



The American  
University in Cairo

School of Business



Global  
Entrepreneurship  
Monitor

# EGYPT NATIONAL REPORT

2018/2019

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## FROM THE DEAN

This year, AUC celebrates its Centennial with 100 years of contribution to education, social progress, and economic development in Egypt and the Middle East and Africa (MENA) region. Entrepreneurship stands at the core of AUC's liberal arts education and AUC School of Business' mission and vision.

Over the past decade, Egypt has experienced a dynamic entrepreneurial movement that started to take place amongst the youth and young professionals nationally and regionally, with AUC School of Business being at the heart of this entrepreneurial movement. In 2010, the School selected entrepreneurship as one of its key strategic priorities. With almost 10 years down the road, the AUC School of Business has become a leading force in the entrepreneurship ecosystem in Egypt and the MENA region. Through academic and executive education programs, quality impact-oriented research, and various initiatives targeting Egyptian and Arab entrepreneurs, the School has strongly contributed in spreading the entrepreneurial spirit and in increasing the startup activity rate in the whole region.

This year for the fourth consecutive time, we join our efforts with the Global Entrepreneurship Monitor (GEM) Consortium to produce the GEM Egypt report. As usual, the report provides key indicators and in-depth analysis of entrepreneurship activity as well as individual motivations, behaviors, and attitudes towards entrepreneurship in the country. Through this report, we also contribute to building knowledge and sharing insights for effective evidence-based decision making and actions amongst key players in the Egyptian entrepreneurial ecosystem, and to foster much needed investments in the country's entrepreneurs.

Through producing the GEM Egypt report, and other teaching, research, and outreach activities and initiatives, the AUC School of Business continues to promote and support entrepreneurship in Egypt, the region and beyond. This emanates from our vision to be the leading knowledge hub with an Arab region relevance and a global influence, and our mission to develop entrepreneurial and responsible global leaders and professionals.



**Sherif Kamel**  
Dean  
AUC School of Business



## THE AMERICAN UNIVERSITY IN CAIRO

The American University in Cairo (AUC) was founded in 1919 by Americans devoted to education and community service in the Middle East. Today, AUC is the region's premier English-language university and an essential contributor to the social, political and cultural life of the Arab world. AUC's academic programs are rooted in liberal arts education and serve as a crossroads for the world's cultures: a vital, vibrant forum for reasoned argument, spirited debate and understanding across cultures. Chartered and accredited in the United States and Egypt, The American University in Cairo is an independent, not-for-profit, equal-opportunity institution.

## AUC SCHOOL OF BUSINESS

The AUC School of Business is the leading business school in the Middle East and Africa, providing world-class undergraduate, graduate and executive business education in management, economics and accounting. The School's programs are built around entrepreneurship, responsible business and economic development. Programs are delivered in ways that allow students to enjoy a learning experience that extends beyond the classroom, through diverse activities that prepare them to compete in a knowledge-based global community. The AUC School of Business is among fewer than 1 percent of business schools worldwide that hold triple-crown accreditation from three top international accreditation bodies: EQUIS, AMBA and AACSB. It consistently ranks among the top business schools in the MENA region and Africa in undergraduate, MBA and executive education.

## FROM THE AUTHORS

This is our fourth consecutive GEM Egypt report since we undertook this project in 2015. Over the past decade, Egypt and the world has witnessed an ambitious entrepreneurial movement. In Egypt, this has translated into policies and programs to support entrepreneurs as well as numerous success stories. We are pleased that the GEM Egypt report is at the heart of this movement, helping many stakeholders make evidence-based analysis and decisions to support their programs, interventions, policies and reforms. The GEM data and analysis provide a strong foundation for these decisions, providing insights to policy makers, helping program managers better target their interventions, and advocating relevant and impactful policy reforms.

This year's report reflects the beginning of Egypt's economic recovery in 2018. During the period between 2016-2018, Egypt's economy experienced a challenging period marked by a severe currency devaluation, high interest rates, rising inflation and a reduction of government subsidies. These challenging economic conditions and austerity measures resulted in high rates of unemployment, especially among youth, and a decline in the standards of living. Despite this challenging environment, Egypt's entrepreneurial indicators remained positive. As the economy began to recover in 2018, we started witnessing this transformation in the various indicators entailed in this report, which reflects a culture of resilience and recovery.

As we present our research and findings, we continue to believe that entrepreneurship is a key driver for economic growth, job creation and competitiveness. It is also a great vehicle for socio-economic inclusion, youth engagement and promoting a free and competitive economy.

In this GEM report, we provide a comprehensive study of entrepreneurship in Egypt, tracking individual motivations, behaviors, attitudes towards entrepreneurship, and benchmarking them against GEM global figures and historical trends. We also examine the different elements of Egypt's entrepreneurial ecosystem and provide insights on the strengths and weaknesses in each area.

GEM's Egypt report provides analytical resources for policy makers, practitioners, and development organizations. It also provides evidence-based analysis on the characteristics of entrepreneurship in Egypt, with the aim of guiding policy decisions, institution building and investments decisions.



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**Drosos** is a non-profit charitable organization based in Zurich, Switzerland and established in 2003. Drosos is involved with more than 100 projects to fight poverty, promote health, increase access to education and creative activities for youth, and protect the environment.

**Hivos**, the Humanist Institute for Cooperation with Developing Countries, is a development aid organization headquartered in the Netherlands. Hivos supports organizations working in Africa, Latin America and Asia in the fields of social change, digital activism and rural innovations.

**Oxfam**, through a grant from the Danish-Arab Partnership Program (DAAP) under the Youth Participation and Employment Project (YPE), supports better economic opportunities, especially for young people and women in the region. The Danish-Arab Partnership Program is Denmark's collaboration program with the Middle East and North Africa.



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# EXECUTIVE SUMMARY

## EXECUTIVE SUMMARY

Despite challenging economic conditions in Egypt over the past few years (currency devaluation, growing inflation, rising interest rates and the reduction of government subsidies), the growing the buildup of a positive entrepreneurial trend continued, with more progress towards growing an entrepreneurial culture in Egypt.

In this report, we examine the behaviors, motivations and attitudes towards entrepreneurship as well as characteristics of early-stage enterprises through insights from the Adult Population Survey (APS) of a sample of 2,542 individuals. We also examine the different aspects of the entrepreneurship ecosystem in Egypt expressed by 50 national experts through the National Expert Survey (NES). We also introduce the National Entrepreneurship Context Index (NECI), a new index providing a composite measure of the entrepreneurial ecosystem, based on GEM's 12 framework conditions. Through our analysis, we benchmark these aspects in Egypt against other GEM countries as well as countries of similar economic development level. We also look at the historical trend comparing this year's data with data from previous years.

### Perspectives on Entrepreneurship in Egypt

Overall, Egyptians hold a positive perspective of entrepreneurs, and a majority of them aspire to start a business. However, the rate of entrepreneurial participation is slowly declining over the past 3 years, along with a high level of business discontinuation, with a majority of entrepreneurs driven by economic necessity.

**Societal perceptions** of entrepreneurship remain highly favorable as 74% of Egyptians perceive entrepreneurship as a good career choice (ranking 10th among GEM countries), 82.6% regard successful entrepreneurs in high social status (ranking 5th among GEM countries), and 68.1% of Egyptians perceived media attention towards entrepreneurship as favorable. These indicators highlight a consistently positive appreciation for entrepreneurship within society at large.

**Opportunity-recognition** is at the heart of the entrepreneurial process; playing an important role in shaping individuals' decisions to start new businesses. 39.3% of the non-entrepreneurs perceived an opportunity to start a new venture (ranking 30th). This represents a drop from previous years (ranging between 47-54% in 2015-2017), suggesting that opportunity is perceived to have reduced in Egypt compared to previous years. This is an indicator that while the economy has started to recover, opportunity recognition is lagging, with fewer people identifying entrepreneurial opportunities compared to previous years.

**Entrepreneurial intention** remains extremely high, with 60.2% of Egyptian non-entrepreneurs surveyed indicating interest or intentions to start a business within the next three years. This score is the third among all GEM countries surveyed and more than 2x the global average. These figures have been consistently high over the past three years. Given the tough economic environment during the time of data collection, it is likely that these intentions reflection economic necessity for self-employment, rather than the perception of a business opportunity.



**Early-stage entrepreneurial activity (TEA)** is the primary metric used by GEM to measure and compare entrepreneurial activities among countries. In 2018, the TEA rate in Egypt was 9.8%, which is lower than the global average of 12.6%, ranking 28th globally. This TEA figure indicates that around 9.8% of the adult population in Egypt (aged 18-64) are currently either actively setting up a new business or have started a business that is younger than 3.5 years. This figure shows a decline from a peak of 14.3% in 2016 and 13.3% in 2017, an indication of a moderate decline in entrepreneurial activities in Egypt. The rate of established businesses has also declined from 6.1% in 2016, to 5.7% in 2017 to 4.5% in 2018. This decline reflects the high rate of business discontinuation (7.6%, ranking 8th globally), which has persisted over the past years and is primarily driven by lack of profitability or limited access to finance.

### Demographic Characteristics of Entrepreneurship

In terms of gender distribution in Egypt: around one in every four entrepreneurs is a woman, and one in every eight established business owners is a woman. Women-led businesses have a lower probability of continuation compared to men-led businesses. The rate of women participation is far below the global and MENA region averages. In terms of age distribution, youth participation (18-24 and 25-34 years old) in entrepreneurial activities in Egypt remains higher than older age segments.

### Characteristics of Entrepreneurship Activities

In terms of the **motivation to start** their business: opportunity-driven entrepreneurship has been decreasing, with 47.5% of early-stage entrepreneurs reporting that they were primarily driven by market opportunity, compared to 53.5% in 2017 and 61.2% in 2016. On the other hand, 47.6% of early stage entrepreneurs remain driven by necessity and their number increased compared to 42.7% in 2017 and 31.3% in 2016, i.e., those who started their business due to the absence of other work alternatives, which is a much higher rate than the global average of 23.0%. This continuous increase in necessity-driven entrepreneurship is an indication that the job market has not recovered yet.

In terms of **sectoral distribution**, most early-stage entrepreneurs are concentrated in three sectors: wholesale and retail distribution (61.5%), manufacturing (12.8%), and agriculture (8.3%); collectively representing 82.6% of all early-stage entrepreneurs in Egypt – an increase from 74.4% in the previous year. These sectors are typically attractive for necessity entrepreneurs, running informal micro/small enterprises that are not capital or knowledge intensive, and have limited or no aspirations for growth or job creation. It is noticeable that the share of knowledge-intensive industries, such as ICT, finance or professional services is very limited among new startups.

**Job creation projections and growth orientation** are divergent. On the one hand, 58.5% of Egyptian early-stage entrepreneurs do not expect to add any new jobs to their business within 5 years; indicating a large percentage of self-employment or low-growth businesses, which is typical in the case of necessity-driven informal micro enterprises. On the other hand, 19.3% of early stage entrepreneurs expect to grow their business by 6 or more jobs within 5 years; reflecting high growth aspirations among one fifth of the early stage entrepreneurs.

Despite the economic challenges in 2016, there seems to be a positive trend in entrepreneurship. More entrepreneurs are launching their startups, positive societal perception of entrepreneurship is gaining ground, and there's a strong recognition for market opportunities. Coupled with serious investment in supporting organizations and the broader ecosystem, these trends could be the real foundation for growing the sector.

## Entrepreneurship Ecosystem in Egypt

Overall, Egypt's entrepreneurship ecosystem ranks low in most indicators compared to GEM global averages; however, there has still been a positive improvement trend across the past years. Most if not all measures witness a noticeable improvement between 2015 and 2018 such as entrepreneurial finance increasing from 3.5 to 4.4; government policies support and relevance (increasing from 3.3 to 4.3); government entrepreneurship programs (increasing from 3.1 to 4), entrepreneurship education at school stage (increasing from 1.6 to 2.3); entrepreneurship education at post-school stage (increasing from 3.1 to 3.7); internal market burdens/entry regulations (increasing from 3.8 to 4.4); and cultural and social norms (increasing from 3.8 to 4.6). These noticeable changes highlight the great potential in Egypt's entrepreneurial ecosystem and an ensured substantial growth in the coming years.

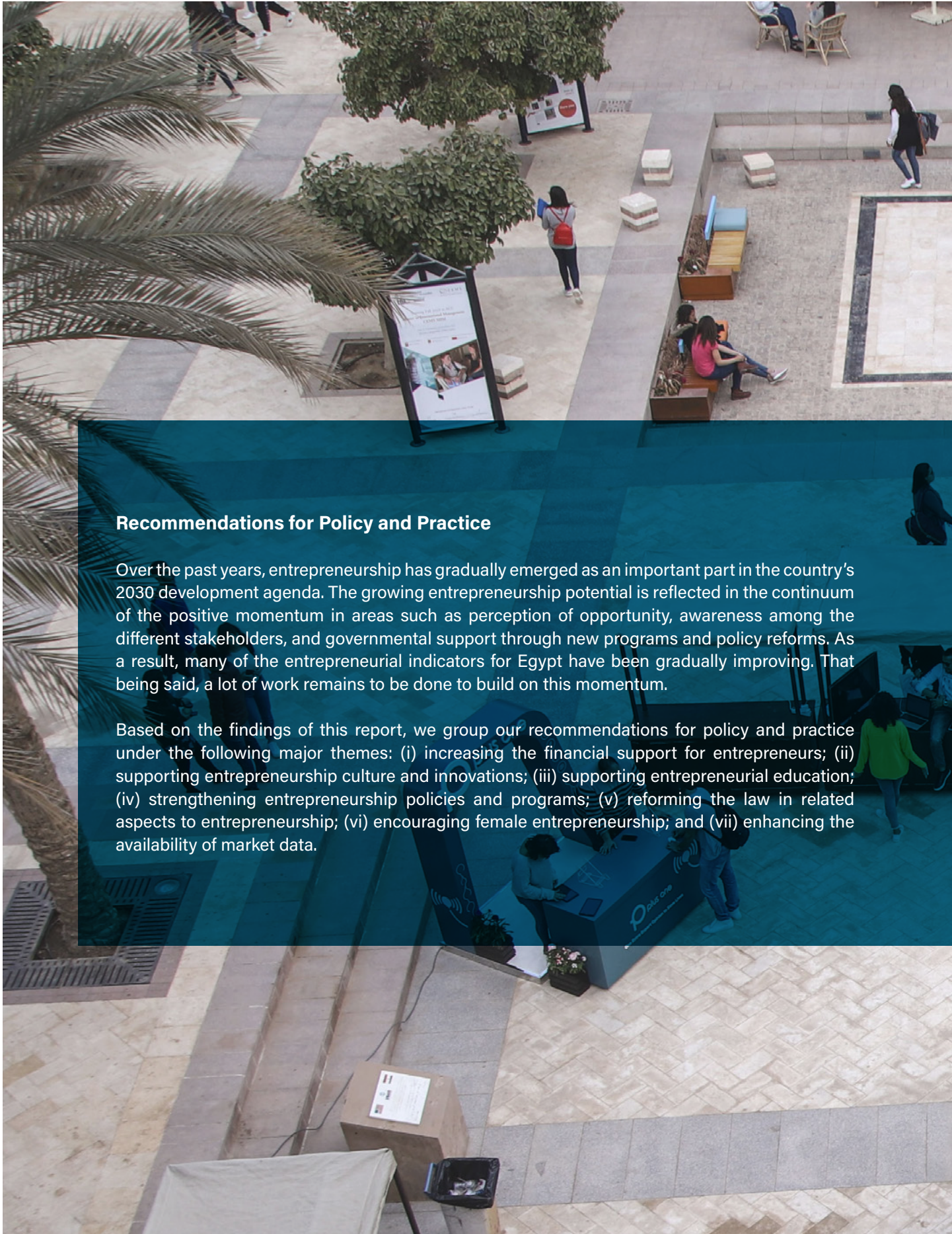
**The National Entrepreneurship Context Index (NECI)**, a composite index being introduced for the first time this year, evaluates the entrepreneurship environment in any given economy to determine the overall strength of the environment. It particularly assesses the following 12 entrepreneurship frameworks conditions: financing, government policies, taxes and bureaucracy, government programs, school-level entrepreneurship education and training, postschool entrepreneurship education and training, research and development transfer, access to commercial and professional infrastructure, internal market dynamics, internal market burdens, access to physical and services infrastructure, and cultural and social norms. Through that, it aims to guide practitioners /stakeholders and inform policy making. Egypt has a moderate ranking for each of the 12 indicators, receiving an overall score of 4.7 points and a ranking of 34 out of 54 participating GEM economies.

Accordingly, Egypt's entrepreneurship ecosystem is considered above average in finance (with a score of 4.4 which is above the global average of 4.3 and low-income economies average of 4.2), physical infrastructure (with a score of 6.5 which is above the global average of 6.3 and low-income economies average of 6.2), and internal market burdens/entry regulations (with a score of 4.4 which is above the global average of 4.2 and low-income economies average of 4.1). In contrast, Egypt's entrepreneurship ecosystem is considerably weak in entrepreneurship education at school stage (with a score of 2.3 which is lower than the global average of 3.2 and low-income economies average of 3.0), and entrepreneurship education at post-school stage (with a score of 3.7 which is lower than the global average of 4.8 and low-income economies average of 4.7).

Egypt's gap in ratings in the following indicators are better than the aforementioned yet still need improvement to meet the global average. Government policies in taxes and bureaucracy (with a score of 3.5 which is lower than the global average of 3.9 and low-income economies average of 3.8), government entrepreneurship programs (with a score of 4.0 which is lower than the global average of 4.5 and low-income economies average of 4.4), research and development (with a score of 3.5 which is lower than the global average of 4 and low-income economies average of 3.8), commercial and legal infrastructure (with a score of 4.5 which is lower than the global average of 4.9 and low-income economies average of 4.8), and cultural and social norms (with a score of 4.6 which is lower than the global low-income economies averages of 4.8).

Finally, Egypt's rating in government policies in support and relevance with a score of 4.3 meets the global average and is better than the low-income economies average of 4.2, and rating in internal market dynamics meets the low-income economies average of 5.1 and is slightly less than the global average of 5.2.





## Recommendations for Policy and Practice

Over the past years, entrepreneurship has gradually emerged as an important part in the country's 2030 development agenda. The growing entrepreneurship potential is reflected in the continuum of the positive momentum in areas such as perception of opportunity, awareness among the different stakeholders, and governmental support through new programs and policy reforms. As a result, many of the entrepreneurial indicators for Egypt have been gradually improving. That being said, a lot of work remains to be done to build on this momentum.

Based on the findings of this report, we group our recommendations for policy and practice under the following major themes: (i) increasing the financial support for entrepreneurs; (ii) supporting entrepreneurship culture and innovations; (iii) supporting entrepreneurial education; (iv) strengthening entrepreneurship policies and programs; (v) reforming the law in related aspects to entrepreneurship; (vi) encouraging female entrepreneurship; and (vii) enhancing the availability of market data.









# INTRODUCTION

## ABOUT GEM

This year marks 20 years since the inaugural Global Entrepreneurship Monitor (GEM) survey of entrepreneurship was conducted in 10 developed economies. Since then, GEM teams around the world have surveyed over 2.9 million adults in 112 economies. Entrepreneurship itself is no longer regarded as a little-known specialization, but as a key driver of economic growth. Academics, policy makers and the broader business sector have come to recognize the role played by small, medium, and micro enterprises in decreasing unemployment, fighting poverty, and enhancing business agility and productivity. The desire to foster entrepreneurial activity and attitudes across the globe is underpinned by an increased appreciation of the critical role played by entrepreneurs — and the businesses they establish — in developing their societies.

GEM is considered the most authoritative and informative study on entrepreneurship today, based on the breadth of both its quantitative and qualitative data. Covered in this report are the results of GEM's 2018 survey of over 164 thousand adults in 49 economies. In 2018, 49 economies participated in the GEM study, comprising approximately 70% of the world's population and 90% of the world's total GDP. GEM's research examines data on rates and types of entrepreneurship at multiple phases of the process (from potential entrepreneur right through to established business owner), as well as the profiles of entrepreneurs (including demographics, motivations and ambitions), and their characteristics as business owners (such as innovativeness and industry participation). The study also looks at the broader entrepreneurship climate, measuring societal attitudes, self-perception, and the social safety net.

The aim, in short, is to understand which factors support a robust environment for entrepreneurship to thrive. Identifying what makes individual entrepreneurs think and perform opens up opportunities to build the entrepreneurial pipeline, moving from aspiring entrepreneurs, to intentional entrepreneurs, to entrepreneurs who actually manage to start a growing, established business.

These results are highlighted in the GEM report every year, with global trends identified, and the report is then launched at the GEM annual meeting, which takes place in a different global sponsor location every year. Research teams in every GEM economy issue national reports, which provide a more detailed examination of entrepreneurship in their particular economies. These reports illustrate changes taking place year to year, and use local knowledge to contextualize the results, analyzing the conditions and initiatives influencing regional entrepreneurial activity. In the last 20 years, regional reports have examined entrepreneurship in Africa, the Middle East, Southeast Asia, Latin America, the Caribbean and Europe.

GEM has also recently partnered with the United Nations Development Program and the World Economic Forum to produce several regional and thematic reports on entrepreneurship. All global, national and special topic reports are available for download from the GEM website at [www.gemconsortium.org](http://www.gemconsortium.org).

## GEM'S APPROACH AND IMPACT

GEM reports are a primary source of data, generated through an Adult Population Survey of at least 2,000 randomly selected adults (18-64 years of age) in every economy examined. National teams also collect expert opinions about different aspects of the broader entrepreneurship environment through a National Expert Survey (NES).

The Adult Population Survey captures information about both formal and informal activities. This is important because entrepreneurship studies that look only at registered businesses will capture only a fraction of the entrepreneurial activity actually taking place in many economies, especially in developing countries. GEM reports apply a rigorous methodology, followed by all regional teams and then supervised and processed by a central data team. This enables us to make cross-national comparisons, but also to be confident that the data we present reflects the reality on the ground, to the greatest degree possible.

GEM seeks to track societal attitudes and cross-cutting themes that particularly impact the growth of a highly entrepreneurial environment. These include women's entrepreneurship, high-growth entrepreneurship, education and training for entrepreneurs, promoting entrepreneurship in the workplace, social entrepreneurship, youth and senior entrepreneurship, and policy.



