.94	42.0%	36.6%	1.15	46.6%	48.4%	0.96	8.0%	10.7%	0.75	3.4%	4.2%	0.81
Latin America and Caribbean	13.4%	8.5%	1.58	44.9%	32.2%	1.39	49.9%	55.5%	0.90	4.0%	9.8%	0.41	1.1%	2.5%	0.44
Middle East and Africa	23.0%	11.8%	1.95	15.5%	11.7%	1.32	66.2%	66.0%	1.00	15.1%	16.4%	0.92	3.3%	6.0%	0.55
North America	16.9%	11.9%	1.42	23.3%	17.8%	1.31	49.2%	41.7%	1.18	10.0%	19.4%	0.52	17.5%	21.1%	0.83
National Income															
High Income	22.9%	12.0%	1.91	21.8%	14.9%	1.46	57.1%	58.1%	0.98	14.4%	18.2%	0.79	6.6%	8.8%	0.75
Middle Income	19.7%	10.7%	1.84	40.9%	34.3%	1.19	49.9%	51.2%	0.97	7.6%	11.3%	0.67	1.6%	3.2%	0.50
Low Income	12.8%	8.1%	1.58	41.5%	31.8%	1.31	51.4%	57.6%	0.89	4.4%	7.4%	0.59	2.7%	3.1%	0.87

Table D3: High-potential activity, rates and gender ratios, GEM 2023

Country	Expecting 20+ new hires			Innovation			Women export >25%		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Brazil	9.8%	20.3%	0.49	18.7%	29.6%	0.63	0.7%	2.3%	0.30
Canada	19.8%	36.2%	0.55	36.7%	47.6%	0.77	17.0%	23.7%	0.72
Chile	8.0%	18.2%	0.44	70.1%	70.7%	0.99	1.2%	4.8%	0.25
China	15.5%	10.0%	1.55	23.1%	18.6%	1.24	6.3%	1.7%	3.75
Colombia	7.0%	8.0%	0.88	34.3%	36.5%	0.94	2.6%	1.0%	2.51
Croatia	7.9%	12.4%	0.64	45.0%	52.8%	0.85	21.3%	26.2%	0.81
Cyprus	6.8%	17.3%	0.40	35.9%	45.9%	0.78	21.6%	22.7%	0.95
Ecuador	0.9%	2.8%	0.32	19.7%	21.9%	0.90	0.6%	1.3%	0.48
Estonia	7.5%	12.8%	0.59	29.9%	31.3%	0.96	20.5%	34.6%	0.59
France	5.7%	17.2%	0.33	41.7%	52.1%	0.80	17.4%	17.1%	1.02
Germany	19.6%	15.1%	1.30	33.3%	33.3%	1.00	19.1%	27.1%	0.70
Greece	10.9%	10.7%	1.01	39.0%	34.2%	1.14	27.6%	13.7%	2.01
Guatemala	2.1%	8.2%	0.26	46.9%	49.9%	0.94	0.6%	2.0%	0.32
Hungary	0.0%	12.1%	0.00	30.6%	44.9%	0.68	4.6%	11.1%	0.42
India	2.3%	1.9%	1.22	29.1%	32.9%	0.89	2.2%	1.0%	2.33
Iran	14.7%	16.7%	0.88	28.0%	19.8%	1.42	2.4%	1.9%	1.27
Israel	10.5%	18.4%	0.57	30.4%	31.6%	0.96	15.0%	12.2%	1.23
Italy	6.0%	4.8%	1.25	57.1%	63.7%	0.90	11.5%	9.8%	1.18
Jordan	4.7%	4.6%	1.02	36.4%	20.2%	1.80	4.0%	6.3%	0.64
Latvia	8.0%	19.4%	0.41	24.0%	34.6%	0.69	14.9%	33.3%	0.45
Lithuania	8.7%	12.1%	0.72	8.1%	3.5%	2.31	7.0%	1.8%	3.87
Luxembourg	10.3%	10.9%	0.95	59.0%	51.4%	1.15	30.9%	45.7%	0.68
Mexico	7.7%	14.3%	0.54	52.0%	52.0%	1.00	3.7%	5.4%	0.67
Morocco	9.5%	14.5%	0.65	20.3%	20.0%	1.01	2.9%	1.7%	1.72
Netherlands	12.7%	13.6%	0.93	51.9%	36.6%	1.42	14.0%	20.5%	0.68
Norway	2.5%	16.3%	0.15	20.8%	35.6%	0.59	11.4%	16.7%	0.68
Oman	12.1%	14.0%	0.86	22.2%	22.3%	1.00	5.4%	4.8%	1.14
Panama	7.2%	9.4%	0.77	54.3%	52.8%	1.03	1.8%	8.1%	0.23
Poland	2.4%	2.4%	1.02	31.6%	37.5%	0.84	3.2%	1.8%	1.77
Puerto Rico	7.4%	15.7%	0.47	35.6%	47.5%	0.75	13.4%	7.4%	1.82
Qatar	29.5%	51.8%	0.57	47.9%	47.5%	1.01	12.4%	11.7%	1.06
Romania	13.2%	6.3%	2.11	22.4%	17.1%	1.31	7.3%	7.7%	0.95
Saudi Arabia	13.3%	9.1%	1.47	35.3%	27.5%	1.28	3.0%	6.8%	0.45

Table D3 (continued)

Country	Local market			National market			International market		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Brazil	54.4%	43.5%	1.25	43.6%	50.7%	0.86	2.0%	5.4%	0.37
Canada	47.2%	32.0%	1.48	20.8%	24.2%	0.86	26.4%	36.6%	0.72
Chile	74.1%	69.9%	1.06	22.3%	22.2%	1.01	3.3%	6.3%	0.53
China	56.9%	65.0%	0.88	29.2%	28.3%	1.03	12.3%	5.0%	2.46
Colombia	44.9%	45.1%	1.00	45.6%	43.1%	1.06	6.7%	11.3%	0.60
Croatia	33.0%	25.3%	1.30	34.0%	29.0%	1.17	30.0%	42.0%	0.71
Cyprus	20.8%	12.9%	1.61	37.7%	44.2%	0.85	41.6%	41.5%	1.00
Ecuador	69.9%	64.8%	1.08	26.0%	28.3%	0.92	2.7%	6.0%	0.45
Estonia	17.8%	7.1%	2.51	33.7%	36.7%	0.92	48.5%	53.3%	0.91
France	33.5%	38.6%	0.87	29.0%	27.1%	1.07	34.7%	31.8%	1.09
Germany	38.5%	25.6%	1.50	21.8%	28.0%	0.78	33.3%	45.6%	0.73
Greece	33.9%	42.1%	0.81	15.3%	17.1%	0.89	50.8%	35.5%	1.43
Guatemala	64.0%	48.9%	1.31	34.5%	46.3%	0.74	1.3%	4.6%	0.28
Hungary	36.1%	18.9%	1.91	33.3%	51.2%	0.65	30.6%	29.1%	1.05
India	76.6%	70.0%	1.10	8.8%	18.4%	0.48	2.2%	2.7%	0.81
Iran	26.5%	23.5%	1.13	54.5%	67.3%	0.81	16.7%	8.6%	1.93
Israel	20.3%	17.5%	1.16	49.4%	59.8%	0.83	24.1%	18.6%	1.30
Italy	36.5%	39.8%	0.92	23.8%	26.2%	0.91	30.2%	30.1%	1.00
Jordan	33.9%	29.2%	1.16	49.5%	56.4%	0.88	15.6%	14.0%	1.11
Latvia	13.4%	9.9%	1.35	47.4%	37.4%	1.27	38.1%	50.4%	0.76
Lithuania	43.2%	39.0%	1.11	37.8%	50.8%	0.74	17.6%	10.2%	1.73
Luxembourg	12.8%	7.3%	1.74	33.7%	25.7%	1.31	47.7%	60.6%	0.79
Mexico	58.0%	45.4%	1.28	28.4%	34.5%	0.82	9.1%	17.2%	0.53
Morocco	65.2%	50.8%	1.28	20.3%	29.2%	0.70	2.9%	5.8%	0.50
Netherlands	24.5%	18.8%	1.30	37.7%	44.4%	0.85	34.0%	34.6%	0.98
Norway	27.1%	28.9%	0.94	41.7%	40.0%	1.04	27.1%	23.3%	1.16
Oman	41.5%	38.9%	1.07	40.2%	42.0%	0.96	18.3%	14.5%	1.26
Panama	32.0%	19.3%	1.66	56.3%	57.9%	0.97	9.5%	17.5%	0.54
Poland	60.0%	51.8%	1.16	35.8%	40.2%	0.89	4.2%	8.0%	0.52
Puerto Rico	12.4%	10.5%	1.19	49.8%	56.9%	0.87	36.4%	30.1%	1.21
Qatar	25.5%	18.6%	1.37	41.8%	49.7%	0.84	27.6%	25.9%	1.06
Romania	62.0%	46.5%	1.33	20.0%	40.8%	0.49	14.0%	9.9%	1.42
Saudi Arabia	45.7%	49.6%	0.92	48.5%	42.8%	1.13	5.8%	7.5%	0.78

Table D3 (continued)

Country	Expecting 20+ new hires			Innovation			Women export >25%		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Slovakia	0.0%	12.4%	0.00	36.4%	37.8%	0.96	7.2%	11.9%	0.61
Slovenia	3.6%	11.8%	0.30	40.5%	23.0%	1.76	20.0%	28.1%	0.71
South Africa	15.6%	16.1%	0.97	48.0%	47.5%	1.01	12.7%	13.4%	0.95
South Korea	-	-	-	21.3%	18.6%	1.15	0.0%	3.1%	0.00
Spain	2.6%	6.5%	0.40	41.3%	39.7%	1.04	15.9%	19.5%	0.82
Sweden	10.4%	15.1%	0.69	44.8%	48.8%	0.92	17.6%	21.9%	0.80
Switzerland	6.1%	13.9%	0.44	42.9%	45.0%	0.95	13.8%	23.4%	0.59
Thailand	13.5%	15.3%	0.88	35.6%	45.3%	0.79	8.5%	8.6%	0.98
United Kingdom	13.9%	13.8%	1.01	37.5%	31.3%	1.20	23.0%	17.2%	1.34
United States	8.8%	28.1%	0.31	34.4%	42.4%	0.81	11.9%	23.7%	0.50
Uruguay	5.7%	9.3%	0.61	42.1%	42.7%	0.99	2.0%	3.2%	0.62
Venezuela	2.9%	8.7%	0.33	35.7%	28.3%	1.26	1.1%	3.9%	0.27
Sample Average	**7.3%**	**12.9%**	**0.57**	**39.4%**	**39.8%**	**0.99**	**8.1%**	**11.3%**	**0.72**
Region									
Central and East Asia	8.8%	6.7%	1.31	30.3%	33.0%	0.92	5.4%	4.0%	1.33
Europe & UK	5.8%	11.0%	0.52	38.9%	40.4%	0.96	15.8%	20.1%	0.79
Latin America and Caribbean	5.3%	11.1%	0.48	43.6%	45.7%	0.95	2.3%	3.9%	0.60
Middle East and Africa	13.8%	17.8%	0.78	35.2%	30.6%	1.15	5.9%	7.5%	0.80
North America	12.2%	31.3%	0.39	35.3%	44.8%	0.79	13.9%	23.7%	0.59
National Income									
High Income	11.4%	18.6%	0.61	39.7%	39.7%	1.00	12.4%	16.4%	0.76
Middle Income	5.6%	11.2%	0.50	42.9%	42.9%	1.00	10.1%	13.7%	0.74
Low Income	6.4%	9.7%	0.66	34.9%	34.9%	1.00	3.1%	3.6%	0.84

Table D3 (continued)

Country	Local market			National market			International market		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Slovakia	31.5%	23.0%	1.37	37.1%	37.3%	0.99	28.1%	38.9%	0.72
Slovenia	21.1%	6.8%	3.12	31.6%	36.5%	0.87	44.7%	56.8%	0.79
South Africa	43.4%	33.3%	1.30	41.4%	47.3%	0.88	13.8%	17.7%	0.78
South Korea	2.7%	4.6%	0.58	84.0%	83.1%	1.01	13.3%	11.5%	1.16
Spain	35.2%	35.8%	0.98	27.1%	25.1%	1.08	30.2%	32.2%	0.94
Sweden	20.6%	18.5%	1.12	48.1%	39.8%	1.21	24.4%	31.8%	0.77
Switzerland	35.1%	27.4%	1.28	23.0%	34.5%	0.67	33.8%	35.7%	0.95
Thailand	8.0%	6.3%	1.27	69.6%	68.9%	1.01	22.4%	24.8%	0.90
United Kingdom	18.5%	21.0%	0.88	42.0%	44.0%	0.95	37.0%	34.0%	1.09
United States	29.3%	24.9%	1.18	46.2%	38.2%	1.21	21.7%	31.3%	0.69
Uruguay	44.0%	36.7%	1.20	33.5%	47.7%	0.70	12.4%	11.4%	1.09
Venezuela	53.6%	47.4%	1.13	34.1%	40.9%	0.83	9.0%	7.8%	1.16
Sample Average	**41.6%**	**35.3%**	**1.18**	**37.0%**	**39.8%**	**0.93**	**18.2%**	**21.5%**	**0.85**
Region									
Central and East Asia	31.1%	34.0%	0.91	50.9%	50.2%	1.02	14.6%	12.4%	1.17
Europe & UK	32.0%	27.9%	1.14	31.7%	32.7%	0.97	31.6%	35.1%	0.90
Latin America and Caribbean	54.1%	45.4%	1.19	36.0%	42.0%	0.86	7.8%	10.6%	0.73
Middle East and Africa	39.3%	35.5%	1.11	45.5%	48.2%	0.94	13.1%	13.5%	0.97
North America	36.7%	28.2%	1.30	36.0%	31.6%	1.14	23.7%	33.8%	0.70
National Income									
High Income	31.9%	29.2%	1.09	40.1%	39.8%	1.01	24.5%	27.4%	0.89
Middle Income	39.1%	32.9%	1.19	34.0%	36.6%	0.93	23.2%	26.5%	0.88
Low Income	51.3%	44.3%	1.16	38.4%	43.9%	0.87	7.9%	9.6%	0.83