Data and analysis provided by the GEM report is intended to benefit anyone with an interest in entrepreneurship, including business owners and entrepreneurs themselves, but it is particularly useful to researchers and policymakers. Researchers around the world have produced over 650 peer-reviewed research publications using GEM data, often combined with data from the World Economic Forum, the World Bank, the Heritage Foundation, Transparency International and many other sources. GEM representatives have presented research findings at the United Nations, the World Bank, the OECD, the U.S. State Department, the African Union, the Ibero-American Association, the International Development Research Center, and at many national, regional, and global events. For educators, GEM serves as an informative resource to teach university students about entrepreneurship in other countries.

GEM results are also highly publicized in the media, in global news publications including the Wall Street Journal, the Economist, the Financial Times, Business Week, Fortune, Forbes, and Entrepreneur. At least as important as this is GEM's extensive reach into local, regional and national news outlets, which has resulted in a broad dissemination of GEM discoveries, and influences how the public — particularly practitioners and policy makers — understand entrepreneurship and address the issues surrounding it.

## **GEM IN EGYPT**

GEM provides an annual assessment of entrepreneurial activity, aspirations and attitudes across countries at different levels of economic development. It examines the factors that contribute to an entrepreneurial climate as well as the links between entrepreneurship and economic growth. Each year, teams of researchers from participating countries in the GEM cycle conduct independent investigations of domestic entrepreneurship, using the same methods to ensure quality and comparability of data. This is to help in studying the complex relationships between new venture creation, economic growth, culture, government policies and national propensity.

Egypt participates in GEM cycles to monitor its entrepreneurial performance, along with many other countries. This 2018-19 report is the seventh report covering Egypt. 2017-18, 2016-17 and 2015-16 reports were developed by a team of researchers from the American University in Cairo (AUC) led by Dr. Ayman Ismail. Previous reports for 2008, 2010, and 2012 were developed by Dr. Hala Hattab from the British University in Cairo.

The 2018-19 GEM Egypt report is a valuable resource for guiding policies and programs aimed at improving conditions for entrepreneurs, whether they are risk-taking innovators looking to start a business, or micro-entrepreneurs trying to support their families.

## **SCOPE OF THIS REPORT**

In this report, we compare Global Entrepreneurship Monitor (GEM) measures of entrepreneurial attitudes, activities and aspirations in Egypt with other GEM economies in 2018-19 based on our analysis of the Adult Population Survey (APS), a survey of 2,542 Egyptian adults. We track entrepreneurial attitudes, activities and demographics in Egypt over three cycles of GEM participation (2015-16, 2016-17 and 2017-18), and also compare Egypt to high-income, middle-income, and low-income countries.

We analyze the state of Egypt's entrepreneurial ecosystem, using data from the National Expert Survey (NES), a survey of 50 entrepreneurship experts in nine key areas. An entrepreneurship ecosystem is the framework, or the conditions, within which entrepreneurial activities take place, and is therefore absolutely crucial to supporting and encouraging entrepreneurship at large. We benchmark Egypt's entrepreneurship ecosystem against that of other participating GEM countries, and also examine changes in Egypt from 2015, 2016 and 2017 results to better understand how the ecosystem has changed and progressed over this period.

In this year's report, GEM also introduces the National Entrepreneurship Context Index (NECI), a new index based on GEM's National Expert Survey (NES). This represents a composite measure of the entrepreneurial ecosystem, based on 12 framework conditions. The aim is to quantify the contextual data as much as possible, so that policy makers and practitioners can benchmark results against peer economies and identify areas to address, as they seek to enhance an economy's entrepreneurial impact and potential.







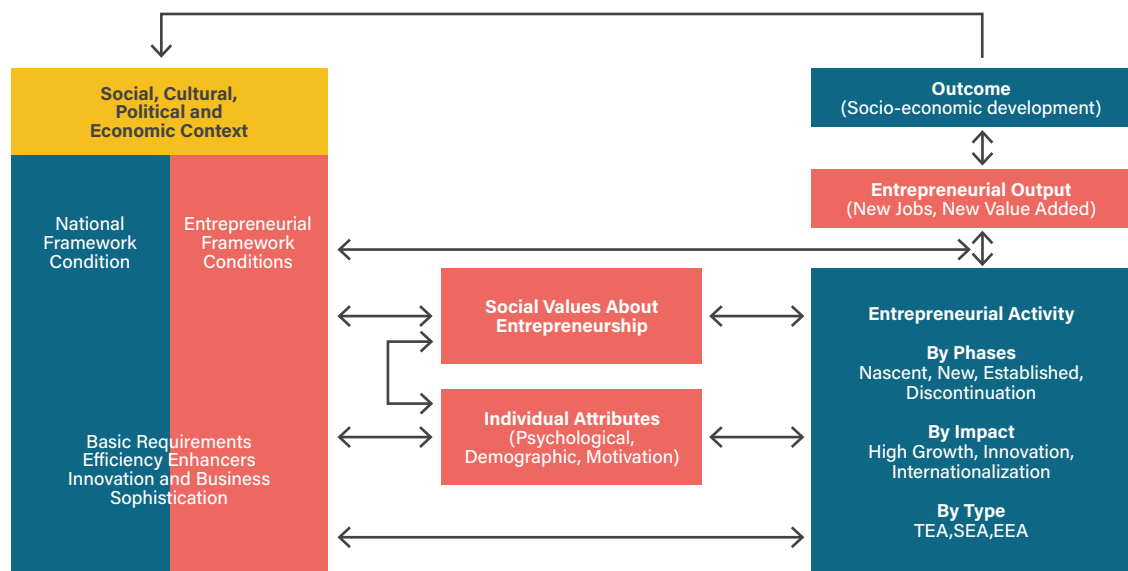
# METHODOLOGY

## GEM CONCEPTUAL FRAMEWORK

GEM's conceptual framework depicts the multifaceted features of entrepreneurship, showing the constant interplay between the proactive, innovative and risk responsible behavior of individuals and the environment they operate in. Understanding and conveying the interdependency of entrepreneurship and economic development has always been an important part of what the GEM survey seeks to do, in order to:

- *Uncover factors that encourage or hinder entrepreneurial activity, especially related to societal values, personal attributes and the entrepreneurship ecosystem.*
- *Provide a platform to assess to what extent entrepreneurial activity influences economic growth within individual economies.*
- *Uncover policy implications, to enhance entrepreneurial capacity in an economy.*

Figure 1: The GEM Framework



Source: GEM Global Report 2018-19

**The social, cultural, political and economic** context can essentially be broken down into National Framework Conditions and Entrepreneurial Framework Conditions. National Framework Conditions identify three kinds of economic development (factor-driven, efficiency-driven and innovation-driven) through which society can advance. Entrepreneurial Framework Conditions could be said to influence entrepreneurial activity more directly, and range from entrepreneurial finance to government policy, government entrepreneurship programs, entrepreneurship education, research and development (R&D) transfer, commercial and legal infrastructure, internal market dynamics and entry regulation, physical infrastructure, and social and cultural norms.



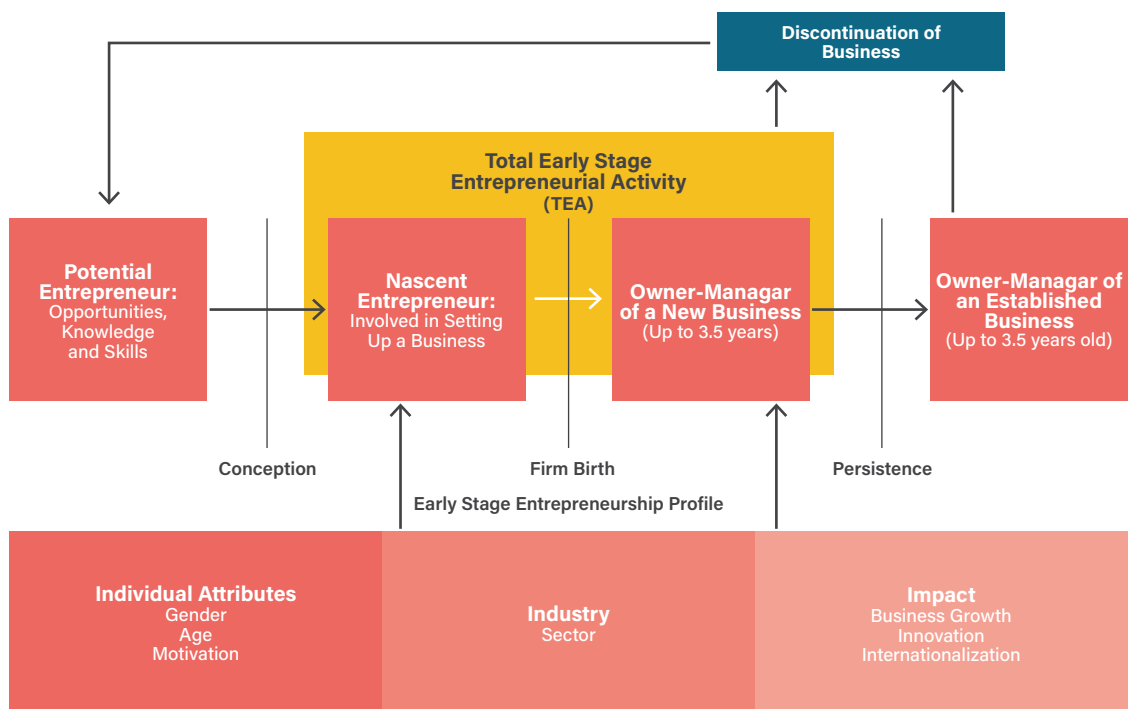
**Societal values about entrepreneurship** include whether society regards entrepreneurship as a good career choice, whether entrepreneurs have high societal status and the extent to which entrepreneurship is positively represented in the media.

**Individual attributes** include demographic characteristics (gender, age, etc.), self-perception (perceived capabilities, perceived opportunities, fear of failure) and motives for starting a business (i.e., necessity versus opportunity).

**Entrepreneurial activity** encompasses multiple phases of the business process (nascent, new business, established business, discontinuation), potential impact (job creation, innovation, internationalization), and the type of activity (Early-Stage Entrepreneurial Activity (TEA), Social Entrepreneurial Activity (SEA) or Employee Entrepreneurial Activity (EEA)). Operational definitions of the business phases and entrepreneurship characteristics are represented in Figure 2.

## GEM ENTREPRENEURSHIP INDICATOR

Figure 2: The Entrepreneurial Process and GEM Operational Definitions



Source: GEM Global Report 2018-19

## GEM'S multi-phase measures of entrepreneurship

**-Potential Entrepreneurs:** Those that see opportunities in their environments, have the capabilities to start businesses and are undeterred by fear of failure.

**-Intentional Entrepreneurs:** Those who intend to start a business in the future (in the next three years).

**-Nascent Entrepreneurs:** Those who have taken steps to start a new business, but have not yet paid salaries or wages for more than three months.

**-New Entrepreneurs:** Those who are running new businesses that have been in operation from three months to 3.5 years.

**-Early-stage Entrepreneurs:** The sum of nascent and new entrepreneurs. This is measured by analyzing Early-stage Entrepreneurial Activity (TEA), the primary indicator used by GEM.

**-Established Business Owners:** Those who are running a business operating for more than 42 months.

**-Discontinued Entrepreneurs:** Those who, for whatever reason, have ceased to run their business in the past year.

GEM's focus at the individual level allows for a more comprehensive and nuanced analysis of business activity than measuring only formally registered businesses. Capturing both formal and informal activity is important because, in many societies, the majority of entrepreneurs operate in the informal sphere. A focus on the behavior of individuals, rather than analyzing business data, also offers greater insights into the profiles of the entrepreneurs themselves, including demographics, their motivations for starting their ventures and their ambitions for their businesses. GEM also assesses broader societal attitudes towards entrepreneurship, which has a bearing on the extent to which people are engaged in or willing to participate in entrepreneurial activity, and the level of societal support for their efforts. All this information is then collected in the GEM database, allowing analysts to explore the individual or business characteristics most likely to determine success, as well as the causes and consequences of new business creation.

## GEM DATA

All participating GEM countries use similar research design, survey questionnaires and data collection methodology, to ensure the consistency and comparability of data. This year's GEM report is based on two main surveys: The Adult Population Survey (APS) and the National Expert Survey (NES).

### Adult Population Survey

The Adult Population Survey (APS) was conducted on a randomly-selected representative sample of 2,542 adults in the 18-64 age range from all geographic regions in Egypt. Data collection was conducted by PHI Knowledge, a market information and research firm, between June and July 2018 through phone interviews.

### National Expert Survey

The National Expert Survey (NES) covers 12 key areas representing the Entrepreneurial Framework Conditions and was conducted with 50 key experts selected on the basis of their knowledge and experience in these areas.

## COUNTRIES PARTICIPATING IN THE GEM PROJECT

GEM has been measuring entrepreneurship in over 100 economies for the past 20 years, covering all geographic regions and all economic levels. During this time, it has gained widespread recognition as the most informative and authoritative longitudinal study of entrepreneurship in the world. In 2018-19, 49 economies participated in the GEM study, comprising approximately 40% of the world's population and 90% of the world's total GDP. In Table 1, we list the participating countries in the 2018-19 GEM cycle, based on geographic region and income level.



	LOW INCOME	MIDDLE INCOME	HIGH INCOME
EAST AND SOUTH ASIA	India Indonesia	China Thailand	Japan Korea Republic Taiwan
EUROPE AND NORTH AMERICA		Bulgaria Kazakhstan* Russian Federation Turkey	Austria Canada Croatia Cyprus France Germany Greece Ireland Italy Latvia* Luxembourg Netherlands Poland Slovak Republic Slovenia Spain Sweden Switzerland United Kingdom United States
LATIN AMERICA & CARIBBEAN		Brazil Colombia Dominican Republic* Guatemala Mexico* Peru	Argentina Chile Panama Puerto Rico Uruguay
MIDDLE EAST AND AFRICA	Angola Egypt Madagascar Morocco Mozambique* Sudan	Iran Lebanon	Israel Qatar Saudi Arabia United Arab Emirates

Source: GEM Global Report 2018-19

\*included in National Entrepreneurship Context Index (NECI) only

## Global Regions and Income Level

The 49 economies profiled in this report are grouped into four regions, as shown in Figure 3. The East and South Asia region contains economies classified as being in East Asia and Pacific or South Asia by the World Economic Forum (WEF), and classified as Southern, Eastern or Southeastern Asia by the United Nations (UN).

The **Europe and North America** region includes economies classified as European by WEF and the UN. Following WEF, the report moved the United States and Canada into this region, to include them in a larger group of mostly high-income countries with which they have had close historical associations. Also following WEF, the report grouped Turkey and Cyprus in Europe, but acknowledges that the UN classifies them differently, placing them in Western Asia.

The **Latin America and Caribbean** region is classified as such by both the UN and WEF. The **Middle East and Africa** region has countries which WEF classifies as being in the Middle East and North Africa, but which the UN classifies as being in North Africa, Western Asia or Southern Asia. Angola is classified as being in sub-Saharan Africa by both, and the UN also places Madagascar in sub-Saharan Africa.

The economies are also identified by income level, following WEF. The low-income group contains both those classified by WEF as low-income and lower-middle. The middle-income group has those which WEF places as upper-middle. The largest group of GEM economies by income level are those WEF categorizes as high-income.







# SECTION 1

## PERSPECTIVES ON ENTREPRENEURSHIP IN EGYPT

## SOCIETAL VALUES ABOUT ENTREPRENEURSHIP

Societal values and attitudes are indicators of how entrepreneurship is perceived in a country. Among the key factors that can influence a society's views of entrepreneurship are its culture, history, policy and business environment. These can, in turn, affect entrepreneurial ambitions and the extent to which startup companies are supported. GEM assesses the extent to which people think entrepreneurship is a good career choice, whether they feel entrepreneurs are perceived as having high status, and if there are positive representations of entrepreneurship in the media.

### **Entrepreneurship as a desirable career choice:**

Entrepreneurship is perceived as a good career choice by 74% of Egyptians. While this marks a slight decline from last year's figure of 75.9%, it remains consistent and very high. The positive perception of entrepreneurship has remained consistently high over the last 5 years, with slight fluctuations between 73- 83%. This rate is high compared to the global average of 62.3%, with Egypt ranking 10th among 49 GEM countries. At the regional level, entrepreneurship is generally regarded as a good career choice, and a notably higher proportion of the population in both Egypt and the MENA region as a whole see successful entrepreneurs as having high social status and respect than in other countries of a similar income bracket outside the region. In Egypt, this indicates the growing appeal of entrepreneurship as a career choice and the degree to which it is now seen as a desirable alternative to working in the government or corporate sectors. It reflects the continued perception of entrepreneurship as a viable means of gaining economic independence, in the face of fewer corporate jobs, more salary constraints, and high levels of unemployment.

### **High status associated with successful entrepreneurship:**

Successful entrepreneurs are perceived as having high social status by 82.6% of Egyptians. This marks a slight increase on last year, continuing a pattern of minor fluctuations over the last 5 years between 79-87%. Overall, it shows a consistent trend of successful entrepreneurs in Egypt, who enjoy a markedly high status. Egypt ranks 5th out of 47 GEM countries, placing us well above the global average of 70%. This means that we're maintaining our high ranking among the countries where entrepreneurs are well regarded, which is reflective of social attitudes towards "successful" entrepreneurs, who are increasingly seen as examples to emulate, especially by young Egyptians.

**Media attention to entrepreneurship:** Media attention to entrepreneurship is seen as favorable by 68.1% of Egyptians, similar to last year's figure of

68.7%. The figure is higher than the global average of 61.0%, as is the ranking (14th out of 47). It shows a continued steady trend of increased media focus on entrepreneurship, with 58.5% of respondents seeing media attention to entrepreneurship as favorable in 2015 and 62.1% in 2016. This positive image of entrepreneurship is both the result of and a contributor to cultural change, and also reflects state efforts to promote it as a discipline. This trend is also a result of a strong and positive coverage of successful entrepreneurs on social media, especially with the emergence of several local and regional digital news outlets focusing on entrepreneurs and their news and success stories, e.g., Wamda, Magnitt, Startup Scene, Entrepreneur.com and MENAbytes. Stories from these outlets highlight new startup launches, investments and expansion, and are highly shared on social media.

**Overall:** In general, perceptions of entrepreneurship in Egypt are very positive and rank higher than the global average, with continued positive trends from previous years. This is particularly evident when it comes to the perception of the social status of entrepreneurs, which remains exceptionally high (82.6%). These findings suggest that Egyptian societal values and attitudes increasingly support entrepreneurship as a positive and desirable activity.

There is a growing culture in Egypt of people seeing entrepreneurship as a good career choice. Increasingly, Egyptians no longer aspire to holding government jobs. Fewer jobs are available in the traditional corporate space, and salaries are less competitive in relation to the cost of living. At the same time, a visible movement of wealth creation by private entrepreneurs – in Egypt and globally – is pushing many more people to see entrepreneurship as a viable career choice, and one that could yield substantial dividends.

The diverse backgrounds of the entrepreneurs held up as role models means that people of very different backgrounds now also aspire to being entrepreneurs. Some want to emulate global tech entrepreneurs who quickly make money with applications that solve endemic problems; others look at local examples of business tycoons, whose innovation comes from recognizing and seizing opportunities. Their example is catalyzing a change among early, mid and late-career professionals, in a variety of sectors. Not only are there now positive examples of both educated young people and mid-career professionals making quick success stories through an entrepreneurial initiative, but the new image of the entrepreneur does much to dispel previous negative stereotypes of businessmen, which were particularly prevalent from the 1980s onwards



**Table 1: Societal Values about Entrepreneurship in Egypt and GEM Countries (2018)**

	RANK /47	EGYPT (%)	GLOBAL AVERAGE (%)	MIDDLE EAST & NORTH AFRICA (%)	HIGH INCOME COUNTRIES (%)	MIDDLE INCOME COUNTRIES (%)	LOW INCOME COUNTRIES (%)
ENTREPRENEURSHIP AS A DESIRABLE CAREER CHOICE	10	74.0	62.0	69.0	62.0	62.0	63.0
HIGH STATUS OF SUCCESSFUL ENTREPRENEURS	5	82.6	70.0	78.0	69.0	69.0	70.0
POSITIVE MEDIA ATTENTION TO ENTREPRENEURSHIP	14	68.1	61.0	63.0	60.6	60.5	60.6
IT IS EASY TO START A BUSINESS	7/43	61.0	61.0	44.0	39.0	39.8	40.9

Source: The Authors; GEM Global Report 2018-19

**Table 2: Societal Values about Entrepreneurship in Egypt (2015-2018)**

	2018			2017			2016			2015		
	Egypt Rank /47	Egypt %	Global Average %	Egypt Rank /54	Egypt %	Global Average %	Egypt Rank /65	Egypt %	Global Average %	Egypt Rank /60	Egypt %	Global Average %
ENTREPRENEURSHIP AS A DESIRABLE CAREER CHOICE	10	74.0	62.0	7	75.9	61.6	4	83.4	62.5	10	73.6	65.8
HIGH STATUS OF SUCCESSFUL ENTREPRENEURS	5	82.6	70.0	3	82.0	68.4	2	87.1	68.5	11	79.6	71.3
POSITIVE MEDIA ATTENTION TO ENTREPRENEURSHIP	14/43	68.1	61.0	17	68.7	60.5	26	62.1	61.3	34	58.5	60.0

Sources: The Authors; GEM Global Report 2018-19; GEM Egypt Reports 2015-16, 2016-17, 2017-18

## INDIVIDUAL SELF-PERCEPTION ABOUT ENTREPRENEURSHIP

Entrepreneurship as a concept may be held in high social regard, with societal attitudes and behavior being an indicator of this, but it is individual perceptions that are more likely to determine whether one will actually consider starting — or indeed start — a business. GEM assesses these individual perceptions, measuring the degree to which people see opportunities around them, whether those who see opportunities are constrained by the fear of failure, whether they believe they are actually capable of starting a business themselves, and whether they intend to do so within the next three years.