Table D4: High-potential entrepreneurship, composition, GEM 2023

Country	Expecting 20+ hires in 5Y		Innovation		Export >25%		Local market		National market		International market	
	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)
Brazil	24.1%	75.9%	29.8%	70.2%	16.7%	83.3%	45.5%	54.5%	36.5%	63.5%	20.0%	80.0%
Canada	25.4%	74.6%	33.1%	66.9%	30.5%	69.5%	48.8%	51.2%	35.6%	64.4%	31.7%	68.3%
Chile	28.4%	71.6%	49.3%	50.7%	19.2%	80.8%	51.1%	48.9%	49.8%	50.2%	34.1%	65.9%
China	64.3%	35.7%	57.7%	42.3%	80.0%	20.0%	48.7%	51.3%	52.8%	47.2%	72.7%	27.3%
Colombia	54.3%	45.7%	56.5%	43.5%	77.8%	22.2%	58.0%	42.0%	59.4%	40.6%	45.2%	54.8%
Croatia	29.4%	70.6%	34.4%	65.6%	32.7%	67.3%	44.6%	55.4%	42.0%	58.0%	30.6%	69.4%
Cyprus	17.2%	82.8%	29.5%	70.5%	33.3%	66.7%	45.7%	54.3%	30.9%	69.1%	34.4%	65.6%
Ecuador	25.0%	75.0%	48.5%	51.5%	33.3%	66.7%	53.2%	46.8%	49.2%	50.8%	32.1%	67.9%
Estonia	28.6%	71.4%	36.3%	63.8%	26.6%	73.4%	60.0%	40.0%	35.4%	64.6%	35.3%	64.7%
France	20.5%	79.5%	37.4%	62.6%	42.6%	57.4%	39.3%	60.7%	44.3%	55.7%	44.9%	55.1%
Germany	38.5%	61.5%	38.8%	61.2%	28.9%	71.1%	48.4%	51.6%	32.7%	67.3%	31.3%	68.7%
Greece	45.5%	54.5%	46.9%	53.1%	61.5%	38.5%	38.5%	61.5%	40.9%	59.1%	52.6%	47.4%
Guatemala	17.3%	82.7%	44.4%	55.6%	21.4%	78.6%	52.8%	47.2%	38.8%	61.2%	19.4%	80.6%
Hungary	-	100.0%	27.8%	72.2%	18.8%	81.3%	52.0%	48.0%	27.0%	73.0%	37.3%	62.7%
India	42.9%	57.1%	36.1%	63.9%	60.0%	40.0%	40.2%	59.8%	22.6%	77.4%	33.3%	66.7%
Iran	37.8%	62.2%	53.6%	46.4%	50.0%	50.0%	47.9%	52.1%	39.8%	60.2%	61.1%	38.9%
Israel	30.8%	69.2%	44.4%	55.6%	50.0%	50.0%	48.5%	51.5%	40.2%	59.8%	51.4%	48.6%
Italy	42.9%	57.1%	35.6%	64.4%	40.0%	60.0%	35.9%	64.1%	35.7%	64.3%	38.0%	62.0%
Jordan	31.3%	68.8%	44.9%	55.1%	21.1%	78.9%	34.3%	65.7%	28.3%	71.7%	33.3%	66.7%
Latvia	24.0%	76.0%	33.8%	66.2%	26.0%	74.0%	50.0%	50.0%	48.4%	51.6%	35.9%	64.1%
Lithuania	50.0%	50.0%	75.0%	25.0%	83.3%	16.7%	58.2%	41.8%	48.3%	51.7%	68.4%	31.6%
Luxembourg	41.2%	58.8%	46.7%	53.3%	32.8%	67.2%	57.9%	42.1%	50.9%	49.1%	38.3%	61.7%
Mexico	34.3%	65.7%	50.3%	49.7%	40.0%	60.0%	56.4%	43.6%	45.5%	54.5%	34.8%	65.2%
Morocco	33.3%	66.7%	36.8%	63.2%	50.0%	50.0%	42.5%	57.5%	28.6%	71.4%	22.2%	77.8%
Netherlands	40.0%	60.0%	52.9%	47.1%	33.3%	66.7%	51.0%	49.0%	40.4%	59.6%	43.9%	56.1%
Norway	7.1%	92.9%	23.8%	76.2%	26.3%	73.7%	33.3%	66.7%	35.7%	64.3%	38.2%	61.8%
Oman	33.3%	66.7%	39.0%	61.0%	40.0%	60.0%	40.0%	60.0%	37.5%	62.5%	44.1%	55.9%
Panama	40.4%	59.6%	45.9%	54.1%	16.1%	83.9%	58.0%	42.0%	44.7%	55.3%	31.0%	69.0%
Poland	50.0%	50.0%	41.7%	58.3%	60.0%	40.0%	49.6%	50.4%	43.0%	57.0%	30.8%	69.2%
Puerto Rico	28.0%	72.0%	39.6%	60.4%	60.5%	39.5%	51.0%	49.0%	43.3%	56.7%	51.4%	48.6%
Qatar	13.9%	86.1%	23.1%	76.9%	23.9%	76.1%	29.1%	70.9%	20.1%	79.9%	24.1%	75.9%
Romania	62.5%	37.5%	47.8%	52.2%	37.5%	62.5%	48.4%	51.6%	25.6%	74.4%	50.0%	50.0%
Saudi Arabia	48.1%	51.9%	44.6%	55.4%	22.2%	77.8%	36.6%	63.4%	41.5%	58.5%	32.9%	67.1%

Table D4 (continued)

Country	Local market		National market		International market		Local market		National market		International market	
	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)
Slovakia	-	100.0%	40.0%	60.0%	30.0%	70.0%	49.1%	50.9%	41.3%	58.8%	33.8%	66.2%
Slovenia	14.3%	85.7%	46.9%	53.1%	28.0%	72.0%	61.5%	38.5%	30.8%	69.2%	28.8%	71.2%
South Africa	43.8%	56.3%	45.9%	54.1%	42.9%	57.1%	51.6%	48.4%	41.7%	58.3%	38.9%	61.1%
South Korea	-	-	40.0%	60.0%	-	100.0%	25.0%	75.0%	36.8%	63.2%	40.0%	60.0%
Spain	24.1%	75.9%	45.5%	54.5%	39.2%	60.8%	44.2%	55.8%	46.5%	53.5%	43.1%	56.9%
Sweden	29.4%	70.6%	36.4%	63.6%	32.8%	67.2%	40.9%	59.1%	42.9%	57.1%	32.3%	67.7%
Switzerland	23.1%	76.9%	45.5%	54.5%	30.8%	69.2%	53.1%	46.9%	37.0%	63.0%	45.5%	54.5%
Thailand	50.8%	49.2%	46.8%	53.2%	52.5%	47.5%	58.8%	41.2%	53.2%	46.8%	50.5%	49.5%
United Kingdom	45.5%	54.5%	49.2%	50.8%	51.5%	48.5%	41.7%	58.3%	43.6%	56.4%	46.9%	53.1%
United States	21.9%	78.1%	40.6%	59.4%	29.2%	70.8%	50.0%	50.0%	50.6%	49.4%	37.0%	63.0%
Uruguay	34.5%	65.5%	46.8%	53.2%	36.4%	63.6%	51.4%	48.6%	38.3%	61.7%	49.1%	50.9%
Venezuela	23.1%	76.9%	53.6%	46.4%	20.0%	80.0%	50.7%	49.3%	43.1%	56.9%	51.4%	48.6%
Sample Average	**30.3%**	**69.7%**	**43.3%**	**56.7%**	**35.4%**	**64.6%**	**47.6%**	**52.4%**	**41.8%**	**58.2%**	**39.5%**	**60.5%**
Region												
Central and East Asia	52.4%	47.6%	43.7%	56.3%	52.8%	47.2%	43.2%	56.8%	45.7%	54.3%	49.4%	50.6%
Europe & UK	27.6%	72.4%	41.2%	58.8%	36.0%	64.0%	45.4%	54.6%	41.4%	58.6%	39.6%	60.4%
Latin America and Caribbean	30.3%	69.7%	47.0%	53.0%	35.8%	64.2%	52.6%	47.4%	44.4%	55.6%	40.5%	59.5%
Middle East and Africa	30.8%	69.2%	40.5%	59.5%	31.4%	68.6%	39.4%	60.6%	35.7%	64.3%	36.3%	63.7%
North America	23.5%	76.5%	37.2%	62.8%	29.8%	70.2%	49.3%	50.7%	46.1%	53.9%	34.4%	65.6%
National Income												
High Income	27.1%	72.9%	39.0%	61.0%	31.7%	68.3%	41.2%	58.8%	39.1%	60.9%	36.1%	63.9%
Middle Income	29.3%	70.7%	44.0%	56.0%	37.0%	63.0%	48.6%	51.4%	42.6%	57.4%	41.4%	58.6%
Low Income	36.3%	63.7%	46.5%	53.5%	42.3%	57.7%	50.2%	49.8%	43.2%	56.8%	41.9%	58.1%
National Income Slovekia Level B												
High Income	27.1%	72.9%	39.0%	61.0%	31.7%	68.3%	41.2%	58.8%	39.1%	60.9%	36.1%	63.9%
Middle Income	29.3%	70.7%	44.0%	56.0%	37.0%	63.0%	48.6%	51.4%	42.6%	57.4%	41.4%	58.6%
Low Income	36.3%	63.7%	46.5%	53.5%	42.3%	57.7%	50.2%	49.8%	43.2%	56.8%	41.9%	58.1%

Table D5: Entrepreneurial perceptions, rates and gender ratios, GEM 2023

Country	Easy to start a business			Opportunity recognition			Startup skills			No fear of failure		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Brazil	42.3%	43.9%	0.96	66.4%	64.4%	1.03	60.9%	71.0%	0.86	44.1%	54.1%	0.82
Canada	59.9%	67.5%	0.89	58.5%	66.5%	0.88	49.2%	64.0%	0.77	52.7%	56.9%	0.93
Chile	47.1%	52.9%	0.89	56.7%	62.2%	0.91	71.8%	79.6%	0.90	42.5%	48.9%	0.87
China	30.0%	32.5%	0.92	69.7%	68.7%	1.01	49.2%	61.7%	0.80	62.7%	69.4%	0.90
Colombia	44.6%	47.9%	0.93	60.5%	59.3%	1.02	70.4%	74.3%	0.95	38.1%	38.8%	0.98
Croatia	35.4%	46.5%	0.76	60.8%	67.3%	0.90	69.5%	77.5%	0.90	44.2%	52.0%	0.85
Cyprus	46.8%	53.1%	0.88	37.1%	42.4%	0.88	54.7%	66.4%	0.82	55.1%	59.7%	0.92
Ecuador	43.9%	49.0%	0.90	53.7%	54.9%	0.98	72.4%	77.9%	0.93	36.1%	39.8%	0.91
Estonia	71.4%	82.8%	0.86	47.4%	51.6%	0.92	38.6%	55.3%	0.70	44.1%	55.7%	0.79
France	46.2%	54.7%	0.84	46.4%	55.1%	0.84	44.0%	55.0%	0.80	46.3%	53.6%	0.86
Germany	30.8%	40.7%	0.76	37.6%	45.0%	0.84	30.5%	53.5%	0.57	37.9%	49.0%	0.77
Greece	32.8%	36.5%	0.90	46.8%	43.7%	1.07	48.8%	58.8%	0.83	56.8%	62.6%	0.91
Guatemala	47.0%	48.2%	0.98	71.2%	72.5%	0.98	75.0%	83.0%	0.90	36.0%	47.2%	0.76
Hungary	38.5%	52.7%	0.73	27.5%	28.9%	0.95	30.9%	45.8%	0.67	38.7%	45.8%	0.84
India	77.6%	84.3%	0.92	79.0%	85.9%	0.92	75.3%	87.6%	0.86	59.5%	54.8%	1.09
Iran	12.9%	14.3%	0.90	27.7%	25.5%	1.09	53.0%	68.4%	0.77	45.5%	44.3%	1.03
Israel	15.7%	15.5%	1.01	48.3%	46.1%	1.05	30.7%	43.4%	0.71	49.7%	54.4%	0.91
Italy	15.3%	20.2%	0.76	30.4%	37.0%	0.82	45.2%	56.6%	0.80	47.6%	56.6%	0.84
Jordan	39.2%	34.3%	1.14	55.3%	41.3%	1.34	67.4%	78.1%	0.86	52.2%	56.8%	0.92
Latvia	27.7%	37.8%	0.73	46.3%	39.7%	1.17	46.8%	58.0%	0.81	36.1%	47.4%	0.76
Lithuania	41.7%	43.0%	0.97	58.0%	64.7%	0.90	53.2%	61.4%	0.87	34.9%	41.6%	0.84
Luxembourg	54.7%	65.7%	0.83	45.8%	52.4%	0.87	42.1%	57.9%	0.73	48.6%	49.0%	0.99
Mexico	48.9%	51.9%	0.94	61.3%	61.8%	0.99	67.2%	71.4%	0.94	41.2%	43.4%	0.95
Morocco	46.7%	56.0%	0.83	71.0%	70.4%	1.01	61.3%	75.1%	0.82	29.9%	38.4%	0.78
Netherlands	79.1%	81.5%	0.97	63.8%	70.5%	0.90	39.9%	52.2%	0.76	39.4%	41.7%	0.94
Norway	75.3%	77.9%	0.97	64.6%	71.0%	0.91	42.1%	66.9%	0.63	42.3%	42.4%	1.00
Oman	55.1%	58.3%	0.95	72.7%	64.9%	1.12	74.1%	71.6%	1.03	31.4%	35.1%	0.89
Panama	52.2%	55.4%	0.94	48.6%	56.3%	0.86	74.2%	79.0%	0.94	40.1%	38.7%	1.04
Poland	83.7%	82.7%	1.01	74.6%	72.7%	1.03	45.2%	50.9%	0.89	54.4%	57.3%	0.95
Puerto Rico	27.9%	27.8%	1.00	63.3%	63.3%	1.00	67.2%	75.8%	0.89	38.5%	45.2%	0.85
Qatar	54.0%	64.4%	0.84	73.4%	67.3%	1.09	58.9%	70.2%	0.84	38.9%	42.6%	0.91
Romania	37.3%	34.7%	1.07	57.2%	54.2%	1.06	53.1%	52.2%	1.02	57.2%	60.8%	0.94
Saudi Arabia	91.6%	93.0%	0.98	93.2%	93.2%	1.00	88.9%	92.3%	0.96	56.3%	59.3%	0.95

Table D5 (continued)

Country	Easy to start a business			Opportunity recognition			Startup skills			No fear of failure		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Slovakia	19.6%	28.9%	0.68	30.6%	35.1%	0.87	45.4%	56.1%	0.81	42.2%	54.0%	0.78
Slovenia	58.4%	66.6%	0.88	46.5%	53.5%	0.87	52.3%	72.7%	0.72	42.8%	52.5%	0.82
South Africa	62.5%	61.2%	1.02	61.7%	66.7%	0.93	66.2%	72.4%	0.91	51.5%	52.6%	0.98
South Korea	35.4%	42.0%	0.84	30.8%	44.0%	0.70	46.1%	63.2%	0.73	35.9%	33.2%	1.08
Spain	27.0%	32.7%	0.83	27.8%	33.5%	0.83	47.6%	58.7%	0.81	47.0%	50.5%	0.93
Sweden	79.9%	79.5%	1.01	67.3%	70.3%	0.96	37.5%	56.3%	0.67	40.5%	44.8%	0.90
Switzerland	64.4%	70.0%	0.92	43.4%	61.1%	0.71	37.5%	52.0%	0.72	43.5%	52.0%	0.84
Thailand	77.4%	78.9%	0.98	79.2%	79.7%	0.99	72.3%	81.0%	0.89	45.2%	51.6%	0.88
United Kingdom	59.8%	66.7%	0.90	44.9%	49.6%	0.91	46.2%	59.8%	0.77	56.7%	65.7%	0.86
United States	52.8%	58.7%	0.90	50.2%	57.0%	0.88	43.0%	54.6%	0.79	46.1%	49.5%	0.93
Uruguay	37.3%	42.6%	0.88	54.1%	62.5%	0.87	65.4%	74.6%	0.88	52.2%	54.9%	0.95
Venezuela	44.9%	46.9%	0.96	63.8%	67.9%	0.94	81.7%	86.5%	0.94	30.1%	34.8%	0.86
Sample Average	**45.9%**	**51.3%**	**0.89**	**51.7%**	**55.2%**	**0.94**	**54.4%**	**65.2%**	**0.83**	**45.6%**	**50.2%**	**0.91**
Region												
Central and East Asia	59.9%	64.5%	0.93	68.1%	72.5%	0.94	64.4%	76.0%	0.85	51.7%	52.2%	0.99
Europe & UK	43.4%	49.3%	0.88	42.5%	47.0%	0.90	45.9%	57.8%	0.79	46.6%	51.8%	0.90
Latin America and Caribbean	44.0%	47.0%	0.94	60.8%	63.1%	0.96	70.9%	77.8%	0.91	39.6%	44.8%	0.88
Middle East and Africa	49.7%	54.9%	0.91	64.7%	63.6%	1.02	64.9%	74.4%	0.87	45.0%	48.5%	0.93
North America	55.4%	61.8%	0.90	51.7%	60.7%	0.85	45.4%	58.1%	0.78	48.5%	52.2%	0.93
National Income												
High Income	45.3%	51.8%	0.87	47.4%	52.6%	0.90	50.1%	61.7%	0.81	46.0%	50.9%	0.90
Middle Income	49.6%	51.2%	0.97	65.1%	66.2%	0.98	69.2%	76.0%	0.91	42.8%	47.8%	0.90
Low Income	44.4%	47.9%	0.93	59.2%	56.7%	1.04	63.9%	77.1%	0.83	46.6%	47.8%	0.97

Table D6: Motivations for business startup, rates and gender ratios, GEM 2023

Country	TEA: Because jobs are scarce a business			TEA: To build wealth			TEA: To make a difference			TEA: To continue family tradition		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Brazil	79.3%	70.5%	1.12	63.8%	68.6%	0.93	76.0%	77.0%	0.99	30.2%	40.5%	0.75
Canada	69.7%	65.8%	1.06	64.2%	72.2%	0.89	56.5%	66.1%	0.85	38.2%	43.8%	0.87
Chile	74.3%	72.8%	1.02	58.0%	62.1%	0.93	56.5%	58.6%	0.96	29.1%	27.0%	1.08
China	70.8%	66.7%	1.06	40.0%	43.3%	0.92	19.0%	18.0%	1.06	27.7%	30.0%	0.92
Colombia	82.3%	77.6%	1.06	55.3%	51.2%	1.08	48.4%	48.7%	0.99	36.9%	33.3%	1.11
Croatia	67.0%	53.7%	1.25	54.5%	54.0%	1.01	41.8%	31.9%	1.31	21.6%	26.7%	0.81
Cyprus	67.9%	63.9%	1.06	81.8%	87.6%	0.93	42.3%	38.4%	1.10	26.3%	27.2%	0.97
Ecuador	92.5%	89.0%	1.04	37.3%	43.1%	0.87	39.9%	45.6%	0.88	40.3%	41.7%	0.97
Estonia	54.5%	54.2%	1.01	41.4%	39.4%	1.05	35.7%	31.9%	1.12	12.0%	20.7%	0.58
France	44.9%	41.9%	1.07	32.6%	51.9%	0.63	14.2%	24.0%	0.59	15.4%	18.7%	0.82
Germany	38.2%	51.6%	0.74	44.9%	63.2%	0.71	48.7%	51.2%	0.95	18.2%	39.2%	0.46
Greece	71.2%	73.0%	0.98	57.6%	54.1%	1.06	23.3%	28.4%	0.82	28.8%	39.2%	0.73
Guatemala	93.1%	86.2%	1.08	84.7%	84.7%	1.00	80.1%	81.0%	0.99	52.9%	51.8%	1.02
Hungary	91.7%	89.1%	1.03	79.2%	81.0%	0.98	51.4%	43.0%	1.20	22.5%	34.9%	0.64
India	92.6%	85.2%	1.09	82.7%	79.8%	1.04	83.1%	84.2%	0.99	78.4%	73.2%	1.07
Iran	62.9%	70.0%	0.90	92.4%	96.3%	0.96	48.1%	28.5%	1.69	20.0%	17.6%	1.14
Israel	46.8%	48.9%	0.96	71.8%	77.1%	0.93	48.7%	29.8%	1.63	16.9%	28.6%	0.59
Italy	60.9%	56.3%	1.08	50.0%	59.6%	0.84	40.6%	32.0%	1.27	26.6%	35.0%	0.76
Jordan	96.4%	94.6%	1.02	71.6%	55.6%	1.29	26.9%	18.1%	1.49	22.9%	27.9%	0.82
Latvia	66.0%	63.1%	1.05	37.5%	47.7%	0.79	50.0%	38.9%	1.29	34.0%	26.2%	1.30
Lithuania	82.7%	84.5%	0.98	45.2%	61.0%	0.74	43.1%	42.1%	1.02	21.6%	23.7%	0.91
Luxembourg	48.2%	46.4%	1.04	38.1%	52.7%	0.72	47.0%	53.2%	0.88	33.3%	32.4%	1.03
Mexico	85.9%	76.9%	1.12	54.0%	57.5%	0.94	63.3%	62.1%	1.02	49.4%	60.7%	0.81
Morocco	82.6%	80.0%	1.03	36.2%	58.3%	0.62	10.3%	23.0%	0.45	15.9%	30.8%	0.52
Netherlands	38.8%	37.9%	1.02	40.8%	48.9%	0.83	46.2%	48.8%	0.95	23.3%	27.5%	0.85
Norway	31.3%	22.2%	1.41	31.3%	35.6%	0.88	41.7%	35.6%	1.17	18.8%	20.0%	0.94
Oman	63.4%	63.9%	0.99	64.2%	64.5%	1.00	50.6%	36.8%	1.38	37.8%	38.6%	0.98
Panama	81.9%	75.6%	1.08	48.6%	61.0%	0.80	67.3%	68.5%	0.98	46.1%	55.3%	0.83
Poland	61.1%	64.3%	0.95	31.6%	46.4%	0.68	16.8%	23.6%	0.71	6.3%	12.5%	0.50
Puerto Rico	68.9%	60.7%	1.14	38.0%	55.3%	0.69	71.0%	67.9%	1.05	33.5%	28.7%	1.17
Qatar	55.7%	64.8%	0.86	77.9%	77.4%	1.01	54.1%	46.9%	1.15	33.7%	39.8%	0.85
Romania	94.0%	83.1%	1.13	81.3%	76.1%	1.07	66.0%	66.2%	1.00	46.0%	28.6%	1.61
Saudi Arabia	93.1%	89.5%	1.04	92.8%	89.8%	1.03	72.6%	69.3%	1.05	73.0%	71.7%	1.02

Table D6 (continued)

Country	TEA: Because jobs are scarce a business			TEA: To build wealth			TEA: To make a difference			TEA: To continue family tradition		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Slovakia	70.8%	70.1%	1.01	35.6%	39.3%	0.91	29.9%	42.1%	0.71	19.3%	27.6%	0.70
Slovenia	55.3%	45.9%	1.20	57.9%	51.4%	1.13	68.4%	50.0%	1.37	28.9%	29.7%	0.97
South Africa	69.4%	69.2%	1.00	65.3%	64.7%	1.01	63.3%	59.6%	1.06	46.2%	47.8%	0.97
South Korea	37.3%	23.1%	1.61	76.0%	86.2%	0.88	2.7%	4.6%	0.59	4.0%	6.2%	0.65
Spain	62.2%	52.9%	1.18	34.8%	39.2%	0.89	38.0%	37.2%	1.02	22.6%	21.1%	1.07
Sweden	25.6%	31.3%	0.82	42.0%	60.8%	0.69	48.9%	39.2%	1.25	29.0%	24.5%	1.18
Switzerland	43.2%	38.1%	1.13	32.9%	45.2%	0.73	59.7%	48.8%	1.22	5.5%	12.0%	0.46
Thailand	86.4%	77.1%	1.12	82.0%	74.8%	1.10	53.8%	46.4%	1.16	65.9%	68.2%	0.97
United Kingdom	67.5%	57.0%	1.18	61.3%	71.0%	0.86	65.0%	53.5%	1.21	23.8%	18.0%	1.32
United States	60.2%	64.5%	0.93	65.0%	68.2%	0.95	61.2%	65.7%	0.93	27.9%	41.0%	0.68
Uruguay	75.6%	63.5%	1.19	43.8%	57.6%	0.76	41.8%	37.6%	1.11	25.2%	39.2%	0.64
Venezuela	88.5%	93.4%	0.95	53.2%	54.2%	0.98	68.4%	68.3%	1.00	54.0%	51.1%	1.06
Sample Average	**72.5%**	**67.5%**	**1.07**	**56.4%**	**62.2%**	**0.91**	**51.9%**	**50.1%**	**1.04**	**35.4%**	**37.5%**	**0.94**
Region												
Central and East Asia	78.9%	67.9%	1.16	76.1%	76.0%	1.00	49.9%	48.3%	1.03	55.3%	53.7%	1.03
Europe & UK	58.7%	53.8%	1.09	42.4%	50.9%	0.83	40.2%	38.7%	1.04	22.3%	24.4%	0.91
Latin America and Caribbean	83.0%	77.6%	1.07	55.9%	62.0%	0.90	61.1%	63.2%	0.97	40.3%	42.8%	0.94
Middle East and Africa	77.3%	77.9%	0.99	78.5%	77.1%	1.02	55.3%	47.5%	1.16	44.7%	46.7%	0.96
North America	64.0%	65.0%	0.98	64.5%	70.0%	0.92	59.3%	66.0%	0.90	32.0%	42.3%	0.76
National Income												
High Income	58.8%	58.0%	1.01	60.6%	69.2%	0.88	51.7%	50.3%	1.03	35.1%	39.3%	0.89
Middle Income	69.2%	63.3%	1.09	46.8%	53.7%	0.87	46.9%	44.5%	1.05	27.0%	29.0%	0.93
Low Income	85.8%	82.0%	1.05	65.0%	66.5%	0.98	58.0%	56.9%	1.02	45.5%	46.5%	0.98