**Perceived opportunities:** Opportunity-recognition is a key driver of decisions taken by individuals to start new businesses, and is therefore at the very heart of the entrepreneurial process. In Egypt, 39.3% of the non-entrepreneurially active population saw good opportunities to start new ventures in 2018 (ranking 30th out of 49). This continues a downward trend from 46.6% in 2015, suggesting that perceived opportunities to start a new business have declined in Egypt since that time. This is almost certainly the continued impact of economic challenges, including the devaluation of the currency and the reduction of subsidies which resulted in significant inflation, as well as the increase of interest rates and limited access to finance. While generally regarded as necessary for the economy, these measures have contributed to a feeling of uncertainty which may well be reflected in the perception of opportunities. It is, however, worth bearing in mind that this data was taken in the summer of 2018, where these macroeconomic effects were still very visible. Since that time, inflation has declined significantly, and the Central Bank has cut interest rates several times. As the economy continues its recovery, we expect to see an increase in the perceived opportunity rate as well.

**Perceived capabilities:** The perception among Egyptians of their own capability to open new businesses in 2018 was 43.0%, which remains within the range seen since 2015 (between 41.5% and 46.6%). Egypt is a little below the global average of 49.2%, and we are ranked 36th. There is a wider gap this year than there was last year between Egypt's rate and the global average (this year, our rate is 43.0% and the global average is 49.2%, compared to last year's rates of 46.6% and 48.8% respectively). This could, at least in part, be attributed to the continued impact of Egypt's economic measures. While Egyptians perceive economic opportunities, the confidence they exhibit in launching their own new businesses remains relatively low, and this is likely to be one of the main reasons why fewer people are able to take the step from seeing opportunities around them to starting their own businesses.

**Fear of failure:** When it comes to measuring the fear of failure among the non-entrepreneurially active population, lower values are better (denoting less fear). In 2018, the fear of failure among remained low at 28.2% compared to the global average of 36.2%, giving us a ranking of 40. Egypt also has a low fear of failure compared to other MENA economies. There is slight decline from previous years' range of 30.2% - 33.2%, which was always below global average. When asked whether "fear of failure prevent you from starting a business?", Egyptians have consistently had relatively low fear of failure figures, indicating that fear of failure is not a significant barrier to entrepreneurship in Egypt. We have observed before that in general, Egypt and other low-income economies display less fear of failure than high and middle-income economies. This could indicate a higher acceptance of risk as a factor in business, employment, and everyday life, and be reflective of the fact that entrepreneurship is often undertaken here as a matter of necessity.

**Entrepreneurial intention:** 60.2% of the non-entrepreneurially active Egyptians surveyed expressed their interest or intention to start a business within the next three years. This is a very high score, and puts Egypt third among all GEM countries for this particular metric, with a significantly higher proportion of the population intending to start their own businesses here than in other MENA economies. For the third successive year, our score is over twice the global average. The scores of the last three years represent a leap from 2015's score of 39.5%, which was itself higher than the global average (24.0%) but not by such a significant margin. This may well be reflective of the difficult economic environment Egyptians have been operating in since this time, and the figures are likely to show entrepreneurship as primarily a necessity rather than an opportunity (especially given the decline in perceived opportunities above). However, it also speaks to something in Egypt's entrepreneurial culture and mindset: it is very common to discuss starting a business, even if these intentions do not eventually translate into action.

**Overall:** Perception about entrepreneurship continues to be impacted by the economic challenges that Egypt has been facing, including currency devaluation, reduction of subsidies, high inflation and interest rates. This is particularly apparent in the decline in perceived opportunities for starting a new venture and the decline in perception of capabilities to open new businesses. However, it is worth remembering that these declines are slight and could well rebound quickly now the economy is starting to recover. Egypt's low fear of failure rate and high level of entrepreneurial intention are striking compared to global averages, and speak to a willingness to consider undertaking necessity-driven entrepreneurial ventures.

**Table 3: Individual Self-Perceptions of Entrepreneurship in Egypt and GEM Countries (2018)**

	RANK /49	EGYPT (%)	GLOBAL AVERAGE (%)	MIDDLE EAST & NORTH AFRICA (%)	HIGH INCOME COUNTRIES (%)	MIDDLE INCOME COUNTRIES (%)	LOW INCOME COUNTRIES (%)
PERCEIVED OPPORTUNITIES	30	39.3	45.0	51.0	46.0	44.0	46.0
PERCEIVED CAPABILITIES	36	43.0	49.0	57.0	49.0	49.0	50.0
FEAR OF FAILURE	40	28.2	36.2	36.4	36.6	36.9	36.9
ENTREPRENEURIAL INTENTION	3	60.2	26.8	26.8	27.0	24.2	27.3

Sources: The Authors; GEM Global Report 2018-19



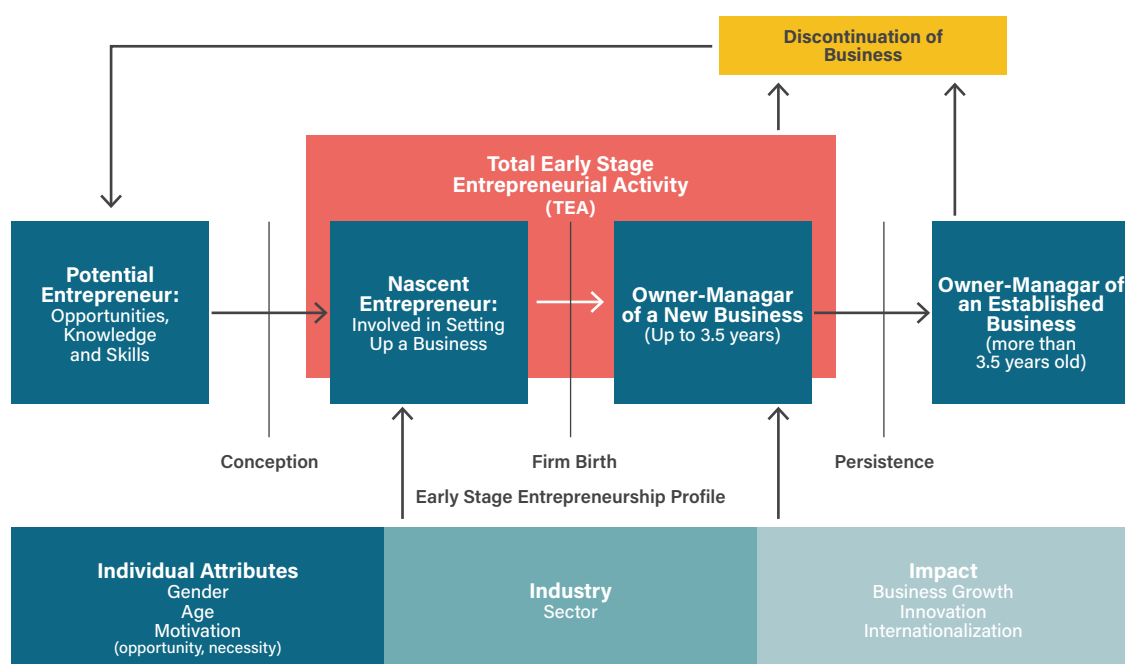
**Table 4: Individual Self-Perceptions of Entrepreneurship in Egypt (2015-2018)**

	2018			2017			2016			2015		
	Egypt Rank /49	Egypt %	Global Average %	Egypt Rank /54	Egypt %	Global Average %	Egypt Rank /65	Egypt %	Global Average %	Egypt Rank /60	Egypt %	Global Average %
PERCEIVED OPPORTUNITIES	30	39.3	45.6	29	43.5	42.9	14	53.5	42.2	27	46.6	42.0
PERCEIVED CAPABILITIES	36	43.0	49.2	31	46.6	48.8	38	46.2	50.2	46	41.5	49.8
FEAR OF FAILURE	40	28.2	36.2	41	30.2	41.3	52	33.2	40.1	46	32.6	39.0
ENTREPRENEURIAL INTENTION	3	60.2	27.0	2	55.5	24.9	1	65.5	25.6	12	39.5	24.0

Sources: The Authors; GEM Global Report 2018-19; GEM Egypt Reports 2015-16, 2016-17, 2017-18

## PHASES AND TYPES OF ENTREPRENEURIAL ACTIVITY

GEM visualizes entrepreneurship as a process in which individuals become increasingly engaged in entrepreneurial activity. This would begin with individuals having the intention to start a new business, and then continue along a path of actually starting the business (the first 3 months), managing the new business (the first 3 months to 3.5 years), and becoming the owner of an established business (any business that is older than 3.5 years). The process could end with the discontinuation of the business.



Source: GEM Global Report, 2018-19

**Definitions:** GEM defines the different phases of entrepreneurial Activities as follows:

**Nascent Entrepreneurship Rate:** Percentage of individuals aged 18–64 who are currently actively involved in setting up a business they own/co-own, which hasn't paid salaries, wages, or any other form of remuneration to its for three months.

**New Business Ownership Rate:** Percentage of individuals aged 18–64 who are currently owners/managers of new businesses that have paid salaries, wages or other form of remuneration to its owners after three months and up to 3.5 years.

**Early-Stage Entrepreneurial Activity (TEA):** Percentage of individuals aged 18–64 who are either nascent entrepreneurs or owners/managers of a new business.

**Established Business Ownership Rate:** Percentage of individuals aged 18–64 who are currently owners/managers of established businesses that have paid salaries, wages or other forms of remuneration to its owners for more than 42 months.

**Business Discontinuation Rate:** Percentage of individuals aged 18– 64 who have discontinued a business in the past 12 months, either by selling, shutting down, or suspending an owner/management relationship with the business. It's worth noting that this is not a measure of business failure.

**Early-stage entrepreneurial activity (TEA):** TEA is the primary metric used by GEM to measure and compare entrepreneurial activities among countries. It is the amalgamation of the nascent entrepreneurship rate (the amount of people who have started businesses that are up to 3 months old) and the new business ownership rate (the amount of people who have started businesses that are between 3 months and 3.5 years old). In 2018, the TEA rate in Egypt was 9.8%, giving us a ranking of 28 out of 49 countries. This is lower than the global average of 12.6%. This figure indicates that around 9.8% of the adult population in Egypt (aged 18-64) are currently either actively setting up a new business or have started a business that is younger than 3.5 years. Globally, the highest TEA rates are seen in the MENA region and in low-income economies, while the lowest rates are seen in south and east Asia.

**Egypt's TEA** saw a substantial jump between 2015 and 2017, where it moved from 7.4% to 13.3%, indicating an overall growth in entrepreneurship in the country. This means that at its peak, 13.3% of the population was starting a business, which is a significant number, but we should remember that this rate includes the self-employed, solo entrepreneurs, business owners, micro-enterprise owners and all sorts of people within the informal economy. The sharp increase in the TEA rate is likely to have been driven by necessity entrepreneurs — people who had difficulty finding work after the currency devaluation in late-2016, who then started their own initiatives as a matter of survival. As the economy stabilized and regained its growth momentum, this type of necessity entrepreneurship started to gradually decline, albeit still high. Hence, we attribute a portion of the decline in Egypt's TEA, from 13.3% last year to 9.8% this year, as being the result of necessity-driven entrepreneurs exiting the self-employment space, having found other employment opportunities.

Breaking down the TEA rate into its two components of nascent entrepreneurship and new business ownership supports the above pattern. **Nascent entrepreneurship**, indicating the percentage of individuals aged 18-64 who are currently actively involved in setting up a new business they own/co-own, increased dramatically after 2015, moving from 4.0% up to 6.5% in 2017, before moving back to 4.0% this year. Egypt's ranking among the GEM countries has likewise followed a similar pattern, moving from 46 in 2015 up to 25 in 2017, and then falling to 36 this year. The global average for nascent entrepreneurship, meanwhile, has seen a slight decline during this period, moving from 7.9% in 2015 down to 6.8% this year. Egypt remains below the global average for nascent entrepreneurship

The growth pattern was even more striking in the **new business ownership rate**, which measures the percentage of entrepreneurs who own or manage a new business that is younger than 3.5 years. The rate soared from 3.4% in 2015 up to a range of 5.9% to 7.0% in 2016-2018. Egypt's ranking in this area has skyrocketed from 2015, where we were ranked 37th out of 60 countries, to now, where we are ranked 17th out of 49. This is a striking increase. The global average for new business ownership has remained fairly steady since 2015, fluctuating between 5.4% and 6.1%. During 2016 and 2017, Egypt's new business ownership rate was slightly higher than the global average, but it is now once again slightly below it. It is also slightly below the rate for low-income countries, and broadly equal to that of Europe and North America.

It is worth noting that while the nascent entrepreneurship rate has effectively returned to the level it was at before economic measures (such as the currency devaluation) were taken, the new business entrepreneurship rate is markedly higher than it was in 2015. This supports the view that the sharp decline in Egypt's TEA from 13.3% last year to 9.8% this year may have been primarily driven by necessity-driven entrepreneurs exiting the space, having engaged in nascent entrepreneurship activities for a relatively short period of time.

**Established business:** In 2018, the percentage of Egyptian individuals aged 18-64 who are currently owners/managers of an established businesses (older than 3.5 years) was 4.5% (ranking 39th). While this figure remains lower than the global average of 8.4%, and the average of 8.7% for low-income countries, it represents a significant increase from Egypt's 2015's figure of 2.9%. The overall trend for established businesses follows that of the TEA rate, where the rate increased substantially between 2015 and 2017, and has since declined somewhat.

Egypt's **business discontinuation** rates have been wildly fluctuating over the past four years, within the range of 4.8% and 10.2%. Last year, we had the highest business discontinuation rate (10.2%) of all the countries surveyed. This year, Egypt's business discontinuation rate was 7.6%, ranking is 8th out of 49 countries, which is an improvement from last year, but nevertheless remains one of the highest global rates. 2018 marks the first year since 2010 that business discontinuation rates started decreasing, which is a good break in the pattern. When we examine the reasons for discontinuation, businesses in Egypt are more likely to discontinue because of financing issues than the global average, and it is highly unlikely that their discontinuation is due to retirement or their exits planned in advance.



If we examine opportunities for “**exit**”, i.e., selling the business, we find that in 2015, Egypt had a score of 0% under opportunities to sell businesses. This then increased to 3.3% in 2017 and then decreased to 1.2% in 2018. The global average, on the other hand, has witnessed a steady increase of opportunities to sell, moving from 4.0% in 2015 to 6.1% in 2017, to 7.0% in 2018. Interestingly, Egypt’s global ranking has increased in this area: in 2017, we ranked 36 out of 54, while in 2018 we ranked 10 out of 49. This would indicate that while Egypt has fewer opportunities for businesses to be sold compared to the global average, our opportunities are gradually increasing. Exit opportunities are important for the economy as they indicate the ability to professionalize the business or to continue past the founders in the case of family-owned businesses.

**Overall:** Egypt’s TEA figures, which are the most important metric to focus on when measuring the entrepreneurial environment, underwent a significant increase between 2015 and 2017, from 7.4% to 13.3%. The rate has since declined to 9.8%, with the decline sharper in nascent entrepreneurial ventures (3 months old or less) than in new businesses aged between 3 months and 3.5 years. We attribute this overall pattern to a combination of the rise in positive entrepreneurial perceptions among Egyptians, a gradually improving support ecosystem and the increase in necessity-driven entrepreneurship due to the economic climate — the latter having then eased as the impact of the economic rebound started to be felt.

**Table 5: Entrepreneurial Activity in Egypt and GEM Countries**

	RANK /49	EGYPT (%)	GLOBAL AVERAGE (%)	MIDDLE EAST & NORTH AFRICA (%)	HIGH INCOME COUNTRIES (%)	MIDDLE INCOME COUNTRIES (%)	LOW INCOME COUNTRIES (%)
POTENTIAL ENTREPRENEURS RATE	3	60.2	26.8	26.8	27.0	24.2	27.3
NASCENT ENTREPRENEURSHIP RATE	36	4.0	6.8	6.7	6.5	6.3	6.7
NEW BUSINESSES RATE	17	5.8	6.1	6.2	5.8	6.0	6.2
TOTAL EARLY STAGE ENTREPRENEURIAL ACTIVITIES (TEA) RATE	28	9.8	12.6	12.6	12.0	12.1	12.6
DISCONTINUED BUSINESS RATE	8	7.6	5.0	5.0	4.6	4.6	5.0

Sources: The Authors; GEM Global Report 2018-19

**Table 6: Entrepreneurial Activity in Egypt (2015-2018)**

	2018			2017			2016			2015		
	Egypt Rank /49	Egypt %	Global Average %	Egypt Rank /54	Egypt %	Global Average %	Egypt Rank /65	Egypt %	Global Average %	Egypt Rank /60	Egypt %	Global Average %
POTENTIAL ENTREPRENEURS RATE	3	60.2	27	2	55.5	24.9	1	65.5	25.6	12	39.5	24.0
NASCENT ENTREPRENEURSHIP RATE	36	4.0	6.8	25	6.5	7	20	8.2	7.1	46	4	7.9
NEW BUSINESSES RATE TOTAL EARLY STAGE ENTREPRENEURIAL ACTIVITIES (TEA) RATE	17	5.9	6.1	11	7	5.5	17	6.6	5.4	37	3.4	5.7
TOTAL EARLY STAGE ENTREPRENEURIAL ACTIVITIES (TEA) RATE	28	9.8	12.6	19	13.3	12.3	17	14.3	12.3	43	7.4	13.2
ESTABLISHED BUSINESS RATE	39	4.5	8.4	38	5.7	8.5	42	6.1	8	56	2.9	8
DISCONTINUED BUSINESS RATE	8	7.6	5.0	1	10.2	3.2	3	7.3	3	11	4.8	3

Sources: The Authors; GEM Global Report 2018-19; GEM Egypt Reports 2015-16, 2016-17, 2017-18

**Table 7: Reasons for Business Discontinuation in Egypt and GEM Countries (2018)**

	RANK /49	EGYPT (%)	GLOBAL AVERAGE (%)	MIDDLE EAST & NORTH AFRICA (%)	HIGH INCOME COUNTRIES (%)	MIDDLE INCOME COUNTRIES (%)	LOW INCOME COUNTRIES (%)
OPPORTUNITY TO SELL	10	1.2	7.0	10.0	7.0	3.0	11.0
THE BUSINESS IS NOT PROFITABLE	3	42.4	31.0	33.5	27.8	40.3	30.7
PROBLEM GETTING FINANCE	13	21.8	14.0	17.7	11.0	17.3	22.4
ANOTHER JOB OR BUSINESS OPPORTUNITY	30	4.9	10.4	6.8	11.4	9.7	7.0
EXIT PLANNED IN ADVANCE	35	1.4	3.8	2.7	4.5	2.8	2.4
RETIREMENT	46	0	4.0	2.2	4.7	2.8	2.4
FAMILY OR BUSINESS REASONS	25	17.5	18.5	15.4	19.7	16.4	16.5
AN INCIDENT	23	3.5	4.8	4.0	5.2	3.4	5.1
BUREAUCRACY	19	7.3	6.8	7.5	8.7	5.3	2.4

Sources: The Authors; GEM Global Report 2018-19



**Table 8: Reasons for Business Discontinuation in Egypt (2015-2018)**

	2018			2017			2016			2015		
	Egypt Rank /49	Egypt %	Global Average %	Egypt Rank /54	Egypt %	Global Average %	Egypt Rank /65	Egypt %	Global Average %	Egypt Rank /60	Egypt %	Global Average %
OPPORTUNITY TO SELL	10	1.2	7.0	36	3.3	6.1	55	0.3	6.4	50	0.0	4.0
THE BUSINESS IS NOT PROFITABLE	3	42.4	31.0	11	49.2	32.4	10	47.7	35.7	13	43.0	33.5
PROBLEM GETTING FINANCE	13	21.8	14.0	19	15.5	13.5	30	11.7	12.0	8	24.0	13.2
ANOTHER JOB OR BUSINESS OPPORTUNITY	30	4.9	10.4	35	6.3	10.3	44	7.6	10.6	39	8.8	11.0
EXIT PLANNED IN ADVANCE	35	1.4	3.8	40	1.4	4.3	48	1.3	4.0	31	3.5	3.8
RETIREMENT	46	0	4.0	41	0.8	3.1	47	0.9	3.8	38	1.0	3.4
FAMILY OR BUSINESS REASONS	25	17.5	18.5	43	12.6	18.6	25	20.5	18.0	57	10.3	20.3
AN INCIDENT	23	3.5	4.8	21	3.8	3.5	33	2.4	3.0	15	5.2	3.2
BUREAUCRACY	19	7.3	6.8	17	7.3	8.4	22	6.7	6.1	27	4.3	7.1

Sources: The Authors; GEM Global Report 2018-19; GEM Egypt Reports 2015-16, 2016-17, 2017-18









# SECTION 2

DEMOGRAPHIC  
CHARACTERISTICS  
OF ENTREPRENEURS

GEM is unique in its approach in primary data collection, where it focuses on individuals rather than firms. In doing so, it provides a rich demographic profile for entrepreneurs. Through this demographic analysis, GEM brings evidence about the power of women, the young and old, the effect of education and other demographics in contributing to the overall force of entrepreneurship around the world. GEM recognizes that not all types of entrepreneurs are equally represented in all places. A critical implication therefore centers on understanding the diversity, and also the gaps, in participation in entrepreneurship. In this section, we examine these rates across three key demographic characteristics: gender, age and education.

## WOMEN AND GENDER DISTRIBUTION OF ENTREPRENEURSHIP ACTIVITIES

In Egypt, women's participation in entrepreneurship is strikingly low. In 2018, only 26.3% of early-stage entrepreneurs and only 13.5% of established business owners were women. These figures are well below the global average of 42.0% and 37.5% respectively. They are also well below the average figures for high, middle- and low-income countries, as well as for the Middle East and North Africa region.

The decrease of female participation from 26.3% early-stage entrepreneurs to 13.5% established business owners is also an indicator of the higher business discontinuous rate among female entrepreneurs, compared to male entrepreneurs. While women are less likely than men to engage in entrepreneurship, when they do, they are more likely to do so out of necessity.

Looked at over a period of time, we can see that the rates of female early-stage and established business owners have remained fairly stable since 2015. The rate of female early-stage entrepreneurs has ranged between 25% and 29%, while the rate of female established business owners has ranged between 13% to 19%. This significant gender gap has remained consistent throughout this time period.