Table D7: Motivations for business exit, rates and gender ratios, GEM 2023

Country	Discontinued business not profitable			Discontinued family or personal reasons			Discontinued financing problems			Discontinued COVID19 pandemic			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
Brazil	27.0%	25.9%	1.04	26.1%	22.2%	1.2	17.1%	15.7%	1.09	14.4%	15.7%	0.92	-	1.9%	-
Canada	23.8%	14.0%	1.71	17.5%	12.8%	1.4	4.8%	16.3%	0.29	6.3%	3.5%	1.82	25.4%	20.9%	1.21
Chile	41.7%	31.8%	1.31	25.9%	19.7%	1.3	10.8%	10.6%	1.02	8.6%	10.6%	0.81	5.8%	6.1%	0.95
China	36.0%	41.0%	0.88	-	7.7%	-	16.0%	28.2%	0.57	12.0%	7.7%	1.56	-	-	-
Colombia	27.3%	36.4%	0.75	10.9%	18.2%	0.6	25.5%	15.2%	1.68	7.3%	6.1%	1.20	7.3%	15.2%	0.48
Croatia	30.8%	14.9%	2.07	23.1%	19.1%	1.2	-	10.6%	-	7.7%	10.6%	0.72	3.8%	2.1%	1.81
Cyprus	31.8%	25.0%	1.27	13.6%	12.5%	1.1	9.1%	29.2%	0.31	4.5%	4.2%	1.09	13.6%	4.2%	3.27
Ecuador	37.1%	38.4%	0.97	21.6%	16.3%	1.3	22.7%	19.8%	1.15	9.3%	5.8%	1.60	4.1%	3.5%	1.18
Estonia	20.8%	24.5%	0.85	25.0%	13.2%	1.9	-	7.5%	-	8.3%	9.4%	0.88	16.7%	15.1%	1.10
France	28.6%	13.0%	2.20	18.4%	14.3%	1.3	8.2%	9.1%	0.90	12.2%	10.4%	1.18	6.1%	14.3%	0.43
Germany	15.2%	8.1%	1.87	24.2%	24.3%	1.0	15.2%	16.2%	0.93	3.0%	2.7%	1.12	9.1%	10.8%	0.84
Greece	20.8%	18.8%	1.11	12.5%	12.5%	1.0	4.2%	12.5%	0.33	8.3%	-	-	4.2%	-	-
Guatemala	33.1%	35.3%	0.94	32.4%	23.5%	1.4	7.4%	4.9%	1.50	8.8%	8.8%	1.00	2.9%	2.0%	1.50
Hungary	32.1%	29.7%	1.08	14.3%	10.8%	1.3	10.7%	16.2%	0.66	3.6%	-	-	3.6%	2.7%	1.32
India	25.0%	39.7%	0.63	5.4%	10.3%	0.5	21.4%	10.3%	2.08	17.9%	10.3%	1.73	7.1%	5.9%	1.21
Iran	29.3%	44.0%	0.67	10.3%	9.5%	1.1	31.0%	21.4%	1.45	1.7%	-	-	1.7%	2.4%	0.72
Israel	35.5%	43.8%	0.81	22.6%	9.4%	2.4	12.9%	9.4%	1.38	6.5%	9.4%	0.69	6.5%	-	-
Italy	27.3%	26.8%	1.02	18.2%	7.3%	2.5	-	4.9%	-	-	-	-	-	9.8%	-
Jordan	64.4%	63.3%	1.02	18.6%	10.6%	1.8	8.5%	8.3%	1.02	1.7%	6.7%	0.25	1.7%	3.3%	0.51
Latvia	14.8%	15.4%	0.96	18.5%	19.2%	1.0	-	11.5%	-	11.1%	3.8%	2.89	3.7%	3.8%	0.96
Lithuania	20.0%	23.3%	0.86	16.0%	10.0%	1.6	8.0%	6.7%	1.20	-	-	-	12.0%	6.7%	1.80
Luxembourg	26.1%	11.1%	2.35	4.3%	13.0%	0.3	21.7%	16.7%	1.30	4.3%	5.6%	0.78	-	13.0%	-
Mexico	22.0%	26.1%	0.85	15.6%	12.6%	1.2	16.5%	21.8%	0.76	11.0%	12.6%	0.87	11.9%	10.9%	1.09
Morocco	47.3%	42.0%	1.12	16.4%	15.9%	1.0	18.2%	12.5%	1.45	5.5%	2.3%	2.40	10.9%	6.8%	1.60
Netherlands	40.5%	21.0%	1.93	10.8%	6.5%	1.7	10.8%	9.7%	1.12	5.4%	4.8%	1.12	2.7%	24.2%	0.11
Norway	6.3%	27.6%	0.23	6.3%	3.4%	1.8	18.8%	6.9%	2.72	6.3%	-	-	6.3%	24.1%	0.26
Oman	37.7%	31.1%	1.21	13.0%	10.1%	1.3	5.8%	8.4%	0.69	14.5%	14.3%	1.01	8.7%	5.0%	1.72
Panama	26.3%	20.8%	1.27	18.4%	12.3%	1.5	22.4%	8.5%	2.63	14.5%	16.0%	0.90	2.6%	12.3%	0.21
Poland	19.8%	16.3%	1.22	8.7%	7.5%	1.2	2.4%	8.8%	0.27	33.3%	38.8%	0.86	-	3.4%	-
Puerto Rico	15.4%	17.6%	0.87	25.6%	14.7%	1.7	5.1%	2.9%	1.74	25.6%	17.6%	1.45	-	-	-
Qatar	15.2%	28.2%	0.54	37.0%	18.5%	2.0	13.0%	17.4%	0.75	8.7%	5.1%	1.70	2.2%	2.6%	0.85
Romania	54.5%	50.0%	1.09	18.2%	6.3%	2.9	9.1%	12.5%	0.73	-	6.3%	-	-	-	-
Saudi Arabia	27.0%	25.5%	1.06	13.5%	9.7%	1.4	13.5%	17.3%	0.78	6.4%	4.6%	1.39	13.5%	16.3%	0.83

Table D7 (continued)

Country	Discontinued another job			Discontinued another opportunity			Discontinued supply problems			Discontinued tax & regulations			Discontinued retirement		
	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
Brazil	5.4%	6.5%	0.8	2.7%	6.5%	0.42	4.5%	-	-	1.8%	5.6%	-	0.9%	-	-
Canada	6.3%	16.3%	0.4	12.7%	12.8%	0.99	-	1.2%	-	1.6%	2.3%	-	1.6%	-	-
Chile	5.8%	6.1%	0.9	1.4%	6.8%	0.21	-	-	-	-	6.8%	-	-	1.5%	-
China	16.0%	2.6%	6.2	16.0%	5.1%	3.12	-	2.6%	-	-	2.6%	-	4.0%	2.6%	-
Colombia	7.3%	9.1%	0.8	9.1%	-	-	5.5%	-	-	-	-	-	-		-
Croatia	7.7%	12.8%	0.6	11.5%	8.5%	1.36	-	2.1%	-	7.7%	12.8%	-	7.7%	6.4%	1.2
Cyprus	9.1%	4.2%	2.2	-	-	-	9.1%	-	-	4.5%	8.3%	0.55	4.5%	12.5%	0.4
Ecuador	2.1%	9.3%	0.2	-	1.2%	-	-	2.3%	-	3.1%	2.3%	1.33	-	1.2%	-
Estonia	12.5%	11.3%	1.1	4.2%	1.9%	2.21	-	-	-	12.5%	11.3%	1.10	-	5.7%	-
France	6.1%	10.4%	0.6	8.2%	10.4%	0.79	-	-	-	10.2%	7.8%	1.31	2.0%	10.4%	0.2
Germany	6.1%	16.2%	0.4	24.2%	5.4%	4.48	-	8.1%	-	3.0%	5.4%	0.56	-	2.7%	-
Greece	12.5%	12.5%	1.0	8.3%	-	-	-	-	-	12.5%	25.0%	0.50	16.7%	18.8%	0.9
Guatemala	-	-	-	5.9%	8.8%	0.67	7.4%	11.8%	0.6	2.2%	2.0%	1.13	-	2.9%	-
Hungary	21.4%	16.2%	1.3	-	10.8%	-	3.6%	2.7%	1.3	10.7%	5.4%	1.98	-	5.4%	-
India	5.4%	2.9%	1.8	8.9%	13.2%	0.67	5.4%	2.9%	1.8	-	1.5%	-	3.6%	2.9%	1.2
Iran	13.8%	11.9%	1.2	3.4%	7.1%	0.48	1.7%	1.2%	1.4	-	-	-	6.9%	2.4%	2.9
Israel	9.7%	12.5%	0.8	-	9.4%	-	-	-	#ARG!	6.5%	6.3%	-	-	-	-
Italy	9.1%	17.1%	0.5	18.2%	7.3%	2.48	9.1%	4.9%	1.9	9.1%	9.8%	0.93	9.1%	12.2%	-
Jordan	1.7%	2.2%	0.8	-	-	-	3.4%	4.4%	0.8	-	1.1%	-	-	-	-
Latvia	11.1%	19.2%	0.6	3.7%	7.7%	0.48	-	3.8%		33.3%	15.4%	2.17	3.7%	-	-
Lithuania	32.0%	36.7%	0.9	-	-	-	4.0%	3.3%	1.2	4.0%	6.7%	0.60	4.0%	6.7%	0.6
Luxembourg	26.1%	13.0%	2.0	-	5.6%	-	13.0%	9.3%	1.4	-	9.3%	-	4.3%	3.7%	1.2
Mexico	11.9%	11.8%	1.0	2.8%	0.8%	3.28	3.7%	0.8%	4.4	2.8%	2.5%	1.09	1.8%	-	-
Morocco	1.8%	9.1%	0.2	-	1.1%	-	-	-	-	-	9.1%	-	-	1.1%	-
Netherlands	16.2%	14.5%	1.1	8.1%	11.3%	0.72	-	1.6%	-	2.7%	1.6%	1.68	2.7%	4.8%	-
Norway	43.8%	20.7%	2.1	12.5%	13.8%	0.91	-	-	-	-	3.4%	-	-	-	-
Oman	11.6%	17.6%	0.7	7.2%	5.9%	1.23	1.4%	-	-	-	5.0%	-	-	2.5%	-
Panama	9.2%	11.3%	0.8	2.6%	9.4%	0.28	2.6%	4.7%	0.6	1.3%	3.8%	0.35	-	0.9%	-
Poland	7.1%	7.5%	1.0	-	-	-	0.8%	-	-	10.3%	10.9%	0.95	17.5%	6.8%	2.6
Puerto Rico	17.9%	29.4%	0.6	-	-	-	-	-	-	10.3%	8.8%	-	-	8.8%	-
Qatar	6.5%	7.2%	0.9	6.5%	7.2%	0.91	6.5%	8.2%	0.8	4.3%	5.1%	-	-	0.5%	-
Romania	18.2%	18.8%	1.0	-	-	-	-	-	-	-	6.3%	-	-	-	-
Saudi Arabia	9.2%	6.1%	1.5	9.9%	11.2%	0.88	5.7%	4.6%	1.2	-	1.0%	-	1.4%	3.6%	-

Table D7 (continued)

Country	Discontinued business not profitable			Discontinued family or personal reasons			Discontinued financing problems			Discontinued COVID19 pandemic			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
Slovakia	31.6%	12.2%	2.59	26.3%	17.1%	1.5	5.3%	9.8%	0.54	15.8%	9.8%	1.62	5.3%	2.4%	2.16
Slovenia	15.0%	-	-	20.0%	16.0%	1.3	-	12.0%	-	-	4.0%	-	-	8.0%	-
South Africa	34.4%	21.5%	1.60	21.5%	12.1%	1.8	21.5%	17.8%	1.21	8.6%	4.7%	1.84	10.8%	18.7%	0.58
South Korea	71.4%	58.6%	1.22	14.3%	24.1%	0.6	4.8%	10.3%	0.46	-	3.4%	-	-		-
Spain	28.7%	25.4%	1.13	12.2%	11.0%	1.1	7.8%	12.0%	0.65	2.9%	2.2%	1.29	11.3%	10.8%	1.05
Sweden	31.9%	18.1%	1.77	14.9%	9.6%	1.5	8.5%	9.6%	0.88	-	6.0%	-	8.5%	14.5%	0.59
Switzerland	4.3%	14.8%	0.29	17.4%	11.1%	1.6	8.7%	3.7%	2.35	21.7%	3.7%	5.87	4.3%	22.2%	0.20
Thailand	22.1%	28.4%	0.78	20.6%	9.0%	2.3	13.2%	13.4%	0.99	29.4%	32.8%	0.90	-	-	-
United Kingdom	44.0%	15.8%	2.79	16.0%	15.8%	1.0	4.0%	5.3%	0.76	12.0%	15.8%	0.76	8.0%	5.3%	1.52
United States	16.3%	25.4%	0.64	11.6%	9.0%	1.3	14.0%	18.0%	0.77	11.6%	4.1%	2.84	14.0%	9.8%	1.42
Uruguay	23.6%	37.3%	0.63	23.6%	10.4%	2.3	9.1%	1.5%	6.09	20.0%	14.9%	1.34	3.6%	1.5%	2.44
Venezuela	31.2%	38.3%	0.81	14.0%	9.3%	1.50	22.6%	19.6%	1.15	11.8%	11.2%	1.05	3.2%	-	-
Sample Average	**29.6%**	**28.4%**	**1.04**	**17.4%**	**12.8%**	**1.36**	**12.1%**	**12.9%**	**0.94**	**9.8%**	**8.6%**	**1.14**	**6.8%**	**8.1%**	**0.84**
Region															
Central and East Asia	31.0%	38.9%	0.80	12.3%	11.3%	1.08	15.2%	14.8%	1.03	19.3%	16.3%	1.19	2.3%	2.0%	1.19
Europe & UK	26.7%	20.6%	1.29	13.9%	11.5%	1.21	7.2%	10.9%	0.66	8.2%	8.0%	1.02	7.6%	10.2%	0.74
Latin America and Caribbean	30.3%	30.8%	0.98	22.5%	16.1%	1.39	15.7%	13.0%	1.21	11.8%	12.2%	0.97	4.3%	5.4%	0.80
Middle East and Africa	35.5%	36.8%	0.97	17.8%	12.5%	1.42	15.6%	14.4%	1.08	6.7%	5.8%	1.15	8.3%	7.6%	1.09
North America	20.4%	20.4%	1.00	14.8%	10.4%	1.42	8.3%	17.5%	0.48	9.3%	3.8%	2.44	20.4%	14.7%	1.39
National Income															
High Income	26.0%	22.1%	1.18	16.4%	12.6%	1.30	10.5%	14.0%	0.75	7.0%	4.9%	1.43	9.5%	12.6%	0.75
Middle Income	28.9%	25.2%	1.15	16.4%	12.2%	1.34	8.1%	10.3%	0.79	10.4%	10.8%	0.96	7.0%	7.1%	0.99
Low Income	32.5%	38.2%	0.85	19.1%	13.8%	1.39	17.9%	15.2%	1.18	10.7%	9.4%	1.15	4.9%	5.2%	0.94

Table D7 (continued)

Country	Discontinued another job			Discontinued another opportunity			Discontinued supply problems			Discontinued tax & regulations			Discontinued retirement		
	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
Slovakia	15.8%	14.6%	1.1	-	4.9%	-	-	4.9%	-	-	19.5%	-	-	4.9%	-
Slovenia	15.0%	20.0%	0.8	25.0%	16.0%	1.56	5.0%	4.0%	1.3	5.0%	4.0%	1.25	15.0%	16.0%	-
South Africa	2.2%	6.5%	0.3	1.1%	3.7%	0.29	-	3.7%	-	-	0.9%	-	-	10.3%	-
South Korea	4.8%	3.4%	1.4	4.8%	-	-	-	-	-	-	-	-	-	-	-
Spain	17.6%	16.0%	1.1	4.9%	9.5%	0.51	1.6%	1.4%	1.1	2.9%	3.2%	0.89	10.2%	8.5%	1.2
Sweden	23.4%	26.5%	0.9	2.1%	9.6%	0.22	-	-	-	4.3%	2.4%	1.77	6.4%	3.6%	-
Switzerland	30.4%	11.1%	2.7	-	3.7%	-	-	-	-	-	11.1%	-	13.0%	18.5%	-
Thailand	1.5%	4.5%	0.3	-	3.0%	-	7.4%	6.0%	1.2	5.9%	1.5%	3.94	-	1.5%	-
United Kingdom	8.0%	10.5%	0.8	4.0%	-	-	-	-	-	-	21.1%	-	4.0%	10.5%	0.4
United States	4.7%	10.7%	0.4	2.3%	8.2%	0.28	11.6%	3.3%	3.5	7.0%	9.0%	-	7.0%	2.5%	2.8
Uruguay	7.3%	9.0%	0.8	1.8%	9.0%	0.20	3.6%	-	-	5.5%	11.9%	0.46	1.8%	4.5%	0.4
Venezuela	6.5%	5.6%	1.2	-	3.7%	-	10.8%	9.3%	1.2	-	2.8%	-	-	-	-
Sample Average	**9.9%**	**10.7%**	**0.93**	**4.5%**	**6.5%**	**0.69**	**2.9%**	**2.9%**	**1.00**	**3.2%**	**5.0%**	**0.64**	**3.9%**	**4.0%**	**0.98**
Region															
Central and East Asia	5.3%	3.0%	1.78	5.8%	6.4%	0.91	4.7%	3.4%	1.36	2.3%	2.0%	1.19	1.8%	2.0%	0.89
Europe & UK	15.7%	15.2%	1.03	5.2%	7.3%	0.72	1.5%	1.9%	0.80	5.5%	7.0%	0.78	8.5%	7.4%	1.15
Latin America and Caribbean	6.3%	8.3%	0.76	2.6%	5.3%	0.50	4.1%	3.4%	1.21	2.0%	4.5%	0.44	0.4%	1.2%	0.36
Middle East and Africa	7.1%	7.9%	0.89	4.5%	5.6%	0.81	2.7%	3.8%	0.71	0.7%	3.0%	0.24	1.1%	2.5%	0.43
North America	5.6%	12.8%	0.43	8.3%	10.4%	0.80	4.6%	2.4%	1.95	3.7%	6.2%	0.60	4.6%	1.4%	3.26
National Income															
High Income	11.9%	11.9%	1.00	9.0%	9.0%	1.00	3.5%	4.0%	0.88	2.7%	5.1%	0.53	3.5%	4.0%	0.88
Middle Income	13.2%	13.8%	0.96	3.3%	6.8%	0.49	1.4%	1.3%	1.08	4.9%	7.0%	0.70	6.5%	5.6%	1.16
Low Income	5.0%	6.1%	0.83	3.2%	3.9%	0.81	4.2%	3.8%	1.12	1.4%	2.6%	0.53	1.0%	1.9%	0.53

Table D8: Age, education, and household income, rates and gender ratios, GEM 2023

Country	TEA 18-35 yo			TEA 36-54 yo			TEA 55-64 yo		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Brazil	43.6%	50.5%	0.86	49.0%	41.4%	1.18	7.4%	8.1%	0.91
Canada	47.2%	60.0%	0.79	42.4%	32.3%	1.31	10.4%	7.7%	1.35
Chile	42.5%	41.9%	1.01	44.7%	44.3%	1.01	12.8%	13.9%	0.92
China	46.2%	45.0%	1.03	44.6%	43.3%	1.03	9.2%	11.7%	0.79
Colombia	41.2%	53.9%	0.76	48.2%	37.3%	1.29	10.6%	8.8%	1.20
Croatia	46.0%	39.3%	1.17	41.0%	49.7%	0.83	13.0%	11.0%	1.18
Cyprus	37.7%	40.1%	0.94	44.2%	48.3%	0.91	18.2%	11.6%	1.57
Ecuador	53.3%	52.0%	1.02	37.4%	38.9%	0.96	9.3%	9.1%	1.02
Estonia	50.0%	39.1%	1.28	41.0%	49.7%	0.82	9.0%	11.2%	0.80
France	43.2%	45.1%	0.96	46.0%	40.9%	1.12	10.8%	13.9%	0.78
Germany	43.6%	56.0%	0.78	43.6%	35.2%	1.24	12.8%	8.8%	1.46
Greece	42.4%	46.7%	0.91	45.8%	44.0%	1.04	11.9%	9.3%	1.27
Guatemala	60.9%	58.5%	1.04	32.2%	35.7%	0.90	6.9%	5.9%	1.17
Hungary	30.6%	45.3%	0.67	54.2%	48.4%	1.12	15.3%	6.3%	2.44
India	51.1%	56.3%	0.91	42.3%	37.5%	1.13	6.6%	6.3%	1.05
Iran	65.6%	61.3%	1.07	33.6%	36.2%	0.93	0.8%	2.5%	0.31
Israel	49.4%	40.2%	1.23	34.2%	49.5%	0.69	16.5%	10.3%	1.60
Italy	44.4%	38.8%	1.14	44.4%	53.4%	0.83	11.1%	7.8%	1.43
Jordan	62.4%	54.1%	1.15	33.0%	39.7%	0.83	4.6%	6.2%	0.74
Latvia	45.9%	48.1%	0.95	46.9%	46.6%	1.01	7.1%	5.3%	1.34
Lithuania	46.7%	59.3%	0.79	46.7%	35.6%	1.31	6.7%	5.1%	1.31
Luxembourg	53.5%	43.6%	1.23	38.4%	47.3%	0.81	8.1%	9.1%	0.90
Mexico	48.3%	46.6%	1.04	43.8%	42.0%	1.04	8.0%	11.5%	0.69
Morocco	43.5%	52.5%	0.83	55.1%	40.8%	1.35	1.4%	6.7%	0.22
Netherlands	48.6%	47.0%	1.03	43.8%	38.6%	1.13	7.6%	14.4%	0.53
Norway	27.1%	23.3%	1.16	56.3%	61.1%	0.92	16.7%	15.6%	1.07
Oman	62.2%	53.8%	1.16	36.6%	43.1%	0.85	1.2%	3.1%	0.40
Panama	39.6%	47.2%	0.84	45.6%	39.9%	1.14	14.8%	12.8%	1.16
Poland	60.0%	57.1%	1.05	37.9%	42.0%	0.90	2.1%	0.9%	2.36
Puerto Rico	50.5%	53.1%	0.95	38.9%	38.1%	1.02	10.6%	8.8%	1.20
Qatar	48.5%	46.0%	1.05	45.4%	49.7%	0.91	6.2%	4.3%	1.45
Romania	48.0%	54.9%	0.87	46.0%	42.3%	1.09	6.0%	2.8%	2.13
Saudi Arabia	42.6%	39.4%	1.08	50.0%	51.0%	0.98	7.4%	9.5%	0.77

Table D8 (continued)

Country	TEA 18-35 yo			TEA 36-54 yo			TEA 55-64 yo		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Slovakia	50.6%	58.7%	0.86	44.9%	33.3%	1.35	4.5%	7.9%	0.57
Slovenia	34.2%	45.9%	0.74	55.3%	44.6%	1.24	10.5%	9.5%	1.11
South Africa	47.4%	50.0%	0.95	42.8%	36.4%	1.17	9.9%	13.6%	0.73
South Korea	29.3%	23.8%	1.23	53.3%	52.3%	1.02	17.3%	23.8%	0.73
Spain	34.7%	29.3%	1.18	50.8%	56.9%	0.89	14.5%	13.7%	1.06
Sweden	40.5%	52.9%	0.77	48.9%	29.5%	1.65	10.7%	17.6%	0.61
Switzerland	28.4%	29.8%	0.95	52.7%	48.8%	1.08	18.9%	21.4%	0.88
Thailand	40.4%	29.7%	1.36	46.0%	53.2%	0.87	13.6%	17.1%	0.79
United Kingdom	48.8%	44.0%	1.11	40.0%	44.0%	0.91	11.3%	12.0%	0.94
United States	50.8%	50.7%	1.00	34.4%	42.4%	0.81	14.8%	6.9%	2.13
Uruguay	51.7%	46.0%	1.12	41.1%	42.3%	0.97	7.2%	11.7%	0.61
Venezuela	42.5%	42.9%	0.99	48.1%	43.7%	1.10	9.4%	13.4%	0.70
Sample Average	**45.6%**	**45.3%**	**1.01**	**44.1%**	**44.4%**	**0.99**	**10.3%**	**10.4%**	**1.00**
Region									
Central and East Asia	42.3%	39.3%	1.08	46.1%	46.5%	0.99	11.6%	14.2%	0.82
Europe & UK	41.1%	40.5%	1.01	47.1%	47.8%	0.99	11.8%	11.6%	1.02
Latin America and Caribbean	48.2%	49.7%	0.97	41.9%	40.1%	1.05	9.9%	10.3%	0.97
Middle East and Africa	50.3%	47.3%	1.06	43.3%	45.3%	0.95	6.5%	7.4%	0.87
North America	49.4%	55.0%	0.90	37.7%	37.7%	1.00	13.0%	7.3%	1.78
National Income									
High Income	43.5%	44.0%	0.99	45.8%	45.0%	1.02	10.7%	11.0%	0.97
Middle Income	42.9%	41.6%	1.03	45.3%	47.4%	0.96	11.8%	10.9%	1.08
Low Income	50.3%	51.3%	0.98	41.5%	39.8%	1.04	8.3%	8.9%	0.92

Table D8 (continued)

Country	TEA some secondary education			TEA secondary education			TEA post secondary education			TEA grad education		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Brazil	15.2%	10.3%	1.47	45.5%	50.2%	0.91	29.7%	28.7%	1.03	2.1%	0.9%	2.31
Canada	3.2%	4.1%	0.78	21.0%	18.6%	1.13	59.7%	61.9%	0.96	15.3%	12.4%	1.24
Chile	2.0%	3.0%	0.65	19.0%	19.1%	0.99	71.9%	69.3%	1.04	4.0%	8.0%	0.50
China	9.4%	6.8%	1.38	23.4%	33.9%	0.69	62.5%	59.3%	1.05	3.1%	-	-
Colombia	11.0%	6.8%	1.62	36.3%	40.0%	0.91	44.5%	40.0%	1.11	1.1%	4.4%	0.24
Croatia	-	1.2%	-	44.4%	53.4%	0.83	36.4%	32.3%	1.13	19.2%	13.0%	1.47
Cyprus	2.6%	8.9%	0.30	13.2%	24.0%	0.55	48.7%	43.8%	1.11	35.5%	22.6%	1.57
Ecuador	11.3%	13.0%	0.87	50.4%	46.8%	1.08	14.3%	18.7%	0.77	-	0.6%	-
Estonia	-	-	-	24.8%	22.4%	1.11	17.8%	35.9%	0.50	40.6%	32.4%	1.25
France	5.7%	9.3%	0.61	11.9%	21.5%	0.55	42.6%	38.4%	1.11	39.8%	28.7%	1.39
Germany	5.3%	7.1%	0.75	37.3%	29.4%	1.27	56.0%	51.6%	1.09	-	-	-
Greece	8.6%	10.7%	0.81	32.8%	25.3%	1.29	48.3%	45.3%	1.06	10.3%	18.7%	0.55
Guatemala	14.7%	16.1%	0.91	43.4%	49.4%	0.88	7.1%	10.7%	0.66	-	0.6%	-
Hungary	6.8%	19.7%	0.35	42.5%	38.6%	1.10	24.7%	14.2%	1.74	24.7%	25.2%	0.98
India	1.5%	2.3%	0.68	31.5%	23.5%	1.34	60.0%	68.8%	0.87	3.8%	3.2%	1.21
Iran	-	1.9%	-	23.8%	32.9%	0.72	47.7%	43.5%	1.10	27.7%	21.1%	1.31
Israel	-	1.0%	-	-	2.1%	-	85.7%	73.2%	1.17	13.0%	22.7%	0.57
Italy	6.8%	12.1%	0.56	25.4%	46.5%	0.55	25.4%	15.2%	1.68	40.7%	26.3%	1.55
Jordan	44.5%	41.6%	1.07	10.0%	7.0%	1.43	24.5%	27.2%	0.90	3.6%	5.3%	0.68
Latvia	-	2.3%	-	26.0%	45.8%	0.57	47.9%	35.9%	1.34	26.0%	16.0%	1.62
Lithuania	-	-	-	32.4%	40.7%	0.80	66.2%	57.6%	1.15	-	-	-
Luxembourg	4.7%	14.8%	0.32	17.6%	15.7%	1.12	21.2%	30.6%	0.69	50.6%	26.9%	1.88
Mexico	21.0%	19.7%	1.07	28.4%	29.5%	0.96	43.8%	41.6%	1.05	1.1%	2.9%	0.39
Morocco	27.5%	30.3%	0.91	21.7%	14.3%	1.52	34.8%	28.6%	1.22	1.4%	7.6%	0.19
Netherlands	11.7%	18.3%	0.64	48.5%	48.9%	0.99	27.2%	19.1%	1.42	12.6%	11.5%	1.10
Norway	-	-	-	27.1%	33.7%	0.80	33.3%	33.7%	0.99	37.5%	29.2%	1.28
Oman	-	-	-	8.6%	12.9%	0.67	45.7%	25.8%	1.77	-	-	-
Panama	26.5%	30.8%	0.86	9.2%	8.8%	1.04	50.2%	48.4%	1.04	7.4%	5.9%	1.27
Poland	4.2%	4.5%	0.94	20.0%	28.6%	0.70	23.2%	10.7%	2.16	52.6%	52.7%	1.00
Puerto Rico	1.9%	1.7%	1.13	13.9%	16.0%	0.87	63.2%	68.4%	0.92	20.1%	12.7%	1.59
Qatar	17.9%	15.7%	1.14	-	-	-	60.0%	66.0%	0.91	21.1%	17.3%	1.22
Romania	-	-	-	4.1%	4.3%	0.94	32.7%	49.3%	0.66	63.3%	46.4%	1.36
Saudi Arabia	-	-	-	42.1%	27.3%	1.54	50.8%	58.8%	0.86	5.1%	11.6%	0.44

Table D8 (continued)