**Table 9: Gender Distribution of Entrepreneurship Activities in Egypt and GEM Countries (2018)**

		EGYPT (%)	GLOBAL AVERAGE (%)	MIDDLE EAST & NORTH AFRICA (%)	HIGH INCOME COUNTRIES (%)	MIDDLE INCOME COUNTRIES (%)	LOW INCOME COUNTRIES (%)
EARLY-STAGE ENTREPRENEURSHIP	Female	26.3	42.0	43.7	41.0	41.6	42.3
	Male	73.7	58.0	56.3	59.0	58.4	57.7
ESTABLISHED BUSINESSES	Female	13.5	37.5	36.7	37.0	36.3	37.3
	Male	86.5	62.5	63.3	63.0	63.7	62.7

Sources: The Authors; GEM Global Report 2018-19

**Table 10: Gender Distribution of Entrepreneurship Activities in Egypt (2015-2018)**

		2018(%)	2017(%)	2016(%)	2015(%)
EARLY-STAGE ENTREPRENEURSHIP	Female	26	29	26	25
	Male	74	71	74	75
ESTABLISHED BUSINESSES	Female	13.5	19	15	17
	Male	87	81	85	83

Sources: The Authors; GEM Global Report 2018-19; GEM Egypt Reports 2015-16, 2016-17, 2017-18



## YOUTH AND AGE DISTRIBUTION OF ENTREPRENEURSHIP ACTIVITIES

Globally, the most entrepreneurially active age groups are those aged 25-34 (TEA of 15.9%), followed by those aged 35-44 (13.9%). These are people in their early and mid-careers, who have perhaps acquired some experience, contacts and useful skill sets for starting a business, and who can balance youthful enthusiasm with concrete experience. They would also most likely be at the stage in their careers where they had not attained such positions of responsibility or high salaries as to be compelled to remain working for companies as employees.

In Egypt, the most entrepreneurially active age groups are those aged 25-34 (TEA of 11.2%) followed by those aged 18-24 (10.7%). The 18-24 segment ranks higher in Egypt compared to the global and regional averages, which indicates higher entrepreneurial activity among recent graduates from universities and other types of education. This is likely to be a response to higher unemployment rates and necessity entrepreneurship among youth.

Another noticeable pattern is the growth of senior entrepreneurship in Egypt (TEA of 9% among the 55-64 segment), both compared to previous years (normalized) and to the global average of 8%

We can see that, for the most part in Egypt, entrepreneurship remains a youth-centered phenomenon. This is partly because young people are eager to seize upon opportunities, but it is also because youth unemployment is high, making entrepreneurial endeavors a necessity for many.

**Table 11: Total Early-Stage Entrepreneurship Activities (TEA) by Age Group in Egypt and GEM Countries (2018)**

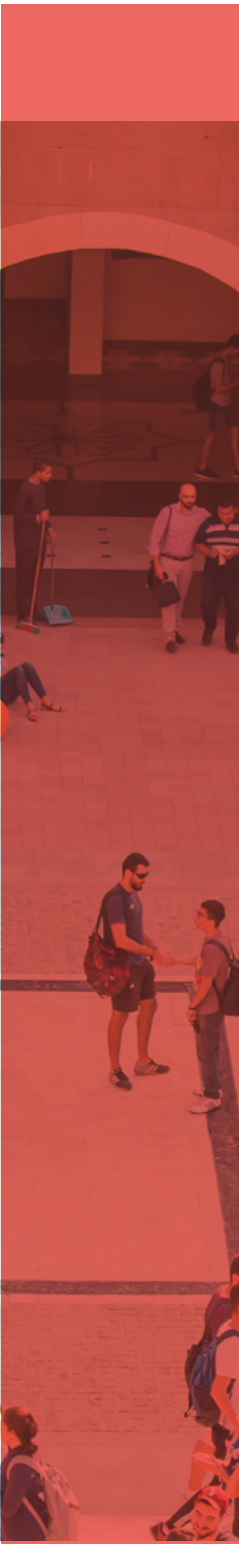
	EGYPT (%)	GLOBAL AVERAGE (%)	MIDDLE EAST & NORTH AFRICA (%)	HIGH INCOME COUNTRIES (%)	MIDDLE INCOME COUNTRIES (%)	LOW INCOME COUNTRIES (%)
18-24 YEARS	10.7	11.8	11.8	11.3	11.3	12.1
25-34 YEARS	11.2	15.9	15.7	15.1	15.1	15.8
35-44 YEARS	9.0	13.9	13.8	13.4	13.4	14.0
45-54 YEARS	7.4	11.5	11.5	11.1	11.1	11.6
55-64 YEARS	9.0	8.0	8.1	7.6	7.8	8.2

Sources: The Authors; GEM Global Report 2018-19

**Table 12: Total Early-Stage Entrepreneurship Activities (% of TEA) by Age Group in Egypt and GEM Countries (2018)**

	2018	2017	2016	2015
18-24 YEARS	10.7	13.2	16.2	6.0
25-34 YEARS	11.2	18.3	17.7	9.7
35-44 YEARS	9.0	12.2	15.4	8.8
45-54 YEARS	7.4	10.5	9.3	5.9
55-64 YEARS	9.0	6.3	5.6	4.6

Sources: The Authors; GEM Global Report 2018-19; GEM Egypt Reports 2015-16, 2016-17, 2017-18







# SECTION 3

## CHARACTERISTICS OF ENTREPRENEURIAL ACTIVITIES



GEM provides a comprehensive set of indicators that characterize the entrepreneurial activities in an economy. In this section, we offer a detailed analysis on the following aspects: entrepreneurship motivation, sector of activity, job creation projections, growth orientation, innovation, use of new technologies, and internationalization.

## MOTIVATION FOR EARLY-STAGE ENTREPRENEURIAL ACTIVITY

Understanding the motivations behind why people start new businesses can shed light on many aspects of early-stage entrepreneurial activity. GEM divides entrepreneurs based on their motivation into opportunity-driven entrepreneurs, who seek to capitalize on profitable business opportunities, and necessity-driven entrepreneurs, who have no other work options.

Most entrepreneurs around the world are opportunity motivated. At the global level, 71.7% of the entrepreneurs surveyed in 2018 stated that they were motivated by opportunities, while 23.0% were motivated by necessity. This breakdown is remarkably similar in high, middle- and low-income countries, as well as throughout the Middle East and North Africa. Egypt, however, shows a strikingly different pattern, with 47.5% of respondents motivated by opportunity and 47.6% motivated by necessity.

**Opportunity-driven entrepreneurs:** Of the entrepreneurially active population in Egypt, 47.5% are motivated by opportunity. This marks a decrease from 2017's figure of 53.5%, and is part of an overall pattern of decrease from 66% in 2012. It is well below the global average of 71.7% and puts Egypt almost at the bottom of the GEM countries surveyed in 2018 (ranking 47th out of 49 countries).

**Necessity-driven entrepreneurs:** For the second year in a row, Egypt ranks the highest globally for necessity-driven entrepreneurs, with 47.6% of the entrepreneurially active population motivated by necessity. This figure has seen a slight increase over the past five years, from 42.4% in 2015. For the most part Egypt has had a consistently high level of necessity-driven entrepreneurship, and we remain well above the global average of 23.0%. Globally, many more entrepreneurs in low-income economies are motivated by necessity compared to entrepreneurs working in wealthier countries. Among low-income economies in the 2018 GEM report, 35% of the entrepreneurs surveyed stated that they started businesses because they had no better options for work. Europe and North America report the lowest rate of necessity entrepreneurs, at 22.4%.

It is clear from this data that Egypt has a very high level of necessity-driven entrepreneurship and a very high proportion of micro-businesses operating within the informal sector, many of which are in retail and manufacturing sectors. Despite the positive perception of entrepreneurship in the media, and the collective focus on tech startups, it is important to remember that the highest proportion of entrepreneurship in Egypt consists of people starting micro and small businesses. There's a clear increase in necessity-driven entrepreneurship within the entrepreneurially active population, but we have also observed a decrease in TEA in Egypt. So, looked at broadly, the data we see may indicate an overall decline in entrepreneurial activity from last year.

**Table 13: Motivation for Early-Stage Entrepreneurial Activity in Egypt and GEM Countries (2018)**

	RANK /47	EGYPT (%)	GLOBAL AVERAGE (%)	MIDDLE EAST & NORTH AFRICA (%)	HIGH INCOME COUNTRIES (%)	MIDDLE INCOME COUNTRIES (%)	LOW INCOME COUNTRIES (%)
NECESSITY-DRIVEN	1	47.6	23.0	23.4	22.7	23.2	24.5
OPPORTUNITY-DRIVEN	49	47.5	71.7	71.4	72.0	71.6	70.5

Sources: The Authors; GEM Global Report 2018-19

Definitions:

**Necessity-driven entrepreneurs:** Percentage of individuals aged 18–64 who indicate that they have “no better choices for work” or alternative means of survival, which rather compels them to become entrepreneurs.

**Opportunity-driven entrepreneurs:** Percentage of individuals aged 18–64 who voluntarily start a business to take advantage of a business opportunity and gain profits.

**Table 14: Motivation for Early-Stage Entrepreneurial Activity in Egypt (2015-2018)**

	2018			2017			2016			2015		
	Egypt Rank /49	Egypt %	Global Average %	Egypt Rank /54	Egypt %	Global Average %	Egypt Rank /65	Egypt %	Global Average %	Egypt Rank /60	Egypt %	Global Average %
NECESSITY-DRIVEN	1	47.6	23.0	1	42.7	22.0	13	31.3	23.2	5	42.4	24.6
OPPORTUNITY-DRIVEN	47	47.5	71.7	53	53.5	74.4	56	61.2	73.5	56	57.3	72.5

Sources: The Authors; GEM Global Report 2018-19; GEM Egypt Reports 2015-16, 2016-17, 2017-18

## INDUSTRY SECTOR PARTICIPATION

Early-stage entrepreneurs working in Egypt are overwhelmingly active in the field of wholesale and retail distribution (61.5%), followed by manufacturing (12.8%) and agriculture (8.3%). Collectively, these sectors represent over 81% of all early-stage entrepreneurship taking place in Egypt.

The percentage of early-stage entrepreneurs working in the wholesale and retail distribution sector in Egypt (61.5%) is significantly higher than the global average of 43.0%. There has been a noticeable increase since 2017 of entrepreneurs working in this sector, up from 54.3% to 61.5%. This increase is likely to indicate the growth of micro and small informal retail outlets that are often the typical refuge at times of high unemployment.

Manufacturing in Egypt (12.8%) is also significantly higher than the global average of 8.4%, remaining almost unchanged from the previous two years.

The agricultural sector is likewise quite significantly higher than the global average of 4.6%, with 8.3% of early-stage entrepreneurs in Egypt work in this sector, an increase from last year’s score of 7.0%.

5.6% of early-stage Egyptian entrepreneurs work in health, education, government and social services. While this figure is the fourth-largest sector for entrepreneurship in Egypt, we are well below the global average of 14.5%, indicating a lag in entrepreneurial activities in these sectors and the dominance of large established companies or state-owned enterprises.

These figures may indicate that Egypt's retail distribution and manufacturing sectors remain highly fragmented, with many micro and small enterprises and factories. As we observed last year, businesses such as small workshops, agri-businesses or retail stores generally have low barriers to entry, are labor intensive, and do not require substantial capital or knowledge. They can also be quickly started and are often created by necessity entrepreneurs.

Egypt continues to score well below the global average for early-stage entrepreneurs working in sectors that require extensive capital and knowledge,

including information and communication technology, finance and administrative services. There was no observable activity in early-stage entrepreneurship within the finance sector, and both the ICT and professional service sectors were very limited (0.3% and 2.2% respectively).

Overall, we can see that the number of entrepreneurs working in the wholesale and retail sector is increasing dramatically, and those working in agriculture are increasing at a more gradual pace. This shows the continued growth of necessity entrepreneurship in the informal sector.

**Table 15: Sector Distribution of Entrepreneurial Activity in Egypt and GEM Countries (2018)**

INDUSTRY SECTOR	RANK /49	EGYPT (%)	GLOBAL AVERAGE (%)	MIDDLE EAST & NORTH AFRICA (%)	HIGH INCOME COUNTRIES (%)	MIDDLE INCOME COUNTRIES (%)	LOW INCOME COUNTRIES (%)
AGRICULTURE	8	8.3	4.6	4.7	4.7	5.0	4.6
MINING	39	2.4	5.4	5.2	5.5	5.4	5.1
MANUFACTURING	8	12.8	8.4	8.4	8.5	8.7	8.3
TRANSPORTATION	14	3.8	3.2	3.2	3.2	3.3	3.2
WHOLESALE & RETAIL	8	61.5	43.0	44.1	42.2	43.5	44.6
INFORMATION & COMMUNICATION TECHNOLOGY	44	0.3	4.2	4.0	4.2	4.0	4.0
FINANCE	47	0.0	3.1	3.0	3.2	3.0	2.8
PROFESSIONAL SERVICES	37	2.2	6.9	6.7	7.1	6.5	6.3
ADMINISTRATIVE SERVICES	46	0.7	3.9	3.8	4.0	3.9	3.9
HEALTH, EDUCATION, GOVERNMENT & SOCIAL SERVICES	47	5.6	14.5	14.4	14.6	14.2	14.5
PERSONAL & CONSUMER SERVICES	20	2.4	2.7	2.6	2.7	2.5	2.5

Sources: The Authors; GEM Global Report 2018-19



**Table 16: Sector Distribution of Entrepreneurial Activity in Egypt (% of TEA) (2015 - 2018)**

INDUSTRY SECTOR	2018%	2017%	2016%	2015%
AGRICULTURE	8.3	7.0	13.0	6.6
MINING	2.4	2.1	3.8	0.7
MANUFACTURING	12.8	13.1	12.9	21.9
TRANSPORTATION	3.8	4.3	5.7	1.7
WHOLESALE & RETAIL	61.5	54.3	50.3	53.6
INFORMATION & COMMUNICATION TECHNOLOGY	0.3	0.4	0.0	0.2
FINANCE	0.0	1.8	1.8	0.5
PROFESSIONAL SERVICES	2.2	0.6	2.0	0.8
ADMINISTRATIVE SERVICES	0.7	1.5	2.8	1.0
HEALTH, EDUCATION, GOVERNMENT & SOCIAL SERVICES	5.6	8.1	6.3	8.5
PERSONAL & CONSUMER SERVICES	2.4	1.9	1.4	4.3

Sources: The Authors; GEM Global Report 2018-19; GEM Egypt Reports 2015-16, 2016-17, 2017-18

## JOB CREATION PROJECTIONS AND GROWTH ORIENTATION

As entrepreneurs start to build and grow their businesses, they may employ others, or they may intend to do so in the future. Whether and to what degree entrepreneurs anticipate adding employees to grow their businesses—that is, the extent to which they are job creators—is of great interest to policy makers and other stakeholders. Job creation projections are a key indicator for a business's growth aspirations, and potential socio-economic impact. GEM examines the job creation projections for early-stage enterprises: ranging from no-growth (not expecting to add any employees over the next five years), to low-growth (planning to add between one and five more employees in the next five years) to high-growth (planning to add six or more employees over the next five years).

In 2018, 58.5% of early-stage entrepreneurs in Egypt did not expect to add any new jobs to their businesses within 5 years. This is quite significantly higher than the global average of 46.2%, the MENA region average of 46.7%. This also represents an increase from 2015-2017 range of 51.4% - 55.3%,

%, indicating that the number of necessity-driven informal micro enterprises with no growth aspirations is increasing as a proportion of total entrepreneurial activity in Egypt.

Likewise, only 19.3% of early-stage entrepreneurs expect to create 6 or more jobs in their businesses within the coming five years. This figure is marginally higher than the figure for low income countries (18.5%), almost on a par with middle-income countries (19.9%) and somewhat lower than high-income countries (20.6%), the average in MENA (20.4%) and the global average (20.6%). But what's really striking is the extent to which these scores have decreased in recent years, falling from 25.7% in 2015 to 23.7% in 2017 and now 19.3% this year, indicating lower growth sentiment among the business entrepreneurs.

This data shows that people's expectations for growth are becoming more limited, which is consistent with the decline in opportunity-driven entrepreneurs which we observed earlier.

**Table 17: Job Creation Projections Among Early-Stage Entrepreneurs in Egypt and GEM Countries (2018)**

	RANK /48	EGYPT (%)	GLOBAL AVERAGE (%)	MIDDLE EAST & NORTH AFRICA (%)	HIGH INCOME COUNTRIES (%)	MIDDLE INCOME COUNTRIES (%)	LOW INCOME COUNTRIES (%)
0 JOBS IN 5 YEARS	10	58.5	46.2	46.7	46.2	46.2	48.0
1 - 5 JOBS IN 5 YEARS	41	22.2	33.2	32.9	33.2	33.0	33.5
6 OR MORE JOBS IN 5 YEARS	25	19.3	20.6	20.4	20.6	19.9	18.5

Sources: The Authors; GEM Global Report 2018-19

**Table 18: Job Creation Projections Among Early-Stage Entrepreneurs in Egypt (2015-2018)**

INDUSTRY SECTOR	2018	2017	2016	2015
0 JOBS IN 5 YEARS	58.5	52.5	55.3	51.4
1 - 5 JOBS IN 5 YEARS	22.2	23.8	19.3	22.8
6 OR MORE JOBS IN 5 YEARS	19.3	23.7	25.4	25.7

Sources: The Authors; GEM Global Report 2018-19; GEM Egypt Reports 2015-16, 2016-17, 2017-18

## ORIENTATION INNOVATION

Innovation represents a company's ability to introduce new products and services to the market and to use new technology within their own internal operations. Average innovation levels increase with economic development levels, with greater participation in technology-intensive sectors such as information and communication technology, and professional and other service industries, correlating with higher levels of education and greater access to advanced technologies. In addition, many developed economies are characterized by crowded competitive spaces and markets accustomed to advanced solutions; entrepreneurs may need to introduce novel solutions in order to compete successfully. GEM follows three approaches to measure innovation: (i) product innovation, (ii) market innovation, and (iii) use of new technology.

**Product innovation:** is measured in terms of customer familiarity with a product/service that is

introduced by the company. The scale is divided into three levels: product/service is new or unfamiliar to all potential customers, unfamiliar to some potential customers, or familiar to all potential customers. The percentage of Egyptian entrepreneurs — both early-stage and established — who believe their product to be new to all customers is growing. Among early-stage entrepreneurs, the numbers have increased noticeably, from 13.5% in 2015 to 26.9% in 2018. Established businesses follow the same trend, albeit with a less startling trajectory, moving from 14.8% in 2015 to 23.6% in 2018. These figures may be explained in several ways. It could be representative of true product innovation by local companies, or the introduction of existing products to new underdeveloped regions where they were not available before, or the importation of new products to the market. These new products are introduced more often by new businesses compared to established ones.

**Table 19: Product Innovation in Egypt and GEM Countries (2018)**

PRODUCT IS NEW TO	EGYPT		GLOBAL		MIDDLE EAST & NORTH AFRICA		HIGH INCOME COUNTRIES		MIDDLE INCOME COUNTRIES		LOW INCOME COUNTRIES	
	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)
ALL CUSTOMERS	26.9	23.6	19.0	15.0	20.2	20.7	19.2	15.0	19.2	15.6	20.0	17.7
SOME CUSTOMERS	22.6	18.2	29.5	21.7	27.8	22.0	29.6	21.0	29.8	22.2	29.8	21.7
NONE	50.5	58.2	51.4	63.4	52.0	57.3	51.3	64.0	50.7	62.2	50.2	60.6

Sources: The Authors; GEM Global Report 2018-19

**Table 20: Product Innovation in Egypt (2015 - 2018)**

PRODUCT IS NEW TO	2018		2017		2016		2015	
	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)
ALL CUSTOMERS	26.9	23.6	19.4	15.4	22.6	13.2	13.5	14.8
SOME CUSTOMERS	22.6	18.2	23.8	24.8	18.6	15.0	29.4	18.7
NONE	50.5	58.2	56.9	59.8	58.8	72.0	57.0	66.5

Sources: The Authors; GEM Global Report 2018-19; GEM Egypt Reports 2015-16, 2016-17, 2017-18

**Market innovation:** GEM measures market innovation by assessing the use of technology in market expansion. The scale includes four different levels: whether the company has no market expansion, or some market expansion without the use of new technology, or some market expansion with the use of new technology, or profound market expansion.

More Egyptian companies are expanding their markets compared to the global figures: 58% of early-stage Egyptian companies compared to 48% globally, and 53% of established Egyptian companies compared to 30% globally. Within the companies expanding, more Egyptian companies are using new technology in their market expansion and having profound market expansion compared to the global average. These figures do not add up when compared to the high levels of informality and the types of sectors that are dominant in the economy (e.g., retail, manufacturing and agriculture), and may require further investigation. We suspect that some respondents may have included the use of basic computing or telecommunications technology under this category.



**Table 21: Market Innovation Measured by Market Expansion Mode in Egypt and GEM Countries (2018)**

PRODUCT IS NEW TO	EGYPT		GLOBAL		MIDDLE EAST & NORTH AFRICA		HIGH INCOME COUNTRIES		MIDDLE INCOME COUNTRIES		LOW INCOME COUNTRIES	
	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)
NO MARKET EXPANSION	42	47	52	70	49	65	53	69	51	69	52	69
MARKET EXPANSION	58	53	48	30	51	35	47	31	49	31	48	31
SOME MARKET EXPANSION (NO NEW TECHNOLOGIES)	32	31	31	24	26	27	31	24	32	24	31	24
SOME MARKET EXPANSION (NEW TECHNOLOGIES)	18	18	13	5	22	7	13	6	14	6	14	6
PROFOUND MARKET EXPANSION	8	4	3	1	4	1	3	1	3	1	3	1

Sources: The Authors; GEM Global Report 2018-19

**Table 22: Market Innovation Measured by Market Expansion Mode in Egypt (2015-2018)**

	2018		2017		2016		2015	
	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)
NO MARKET EXPANSION	42	47	41	50	46	64	37	76
MARKET EXPANSION	58	53	59	50	54	36	63	24
SOME MARKET EXPANSION (NO NEW TECHNOLOGIES)	32	31	38	30	32	20	23	21
SOME MARKET EXPANSION (NEW TECHNOLOGIES)	18	18	19	13	18	15	36	3
PROFOUND MARKET EXPANSION	8	4	2	7	4	2	4	0

Sources: The Authors; GEM Global Report 2018-19; GEM Egypt Reports 2015-16, 2016-17, 2017-18

**Use of New Technologies:** is another measure for a company's innovation capacity, especially within their internal operations. More early stage businesses in Egypt (60%) make use of new technology, compared to 43.7% of the established companies. The figures for Egyptian companies, both early stage and established, using new technology are higher than the global average. This pattern has been consistent over the past 3 years, which is unlikely to be the case, based on the high levels of informality and necessity entrepreneurship in the economy. Similar to the market innovation, we suspect that some respondents may have included the use of basic computing or telecommunications technology under this category.

**Table 23: Innovation Measured Through the Use of New Technology in Egypt and GEM Countries (2018)**

	EGYPT		GLOBAL		MIDDLE EAST & NORTH AFRICA		HIGH INCOME COUNTRIES		MIDDLE INCOME COUNTRIES		LOW INCOME COUNTRIES	
	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)
VERY LATEST TECHNOLOGY (NEWER THAN ONE YEAR)	25.5	23.3	16.3	7.5	26.4	11.8	16.9	7.8	17.3	8.3	21.4	10.4
NEW TECHNOLOGY (1-5 YEARS OLD)	34.5	20.4	24.0	14.1	28.0	20.7	24.0	14.5	24.7	15.0	26.3	18.1
NO NEW TECHNOLOGY (MORE THAN 5 YEARS OLD)	40.0	56.3	59.8	78.4	45.6	67.5	59.0	77.8	57.9	76.8	52.2	71.4

Sources: The Authors; GEM Global Report 2018-19; GEM Egypt Reports 2015-16, 2016-17, 2017-18

**Table 24: Innovation Measured Through the Use of New Technology in Egypt (2016-18)**

	2018		2017		2016	
	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)	EARLY STAGE ENTREPRENEURSHIP (%)	ESTABLISHED BUSINESS (%)
VERY LATEST TECHNOLOGY (NEWER THAN ONE YEAR)	25.5	23.3	21.0	14.9	22.0	16.3
NEW TECHNOLOGY (1-5 YEARS OLD)	34.5	20.4	35.6	26.6	31.0	39.0
NO NEW TECHNOLOGY (MORE THAN 5 YEARS OLD)	40.0	56.3	43.4	58.5	47.0	44.6

Sources: The Authors; GEM Global Report 2018-19

## INTERNATIONALIZATION

Internationalization is an indicator of the entrepreneur's aspirations for growth within a more globalized world, as well as the ability to compete in a more sophisticated and competitive global market. It is considered to be an indicator of high sustainability or success in the future because international trade may create more economic value. In today's global context, internationalization is key to an economy's national competitiveness. GEM asks entrepreneurs about the approximate percentage of their sales to customers outside their country. GEM measures internationalization by the percentage of entrepreneurs who report that 25% or more of their customers come from outside their country.

Egypt has an increasing number of companies — both early-stage and established — exporting their products compared to a year ago. In 2018, 22.3% of

the early-stage businesses and 19.2% of the established businesses had more than 25% of their customers outside the country, compared to 15.8% and 13.3% respectively in 2017. This increase could be the result of the currency devaluation rendering Egyptian products or services more competitive at a global level.

Egypt also had relatively high levels of internationalization in 2018, whether compared to the global average or MENA economies. This was the case for both early-stage and established businesses. At 22.3%, the internationalization of entrepreneurial businesses in Egypt is higher than the global average of 20.8% and slightly higher than the MENA average of 21.3%. For established businesses, 2018 levels of internationalization (19.2%) were also higher than the global average (16.4%) and the MENA average (16.8%).

**Table 25: Internationalization Among Entrepreneurial Businesses and Established Businesses in Egypt and GEM Countries (2018)**

	EGYPT		GLOBAL		MIDDLE EAST & NORTH AFRICA		HIGH INCOME COUNTRIES		MIDDLE INCOME COUNTRIES		LOW INCOME COUNTRIES	
	ENTREPRENEURIAL BUSINESS (%)	ESTABLISHED BUSINESS (%)	ENTREPRENEURIAL BUSINESS (%)	ESTABLISHED BUSINESS (%)	ENTREPRENEURIAL BUSINESS (%)	ESTABLISHED BUSINESS (%)	ENTREPRENEURIAL BUSINESS (%)	ESTABLISHED BUSINESS (%)	ENTREPRENEURIAL BUSINESS (%)	ESTABLISHED BUSINESS (%)	ENTREPRENEURIAL BUSINESS (%)	ESTABLISHED BUSINESS (%)
<b>MORE THAN 25% OF CUSTOMERS OUTSIDE THE COUNTRY</b>	22.3	19.2	20.8	16.4	21.3	16.8	21.2	16.7	22.2	17.8	20.8	16.3

Sources: The Authors; GEM Global Report 2018-19; GEM Egypt Reports 2015-16, 2016-17, 2017-18

**Table 26: Internationalization Among Early-Stage Entrepreneurship and Established Businesses in Egypt (2015-2018)**

	2018		2017		2016		2015	
	ENTREPRENEURIAL BUSINESS (%)	ESTABLISHED BUSINESS (%)	ENTREPRENEURIAL BUSINESS (%)	ESTABLISHED BUSINESS (%)	ENTREPRENEURIAL BUSINESS (%)	ENTREPRENEURIAL BUSINESS (%)	ENTREPRENEURIAL BUSINESS (%)	ESTABLISHED BUSINESS (%)
<b>MORE THAN 25% OF CUSTOMERS OUTSIDE THE COUNTRY</b>	22.3	19.2	15.8	13.3	9.0	10.0	17.2	22.3

Sources: The Authors; GEM Global Report 2018-19













# SECTION 4

## ENTREPRENEURSHIP ECOSYSTEM



## GEM'S ENTREPRENEURSHIP FRAMEWORK CONDITIONS

An entrepreneurship framework measures the conditions shaping the national context in which entrepreneurial activities take place within an economy. As we have shown, each economy has its own specific profile when it comes to the rate of entrepreneurial activity in different fields, the characteristics of entrepreneurs and the nature of their businesses, and the attitudes towards and perceptions of entrepreneurship in wider society. Likewise, the environment of each economy differs when it comes to the opportunities that entrepreneurs can leverage and the constraints that they must overcome to start their businesses.

The National Expert Survey (NES) consists of an overview of the current ecosystem, offering insights into the major constraints, recommendations, and potential areas of improvement. From Egypt, 50 experts participated in the 2018 NES, comprising a minimum of four experts for each of the nine areas of Entrepreneurial Function Conditions (EFCs). EFCs average scores - assessed in National Expert Survey in 9-point Likert scale (1=highly insufficient; 9=highly sufficient) were re-scaled to 10 points for the purpose of NECI. In our analysis of Egypt's National Expert Survey, we provide benchmarks to show how we compare to other GEM economies, including global averages and averages based on income levels, as identified and categorized by GEM 2018 (high, middle and low-income economies). We also track the progress of the entrepreneurship ecosystem in Egypt in the period between 2015 and 2018.

**Table 27: Entrepreneurship Framework Conditions**

<b>ENTREPRENEURIAL FINANCE</b>	The availability of financial resources and funding for current and potential entrepreneurs, including the accessibility and efficient functioning of equity markets and the availability of typical financing channels for entrepreneurs. Sources of funding include informal investments, professional business angels, venture capitalists, banks, government loans, grants and subsidies, as well as crowdfunding.
<b>GOVERNMENT POLICIES SUPPORT AND RELEVANCE</b>	The extent to which national governments demonstrate support for entrepreneurs, for example, whether policymakers mention entrepreneurship in public discourse and press for specific regulations to improve conditions for different types of entrepreneurs and small and medium enterprises (SMEs).
<b>GOVERNMENT POLICIES, TAXES AND BUREAUCRACY</b>	The degree to which taxes are affordable and balanced for entrepreneurs, or whether they constitute a burden to starting and growing businesses, and the burden of dealing with bureaucracy in government processes.
<b>GOVERNMENT ENTREPRENEURSHIP PROGRAMS</b>	The presence and quality of government programs directly assisting new firms and SMEs at all levels of government (national, regional, municipal, including subsidies, incubators, training and advisory services).
<b>ENTREPRENEURSHIP EDUCATION AT SCHOOL STAGE</b>	The extent to which training in creating or managing new firms and SMEs and entrepreneurial values are incorporated within the education system at primary and secondary school level
<b>ENTREPRENEURIAL EDUCATION AT POST-SCHOOL STAGE</b>	The inclusion of entrepreneurship subjects in post-school programs, such as colleges, business schools, and vocational centers, including the effectiveness of post-school educational systems in building students' entrepreneurship skills and values and facilitating the venture creation process among students and graduates.
<b>RESEARCH AND DEVELOPMENT (R&amp;D) TRANSFER</b>	The extent to which research and development is transferred from universities and research centers to the business sector, including new firms and SMEs, and leading to new commercial opportunities. And the degree engineers and scientists can commercialize research findings and bring them to the market.

<b>COMMERCIAL AND PROFESSIONAL INFRASTRUCTURE</b>	The presence of property rights and the availability and affordability of professionals and firms providing services to entrepreneurs, including accountants, lawyers, and consultants, to help them start and manage new businesses.
<b>INTERNAL MARKET DYNAMICS</b>	The presence of a free and open market where no entity exerts power to influence or set prices, and where changes in demand are met with changes in supply, and vice versa.
<b>INTERNAL MARKET BURDENS OR ENTRY REGULATION</b>	The extent to which new firms are free to enter existing markets, including regulatory and other burdens.
<b>PHYSICAL INFRASTRUCTURE</b>	The ease of access and affordability of physical infrastructure, such as, communication, utilities, transportation, land or space, at a price that does not discriminate against new firms or SMEs.
<b>CULTURAL AND SOCIAL NORMS</b>	<p>The extent to which social and cultural norms, including behaviors, beliefs, language and customs, encourage or allow entrepreneurial activities leading to new business ventures business methods or activities that can potentially increase personal wealth and income</p> <p>The extent to which a society exhibits an entrepreneurship focus within the culture through behavior, beliefs, language and customs. This can encourage entrepreneurs by demonstrating acceptance, support and high regard for their activity.</p>

Sources: GEM Global Report, 2018-19

## NATIONAL ENTREPRENEURSHIP CONTEXT INDEX (NECI)

For the first time, GEM is introducing a composite index, the National Entrepreneurship Context Index (NECI), to assess the environment for entrepreneurship in any given economy. This is an index combining the assessment of the 12 entrepreneurship framework conditions: financing, government policies, taxes and bureaucracy, government programs, school-level entrepreneurship education and training, postschool entrepreneurship education and training, R&D transfer, access to commercial and professional infrastructure, internal market dynamics, internal market burdens, access to physical and services infrastructure, and cultural and social norms.

The aim of the NECI is to assess the overall strength of the entrepreneurship environment through an examination of key matrices, providing an analysis that can then be used to inform policy, and guide practitioners and other stakeholders.

The NECI is calculated based on surveys of a minimum of 36 experts in each economy, including entrepreneurs as well as those involved in

entrepreneurship in areas including finance, government, and education. Experts are asked to assess different aspects of the 12 framework conditions and their importance in stimulating and supporting entrepreneurship within their particular economies, giving each a rating of between 1 and 9 (with 1 signifying the lowest possible rating, and 9 the highest). Then, the average of each factor is calculated.

Table X shows the NECI rankings and scores for the 54 GEM economies participating in the 2018 National Expert Survey (NES). These are sorted from high to low. In the appendix of this report, there is an additional breakdown, with detailed rankings and scores for each of the 12 framework conditions.

Egypt shows an average or below average rating for each of the framework condition, with an overall score of 4.7 points, ranking of 34th out of 54 economies, which places Egypt within the third quartile among the participating GEM economies, and within the middle of the MENA region countries.

**Table 28: 2018 NECI Rankings and Scores for 54 Participating Economies**

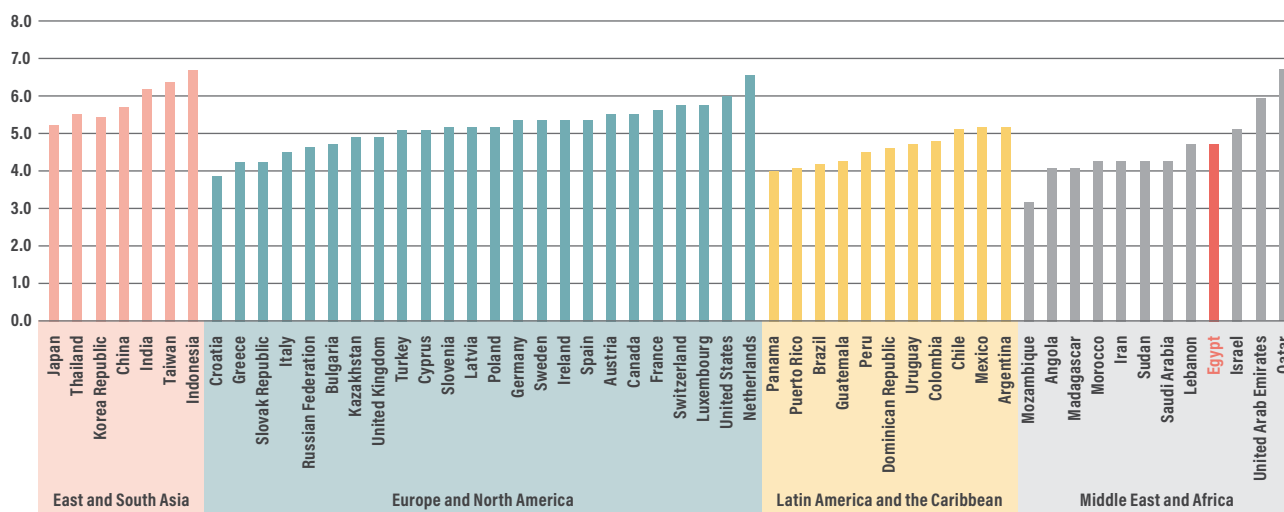
NECI RANK	ECONOMY	NECI SCORE (OUT OF 10)	INCOME LEVEL	REGION
1	Qatar	6.7	High	Middle East and Africa
2	Indonesia	6.6	Low	East and South Asia
3	Netherlands	6.5	High	Europe and North America
4	Taiwan	6.3	High	East and South Asia
5	India	6.2	Low	East and South Asia
6	United States	6.0	High	Europe and North America
7	United Arab Emirates	5.9	High	Middle East and Africa
8	Luxembourg	5.7	High	Europe and North America
9	Switzerland	5.7	High	Europe and North America
10	France	5.6	High	Europe and North America
11	China	5.6	Middle	East and South Asia
12	Canada	5.5	High	Europe and North America
13	Austria	5.5	High	Europe and North America
14	Korea Republic	5.5	High	East and South Asia
15	Thailand	5.5	Middle	East and South Asia
16	Spain	5.4	High	Europe and North America
17	Ireland	5.4	High	Europe and North America
18	Sweden	5.4	High	Europe and North America
19	Germany	5.4	High	Europe and North America
20	Japan	5.3	High	East and South Asia
21	Argentina	5.2	High	Latin America and the Caribbean
22	Latvia	5.2	High	Europe and North America
23	Mexico	5.2	Middle	Latin America and the Caribbean
24	Poland	5.2	High	Europe and North America
25	Slovenia	5.2	High	Europe and North America
26	Chile	5.1	High	Latin America and the Caribbean
27	Cyprus	5.1	High	Europe and North America
28	Israel	5.1	High	Middle East and Africa
29	Turkey	5.1	Middle	Europe and North America
30	United Kingdom	4.9	High	Europe and North America
31	Kazakhstan	4.9	Middle	Europe and North America
32	Colombia	4.8	Middle	Latin America and the Caribbean



33	Uruguay	4.7	High	Latin America and the Caribbean
34	Egypt	4.7	Low	Middle East and Africa
35	Lebanon	4.7	Middle	Middle East and Africa
36	Bulgaria	4.7	Middle	Europe and North America
37	Russian Federation	4.6	Middle	Europe and North America
38	Dominican Republic	4.6	Middle	Latin America and the Caribbean
39	Peru	4.5	Middle	Latin America and the Caribbean
40	Italy	4.5	High	Europe and North America
41	Saudi Arabia	4.4	High	Middle East and Africa
42	Greece	4.3	High	Europe and North America
43	Slovak Republic	4.3	High	Europe and North America
44	Guatemala	4.3	Middle	Latin America and the Caribbean
45	Sudan	4.3	Low	Middle East and Africa
46	Iran	4.3	Middle	Middle East and Africa
47	Morocco	4.3	Low	Middle East and Africa
48	Brazil	4.2	Middle	Latin America and the Caribbean
49	Madagascar	4.1	Low	Middle East and Africa
50	Angola	4.1	Low	Middle East and Africa
51	Puerto Rico	4.1	High	Latin America and the Caribbean
52	Panama	4.0	High	Latin America and the Caribbean
53	Croatia	3.8	High	Europe and North America
54	Mozambique	3.2	Low	Middle East and Africa

Sources: GEM Global Report, 2018-19

**Figure 3: National Entrepreneurship Context Index (NECI) Results for 54 Economies in Four Geographic Regions**



Sources: GEM Global Report, 2018-19

Note: Figures represent the mean scores based on a scale of 1 to 9 (1 = highly insufficient; 9 = highly sufficient)

## EGYPT'S ENTREPRENEURSHIP ECOSYSTEM

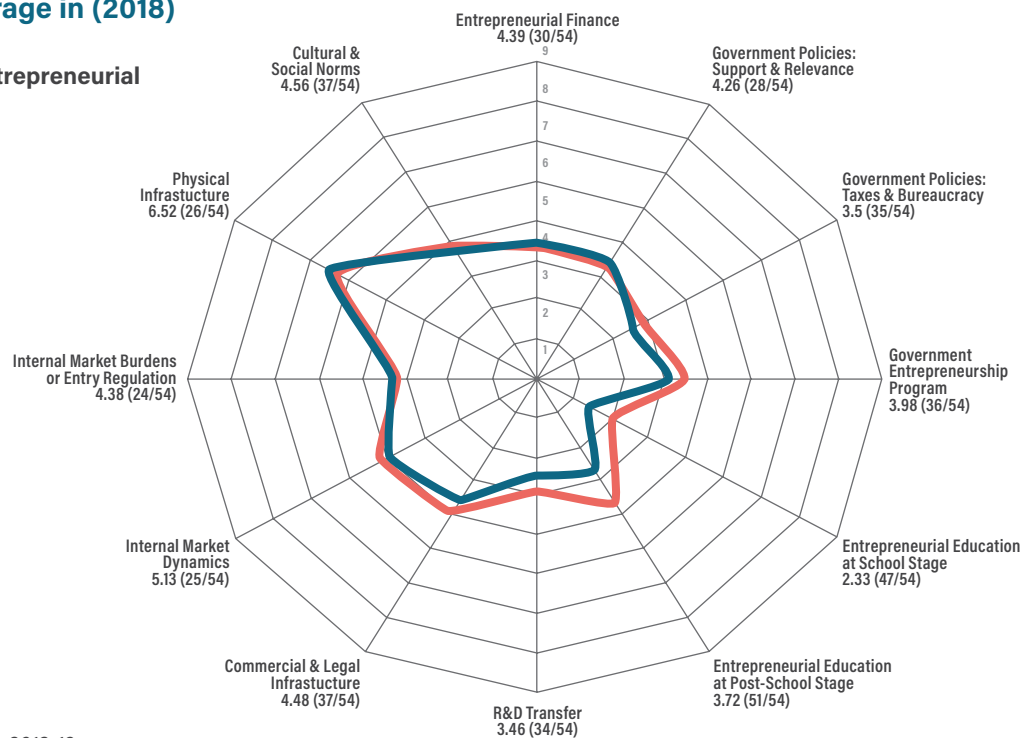
Egypt's entrepreneurship ecosystem is steadily improving when it comes to most indicators, although our ratings remain relatively low compared to GEM global averages. Experts are particularly noticing improvements in entrepreneurial finance, support and relevance of government policies, and government entrepreneurship programs. Experts are also observing noticeable decline in entrepreneurship education, both school and post school stages. The emerging areas of strength for the entrepreneurship ecosystem in Egypt include access to finance (Egypt's score of 4.4, compared to the global average of 4.3) and physical infrastructure (Egypt's score of 6.5 compared to the global average of 6.3). The key areas of weakness for the entrepreneurship ecosystem in Egypt include entrepreneurship education at both the school and post-school stages (Egypt's score was 2.3 and 3.7, compared to the global averages of 3.2 and 4.8 respectively), and government bureaucracy and taxation policy (Egypt's score was 3.5, compared to the global average of 3.9).

In the rest of this section, we review the expert assessment in each of these sections, comparing it to global averages as well as previous years.