Country	TEA some secondary education			TEA secondary education			TEA post secondary education			TEA grad education		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Slovakia	8.0%	8.7%	0.93	43.7%	38.6%	1.13	11.5%	11.0%	1.04	35.6%	41.7%	0.85
Slovenia	2.6%	1.4%	1.95	23.7%	39.2%	0.60	60.5%	48.6%	1.24	10.5%	10.8%	0.97
South Africa	27.2%	32.1%	0.85	33.1%	23.9%	1.38	38.4%	43.5%	0.88	1.3%	0.5%	2.44
South Korea	4.0%	3.9%	1.03	30.7%	35.7%	0.86	52.0%	52.7%	0.99	13.3%	7.8%	1.72
Spain	8.5%	9.0%	0.94	33.9%	32.7%	1.04	33.9%	35.0%	0.97	22.4%	22.4%	1.00
Sweden	-	1.4%	-	27.5%	49.8%	0.55	66.4%	46.4%	1.43	6.1%	2.4%	2.53
Switzerland	-	3.6%	-	27.4%	21.4%	1.28	71.2%	72.6%	0.98	1.4%	2.4%	0.58
Thailand	5.2%	12.6%	0.41	10.8%	23.9%	0.45	73.9%	51.8%	1.43	2.0%	5.4%	0.37
United Kingdom	8.8%	14.1%	0.62	6.3%	3.0%	2.06	20.0%	23.2%	0.86	65.0%	59.6%	1.09
United States	2.7%	11.6%	0.23	23.9%	28.2%	0.85	59.8%	49.5%	1.21	11.4%	8.8%	1.30
Uruguay	25.7%	26.7%	0.96	39.0%	28.8%	1.36	10.5%	11.0%	0.95	1.4%	1.3%	1.12
Venezuela	15.1%	19.5%	0.77	34.0%	39.0%	0.87	41.0%	30.7%	1.34	2.4%	0.9%	2.72
Sample Average	**9.2%**	**10.9%**	**0.85**	**28.8%**	**28.9%**	**1.00**	**41.9%**	**40.8%**	**1.03**	**12.8%**	**12.7%**	**1.01**
Region												
Central and East Asia	4.6%	6.6%	0.69	20.6%	27.2%	0.76	65.8%	58.5%	1.12	4.2%	4.6%	0.92
Europe & UK	5.5%	7.7%	0.72	29.3%	32.7%	0.90	37.1%	34.8%	1.07	26.5%	22.8%	1.16
Latin America and Caribbean	13.4%	14.6%	0.92	31.9%	32.8%	0.97	37.4%	36.4%	1.03	3.5%	3.8%	0.92
Middle East and Africa	11.4%	13.3%	0.85	25.4%	17.1%	1.48	47.9%	49.8%	0.96	8.4%	11.0%	0.76
North America	3.3%	8.1%	0.40	22.8%	23.7%	0.96	59.6%	55.5%	1.07	13.0%	10.3%	1.27
National Income												
High Income	4.1%	7.0%	0.59	27.1%	26.0%	1.04	49.0%	49.2%	1.00	18.5%	15.3%	1.21
Middle Income	8.0%	9.4%	0.85	25.6%	26.5%	0.97	43.3%	40.5%	1.07	18.0%	18.0%	1.00
Low Income	14.2%	16.6%	0.86	33.7%	34.7%	0.97	35.3%	33.1%	1.07	2.7%	3.4%	0.81

Table D8 (continued)

Country	TEA lower third household income			TEA middle household income			TEA upper third household income		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Brazil	22.9%	6.8%	3.39	42.7%	32.4%	1.32	34.4%	60.9%	0.56
Canada	27.4%	22.8%	1.20	47.0%	38.1%	1.23	25.6%	39.2%	0.65
Chile	42.8%	17.5%	2.44	28.8%	31.0%	0.93	28.4%	51.5%	0.55
China	19.4%	10.3%	1.87	30.6%	31.0%	0.99	50.0%	58.6%	0.85
Colombia	17.9%	9.6%	1.87	55.6%	62.6%	0.89	26.5%	27.8%	0.95
Croatia	21.0%	19.8%	1.06	25.0%	21.0%	1.19	54.0%	59.3%	0.91
Cyprus	42.2%	19.1%	2.21	32.8%	42.7%	0.77	25.0%	38.2%	0.66
Ecuador	29.2%	20.1%	1.45	39.4%	44.0%	0.90	31.4%	35.9%	0.87
Estonia	33.0%	26.7%	1.23	30.7%	19.9%	1.54	36.4%	53.4%	0.68
France	22.1%	21.8%	1.01	41.7%	37.6%	1.11	36.2%	40.6%	0.89
Germany	33.9%	20.0%	1.70	28.6%	32.0%	0.89	37.5%	48.0%	0.78
Greece	29.2%	33.8%	0.86	37.5%	38.5%	0.98	33.3%	27.7%	1.20
Guatemala	36.5%	16.1%	2.28	23.6%	19.9%	1.19	39.8%	64.0%	0.62
Hungary	22.8%	11.8%	1.93	40.4%	33.3%	1.21	36.8%	54.8%	0.67
India	12.7%	8.7%	1.46	29.9%	45.9%	0.65	57.5%	45.4%	1.27
Iran	76.3%	76.9%	0.99	23.7%	23.1%	1.02	-	-	-
Israel	22.9%	21.1%	1.08	37.1%	34.4%	1.08	40.0%	44.4%	0.90
Italy	24.5%	13.4%	1.83	32.1%	32.9%	0.97	43.4%	53.7%	0.81
Jordan	34.0%	29.7%	1.15	31.0%	23.4%	1.32	35.0%	46.9%	0.75
Latvia	17.2%	9.3%	1.85	20.7%	6.8%	3.05	62.1%	83.9%	0.74
Lithuania	11.3%	7.5%	1.50	58.1%	45.3%	1.28	30.6%	47.2%	0.65
Luxembourg	37.1%	36.1%	1.03	31.4%	39.2%	0.80	31.4%	24.7%	1.27
Mexico	22.6%	11.5%	1.97	27.7%	18.8%	1.47	49.7%	69.7%	0.71
Morocco	33.3%	28.8%	1.16	35.4%	31.8%	1.11	31.3%	39.4%	0.79
Netherlands	8.7%	16.3%	0.53	68.5%	52.0%	1.32	22.8%	31.7%	0.72
Norway	17.1%	6.2%	2.77	29.3%	33.3%	0.88	53.7%	60.5%	0.89
Oman	16.7%	21.3%	0.78	54.2%	40.4%	1.34	29.2%	38.3%	0.76
Panama	36.4%	20.7%	1.76	39.2%	44.6%	0.88	24.4%	34.7%	0.70
Poland	27.0%	30.2%	0.89	39.2%	40.6%	0.96	33.8%	29.2%	1.16
Puerto Rico	29.3%	23.0%	1.27	38.4%	23.5%	1.64	32.3%	53.5%	0.60
Qatar	26.3%	22.9%	1.15	73.8%	77.1%	0.96	-	-	-
Romania	37.2%	19.6%	1.90	14.0%	23.5%	0.59	48.8%	56.9%	0.86
Saudi Arabia	23.1%	24.5%	0.94	23.9%	27.2%	0.88	53.0%	48.3%	1.10

Table D8 (continued)

Country	TEA lower third household income			TEA middle household income			TEA upper third household income		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Slovakia	36.1%	24.4%	1.48	45.8%	45.4%	1.01	18.1%	30.3%	0.60
Slovenia	36.4%	19.4%	1.87	33.3%	23.9%	1.40	30.3%	56.7%	0.53
South Africa	45.6%	42.6%	1.07	24.5%	21.0%	1.16	29.9%	36.4%	0.82
South Korea	13.0%	7.4%	1.75	37.7%	43.0%	0.88	49.3%	49.6%	0.99
Spain	34.4%	22.1%	1.56	25.4%	27.6%	0.92	40.3%	50.4%	0.80
Sweden	24.8%	28.0%	0.88	18.3%	22.5%	0.81	56.9%	49.5%	1.15
Switzerland	41.5%	22.5%	1.85	27.7%	35.0%	0.79	30.8%	42.5%	0.72
Thailand	12.8%	12.3%	1.04	21.8%	33.5%	0.65	65.4%	54.2%	1.21
United Kingdom	31.3%	13.3%	2.35	29.9%	20.0%	1.49	38.8%	66.7%	0.58
United States	47.3%	35.5%	1.33	31.5%	38.3%	0.82	21.2%	26.2%	0.81
Uruguay	48.5%	27.6%	1.76	31.6%	37.7%	0.84	19.9%	34.6%	0.57
Venezuela	34.7%	24.3%	1.43	27.7%	29.7%	0.93	37.6%	46.0%	0.82
Sample Average	**30.8%**	**21.5%**	**1.43**	**32.9%**	**33.7%**	**0.98**	**36.4%**	**44.9%**	**0.81**
Region									
Central and East Asia	13.4%	9.8%	1.37	27.3%	39.7%	0.69	59.3%	50.5%	1.17
Europe & UK	29.2%	21.1%	1.38	31.9%	30.6%	1.04	39.0%	48.4%	0.80
Latin America and Caribbean	33.6%	18.0%	1.86	34.7%	33.7%	1.03	31.7%	48.3%	0.66
Middle East and Africa	33.2%	30.8%	1.08	31.7%	35.6%	0.89	35.1%	33.6%	1.04
North America	39.5%	29.5%	1.34	37.5%	38.2%	0.98	22.9%	32.3%	0.71
National Income									
High Income	27.4%	22.7%	1.21	35.2%	37.9%	0.93	37.4%	39.5%	0.95
Middle Income	34.2%	21.2%	1.61	32.0%	31.5%	1.02	33.8%	47.3%	0.71
Low Income	29.2%	20.9%	1.40	32.2%	32.0%	1.01	38.6%	47.1%	0.82

Table D9: Digitalization, rates and gender ratios, GEM 2023

Country	TEA digital tools not necessary			TEA digital tools plans before pandemic			TEA adopted due to pandemic			TEA improved due to pandemic			TEA intend to adopt digital tools		
	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
Brazil	23.1%	24.2%	0.95	23.8%	37.7%	0.63	23.8%	14.9%	1.60	29.3%	23.3%	1.26	93.2%	88.3%	1.06
Canada	23.0%	19.8%	1.16	22.1%	24.2%	0.91	29.2%	33.5%	0.87	25.7%	22.5%	1.14	46.6%	58.7%	0.79
Chile	26.5%	25.5%	1.04	17.9%	20.2%	0.89	29.1%	33.4%	0.87	26.5%	20.9%	1.27	73.3%	74.8%	0.98
China	44.1%	51.0%	0.86	20.3%	12.2%	1.66	13.6%	20.4%	0.67	22.0%	16.3%	1.35	36.9%	28.8%	1.28
Colombia	54.5%	46.2%	1.18	8.6%	12.8%	0.67	23.9%	28.2%	0.85	13.1%	12.8%	1.02	60.3%	61.0%	0.99
Croatia	26.2%	26.0%	1.01	35.7%	32.0%	1.12	29.8%	23.3%	1.28	8.3%	18.7%	0.44	56.0%	49.7%	1.13
Cyprus	44.4%	39.1%	1.14	12.5%	11.6%	1.08	33.3%	37.7%	0.88	9.7%	11.6%	0.84	48.7%	45.8%	1.06
Ecuador	72.6%	75.2%	0.97	8.6%	8.7%	0.99	14.5%	13.5%	1.07	4.3%	2.6%	1.65	53.0%	59.8%	0.89
Estonia	39.8%	38.4%	1.04	32.5%	37.1%	0.88	15.7%	7.3%	2.15	12.0%	17.2%	0.70	36.6%	38.1%	0.96
France	35.1%	40.1%	0.88	32.7%	30.0%	1.09	15.8%	11.0%	1.44	16.4%	18.9%	0.87	36.8%	35.3%	1.04
Germany	26.4%	33.1%	0.80	26.4%	33.1%	0.80	25.0%	19.0%	1.32	22.2%	14.9%	1.49	31.6%	47.2%	0.67
Greece	29.6%	31.0%	0.95	13.0%	16.9%	0.77	38.9%	29.6%	1.31	18.5%	22.5%	0.82	42.9%	45.6%	0.94
Guatemala	61.7%	58.3%	1.06	3.3%	6.5%	0.51	20.5%	21.2%	0.97	14.5%	14.0%	1.04	75.2%	78.5%	0.96
Hungary	28.6%	35.5%	0.81	30.0%	28.9%	1.04	12.9%	9.9%	1.30	28.6%	25.6%	1.12	39.7%	44.3%	0.90
India	52.9%	32.2%	1.64	16.0%	11.9%	1.34	13.4%	36.6%	0.37	17.6%	19.3%	0.91	28.9%	47.2%	0.61
Iran	17.3%	42.2%	0.41	29.9%	29.8%	1.00	3.1%	7.5%	0.41	49.6%	20.5%	2.42	56.7%	46.5%	1.22
Israel	22.1%	24.7%	0.89	30.9%	18.5%	1.67	26.5%	24.7%	1.07	20.6%	32.1%	0.64	52.0%	53.3%	0.98
Italy	18.5%	23.5%	0.79	29.6%	33.7%	0.88	33.3%	24.5%	1.36	18.5%	18.4%	1.01	49.2%	52.5%	0.94
Jordan	41.1%	53.4%	0.77	13.3%	21.9%	0.61	34.4%	13.5%	2.55	11.1%	11.2%	0.99	46.3%	45.2%	1.02
Latvia	10.2%	19.5%	0.52	39.8%	39.8%	1.00	20.5%	8.5%	2.41	29.5%	32.2%	0.92	52.7%	49.6%	1.06
Lithuania	50.7%	43.9%	1.15	11.6%	7.0%	1.66	5.8%	12.3%	0.47	31.9%	36.8%	0.87	20.8%	19.3%	1.08
Luxembourg	28.7%	18.4%	1.56	18.8%	32.0%	0.59	18.8%	25.2%	0.75	33.8%	24.3%	1.39	43.0%	67.6%	0.64
Mexico	44.1%	37.3%	1.18	12.9%	15.7%	0.82	27.6%	24.1%	1.15	15.3%	22.9%	0.67	67.6%	76.2%	0.89
Morocco	60.3%	56.0%	1.08	6.9%	3.3%	2.09	20.7%	17.6%	1.18	12.1%	23.1%	0.52	53.7%	54.5%	0.99
Netherlands	25.6%	22.3%	1.15	36.7%	46.3%	0.79	10.0%	14.0%	0.71	27.8%	17.4%	1.60	30.7%	27.6%	1.11
Norway	31.0%	47.4%	0.65	35.7%	25.6%	1.39	11.9%	17.9%	0.66	21.4%	9.0%	2.38	47.7%	47.0%	1.01
Oman	3.4%	4.3%	0.79	8.6%	6.5%	1.32	74.1%	73.9%	1.00	13.8%	15.2%	0.91	62.5%	62.9%	0.99
Panama	28.7%	33.5%	0.86	18.3%	18.2%	1.01	36.6%	30.7%	1.19	16.4%	17.6%	0.93	79.7%	73.7%	1.08
Poland	47.9%	38.5%	1.24	10.6%	3.7%	2.86	25.5%	39.4%	0.65	16.0%	18.3%	0.87	39.3%	47.2%	0.83
Puerto Rico	28.6%	36.6%	0.78	19.1%	14.7%	1.30	22.6%	30.6%	0.74	29.6%	18.1%	1.64	78.0%	76.9%	1.01
Qatar	15.9%	18.9%	0.84	23.9%	22.6%	1.06	46.6%	50.8%	0.92	13.6%	7.7%	1.77	65.3%	64.3%	1.02
Romania	33.3%	65.6%	0.51	23.1%	14.8%	1.56	28.2%	6.6%	4.27	15.4%	13.1%	1.18	41.3%	38.2%	1.08
Saudi Arabia	6.6%	5.3%	1.25	15.1%	17.7%	0.85	62.8%	56.5%	1.11	15.6%	20.5%	0.76	82.5%	74.5%	1.11