**Figure 4: Experts' Ratings of the Entrepreneurial Ecosystem in Egypt vs. GEM Global Average in (2018)**

### Expert Ratings of the Entrepreneurial Framework Conditions

■ GEM  
■ EGYPT



Sources: GEM Global Report, 2018-19

**Table 29: Experts' Ratings of the Entrepreneurial Ecosystem in Egypt (2015-2018)**

	2018	2017	2016	2015
1. ENTREPRENEURIAL FINANCE	4.4	4.0	3.9	3.5
2A. GOVERNMENT POLICIES: SUPPORT AND RELEVANCE	4.3	4.2	3.6	3.3
2B. GOVERNMENT POLICIES: TAXES AND BUREAUCRACY	3.5	3.0	3.1	3.0
3. GOVERNMENT ENTREPRENEURSHIP PROGRAMS	4.0	3.3	3.3	3.1
4A. ENTREPRENEURSHIP EDUCATION AT SCHOOL STAGE	2.3	1.8	1.7	1.6
4B. ENTREPRENEURSHIP EDUCATION AT POST-SCHOOL STAGE	3.7	3.4	3.1	3.1
5. RESEARCH AND DEVELOPMENT (R&D) TRANSFER	3.5	2.9	2.8	2.9
6. COMMERCIAL AND LEGAL INFRASTRUCTURE	4.5	4.0	3.9	4.2
7A. INTERNAL MARKET DYNAMICS	5.1	5.8	5.1	5.1
7B. INTERNAL MARKET BURDENS OR ENTRY REGULATIONS	4.4	4.1	4.0	3.8
8. PHYSICAL INFRASTRUCTURE	6.5	6.1	6.5	6.3
9. CULTURAL AND SOCIAL NORMS	4.6	4.0	4.1	3.8

Sources: The Authors; GEM Global Report 2018-19; GEM Egypt Reports 2015-16, 2016-17, 2017-18

**Table 30: Experts' Ratings of the Entrepreneurial Ecosystem in Egypt and GEM Countries (2018)**

	EGYPT	GLOBAL AVERAGE	HIGH INCOME COUNTRIES	MIDDLE INCOME COUNTRIES	LOW INCOME COUNTRIES
1. ENTREPRENEURIAL FINANCE	4.4	4.3	4.3	4.3	4.2
2A. GOVERNMENT POLICIES: SUPPORT AND RELEVANCE	4.3	4.3	4.3	4.2	4.2
2B. GOVERNMENT POLICIES: TAXES AND BUREAUCRACY	3.5	3.9	3.9	3.8	3.8
3. GOVERNMENT ENTREPRENEURSHIP PROGRAMS	4.0	4.5	4.5	4.4	4.4
4A. ENTREPRENEURSHIP EDUCATION AT SCHOOL STAGE	2.3	3.2	3.1	3.1	3.0
4B. ENTREPRENEURSHIP EDUCATION AT POST-SCHOOL STAGE	3.7	4.8	4.8	4.7	4.7
5. RESEARCH AND DEVELOPMENT (R&D) TRANSFER	3.5	4.0	4.0	3.9	3.8
6. COMMERCIAL AND LEGAL INFRASTRUCTURE	4.5	4.9	4.9	4.9	4.8



<b>7A. INTERNAL MARKET DYNAMICS</b>	5.1	5.2	5.2	5.2	5.1
<b>7B. INTERNAL MARKET BURDENS OR ENTRY REGULATIONS</b>	4.4	4.2	4.2	4.2	4.1
<b>8. PHYSICAL INFRASTRUCTURE</b>	6.5	6.3	6.4	6.4	6.2
<b>9. CULTURAL AND SOCIAL NORMS</b>	4.6	4.8	4.9	4.8	4.8

Sources: The Authors; GEM Global Report 2018-19

Note: Figures represent average scores on a scale of 1 to 9 (1 = highly insufficient; 9 = highly sufficient), grouped by income level

## ENTREPRENEURIAL FINANCE

Entrepreneurial finance indicates the availability of financial resources for new firms as well as micro, small and medium enterprises (MSMEs), including debt and equity financing from varieties of sources. Egypt's rating for entrepreneurial finance stands at 4.4, ranking 30th out of 54 economies, slightly higher than the global average of 4.3 and of similar-income countries. Over time, we have seen steady and consistent improvement, from 3.5 in 2015 to 4.4 in 2018. This overall positive improvement indicates improvements of different areas of access to finance such as debt, equity, subsidies and angel investments for startups, as well as for micro, small and medium enterprises. While a lack of financing is consistently identified as being one of the top challenges facing Egyptian entrepreneurs, these ratings are indicative of the efforts undertaken by a variety of stakeholders to improve the status quo.

In multiple areas, funding opportunities for entrepreneurs have improved since 2015. Equity funding has seen a leap from 3.8 in 2015 to 5.0 in 2017 and 5.2 in 2018, and debt funding has also improved substantially, moving from 3.0 in 2015 to 4.3 in 2017, to 4.6 in 2018. Government subsidies, professional business angel funding, informal investor funding from family and friends, and access to venture capital have all also seen notable growth from 2015, now standing at 4.2, 4.7, 5.7 and 4.8 respectively.

Financing through IPOs and crowdfunding has always been very low, with the former remaining at a rate of 3.2 from 2015 to 2018, and the latter having decreased from 3.4 in 2015 to 2.9 in 2018. These are not common methods for entrepreneurial financing in Egypt.

The increase in the ratings related to bank loans in Egypt show that the Central Bank's initiative to support SMEs may be yielding positive results, and that commercial banks likewise are making an effort to increase access to finance for SMEs. New venture capital funds are also entering the market, with around USD 300 million of capitalization. Finally, there is a noticeable increase in the number of accelerators and incubators offering both financial and other kinds of support to entrepreneurs.

**Table 31: Entrepreneurial Finance in Egypt (2015 -2018)**

	2018	2017	2016	2015
<b>EQUITY FUNDING AVAILABLE FOR NEW AND GROWING FIRMS</b>	5.2	5.0	4.4	3.8
<b>DEBT FUNDING AVAILABLE FOR NEW AND GROWING FIRMS</b>	4.6	4.3	4.4	3.0
<b>GOVERNMENT SUBSIDIES AVAILABLE FOR NEW AND GROWING FIRMS</b>	4.2	3.8	3.5	3.0

FUNDING AVAILABLE FROM INFORMAL INVESTORS (FAMILY & FRIENDS)	5.7	5.6	5.7	5.3
PROFESSIONAL BUSINESS ANGELS FUNDING AVAILABLE FOR NEW AND GROWING FIRMS	4.7	4.0	3.9	4.0
VENTURE CAPITALIST FUNDING AVAILABLE FOR NEW AND GROWING FIRMS	4.8	4.4	3.6	3.6
FUNDING AVAILABLE THROUGH INITIAL PUBLIC OFFERINGS (IPOS) FOR NEW AND GROWING FIRMS	3.2	2.8	3.1	3.2
PRIVATE LENDERS' FUNDING (CROWDFUNDING) AVAILABLE FOR NEW AND GROWING FIRMS	2.9	3.2	3.3	3.4

Sources: The Authors; GEM Global Report 2018-19; GEM Egypt Reports 2015-16, 2016-17, 2017-18

## GOVERNMENT POLICIES

Government policies, which impact virtually every area of doing business, including taxation, public procurement, licensing and permits, market regulation, and other legal and regulatory interventions, have a significant effect on businesses. Fledgling companies, at their earliest stages of growth, are particularly impacted by government policies.

GEM examines the influence of government policies and the consistency with which they are applied. It looks particularly at the extent to which policies are either size-neutral or favor either small businesses or large corporations. In doing this, GEM examines two government policy areas: (i) support and relevance, and (ii) taxes and bureaucracy.

In Egypt, government policies support and relevance score is 4.3, ranking 28th out of 54 economies; and government policies in taxes and bureaucracy score is 3.5, ranking 35th out of 54 economies. The support and relevance result is equal to both the global average and slightly higher than similar-income economies, at 4.2. This reflects a growing attention to entrepreneurship at the government.

When it comes to taxes and bureaucracy, however, we fare less well. Our score is substantially below the global average and that of high-income economies, which are both at 3.9, and also below similar-income economies, at 3.8. This indicates that the challenges in this area remain a significant and pressing impediment to progress.

Egypt's scores in the area of government policy are not high, but they have been steadily improving since 2015. Ministerial support of entrepreneurship has been felt at different levels, including through regulatory reform, new policy initiatives and support programs. The impact of reforms made to the investment, bankruptcy and industrial licensing laws also continues to be felt.

Support for new and growing firms is evidently a government priority at both the national and local levels. At the national level, there has been a notable leap from 4.0 in 2015 to 5.5 in 2018. At the local level, there has also been an increase from 3.3 in 2015 to 4.3 in 2018. When it comes to bureaucracy and taxation, rates remain low, but they are improving. The extent to which taxes are not a burden for new and growing firms has grown from 3.7 in 2015 to 4.1 in 2018. Finally, the ease of coping with government bureaucracy, regulations and licensing requirements has seen a very slight increase from 2.6 in 2015 and 2017 up to 3.0 in 2018.

Serious problems remain for entrepreneurs and business owners in, for example, securing permits or making tax payments and assessments. This is reflective of a broader problem exhibited in Egypt, where the difference between making good policy decisions and actually seeing their implementation all the way through the bureaucracy is very pronounced.

**Table 32: Government Policies in Egypt (2015-2018)**

	2018	2017	2016	2015
GOVERNMENT POLICIES (e.g., PUBLIC PROCUREMENT) CONSISTENTLY FAVOR NEW FIRMS.	3.0	3.1	2.6	2.6
THE SUPPORT FOR NEW AND GROWING FIRMS IS A HIGH PRIORITY FOR POLICY AT THE NATIONAL GOVERNMENT LEVEL	5.5	5.2	4.5	4.0
THE SUPPORT FOR NEW AND GROWING FIRMS IS A HIGH PRIORITY FOR POLICY AT THE LOCAL GOVERNMENT LEVEL	4.3	4.0	3.5	3.3
NEW FIRMS CAN GET MOST OF THE REQUIRED PERMITS AND LICENSES IN ABOUT A WEEK	3.2	2.4	2.3	2.4
THE AMOUNT OF TAXES IS NOT A BURDEN FOR NEW AND GROWING FIRMS	4.1	3.6	4.5	3.7
TAXES AND OTHER GOVERNMENT REGULATIONS ARE APPLIED TO NEW AND GROWING FIRMS IN A PREDICTABLE AND CONSISTENT WAY	3.6	3.2	3.3	3.7
COPING WITH GOVERNMENT BUREAUCRACY, REGULATIONS, AND LICENSING REQUIREMENTS IS NOT UNDULY DIFFICULT FOR NEW AND GROWING FIRMS	3.0	2.6	2.8	2.6

Sources: The Authors; GEM Global Report 2018-19; GEM Egypt Reports 2015-16, 2016-17, 2017-18

## GOVERNMENT ENTREPRENEURSHIP PROGRAMS

Government support programs for entrepreneurship play an important role in supporting early-stage businesses, especially in underserved and marginalized communities. Overall, Egypt's score in government entrepreneurship programs is 4.0, ranking 36th out of 54 economies, compared to a global average of 4.5, and similar-income economies' average of 4.4.

There is a noticeable improvement in all of the areas of government entrepreneurship programs from the previous years, including the number availability and effectiveness of these programs. The highest improvement area is in the number and effectiveness of these programs. This perception is likely due to the high visibility of several government programs over the past year, including, Egypt Ventures, Fekretak Sherketak, Falak startup accelerator, the Technology Entrepreneurship and Innovation Center (TIEC) and Rowad 2030. This is confirmed by the high score of 5.5 in the area of science parks and business incubators.



**Table 33: Government Entrepreneurship Programs in Egypt (2015 - 2018)**

	2018	2017	2016	2015
A WIDE RANGE OF GOVERNMENT ASSISTANCE FOR NEW AND GROWING FIRMS CAN BE OBTAINED THROUGH CONTACT WITH A SINGLE AGENCY	4.0	2.6	2.9	3.2
SCIENCE PARKS AND BUSINESS INCUBATORS PROVIDE EFFECTIVE SUPPORT FOR NEW AND GROWING FIRMS	5.5	5.0	4.8	4.5
THERE IS AN ADEQUATE NUMBER OF GOVERNMENT PROGRAMS FOR NEW AND GROWING BUSINESSES	4.4	3.7	3.6	3.8
THE PEOPLE WORKING FOR GOVERNMENT AGENCIES ARE COMPETENT AND EFFECTIVE IN SUPPORTING NEW AND GROWING FIRMS	3.3	2.7	3.0	3.0
ALMOST ANYONE WHO NEEDS HELP FROM A GOVERNMENT PROGRAM FOR A NEW OR GROWING BUSINESS CAN FIND WHAT THEY NEED	3.2	2.7	2.7	2.4
GOVERNMENT PROGRAMS AIMED AT SUPPORTING NEW AND GROWING FIRMS ARE EFFECTIVE.	4.9	3.3	3.3	3.2

Sources: The Authors; GEM Global Report 2018-19; GEM Egypt Reports 2015-16, 2016-17, 2017-18

## ENTREPRENEURSHIP EDUCATION

Providing basic business education and training on how to start, manage and grow a business in areas such as marketing, finance, operations, and strategy is an essential part of expanding the base of potential entrepreneurs. GEM examines two areas of entrepreneurship training: (i) primary and secondary education, and (ii) post-school level, including colleges and universities, as well as vocational, professional, and continuing education.

Egypt's score for both educational sectors is among the lowest compared to all GEM economies. At the school stage, our score is 2.3, compared to the global average of 3.2 and similar-income economies' average of 3.0. At the post-school level, Egypt fares slightly better, with a score of 3.7, compared to the global average of 4.8 and similar-income countries' average of 4.7.

Despite these low scores, there is a positive pattern of improvement, albeit slow, among all the metrics between 2015 and 2018. These improvements reflect ambitious initiatives for educational reforms that target the primary and secondary level, technical and vocational (TVET) education and universities. Although it will take time for the impact of these reforms to be reflected in the scores shown here, all micro-indicators measured have shown some improvement from last year, which is positive. The teaching score for primary and secondary education is showing steady growth in its score for creativity, self-sufficiency, and personal initiative, increasing from 1.8 in 2015 to 2.4 in 2018. Scores have also increased for instruction in market economic principles at the school level, and for preparation for starting and growing new firms in all areas of the post-school level, including college and university, vocational, professional and continuing education.

Despite these improvements, entrepreneurship and business education in Egypt still has a long way to go to provide aspiring or existing entrepreneurs with the skills they need. Traditionally, teaching methods have not tended to foster creativity, independence or personal initiative—all of which are core parts of an entrepreneurial mindset and essential for the risk-taking and perseverance needed when starting one's own business. Teaching content does not provide an understanding of the functioning of a market economy, or an understanding of the process of business creation. Education practices and methodology do not generally allow much room for students to innovate or question the status quo.

Egypt's scores in the field of entrepreneurship education cannot be separated from the country's broader education framework, of which they are a product. Viewed in this context, the scores are not surprising, as Egypt continues to rank very low on global scores for general primary and secondary education. There is, however, a recognition at the highest levels that educational reform is necessary, and it has been set as a government priority. Given that there is also a notable government movement to foster an entrepreneurial environment and support early-stage entrepreneurs, through programming and—increasingly—through policy, and there is a clear causal link between providing entrepreneurship education and building the pipeline of prospective entrepreneurs, we can hope that we may start to see improvements in the coming years.

**Table 34: Entrepreneurship Education in Egypt (2015 – 2018)**

	2018	2017	2016	2015
TEACHING IN PRIMARY AND SECONDARY EDUCATION ENCOURAGES CREATIVITY, SELF-SUFFICIENCY, AND PERSONAL INITIATIVE	2.4	1.9	1.8	1.8
TEACHING IN PRIMARY AND SECONDARY EDUCATION PROVIDES ADEQUATE INSTRUCTION IN MARKET ECONOMIC PRINCIPLES	2.4	1.7	1.7	1.6
TEACHING IN PRIMARY AND SECONDARY EDUCATION PROVIDES ADEQUATE ATTENTION TO ENTREPRENEURSHIP AND NEW FIRM CREATION	2.3	1.7	1.5	1.5
COLLEGES AND UNIVERSITIES PROVIDE GOOD AND ADEQUATE PREPARATION FOR STARTING UP AND GROWING NEW FIRMS	3.5	3.2	3.0	2.8
THE LEVEL OF BUSINESS AND MANAGEMENT EDUCATION PROVIDE GOOD AND ADEQUATE PREPARATION FOR STARTING UP AND GROWING NEW FIRMS	3.8	3.7	3.2	2.2
THE VOCATIONAL, PROFESSIONAL, AND CONTINUING EDUCATION SYSTEMS PROVIDE GOOD AND ADEQUATE PREPARATION FOR STARTING UP AND GROWING NEW FIRMS	3.8	3.2	3.0	3.0

Sources: The Authors; GEM Global Report 2018-19; GEM Egypt Reports 2015-16, 2016-17, 2017-18

## RESEARCH & DEVELOPMENT TRANSFER

The depth and quality of research and development (R&D), in terms of gathering information and deepening collective understanding of particular topics or disciplines, as well as the ability to transfer knowledge and technology from universities and research centers into industry is necessary for a country to transition from a low-income economy to a middle-income economy, and then to a high-income economy. Overall, Egypt's score in R&D transfer in 2018 is 3.5, ranking 34th out of 54 economies, which is relatively low compared to a global average of 4.0 and similar-income economies' average of 3.8.

This relatively low score reflects weak links between industry, on the one hand, and universities and public research centers, on the other. A lack of connections or synergy between research and industry has long been recognized as a problem, with both the transfer of knowledge and technology from institutions of learning to places of industry, and the access to research provided to companies being low.

Government support for new businesses to acquire new technology also remains limited. These are endemic, long-term challenges, which have been consistently highlighted in previous surveys.

Having said this, every micro-indicator we measure improved its score in 2018 - although in general the improvements were small. By far the biggest change has been in new technology, science and knowledge being transferred from universities and public research centers to new and growing firms. This metric saw an increase from 2.4 in 2015 to 3.5 in 2018. There has also been an encouraging increase in the support available for engineers and scientists to have their ideas commercialized through new and growing firms, which has seen a substantial increase from 3.3 in 2015 to 4.0 in 2018. One area that remains low is government subsidies provided for new and growing firms to acquire new technology, which has virtually unchanged, ranging between 2.5 to 2.7 over the past four years.

**Table 35: Research and Development Transfer in Egypt (2015 - 2018)**

	2018	2017	2016	2015
NEW TECHNOLOGY, SCIENCE, AND OTHER KNOWLEDGE ARE EFFICIENTLY TRANSFERRED FROM UNIVERSITIES AND PUBLIC RESEARCH CENTERS TO NEW AND GROWING FIRMS	3.5	2.6	2.3	2.4
NEW AND GROWING FIRMS HAVE JUST AS MUCH ACCESS TO NEW RESEARCH AND TECHNOLOGY AS LARGE, ESTABLISHED FIRMS	3.3	2.6	2.4	2.4
NEW AND GROWING FIRMS CAN AFFORD THE LATEST TECHNOLOGY	3.5	2.8	2.7	3.2
THERE ARE ADEQUATE GOVERNMENT SUBSIDIES FOR NEW AND GROWING FIRMS TO ACQUIRE NEW TECHNOLOGY	2.7	2.6	2.5	2.6
THE SCIENCE AND TECHNOLOGY BASE EFFICIENTLY SUPPORTS THE CREATION OF WORLD-CLASS NEW TECHNOLOGY -BASED VENTURES IN AT LEAST ONE AREA	3.6	3.0	3.1	3.4
THERE IS GOOD SUPPORT AVAILABLE FOR ENGINEERS AND SCIENTISTS TO HAVE THEIR IDEAS COMMERCIALIZED THROUGH NEW AND GROWING FIRMS	4.0	3.0	3.2	3.3

Sources: The Authors; GEM Global Report 2018-19; GEM Egypt Reports 2015-16, 2016-17, 2017-18



## COMMERCIAL AND LEGAL INFRASTRUCTURE

A robust and accessible commercial and legal infrastructure is essential for new and growing firms to make use of services that allow them to organize, structure and grow their businesses. Having recourse to legal, accounting, banking and consulting services is an important part of a business being compliant with the law, and able to grow in the formal economy. Being able to access the services of subcontractors and suppliers for their businesses is also important for growth. Here, we measure the accessibility of such services for early-stage entrepreneurs. Overall, Egypt's score in commercial and legal infrastructure is 4.5, ranking 37th out of 54 economies, slightly below the global average of 4.9, and the similar-income economies' average of 4.8.

Over the past four years, we have seen an improvement in all the indicators for commercial and legal infrastructure in Egypt. Particularly, we have seen improvements in the access to banking services (up from 4.3 in 2015 to 5.0 in 2018), the supply of subcontractors and consultants (up from 4.7 in 2015 to 5.2 in 2018), and their affordability (up from 3.4 in 2015 to 4.1 in 2018).

**Table 36: Commercial and Legal Infrastructure in Egypt (2015 - 2018)**

	2018	2017	2016	2015
THERE ARE ENOUGH SUBCONTRACTORS, SUPPLIERS, AND CONSULTANTS TO SUPPORT NEW AND GROWING FIRMS	5.2	4.6	4.2	4.7
NEW AND GROWING FIRMS CAN AFFORD THE COST OF USING SUBCONTRACTORS, SUPPLIERS, AND CONSULTANTS	4.1	3.4	3.3	3.4
IT IS EASY FOR NEW AND GROWING FIRMS TO GET GOOD SUBCONTRACTORS, SUPPLIERS, AND CONSULTANTS	4.1	3.7	3.7	3.8
IT IS EASY FOR NEW AND GROWING FIRMS TO GET GOOD, PROFESSIONAL LEGAL AND ACCOUNTING SERVICES	4.7	4.2	4.3	4.6
IT IS EASY FOR NEW AND GROWING FIRMS TO GET GOOD BANKING SERVICES (CHECKING ACCOUNTS, FOREIGN EXCHANGE TRANSACTIONS, LETTERS OF CREDIT, AND THE LIKE).	5.0	4.0	3.8	4.3

Sources: The Authors; GEM Global Report 2018-19; GEM Egypt Reports 2015-16, 2016-17, 2017-18

## INTERNAL MARKET DYNAMICS

Internal market dynamics affect the ability of a new business to enter, compete and grow in an economy. GEM examines two areas of internal market dynamics: (i) market dynamics, which is the level of change in markets from year to year, as well as opportunities for new and growing firms created from expanding markets for products and services; and (ii) internal market burdens or entry regulations, i.e., the extent to which new and growing firms are free to enter existing markets considering the barriers to market entry created by high entry costs and blocked competition.

Overall, Egypt's score in internal market dynamics is 5.1, ranking 25th out of 54 economies, compared to a global average of 5.2, and similar-income economies' average of 5.1.

Egypt's score in internal market burdens or entry regulations, meanwhile, is 4.4, ranking 24th out of 54 economies, compared to a global average of 4.2, and a similar-income economies' average of 4.1.

In both areas, Egypt is close to the global average. Most scores in this area have also stayed roughly the same or improved slightly since 2015. There has been a significant positive improvement in new and growing firms being able to enter the market, with the score moving from 4.4 in 2015 to 5.1 in 2018. The affordability of market entry has also seen a positive increase, from 4.2 in 2015 to 4.7 in 2018. The perception of anti-trust legislation laws also continues to gradually improve.