Table D9 (continued)

Country	TEA digital tools not necessary			TEA digital tools plans before pandemic			TEA adopted due to pandemic			TEA improved due to pandemic			TEA intend to adopt digital tools		
	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
Slovakia	45.3%	47.7%	0.95	21.3%	21.1%	1.01	9.3%	14.7%	0.63	24.0%	16.5%	1.45	42.5%	38.6%	1.10
Slovenia	21.6%	26.9%	0.80	32.4%	47.8%	0.68	16.2%	7.5%	2.16	29.7%	17.9%	1.66	40.5%	50.0%	0.81
South Africa	29.3%	35.2%	0.83	10.0%	12.6%	0.79	46.7%	36.3%	1.29	14.0%	15.9%	0.88	63.3%	59.4%	1.07
South Korea	29.3%	33.1%	0.89	25.3%	19.2%	1.32	30.7%	30.8%	1.00	14.7%	16.9%	0.87	13.0%	11.6%	1.12
Spain	23.4%	19.0%	1.23	26.4%	28.0%	0.94	29.6%	28.5%	1.04	20.6%	24.5%	0.84	44.0%	45.1%	0.98
Sweden	35.3%	24.9%	1.42	31.1%	41.1%	0.76	10.1%	12.4%	0.81	23.5%	21.6%	1.09	37.4%	41.2%	0.91
Switzerland	22.2%	23.2%	0.96	50.8%	48.8%	1.04	11.1%	3.7%	3.00	15.9%	24.4%	0.65	31.9%	30.5%	1.05
Thailand	24.9%	33.5%	0.74	9.6%	12.2%	0.79	26.9%	21.7%	1.24	38.6%	32.6%	1.18	75.6%	65.2%	1.16
United Kingdom	20.5%	22.3%	0.92	20.5%	21.3%	0.96	25.6%	18.1%	1.41	33.3%	38.3%	0.87	63.7%	59.6%	1.07
United States	16.9%	16.1%	1.05	36.1%	30.0%	1.20	19.7%	26.7%	0.74	27.3%	27.2%	1.00	41.7%	49.8%	0.84
Uruguay	47.6%	53.8%	0.88	16.0%	15.9%	1.01	12.8%	9.1%	1.41	23.5%	21.2%	1.11	69.4%	61.0%	1.14
Venezuela	40.1%	40.5%	0.99	12.5%	17.2%	0.73	37.0%	27.9%	1.33	10.4%	14.4%	0.72	80.2%	78.3%	1.02
Sample Average	**33.5%**	**32.3%**	**1.04**	**19.4%**	**21.6%**	**0.90**	**26.9%**	**26.7%**	**1.01**	**20.2%**	**19.4%**	**1.04**	**58.0%**	**57.5%**	**1.01**
Region															
Central and East Asia	34.6%	34.3%	1.01	14.7%	13.8%	1.07	22.9%	28.5%	0.80	27.8%	23.3%	1.19	50.2%	44.8%	1.12
Europe & UK	28.7%	28.3%	1.01	27.1%	29.2%	0.93	22.9%	20.8%	1.10	21.2%	21.7%	0.98	42.2%	44.1%	0.96
Latin America and Caribbean	44.9%	44.2%	1.02	12.9%	15.6%	0.83	24.6%	23.9%	1.03	17.6%	16.2%	1.09	71.9%	73.3%	0.98
Middle East and Africa	18.9%	22.9%	0.83	17.0%	18.2%	0.93	45.2%	41.6%	1.09	19.0%	17.3%	1.10	66.6%	62.1%	1.07
North America	19.3%	17.6%	1.10	30.7%	27.4%	1.12	23.3%	29.9%	0.78	26.7%	25.1%	1.06	43.5%	54.0%	0.81
National Income															
High Income	20.9%	20.7%	1.01	26.6%	27.8%	0.96	31.2%	32.0%	0.98	21.4%	19.5%	1.10	50.8%	53.7%	0.95
Middle Income	29.1%	29.5%	0.99	22.1%	22.4%	0.99	27.4%	26.6%	1.03	21.4%	21.5%	1.00	56.4%	54.6%	1.03
Low Income	47.2%	47.0%	1.00	11.2%	14.7%	0.76	23.5%	21.8%	1.08	18.0%	16.4%	1.10	64.7%	64.8%	1.00

Table D10: Sustainability, rates and gender ratios, GEM 2023

Country	SDG awareness			Sustainability > economic goals			Social strategy		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Brazil	-	-	-	83.2%	84.5%	0.98	88.6%	89.5%	0.99
Canada	25.9%	38.9%	0.67	68.6%	62.5%	1.10	75.6%	68.9%	1.10
Chile	21.7%	23.0%	0.94	74.9%	77.6%	0.97	83.3%	82.0%	1.02
China	41.7%	31.0%	1.35	56.3%	68.3%	0.82	73.8%	91.8%	0.80
Colombia	9.7%	13.9%	0.70	50.2%	54.1%	0.93	62.5%	67.2%	0.93
Croatia	23.1%	25.2%	0.92	67.0%	65.4%	1.02	83.7%	75.6%	1.11
Cyprus	12.2%	16.6%	0.73	16.0%	22.8%	0.70	10.5%	14.4%	0.73
Ecuador	3.7%	4.6%	0.80	58.0%	61.8%	0.94	63.2%	67.1%	0.94
Estonia	21.9%	17.7%	1.24	33.0%	33.1%	1.00	58.7%	52.6%	1.12
France	37.0%	37.6%	0.98	53.8%	52.8%	1.02	66.5%	66.5%	1.00
Germany	-	-	-	56.0%	47.6%	1.18	73.3%	72.8%	1.01
Greece	27.3%	27.8%	0.98	52.6%	65.3%	0.81	66.1%	75.7%	0.87
Guatemala	-	-	-	81.7%	84.0%	0.97	91.6%	94.6%	0.97
Hungary	25.0%	27.4%	0.91	46.5%	41.9%	1.11	81.7%	67.2%	1.22
India	4.9%	14.1%	0.35	89.8%	85.2%	1.05	94.8%	88.3%	1.07
Iran	-	-	-	46.9%	26.3%	1.78	56.5%	37.6%	1.50
Israel	18.9%	28.1%	0.67	30.3%	32.3%	0.94	61.5%	55.8%	1.10
Italy	40.0%	51.5%	0.78	65.0%	71.3%	0.91	69.8%	75.5%	0.92
Jordan	3.7%	6.7%	0.55	76.4%	60.2%	1.27	81.7%	78.8%	1.04
Latvia	22.7%	32.3%	0.70	39.3%	42.2%	0.93	77.3%	74.4%	1.04
Lithuania	34.4%	23.6%	1.46	47.2%	32.2%	1.47	70.8%	48.3%	1.47
Luxembourg	41.3%	41.0%	1.01	58.5%	50.0%	1.17	75.6%	72.2%	1.05
Mexico	19.4%	22.1%	0.88	69.9%	74.6%	0.94	81.1%	84.3%	0.96
Morocco	0.0%	1.8%	0.00	45.9%	62.6%	0.73	59.7%	64.3%	0.93
Netherlands	41.3%	40.3%	1.02	54.8%	48.1%	1.14	68.3%	54.3%	1.26
Norway	44.4%	66.7%	0.67	37.5%	42.0%	0.89	57.5%	47.0%	1.22
Oman	-	-	-	60.5%	62.4%	0.97	65.8%	62.6%	1.05
Panama	-	-	-	76.6%	77.7%	0.99	83.7%	83.8%	1.00
Poland	38.5%	54.3%	0.71	30.9%	18.8%	1.64	89.4%	83.0%	1.08
Puerto Rico	-	-	-	78.2%	71.9%	1.09	89.9%	89.1%	1.01
Qatar	19.6%	18.9%	1.04	67.0%	68.2%	0.98	83.7%	81.5%	1.03
Romania	24.4%	11.4%	2.14	78.3%	71.6%	1.09	89.1%	80.6%	1.11
Saudi Arabia	-	-	-	84.2%	77.2%	1.09	85.7%	85.1%	1.01

Table D10 (continued)

Country	SDG awareness			Sustainability > economic goals			Social strategy		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Slovakia	20.2%	25.2%	0.80	66.7%	60.2%	1.11	76.7%	82.9%	0.93
Slovenia	32.4%	20.5%	1.58	65.8%	63.4%	1.04	76.3%	72.2%	1.06
South Africa	29.8%	31.8%	0.94	56.1%	62.2%	0.90	68.7%	68.3%	1.01
South Korea	35.5%	29.8%	1.19	42.7%	26.9%	1.59	73.3%	62.3%	1.18
Spain	36.0%	33.5%	1.07	46.7%	42.1%	1.11	62.7%	58.1%	1.08
Sweden	-	-	-	60.5%	42.1%	1.44	72.0%	52.4%	1.37
Switzerland	36.6%	31.3%	1.17	60.9%	45.2%	1.35	73.8%	69.1%	1.07
Thailand	35.0%	39.0%	0.90	80.4%	75.5%	1.06	90.8%	83.9%	1.08
United Kingdom	-	-	-	63.3%	51.0%	1.24	81.3%	80.0%	1.02
United States	-	-	-	50.6%	57.3%	0.88	68.0%	66.8%	1.02
Uruguay	14.6%	15.5%	0.94	78.5%	72.7%	1.08	87.0%	85.5%	1.02
Venezuela	-	-	-	70.1%	78.0%	0.90	91.7%	92.9%	0.99
Sample Average	**24.6%**	**25.9%**	**0.95**	**63.1%**	**60.7%**	**1.04**	**75.9%**	**73.2%**	**1.04**
Region									
Central and East Asia	27.7%	27.5%	1.01	74.7%	68.2%	1.10	87.2%	81.9%	1.06
Europe & UK	32.7%	32.7%	1.00	50.2%	45.7%	1.10	68.0%	62.6%	1.09
Latin America and Caribbean	14.0%	16.1%	0.87	72.1%	75.1%	0.96	81.9%	84.3%	0.97
Middle East and Africa	16.5%	17.1%	0.96	66.1%	63.5%	1.04	74.8%	73.8%	1.01
North America	25.9%	38.9%	0.67	57.8%	59.9%	0.96	71.1%	67.7%	1.05
National Income									
High Income	35.8%	34.5%	1.04	63.5%	59.0%	1.08	75.4%	72.0%	1.05
Middle Income	27.2%	27.4%	0.99	58.0%	54.5%	1.06	73.5%	69.0%	1.07
Low Income	15.1%	16.4%	0.92	68.8%	70.3%	0.98	79.0%	79.9%	0.99

Table D10 (continued)

Country	Enviromental strategy			Social practices			Environmental practices		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Brazil	90.7%	90.0%	1.01	92.3%	91.7%	1.01	98.0%	94.0%	1.04
Canada	69.9%	63.0%	1.11	59.4%	54.8%	1.08	65.1%	62.4%	1.04
Chile	81.4%	84.7%	0.96	53.9%	50.7%	1.06	69.9%	59.9%	1.17
China	75.4%	90.0%	0.84	62.5%	79.6%	0.79	70.3%	83.1%	0.85
Colombia	62.3%	66.3%	0.94	34.5%	34.4%	1.00	39.7%	46.2%	0.86
Croatia	81.8%	75.0%	1.09	65.8%	53.5%	1.23	70.0%	64.0%	1.09
Cyprus	6.8%	14.7%	0.46	36.5%	44.5%	0.82	59.5%	58.0%	1.03
Ecuador	65.8%	69.3%	0.95	35.8%	33.8%	1.06	45.7%	45.3%	1.01
Estonia	68.0%	57.7%	1.18	15.1%	28.9%	0.52	47.6%	37.6%	1.27
France	67.6%	66.8%	1.01	24.1%	24.6%	0.98	31.8%	33.2%	0.96
Germany	70.3%	71.2%	0.99	51.5%	54.2%	0.95	44.9%	52.5%	0.86
Greece	76.3%	80.3%	0.95	48.1%	49.3%	0.98	66.7%	65.3%	1.02
Guatemala	90.2%	95.2%	0.95	45.1%	52.8%	0.85	61.5%	61.9%	0.99
Hungary	77.8%	77.4%	1.01	42.6%	39.8%	1.07	62.3%	58.5%	1.06
India	83.8%	80.3%	1.04	19.1%	38.4%	0.50	22.5%	39.8%	0.57
Iran	59.2%	37.3%	1.59	32.2%	31.0%	1.04	48.0%	31.3%	1.53
Israel	51.4%	46.7%	1.10	43.5%	41.4%	1.05	47.0%	35.7%	1.32
Italy	75.8%	82.4%	0.92	46.4%	47.3%	0.98	67.9%	60.0%	1.13
Jordan	83.3%	67.2%	1.24	36.7%	37.3%	0.98	44.4%	42.2%	1.05
Latvia	80.2%	75.4%	1.06	30.8%	28.9%	1.07	44.3%	40.2%	1.10
Lithuania	55.7%	48.3%	1.15	42.6%	28.3%	1.51	33.8%	28.8%	1.17
Luxembourg	75.9%	75.7%	1.00	56.0%	51.4%	1.09	71.8%	60.2%	1.19
Mexico	83.4%	84.4%	0.99	54.9%	56.2%	0.98	62.6%	58.8%	1.06
Morocco	64.1%	71.6%	0.90	25.8%	40.4%	0.64	27.0%	31.5%	0.86
Netherlands	63.5%	55.7%	1.14	34.8%	52.9%	0.66	41.3%	46.7%	0.88
Norway	68.3%	65.1%	1.05	21.1%	26.8%	0.79	32.6%	44.0%	0.74
Oman	66.7%	68.9%	0.97	36.2%	54.6%	0.66	47.9%	56.3%	0.85
Panama	90.8%	89.7%	1.01	62.3%	67.1%	0.93	65.9%	68.9%	0.96
Poland	91.6%	86.6%	1.06	48.9%	55.0%	0.89	51.6%	59.3%	0.87
Puerto Rico	94.2%	86.1%	1.09	58.8%	64.5%	0.91	56.0%	65.5%	0.85
Qatar	84.2%	83.8%	1.00	48.4%	47.0%	1.03	45.7%	47.3%	0.97
Romania	85.4%	80.6%	1.06	68.3%	48.4%	1.41	67.4%	55.4%	1.22
Saudi Arabia	80.4%	77.7%	1.03	72.5%	65.7%	1.10	70.8%	65.0%	1.09

Table D10 (continued)

Country	Enviromental strategy			Social practices			Environmental practices		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Slovakia	80.7%	80.2%	1.01	26.7%	46.2%	0.58	48.8%	63.5%	0.77
Slovenia	73.0%	80.6%	0.91	50.0%	28.6%	1.75	41.7%	40.0%	1.04
South Africa	61.5%	60.7%	1.01	51.7%	59.6%	0.87	51.4%	55.6%	0.92
South Korea	61.3%	56.9%	1.08	37.3%	23.3%	1.60	54.7%	53.1%	1.03
Spain	62.4%	55.9%	1.12	44.9%	36.7%	1.22	52.8%	51.4%	1.03
Sweden	58.6%	50.7%	1.16	37.6%	36.1%	1.04	57.1%	51.1%	1.12
Switzerland	81.4%	71.1%	1.14	48.4%	50.7%	0.95	69.2%	61.0%	1.13
Thailand	87.2%	88.3%	0.99	62.0%	59.0%	1.05	68.0%	63.7%	1.07
United Kingdom	70.0%	74.7%	0.94	38.8%	32.0%	1.21	53.2%	42.4%	1.25
United States	63.6%	59.2%	1.07	44.2%	46.5%	0.95	54.2%	56.4%	0.96
Uruguay	91.3%	90.2%	1.01	47.0%	49.8%	0.94	58.4%	53.9%	1.08
Venezuela	88.9%	92.5%	0.96	43.9%	46.6%	0.94	48.4%	45.2%	1.07
Sample Average	**75.0%**	**72.7%**	**1.03**	**47.4%**	**47.5%**	**1.00**	**55.9%**	**54.5%**	**1.03**
Region									
Central and East Asia	18.8%	79.2%	0.24	47.7%	46.2%	1.03	54.8%	55.1%	0.99
Europe & UK	32.6%	63.3%	0.52	41.5%	39.3%	1.06	52.0%	50.7%	1.03
Latin America and Caribbean	16.9%	85.9%	0.20	50.4%	54.0%	0.93	59.8%	60.2%	0.99
Middle East and Africa	28.0%	69.7%	0.40	52.1%	51.9%	1.00	55.0%	51.4%	1.07
North America	33.9%	61.0%	0.56	50.4%	50.4%	1.00	58.4%	59.3%	0.98
National Income									
High Income	71.6%	70.0%	1.02	49.4%	47.3%	1.04	56.1%	53.6%	1.05
Middle Income	74.4%	70.0%	1.06	47.7%	46.1%	1.03	57.3%	55.6%	1.03
Low Income	78.1%	78.7%	0.99	45.7%	49.4%	0.93	54.2%	54.1%	1.00

Table D11: Informal investment, rates and gender ratios, GEM 2023

Country	Knows an entrepreneur			Recently invested			Median investment		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women USD	Men USD	W/M ratio
Brazil	66.3%	75.6%	0.88	7.3%	13.3%	0.55	690	1 018	0.68
Canada	47.0%	56.0%	0.84	10.8%	16.7%	0.65	1 422	2 036	0.70
Chile	72.2%	73.0%	0.99	23.0%	30.9%	0.74	799	1 866	0.43
China	55.5%	56.6%	0.98	6.8%	4.8%	1.42	6 871	14 181	0.48
Colombia	71.7%	73.1%	0.98	3.4%	4.8%	0.71	231	462	0.50
Croatia	69.4%	74.1%	0.94	5.7%	7.6%	0.75	279	290	0.96
Cyprus	65.2%	68.7%	0.95	3.3%	5.0%	0.66	10 641	22 866	0.47
Ecuador	62.4%	68.7%	0.91	2.6%	4.8%	0.54	-	-	-
Estonia	43.8%	44.8%	0.98	3.8%	6.1%	0.62	2 186	349	6.26
France	58.7%	62.3%	0.94	6.0%	8.2%	0.73	2 186	5 464	0.40
Germany	31.0%	41.9%	0.74	4.4%	7.0%	0.63	16 393	5 464	3.00
Greece	32.3%	33.9%	0.95	4.4%	3.1%	1.42	640	9 623	0.07
Guatemala	67.4%	79.1%	0.85	7.9%	15.3%	0.52	4 325	640	6.76
Hungary	45.4%	56.8%	0.80	2.4%	6.0%	0.40	609	2 920	0.21
India	46.2%	65.9%	0.70	3.9%	8.7%	0.45	2 366	122	19.44
Iran	47.5%	59.4%	0.80	5.1%	6.8%	0.75	13 690	2 366	5.79
Israel	67.2%	69.6%	0.97	4.5%	6.6%	0.68	14 137	16 342	0.87
Italy	41.2%	51.4%	0.80	5.1%	5.6%	0.91	837	10 928	0.08
Jordan	48.9%	63.3%	0.77	8.2%	11.8%	0.69	3 279	1 981	1.66
Latvia	41.5%	46.3%	0.90	4.8%	10.9%	0.44	1 111	3 279	0.34
Lithuania	65.2%	75.1%	0.87	5.8%	7.5%	0.77	13 230	2 186	6.05
Luxembourg	44.0%	47.5%	0.93	8.7%	11.0%	0.79	2 860	27 321	0.10
Mexico	53.4%	57.6%	0.93	2.5%	4.6%	0.54	1 081	1 374	0.79
Morocco	43.7%	47.5%	0.92	3.4%	5.8%	0.59	4 173	999	4.18
Netherlands	55.4%	65.3%	0.85	8.2%	14.7%	0.56	7 418	10 928	0.68
Norway	43.9%	54.1%	0.81	4.5%	8.2%	0.55	1 299	11 724	0.11
Oman	55.3%	65.6%	0.84	10.7%	15.7%	0.68	500	1 299	0.38
Panama	45.8%	51.7%	0.89	5.7%	13.4%	0.43	1 875	1 971	0.95
Poland	46.9%	45.3%	1.04	2.9%	2.3%	1.26	4 059	1 330	3.05
Puerto Rico	65.8%	70.3%	0.94	2.9%	4.4%	0.66	4 419	10 000	0.44
Qatar	48.0%	55.1%	0.87	4.5%	8.1%	0.56	1 804	12 354	0.15
Romania	45.0%	46.0%	0.98	1.1%	0.7%	1.57	7 999	11 048	0.72
Saudi Arabia	86.9%	88.7%	0.98	18.2%	21.6%	0.84	10 928	9 332	1.17

Table D11 (continued)

Country	Knows an entrepreneur			Recently invested			Median investment		
	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio	Women (%)	Men (%)	W/M ratio
Slovakia	57.3%	62.1%	0.92	5.1%	5.7%	0.89	5 464	10 928	0.50
Slovenia	49.1%	61.1%	0.80	3.3%	6.9%	0.48	476	12 982	0.04
South Africa	36.7%	41.6%	0.88	4.9%	10.2%	0.48	19 123	2 823	6.77
South Korea	33.5%	42.2%	0.79	1.5%	2.8%	0.54	5 464	15 299	0.36
Spain	45.9%	50.7%	0.91	4.9%	6.8%	0.72	950	6 557	0.14
Sweden	47.8%	55.1%	0.87	8.0%	14.9%	0.54	5 600	4 751	1.18
Switzerland	49.7%	58.6%	0.85	8.6%	12.6%	0.68	1 449	7 491	0.19
Thailand	20.8%	24.1%	0.86	5.5%	6.7%	0.82	6 304	2 899	2.17
United Kingdom	52.2%	53.5%	0.98	1.8%	4.1%	0.44	5 000	9 192	0.54
United States	42.0%	47.0%	0.89	9.9%	15.1%	0.66	1 300	2 000	0.65
Uruguay	56.0%	64.8%	0.86	5.7%	9.3%	0.61	76	1 653	0.05
Venezuela	57.1%	67.0%	0.85	4.6%	5.6%	0.82	-	202	-
Sample Average	**50.8%**	**56.7%**	**0.90**	**5.8%**	**8.7%**	**0.67**	**2 303**	**3 279**	**0.70**
Region									
Central and East Asia	38.9%	48.9%	0.80	4.3%	6.1%	0.70	2 836	2 899	0.98
Europe & UK	47.8%	52.7%	0.91	4.8%	6.9%	0.70	3 279	5 464	0.60
Latin America and Caribbean	62.7%	68.8%	0.91	7.3%	11.8%	0.62	694	1 244	0.56
Middle East and Africa	54.9%	62.3%	0.88	7.8%	11.3%	0.69	4 533	6 023	0.75
North America	43.8%	50.4%	0.87	10.2%	15.7%	0.65	3 000	2 036	1.47
National Income									
High Income	50.3%	57.9%	0.87	7.5%	11.2%	0.67	5 464	8 236	0.66
Middle Income	50.5%	54.5%	0.93	5.3%	7.5%	0.71	2 182	3 000	0.73
Low Income	51.7%	59.8%	0.86	5.1%	8.2%	0.62	886	1 144	0.77

About GEM

Entrepreneurship matters! It drives societal health and economic growth. Innovation is unleashed. Jobs are created. New opportunities come to fruition. Some of society's greatest challenges are addressed (such as the United Nations Sustainable Development Goals).

During its 25+ years of existence, Global Entrepreneurship Monitor (GEM) has repeatedly provided valuable insights on how best to foster entrepreneurship to propel prosperity. GEM is a networked consortium of national country teams, primarily associated with top academic institutions, that carries out survey-based research on entrepreneurship and entrepreneurship ecosystems around the world. It is the only global research source that collects data directly from entrepreneurs. Based on these entrepreneurs' insights, GEM publishes the annual Global Report as well as a range of National and Special Topic Reports.

The go-to source for policymakers

Governments increasingly need credible data to make key decisions that stimulate sustainable forms of entrepreneurship. Official statistics like the number of registered businesses capture a very small part of the picture. Stakeholders need to understand on-the-ground perceptions directly from entrepreneurs. Thus by using GEM research, government officials make better-informed decisions to help entrepreneurs and entrepreneurial ecosystems thrive.

Many other stakeholders also benefit:

- Academics are able to apply unique methodological approaches to studying entrepreneurship at the national level.
- Sponsors advance their organizational interests and gain a higher profile.
- International organizations incorporate or integrate GEM indicators into their own data sets and/or use GEM data as a benchmark for their own analyses.
- Entrepreneurs have better knowledge on where to invest and how to influence key stakeholders.

25+ years of impact

GEM has been generating impact for more than a quarter century!

- 25+ years of data, allowing longitudinal analysis in and across geographies on multiple levels;
- Up to 170,000+ interviews annually with experts and adult populations including entrepreneurs of all ages;
- Data from 120 economies across five continents;
- Collaboration with 370+ specialists in entrepreneurship research;
- Involvement of 150+ academic and research institutions;
- Support from 150+ funding institutions.

In the world of university research, 25+ years is a very long time! Most common are short-lived projects dictated by the longevity of PhD theses. GEM has created both immediate and generational benefits. Not many research projects can make a similar claim!

The beginning

Professors Bill Bygrave of Babson College and Michael Hay of London Business School co-created GEM in the late 1990s. Did they dare to imagine that this "light bulb" research idea would last so long? They were particularly visionary academics, so the answer is a resounding "Yes!".

GEM's first annual study covered 10 countries. Since then, some 120 countries have participated in the research. This enabled GEM to become the richest source of reliable information on the state of entrepreneurship and entrepreneurial ecosystems across the globe.

Moving forward

GEM has become much more than a project. It is a networked organization. Currently, there are 60+ National Teams comprised of hundreds of passionate researchers.

Moving forward, GEM aims for a long-term future. The data generated will never lose relevance as economies seek to grow and thrive, and as the world seeks innovative solutions to some of the greatest threats that it faces. GEM will undoubtedly continue to be a fundamental study for generating knowledge about new ventures and their subsequent economic and social impacts around the world.

Join us on the journey!

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* GRIPs = GEM Research & Innovation Projects

GEM key definitions, abbreviations and 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.

Motivation 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.
W/M Ratios	Throughout the report, gender differences are expressed using W/M ratios. In this context, the gap is defined as the difference between the number of women (W) and the number of men (M), either below or above the level of parity (1.0). For instance, a W/M ratio of 0.68 signifies that there are 0.68 women for every 1.0 man.

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.)

Entrepreneurship fuels economic growth, drives innovation, creates jobs, and tackles global challenges. Global Entrepreneurship Monitor (GEM) has repeatedly provided valuable insights on how best to foster entrepreneurship to propel prosperity.

GEM is a networked consortium of national country teams, primarily associated with top academic institutions, that carries out survey-based research on entrepreneurship and entrepreneurship ecosystems around the world. It is the only global research source that collects data directly from entrepreneurs.

Why GEM?

- Government officials make better-informed decisions to help entrepreneurs and entrepreneurial ecosystems thrive.
- Academics are able to apply unique methodological approaches to studying entrepreneurship.
- Sponsors advance their organizational interests.
- International organizations incorporate GEM indicators to their own data sets and/or use GEM data as a benchmark for their own analyses.
- Entrepreneurs have better knowledge on where to invest.

25+ Years of Data & Impact:

- Allows for longitudinal analysis in and across geographies on multiple levels
- Up to 170,000+ interviews annually with experts and adult populations including entrepreneurs of all ages
- Data from 120 economies across five continents
- Collaboration with 370+ specialists in entrepreneurship research
- Involvement of 150+ academic and research institutions
- Support from 150+ funding institutions

GEM began in 1999 as a joint project between Babson College and London Business School. Today there are 60+ national teams. Join us on the journey of shaping entrepreneurship worldwide!

GEM Global Entrepreneurship Monitor