**Table 37: Internal Market Dynamics in Egypt (2015 - 2018)**

	2018	2017	2016	2015
THE MARKETS FOR CONSUMER GOODS AND SERVICES CHANGE DRAMATICALLY FROM YEAR TO YEAR	5.2	5.9	5.3	5.2
THE MARKETS FOR BUSINESS-TO-BUSINESS GOODS AND SERVICES CHANGE DRAMATICALLY FROM YEAR TO YEAR	5.1	5.6	4.9	5.0
NEW AND GROWING FIRMS CAN EASILY ENTER NEW MARKETS	5.1	4.7	4.9	4.4
NEW AND GROWING FIRMS CAN AFFORD THE COST OF MARKET ENTRY	4.7	4.3	4.3	4.2
NEW AND GROWING FIRMS CAN ENTER MARKETS WITHOUT BEING UNFAIRLY BLOCKED BY ESTABLISHED FIRMS	4.3	3.9	4.1	4.0
THE ANTI-TRUST LEGISLATION IS EFFECTIVE AND WELL ENFORCED	3.7	3.6	3.0	3.3

Sources: The Authors; GEM Global Report 2018-19; GEM Egypt Reports 2015-16, 2016-17, 2017-18

## PHYSICAL INFRASTRUCTURE

Physical infrastructure describes the ease of access to physical resources, such as communication, utilities, transportation, ports or land. Crucially, it looks at whether this access is possible at a price that does not discriminate against new and growing firms. Overall, Egypt's score in physical infrastructure is 6.5, ranking 26th out of 54 economies, compared to a global average of 6.3 and a similar-income economies' average of 6.2.

Physical infrastructure is an area where Egypt has been consistently strong. Egypt's score in this area is the highest among all the ecosystem elements and ranks slightly above the global average. There have been improvements in virtually every area in the last year, with some being large leaps (the score for physical infrastructure itself has increased from 4.6 in 2017 to 5.6 in 2018) and others being smaller steps (the speed of access to utilities has moved from 6.4 in 2017 to 6.7 in 2018).

There have been major investments in both the road and port networks, and these have clearly yielded results. The experts we spoke to view Egypt's physical infrastructure as being in a robust, and improving, condition. Comparing to 2015, the overall availability and access to physical infrastructure has noticeably improved; however, the affordability has declined due to increase in service pricing, reduction of subsidies, and growing inflation. What still remains to be seen is significant investment in the internet infrastructure. This is starting to happen, and we expect to see its impact felt by users and companies within the next couple of years.

**Table 38: Physical Infrastructure in Egypt (2015 - 2018)**

	2018	2017	2016	2015
THE PHYSICAL INFRASTRUCTURE (ROADS, UTILITIES, COMMUNICATIONS, WATER DISPOSAL) PROVIDES GOOD SUPPORT FOR NEW AND GROWING FIRMS	5.6	4.6	4.7	4.5
IT IS NOT TOO EXPENSIVE FOR A NEW OR GROWING FIRM TO GET GOOD ACCESS TO COMMUNICATIONS (PHONE, INTERNET, ETC.)	6.6	6.4	6.6	6.6
A NEW OR GROWING FIRM CAN GET GOOD ACCESS TO COMMUNICATIONS (TELEPHONE, INTERNET, ETC.) IN ABOUT A WEEK	6.7	6.0	6.6	6.3
NEW AND GROWING FIRMS CAN AFFORD THE COST OF BASIC UTILITIES (GAS, WATER, ELECTRICITY, SEWER)	6.8	6.2	7.0	6.8
NEW OR GROWING FIRMS CAN GET GOOD ACCESS TO UTILITIES (GAS, WATER, ELECTRICITY, SEWER) IN ABOUT A MONTH	6.7	6.4	7.1	7.0

Sources: The Authors; GEM Global Report 2018-19; GEM Egypt Reports 2015-16, 2016-17, 2017-18

## CULTURAL AND SOCIAL NORMS

Cultural and social norms describe the extent to which the prevailing culture encourages or allows actions or activities that lead to the creation of new businesses. These include social perceptions of behaviors such as personal initiative, risk-taking, creativity and innovation, experimentation and learning, failure, profit and wealth seeking, and the social status of entrepreneurs. Overall, Egypt's score in social and cultural norms is 4.6, ranking 37th out of 54 economies, compared to a global average of 4.8, and similar-income economies' average of 4.8.

This year has seen a positive and fairly substantial improvement in cultural and social attitudes towards entrepreneurship, all of which is consistent with the

positive perception of entrepreneurship that we saw in earlier sections. This is particularly apparent in the national culture starting to be more encouraging of creativity, innovativeness and entrepreneurial risk-taking. Even the difference between the responsibility of the individual versus the collective, which had remained fairly stagnant in previous years, has seen an increase from 3.5 in 2017 to 4.2 in 2018.

Overall, this shows a trend of continuing improvement in support of entrepreneurship within the national culture. While last year we characterized this trend as showing a small improvement, this year we note that it appears to be gathering momentum, which is an encouraging sign.



**Table 39: Cultural and Social Norms in Egypt (2015 – 2018)**

	2018	2017	2016	2015
THE NATIONAL CULTURE IS HIGHLY SUPPORTIVE OF INDIVIDUAL SUCCESS ACHIEVED THROUGH OWN PERSONAL EFFORTS	5.5	5.0	5.3	5.0
THE NATIONAL CULTURE EMPHASIZES SELF-SUFFICIENCY, AUTONOMY, AND PERSONAL INITIATIVE	4.6	4.3	4.0	4.0
THE NATIONAL CULTURE ENCOURAGES ENTREPRENEURIAL RISK-TAKING	4.0	3.5	3.5	3.4
THE NATIONAL CULTURE ENCOURAGES CREATIVITY AND INNOVATIVENESS	4.4	3.8	3.6	3.4
THE NATIONAL CULTURE EMPHASIZES THE RESPONSIBILITY THAT THE INDIVIDUAL (RATHER THAN THE COLLECTIVE) HAS IN MANAGING HIS OR HER OWN LIFE	4.2	3.5	3.9	3.7

Sources: The Authors; GEM Global Report 2018-19; GEM Egypt Reports 2015-16, 2016-17, 2017-18

## EXPERTS VIEWS AND RECOMMENDATIONS

In addition to the structured questions based on the entrepreneurship framework conditions, we provided open-ended questions for local experts to each raise three areas that either constrain or foster entrepreneurial activity in Egypt, as well as three recommendations to improve the entrepreneurship ecosystem, which we list below. Based on expert recommendations, several key themes emerge, which we explore further in the policy recommendations section.

Government bureaucracy remains a major constraint for entrepreneurs, as suggested by most of the 50 experts interviewed in 2018. They flag some laws and regulations, coupled with bureaucracy and red tape in their implementation. Experts acknowledge the regulatory reforms that were implemented over the last few years to support SMEs and startups; however, the negative impact of the government bureaucracy remains dominant.

Access to finance remains on a major challenge despite the noticeable improvement in this area over the past few years. Several initiatives by the Central Bank, MSMEDA, the Ministry of Trade and Industry, the Ministry of Investments, and other stakeholders were acknowledged. However, their size and scope remain limited, leaving a majority of SMEs lacking the funding needed to grow their businesses.

Access to talent is a growing challenge on several fronts. Technology-driven startups are competing for technical talent with regional and global markets and facing a significant brain drain. Other SMEs are challenged with limited education among the workforce, and the need for extensive on-the-job training. Overall, the traditional educational system is a key constraint for providing entrepreneurial workforce at all levels.

Access to market data is another key area where entrepreneurs are challenged. Micro-level market data is needed to guide the analysis of consumer behavior, product targeting and other marketing and sales activities.

Below are direct quotes from the expert surveys regarding the key constraints, opportunities and recommendations

## Key factors constraining entrepreneurship in Egypt

1. Access to finance is still hindering entrepreneurial activity; not enough VCs and investments are being made and we're yet to see banks and non-banking financial institutions facilitating sufficient access to debt, bank and non-financial products/services. Lack of investors (seed, angels and venture capital) and shortage of funds. Also, funding for startups based on opinions and not tangible proof.
2. Bureaucracy and regulation present the most challenges for entrepreneurs in Egypt. Regulatory constraints, especially in sectors like fintech, healthcare, or hardware. General understanding of the laws and regulations. Absence of a healthy legal, legislative and regulatory environment that is conducive to entrepreneurship and innovation.
3. There is a limited guidance, skill development channels for management and business planning skills.
4. Access to talent and the right skillsets of the entrepreneurs and of entrepreneurs' teams.
5. Lack of market data and intelligence to guide entrepreneurs and investors.
6. Lack of education and training, as well as negative image and stigma about entrepreneurship. Quality of education in general and absence of entrepreneurship education.
7. The absence of support across the country, especially in rural areas and upper Egypt. Exposure to opportunities and entrepreneurs outside of Cairo and access for regional governorate to entrepreneurship programs.
8. Access to deep technical assistance and access to specialist advisory and mentorship. Although this is improving, still there is room for more improvement.
9. Stagnant culture, which is not supporting new ideas and initiatives, and incompetence across various sectors and industries. Additionally, inherited culture discouraging entrepreneurship (e.g. fear of risk, impact on opportunities for marriage without a secure job in the case of men, etc.).

## Key factors fostering entrepreneurship in Egypt

Despite the previous constraints, national experts highlighted several factors that foster and encourage entrepreneurship in Egypt:

1. Concentration of support programs in certain geographies, e.g., Cairo.
2. Availability of angel investor networks and growth in number of incubators. This includes increasing number of hubs, venture capital firms and investors.
3. Government policies, as entrepreneurship is a priority in national development programs. The governmental agenda to push SMEs and raise formal employment in the country, as well as transparency and the national GDP.
4. Success stories, which help change the culture around entrepreneurship one step at a time, with a focus on international and regional success stories.
5. Culture that considers entrepreneurship as a worthy endeavor. Increased community / moral support for entrepreneurs and shifting positive perceptions of entrepreneurship and innovation / self-employment. Entrepreneurial activity is increasingly perceived to be a good career choice.
6. Universities are supportive to entrepreneurship development, including extracurricular activity in primary education.
7. Wide access to mobile internet and smart phones and national mobile wallet payment infrastructure. Money is available but there is a need for good committed entrepreneurs. Supportive legal and regulatory framework (easy establishment, access to land and production inputs, measures supporting access to national and international markets).
8. General recognition by policymakers of the importance of entrepreneurship to help solve key policy issues of unemployment, and diversifying banking sector exposure, although the effectiveness and approach are lacking.



## Key recommendations to support entrepreneurship in Egypt

Experts also provided a set of recommendations that they believe will have the highest impact on growing entrepreneurship in the Egypt and supporting entrepreneurs::

1. Create policies and programs that look to longer term development rather than “quick wins”.
2. Provide better access to finance and credible information to investors, through building both a credit culture and sponsoring research coverage and information dissemination on less covered entities. Funding should not be based on ticket size but rather on validation.
3. Fewer government interventions; shift support to private organizations and effective implementation of governmental incentives (to be discussed with stakeholders before applied and to be followed up on periodically).
4. Structured collaboration between ecosystem players and encouragement of market linkages between large corporates and startups.
5. Invest in developing management capacity of entrepreneurs and developing more sector specific programs. Identify industry sectors (such as agritech, fintech) where Egypt can position itself as a regional hub.
6. Open accelerator for fintech inside the Central Bank.
7. Change culture through media and campaigns to promote entrepreneurship culture.
8. Programs should reach regional governorates and expand to governorates / bridge disparities in access to support programs.
9. Revamping of Nilex to ensure a better functioning market as opposed to its current status.
10. Expand and improve internet restructure (fiber optic last mile).
11. Programs to increase technological readiness, business sophistication and innovation support and promote grassroots innovations (in rural and informal settlements).
12. Providing market research at a low cost (somehow) as well as increasing marketing capabilities.
13. Focus on increasing exports and raising global competitiveness.
14. Government funding programs (zero expected returns) to train would-be venture capitalists and invest in a number of startups to create momentum.
15. Inclusion of corporates to create corporate Venture Capital.
16. Cultural overhaul, specifically with regard to weeding out incompetence and increasing accountability.
17. Allow PayPal and other international acceptance solutions needed by early stage startups in service exports.
18. Structured and accessible entrepreneurship education programs and boosting support for entrepreneurs in public education. Also, embed entrepreneurship and innovation education and training in all schools and universities.



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# SECTION 5

## RECOMMENDATIONS FOR POLICY AND PRACTICE

As the economy started to recover in 2018, it is important to continue and grow the pro-entrepreneurship policies and programs to leverage entrepreneurship as a driver for economic recovery and inclusive growth. In this section, we explore recommendations for policy and practice based on our research and practice.

Over the past three years, government policies and regulatory reforms were supportive for entrepreneurship. Several government regulatory reforms, policies and programs were implemented, and it is important to maintain the momentum in this area. On the regulatory side, a new investment law, bankruptcy law, industrial licensing regulations, and other regulatory reforms were implemented. The impact of these reforms was welcomed by the business community as it removed some of the bottlenecks and reduced red tape. However, most of these reforms were targeting large corporations and FDI, as opposed to micro, small and medium enterprises or technology startups. The biggest challenges facing those enterprises remains in the bureaucratic procedures required to operate on the ground, which typically add a financial and operational burden that is harder to manage for smaller and younger firms. Focusing on administrative reforms to reduce red tape, especially at the local level remains a priority.

For small and medium enterprises (SMEs), especially the ones operating in the manufacturing and retail sectors, they remain constrained by the bureaucracy at the local and municipal level, with many of them operating within the informal sector. These companies have major challenges relating to industrial licensing, operations, labor, industrial safety, and other regulations, mostly administered at the local or municipal level. These challenges have been persistent for long and are limiting the SMEs ability to grow jobs and exports.

Another area that is critical for startups and SMEs is the availability of market data. Several government agencies, especially CAPMAS has extensive databases that could help these companies make informed business decisions; however, most of these datasets are not made public or are not easily accessible. The need for a public data portal that is functioning and accessible is critical for the growth and efficiency of these companies.

Government programs are important to support SMEs as well as technology startups.

Several programs were introduced over time and their impact has been positive to the ecosystem. While many of these programs were pioneering when they were introduced, they have become redundant with other similar programs organized other support organizations, including universities, civil society organizations and companies. These government programs need to be redesigned to focus on gaps in the ecosystem that require the power and resources of the state, and to avoid crowding out other private programs and organizations.

Moreover, government programs should leverage the new mega-projects introduced by the state as enablers for Egyptian startups. For example, the new administrative capital, government digitalization initiative, renewable energy programs, large-scale agriculture programs – all can be used as a fertile ground to support and grow Egyptian startups by offering these startups contracts to introduce their new technologies in these projects.

Support organizations such as startup accelerators and incubators, training programs, co-working spaces, service providers and others act as the “enablers” for the entrepreneurship ecosystem. These support organizations may be civil society organizations, universities, governmental agencies or commercial entities. Over the past three years, there was an expansion in their entrepreneurial programs and in investments directed towards this sector.

Many of the current programs remain “generic” in nature and need to start building deeper specializations to remain relevant. Specifically, there is a need to create sector-focused and region-focused programs, supporting technological or industrial local clusters or ecosystems. Some of these focused programs started emerging in areas such as logistics and supply chain, social entrepreneurship, waste management, and agri-businesses. This specialization is particularly important for government-supported or donor-funded programs. This sectoral and/or regional focus is also important for the financial viability and sustainability of these support programs and organizations, as it creates strong stakeholders and business models.

Educational institutions provide entrepreneurial awareness and basic business skills education which are necessary for an entrepreneurial culture. Egypt ranks among the lowest in entrepreneurial education both at the basic education and university levels.

On the basic education level and technical and vocational level, there is a need to include entrepreneurial behaviors and skills within the general educational curricula. This is taking place as part of the government's ambitious educational reform program; however, it takes time for these reforms to be implemented. In the meantime, there are extracurricular programs that can provide the awareness and basic skills education that would be beneficial to support and widely expand.

On the higher education level, universities typically act as anchors for entrepreneurship ecosystems, providing talent as well as knowledge. More entrepreneurship training programs are needed within universities across Egypt. There are proposals for creating entrepreneurship centers and startup acceleration programs within these universities, but these require significant resources and long-term commitment. Some universities already started their own programs, such as The American University in Cairo, the Faculty of Economics and Political Science (FEPS) at Cairo University, Nile University, or the Arab Academy for Science, Technology & Maritime Transport. These programs need to be built on a foundation of research and development (R&D), where university research can be commercialized by faculty and students. Today, there is limited emphasis on or resources for R&D within most universities in Egypt.

**Funding organizations** including local and international foundations and development organizations play a significant role in filling the funding gap for many of the entrepreneurship programs through funding local implementing organizations, whether at the civil society, universities or companies. Significant resources were poured into this sector over the past five years from the US, Europe and other countries through several large-scale programs funded by USAID, the European Union, GIZ, ILO, and UNIDO, among others. These programs were successful in creating a boost for the sector; however, their visible impact on the ground was substantially less than the amounts of funds invested. Future programs need to learn from these lessons to ensure more effective usage of these investments.

Providing access to finance through the financial services sector is a key driver for promoting entrepreneurship. On the micro-finance side, there is a growth in the number of micro-finance institutions, especially for-profit companies. However, the availability of funding within this sector remains far below the market demand, and there is a visible need for more funding at this level (micro-loans below EGP 100,000), especially in rural areas. This need will grow as the interest rates decline and micro-loans become more affordable to broader segments. There is also a need to increase transaction costs (and hence interest rates) through the use of payment technologies in loan disbursement and collection, as well as credit rating technologies.

On the **SME funding** side, the Central Bank initiative to avail more funding at discounted rates through the banks has expanded the access to credit in this segment. However, banks still target larger companies within this segment, with limited funding available for smaller/younger SMEs. Informality and limited scoring and rating information limits SMEs capacity to access bank credit. More credit instruments such as factoring and leasing need to be further expanded, especially using digital payment solutions to reduce transaction costs.

On the **venture capital** side, where the funding is directed towards technology startups, there is a noticeable increase in the investments in this sector. Several venture capital funds launched, with investment tickets above EGP 10 million, and have made more than 50 investments within the EGP 10-30 million range. However, there is a visible gap in the seed funding stage with tickets between EGP 1-5 million. These investments are typically made by angel investors – a space that needs to be further developed to fill in this gap.



**Digitalization** is an emerging theme that is a key enabler for the transformation of the economy, i.e., using digital platforms and technologies to improve the efficiency of government services, supply chains, financial services or labor markets. This digital transformation is critical for the economy, and a big part of this transformation movement is driven by technology startups. Through technology platforms that deploy new and innovative business models, these startups have a strong potential for creating jobs, increasing productivity and promoting economic growth. Some examples of these technology-driven platforms include:

- 1) job search platforms for white-collar jobs (e.g., wuzzuf) or blue-collar jobs (e.g., forasna, felkhedma) can improve the efficiency of the labor market;
- 2) payment platforms, using mobile wallets and QR codes (e.g., paymob, fawry), which allow for digital payments and reduce informality;
- 3) supply chain platforms (e.g., maxab) that improve the efficiency of local supply chains in manufacturing and retail;
- 4) price discovery platforms (e.g., that create transparency in areas such as agricultural commodities improve the profitability of farmers;
- 5) logistics and transportation platforms (e.g., SWVL, trella) provide more cost-effective services and higher asset utilizations.

These **technology startups** have an economic and social impact that far exceeds their size or direct employment or financial impact, as they act as enablers for other sectors of the economy. Today, the major challenge for this sector is creating a conducive operating environment for fast-growing startups. A number of these startups are moving their headquarters outside of Egypt for a variety of reasons, including their limited ability to attract and employ foreign talent in Egypt under current employment laws; the limited flexibility in implementing and enforcing shareholding agreements, governance structures, investor protections and intellectual property rights; and the complexity of managing a multinational startup from Egypt. Accordingly, there are specific needs in the following areas to support these fast-growing regional startups:

- 1) reforming labor laws to allow for more flexibility in the employment of international staff;
- 2) relaxing visa regulations, especially for Africans to allow for pan-African startups operating from Egypt;
- introducing data protection regulations to provide a framework for data ownership, privacy and protection, especially as big data and artificial intelligence applications grow;
- 3) introducing a regulatory framework to allow for tech-focused shareholder agreements and investment instruments to be implemented and enforced in Egypt. The last investment law referred to this, but the governing regulations were not introduced by GAFI yet;
- 4) relaxing the restrictions on specific technologies that are becoming common globally and need to be activated in Egypt, e.g., drones (especially given their applications in agriculture), internet of things (IoT) and hardware-based startups, 3d printing and financial technologies (beyond payments).

Despite the success for the startup ecosystem in Egypt over the past decade, most startups that reach a certain size (usually around their series B investment round) end up relocating their headquarters to other countries due to the above challenges. Targeted policies to retain these startups are urgently needed.













# APPENDIX TABLES

**1. Societal Values of Entrepreneurship, GEM 2018 – Percentage of Population Aged 18-64**

INCOME LEVEL	REGION	ECONOMY	ENTREPRENEURSHIP AS A GOOD CAREER CHOICE		HIGH STATUS TO SUCCESSFUL ENTREPRENEURS		MEDIA ATTENTION FOR ENTREPRENEURSHIP		EASY TO START A BUSINESS	
			SCORE	RANK/47	SCORE	RANK/47	SCORE	RANK/47	SCORE	RANK/43
Low Income	Middle East and Africa	Angola	74.4	9	80.5	7T	68.6	13	55.0	10T
High Income	Latin America and the Caribbean	Argentina	59.4	30	50.0	43	44.9	46	23.4	33
High Income	Europe and North America	Austria	50.2	38	75.3	17	64.6	18	-	N/A
Middle Income	Latin America and the Caribbean	Brazil	-	N/A	-	N/A	-	N/A	-	N/A
Middle Income	Europe and North America	Bulgaria	62.6	26	69.3	29	44.6	47	14.3	41
High Income	Europe and North America	Canada	64.1	22	74.1	22	76.0	6	51.5	15
High Income	Latin America and the Caribbean	Chile	76.1	8	60.8	39	62.5	21	36.5	23
Middle Income	East and South Asia	China	60.8	29	68.7	30	68.1	14T	17.3	38
Middle Income	Latin America and the Caribbean	Colombia	68.7	15	84.2	3	62.4	22	39.2	20T
High Income	Europe and North America	Croatia	62.1	27	43.0	47	53.7	31	16.4	40
High Income	Europe and North America	Cyprus	69.9	13T	67.6	34	54.3	27T	41.4	19
Low Income	Middle East and Africa	Egypt	74.0	10	82.6	5	68.1	14T	61.5	7
High Income	Europe and North America	France	58.2	32	71.5	25	52.8	33	36.6	22
High Income	Europe and North America	Germany	49.6	39	74.8	19	50.6	38	-	N/A
High Income	Europe and North America	Greece	64.9	21	67.8	33	50.1	39	12.2	43
Middle Income	Latin America and the Caribbean	Guatemala	94.4	1	71.7	24	54.1	29	35.7	24
Low Income	East and South Asia	India	63.7	24	65.0	36	52.1	36	52.9	13
Low Income	East and South Asia	Indonesia	71.9	11	74.9	18	80.4	3	66.0	4
Middle Income	Middle East and Africa	Iran	39.3	45	80.5	7T	50.8	37	12.7	42

High Income	Europe and North America	Ireland	55.5	34	83.9	4	73.4	8	-	N/A
High Income	Middle East and Africa	Israel	66.0	19	85.0	2	54.3	27T	17.9	37
High Income	Europe and North America	Italy	63.9	23	74.6	20	60.2	23	16.8	39
High Income	East and South Asia	Japan	22.8	46	51.5	42	59.4	24	26.8	29T
High Income	East and South Asia	Korea Rep.	53.0	37	70.0	26	67.1	16	33.5	25
Middle Income	Middle East and Africa	Lebanon	-	N/A	-	N/A	-	N/A	-	N/A
High Income	Europe and North America	Luxembourg	48.8	41	74.2	21	49.3	41	55.0	10T
Low Income	Middle East and Africa	Madagascar	87.2	2	77.0	11	56.7	26	32.7	26
Low Income	Middle East and Africa	Morocco	61.1	28	68.3	31	52.2	35	26.8	29T
High Income	Europe and North America	Netherlands	81.7	4	63.1	37T	64.8	17	74.7	1
High Income	Latin America and the Caribbean	Panama	44.6	44	46.3	46	45.2	45	45.3	18
Middle Income	Latin America and the Caribbean	Peru	65.7	20	62.4	38	72.0	10	52.6	14
High Income	Europe and North America	Poland	85.9	3	76.3	15	46.2	44	74.1	2
High Income	Latin America and the Caribbean	Puerto Rico	20.7	47	52.6	41	80.9	2	24.3	31
High Income	Middle East and Africa	Qatar	68.2	16	76.7	12	64.2	19	51.1	16
Middle Income	Europe and North America	Russian Federation	68.0	17	68.0	32	49.0	42	21.3	34
High Income	Middle East and Africa	Saudi Arabia	66.8	18	78.2	10	71.4	11	64.8	6
High Income	Europe and North America	Slovak Republic	46.9	42	60.4	40	53.9	30	18.8	36
High Income	Europe and North America	Slovenia	58.4	31	75.8	16	77.2	4	39.2	20T
High Income	Europe and North America	Spain	53.1	36	49.8	44	49.4	40	29.6	27
Low Income	Middle East and Africa	Sudan	79.4	7	85.3	1	70.8	12	53.6	12
High Income	Europe and North America	Sweden	49.0	40	72.1	23	62.8	20	74.0	3
High Income	Europe and North America	Switzerland	46.5	43	69.7	27	47.7	43	57.9	9



High Income	East and South Asia	Taiwan	69.6	13T	63.1	37T	76.4	5	24.2	32
Middle Income	East and Sout Asia	Thailand	80.1	6	80.9	6	86.8	1	65.8	5
Middle Income	Europe and North America	Turkey	80.8	5	66.1	35	52.6	34	28.9	28
High Income	Middle East and Africa	United Arab Emirates	71.7	12	69.4	28	72.5	9	59.7	8
High Income	Europe and North America	United Kingdom	56.1	33	76.4	13T	58.5	25	-	N/A
High Income	Europe and North America	United States	62.7	25	78.7	9	74.4	7	45.5	17
High Income	Latin America and the Caribbean	Uruguay	54.7	35	49.6	45	53.1	32	19.8	35
			62.4		69.5		60.9		39.7	

Sources: GEM Global Report 2018/19

## 2. Self-Perception Values of Entrepreneurship GEM 2018 – Percentage of Population Aged 18-64

REGION	PERCEIVED OPPORTUNITIES		PERCEIVED CAPABILITIES		FEAR OF FAILURE (% OF 18-64 SEEING OPPORTUNITIES)		PERSONALLY KNOW AN ENTREPRENEUR		ENTREPRENEURIAL INTENTIONS (% OF 18-64, NON-ENTREPRENEURS)	
	SCORE	RANK/49	SCORE	RANK/49	SCORE	RANK/49	SCORE	RANK/49	SCORE	RANK/49
Middle East and Africa	74.0	3	75.7	2	16.6	49	56.7	4	79.8	1
Latin America and the Caribbean	35.9	33	48.8	25	31.9	32	36.9	25	14.8	32
Europe and North America	46.8	21	48.3	27	36.7	20	39.7	20	11.8	37
Latin America and the Caribbean	31.4	40	54.3	14	32.6	29T	34.4	31	26.1	19
Europe and North America	19.3	47	36.9	42	31.0	34	33.5	33	3.9	48
Europe and North America	63.0	9	55.9	12	42.3	12	39.9	19	14.5	34
Latin America and the Caribbean	61.8	10	62.5	9	28.6	40	42.1	15T	48.7	6
East and South Asia	35.1	35	24.2	48	41.7	13	45.7	10	15.3	29T
Latin America and the Caribbean	57.5	11	66.4	6	23.1	45	42.1	15T	48.8	5

Europe and North America	Croatia	33.1	39	52.3	18T	30.3	36T	34.6	30	18.6	26T
Europe and North America	Cyprus	45.9	22	45.9	33	48.5	6	33.2	36T	15.3	29T
Middle East and Africa	Egypt	39.3	30	43.0	36	28.2	41	11.7	49	59.8	3
Europe and North America	France	35.0	36	37.5	41	37.1	19	33.2	36T	18.6	26T
Europe and North America	Germany	42.1	28	38.3	40	35.1	24	23.7	45	5.9	46
Europe and North America	Greece	19.2	48	46.4	31	57.8	3	23.5	46	7.5	42
Latin America and the Caribbean	Guatemala	54.6	16	65.2	7	30.3	36T	42.8	14	49.7	4
East and South Asia	India	49.8	20	52.2	20	50.1	5	31.5	39	20.6	24
East and South Asia	Indonesia	54.9	15	64.0	8	34.1	27	72.2	2	21.2	23
Middle East and Africa	Iran	22.3	46	53.1	17	30.4	35	44.5	12	35.0	10
Europe and North America	Ireland	51.7	18	45.6	34	39.3	16	32.4	38	15.4	28
Middle East and Africa	Israel	56.2	12	41.5	38	47.5	7	56.1	6	26.2	18
Europe and North America	Italy	34.6	37	29.8	44	51.7	4	26.0	43	9.0	40
East and South Asia	Japan	8.1	49	10.1	49	46.4	9T	19.4	47	5.0	47
East and South Asia	Korea Rep.	45.7	23	49.7	24	32.8	28	43.5	13	31.0	13
Middle East and Africa	Lebanon	42.0	29	68.1	5	22.4	46	53.1	9	29.1	15T
Europe and North America	Luxembourg	55.0	14	43.9	35	47.2	8	35.3	28	14.7	33
Middle East and Africa	Madagascar	30.6	41	51.5	21	36.6	21	53.5	7	32.6	11
Middle East and Africa	Morocco	33.6	38	29.5	45	64.2	1	34.1	32	39.8	7
Europe and North America	Netherlands	66.7	7	46.1	32	34.7	25	36.0	26	7.7	41
Latin America and the Caribbean	Panama	39.0	31	42.1	37	19.4	48	56.2	5	18.9	25
Latin America and the Caribbean	Peru	56.0	13	71.8	4	30.2	38	53.2	8	39.7	8
Europe and North America	Poland	68.5	6	46.6	29T	31.1	33	40.1	18	9.5	39

Latin America and the Caribbean	Puerto Rico	35.2	34	47.5	28	20.7	47	18.4	48	22.9	22
Middle East and Africa	Qatar	54.2	17	52.3	18T	32.6	29T	44.9	11	29.1	15T
Europe and North America	Russian Federation	22.8	45	27.5	47	46.4	9T	35.7	27	2.2	49
Middle East and Africa	Saudi Arabia	76.3	2	83.4	1	43.6	11	79.1	1	26.8	17
Europe and North America	Slovak Republic	37.4	32	53.3	16	29.4	39	35.0	29	13.7	35
Europe and North America	Slovenia	42.2	27	51.0	22T	32.0	31	38.5	22T	15.3	29T
Europe and North America	Spain	29.1	42	48.5	26	36.2	22	33.4	34	6.2	45
Middle East and Africa	Sudan	71.0	4	74.5	3	34.5	26	59.3	3	66.7	2
Europe and North America	Sweden	81.6	1	38.4	39	37.2	18	39.2	21	9.6	38
Europe and North America	Switzerland	45.5	24	36.3	43	39.9	15	28.4	41	6.9	44
East and South Asia	Taiwan	26.7	44	28.2	46	41.4	14	41.0	17	24.1	21
East and South Asia	Thailand	50.1	19	51.0	22T	58.9	2	29.3	40	31.5	12
Europe and North America	Turkey	44.3	25	56.8	11	28.1	42	25.3	44	29.7	14
Middle East and Africa	United Arab Emirates	66.5	8	53.6	15	24.3	44	27.9	42	38.2	9
Europe and North America	United Kingdom	44.0	26	46.6	29T	37.7	17	33.3	35	7.2	43
Europe and North America	United States	69.8	5	55.6	13	35.2	23	38.5	22T	12.2	36
Latin America and the Caribbean	Uruguay	28.9	43	59.0	10	27.4	43	38.3	24	24.2	20

Sources: GEM Global Report 2018/19



### 3. Phases and Types of Entrepreneurial Activity, GEM 2018 – Percentage of Population Aged 18-64

INCOME LEVEL	REGION	ECONOMY	NASCENT ENTREPRENEURSHIP RATE		NEW BUSINESS OWNERSHIP RATE		EARLY-STAGE ENTREPRENEURIAL ACTIVITY (TEA)		EMPLOYEE ENTREPRENEURIAL ACTIVITY EEA		ESTABLISHED BUSINESS OWNERSHIP RATE		DISCONTINUATION OF BUSINESSES	
			SCORE	RANK/49	SCORE	RANK/49	SCORE	RANK/49	SCORE	RANK/49	SCORE	RANK/49	SCORE	RANK/49
Low Income	Middle East and Africa	Angola	22.8	1	19.5	1	40.8	1	3.2	25T	15.2	5	25.5	1
High Income	Latin America and the Caribbean	Argentina	4.9	28	4.3	26	9.1	33	1.5	39T	9.1	16	3.9	24
High Income	Europe and North America	Austria	6.8	21T	4.4	25	10.9	24	6.4	9	6.5	27T	5.0	17T
Middle Income	Latin America and the Caribbean	Brazil	1.7	48	16.4	3	17.9	11	0.7	45T	20.3	3	4.3	22T
Middle Income	Europe and North America	Bulgaria	2.4	47	3.7	31T	6.0	43	0.4	48	8.4	19T	1.8	43T
High Income	Europe and North America	Canada	11.2	6	8.9	10	18.7	10	8.6	1T	7.5	22T	8.6	4
High Income	Latin America and the Caribbean	Chile	16.0	3	10.1	9	25.1	3	4.2	21T	8.5	18	7.1	11
Middle Income	East and South Asia	China	4.7	29	5.9	17T	10.4	27	1.0	42	3.2	45	2.5	36T
Middle Income	Latin America and the Caribbean	Colombia	15.7	4	5.8	19T	21.2	7	2.0	32T	6.5	27T	4.7	20T
High Income	Europe and North America	Croatia	5.8	25	3.9	28T	9.6	30T	5.3	15	4.2	40T	3.4	29T
High Income	Europe and North America	Cyprus	1.2	49	2.7	40T	3.9	49	5.4	14	6.1	33T	2.3	41
Low Income	Middle East and Africa	Egypt	4.0	36T	5.9	17T	9.8	28	2.1	31	4.5	39	7.6	8T
High Income	Europe and North America	France	4.0	36T	2.3	45T	6.1	42	4.3	19T	2.5	48	2.9	34
High Income	Europe and North America	Germany	2.7	43T	2.4	44	5.0	47	5.2	16	7.5	22T	1.6	46T
High Income	Europe and North America	Greece	4.2	31T	2.3	45T	6.4	39T	1.8	36	10.8	14	3.4	29T
Middle Income	Latin America and the Caribbean	Guatemala	13.7	5	15.0	4	27.5	2	2.0	32T	11.2	13	7.4	10
Low Income	East and South Asia	India	8.8	13	2.7	40T	11.4	23	0.8	44	7.0	24	4.9	19
Low Income	East and South Asia	Indonesia	3.1	41	11.1	7	14.1	16	1.3	41	11.8	11	1.4	49
Middle Income	Middle East and Africa	Iran	4.1	33T	5.7	21	9.7	29	0.9	43	12.3	9	6.1	13

High Income	Europe and North America	Ireland	6.5	23	3.2	37	9.6	30T	8.6	1T	6.8	25T	3.8	25
High Income	Middle East and North Africa	Israel	7.9	14	4.8	24	12.7	18	7.2	6	4.2	40T	5.0	17T
High Income	Europe and North America	Italy	2.7	43T	1.6	48	4.2	48	3.2	25T	6.4	29T	1.6	46T
High Income	East and South Asia	Japan	3.3	38T	2.2	47	5.3	45	2.2	30	6.2	32	1.8	43T
High Income	East and South Asia	Korea Rep.	6.8	21T	7.9	11	14.7	14	3.6	23	12.5	8	2.5	36T
Middle Income	Middle East and North Africa	Lebanon	6.9	20	17.6	2	24.1	4	1.7	37T	21.6	2	8.0	7
High Income	Europe and North America	Luxembourg	7.1	18T	3.7	31T	10.7	25T	7.1	7	3.4	44	3.7	26T
Low Income	Middle East and North Africa	Madagascar	10.3	9T	10.9	8	20.7	8	0.6	47	22.4	1	4.3	22T
Low Income	Middle East and North Africa	Morocco	3.3	38T	3.5	35	6.7	38	4.8	17	4.2	40T	10.4	3
High Income	Europe and North America	Netherlands	6.0	24	6.5	15T	12.3	19	7.9	4	12.0	10	2.5	36T
High Income	Latin America and the Caribbean	Panama	7.4	15T	6.6	14	13.8	17	0.0	49	6.4	29T	3.4	29T
Middle Income	Latin America and the Caribbean	Peru	17.5	2	5.8	19T	22.4	5	1.5	39T	8.4	19T	7.6	8T
High Income	Europe and North America	Poland	4.1	33T	1.1	49	5.2	46	1.9	34T	13.0	7	2.4	39T
High Income	Latin America and the Caribbean	Puerto Rico	9.1	12	2.6	42	11.6	22	1.9	34T	1.9	49	3.1	32
High Income	Middle East and North Africa	Qatar	5.0	27	3.6	33T	8.5	34	6.3	10T	4.2	40T	3.0	33
Middle Income	Europe and North America	Russian Federation	2.7	43T	2.9	39	5.6	44	0.7	45T	4.9	37	1.6	46T
High Income	Middle East and North Africa	Saudi Arabia	5.3	26	6.9	13	12.1	20T	2.8	28	3.1	46	8.5	5
High Income	Europe and North America	Slovak Republic	9.2	11	3.1	38	12.1	20T	4.4	18	4.6	38	3.6	28
High Income	Europe and North America	Slovenia	2.8	42	3.6	33T	6.4	39T	5.9	13	6.8	25T	2.4	39T
High Income	Europe and North America	Spain	2.7	43T	3.8	30	6.4	39T	1.7	37T	6.1	33T	1.7	45
Low Income	Middle East and North Africa	Sudan	10.3	9T	12.6	6	22.2	6	4.3	19T	10.2	15	17.3	2
High Income	Europe and North America	Sweden	4.6	30	2.5	43	6.8	37	6.8	8	5.3	36	3.7	26T
High Income	Europe and North America	Switzerland	4.1	33T	3.4	36	7.4	36	6.3	10T	11.5	12	2.0	42





High Income	Europe and North America	Cyprus	7.0	14T	20.8	38	25.2	7	4.6	43	0.0	42T	5.4	15	27.1	6	2.4	32	7.5	17T
Low Income	Middle East and Africa	Egypt	1.2	43	42.3	9	21.8	11	4.9	42	1.4	34T	0.0	41T	17.5	25T	3.5	22T	7.3	19
High Income	Europe and North America	France	3.5	27	19.3	40	31.1	3	8.0	35T	1.9	31T	5.2	16T	15.5	33	4.3	19	11.3	7
High Income	Europe and North America	Germany	4.1	26	16.0	45	16.6	15	13.1	10T	1.9	31T	6.0	13T	28.4	5	7.6	11	6.3	20
High Income	Europe and North America	Greece	3.0	31	44.5	8	5.8	41T	3.3	45	0.0	42T	10.9	3	11.4	42	0.0	42T	21.1	2T
Middle Income	Latin America and the Caribbean	Guatemala	1.9	39	39.2	13	10.6	30	10.1	23	1.0	40T	0.0	41T	26.2	8T	0.5	39T	10.5	9
Low Income	East and South Asia	India	4.8	24	44.6	6T	28.9	5	7.4	37T	1.0	40T	0.3	39	7.2	44T	4.4	18	1.5	39T
Low Income	East and South Asia	Indonesia	11.4	8	11.3	49	30.8	4	17.1	6	4.4	19T	13.6	1	9.4	43	0.0	42T	2.0	35
Middle Income	Middle East and Africa	Iran	1.5	41	35.2	18T	28.6	6	10.6	20T	2.1	27T	4.9	19	14.1	36	1.9	35T	1.0	44
High Income	Europe and North America	Ireland	6.6	18T	21.8	37	14.1	18	13.1	10T	2.1	27T	5.2	16T	31.5	3	1.5	37	4.1	26T
High Income	Middle East and Africa	Israel	8.2	11T	36.6	16	9.4	31	8.3	32	1.2	37	3.5	23	16.4	30	3.5	22T	12.9	6
High Income	Europe and North America	Italy	2.6	35	19.1	41	13.0	23	0.0	48T	6.5	8	6.3	11T	26.6	7	4.8	17	21.1	2T
High Income	East and South Asia	Japan	2.7	33T	25.5	28	8.7	32	8.2	33	9.0	4	0.0	41T	25.9	10	19.9	2	0.0	47T
High Income	East and South Asia	Korea Rep.	6.6	18T	39.5	12	10.9	26	8.5	29	4.4	19T	2.1	30T	21.7	18	2.1	33T	4.1	26T
Middle Income	Middle East and Africa	Lebanon	2.1	38	51.1	5	7.1	38	6.4	40	9.9	3	7.8	9	5.6	47	5.0	15T	5.0	24
High Income	Europe and North America	Luxembourg	16.1	4	14.4	46	5.8	41T	9.8	25T	8.3	6	3.7	22	24.4	12	6.9	13	10.6	8
Low Income	Middle East and Africa	Madagascar	0.0	47T	37.0	15	4.0	47	2.3	46	2.6	25	0.0	41T	36.4	1	17.7	3	0.0	47T
Low Income	Middle East and Africa	Morocco	47.7	1	30.9	22	10.7	28T	2.2	47	0.0	42T	1.2	37	6.8	46	0.3	41	0.3	46
High Income	Europe and North America	Netherlands	2.5	36	12.7	48	8.6	33	34.3	1	6.0	9T	1.4	34T	28.6	4	2.6	29T	3.2	32
High Income	Latin America and the Caribbean	Panama	3.1	30	55.4	3	10.8	27	10.8	19	0.0	42T	1.5	33	16.9	28	0.0	42T	1.5	39T
Middle Income	Latin America and the Caribbean	Peru	5.2	22	31.2	21	11.9	24	19.3	4	1.4	34T	2.3	28T	25.5	11	1.9	35T	1.3	43
High Income	Europe and North America	Poland	5.3	21	24.2	31T	5.3	44	13.7	8	7.9	7	9.5	6T	16.3	31T	9.5	5	8.4	13T
High Income	Latin America and the Caribbean	Puerto Rico	0.0	47T	17.2	44	6.1	40	8.1	34	6.0	9T	2.4	27	22.9	16	27.3	1	9.9	10T

High Income	Middle East and Africa	Qatar	20.6	3	35.2	18T	17.2	14	11.5	14T	0.0	42T	0.0	38T	12.6	41T	12.6	38T	0.0	42T	2.9	33T
Middle Income	Europe and North America	Russian Federation	3.2	28T	73.5	1	7.4	35T	0.0	48T	0.0	42T	3.1	48	3.7	24	3.7	48	5.0	15T	4.0	29
High Income	Middle East and Africa	Saudi Arabia	5.0	23	13.1	47	13.9	19	6.1	41	5.3	17	2.9	44T	7.2	26	7.2	44T	3.5	22T	43.0	1
High Income	Europe and North America	Slovak Republic	1.3	42	34.5	20	11.8	25	11.1	16T	3.7	22	0.0	41T	19.5	41T	19.5	21	8.3	9	9.9	10T
High Income	Europe and North America	Slovenia	2.4	37	18.5	42	2.2	49	29.6	2	4.3	21	2.1	30T	16.3	30T	16.3	31T	8.6	8	15.9	5
High Income	Europe and North America	Spain	9.6	9	52.3	4	5.4	43	7.4	37T	1.1	38T	9.5	38T	12.6	6T	12.6	38T	0.6	38	1.6	38
Low Income	Middle East and Africa	Sudan	8.1	13	23.4	36	22.8	9	10.6	20T	5.5	14T	1.3	14	23.7	36	23.7	14	0.5	39T	4.1	26T
High Income	Europe and North America	Sweden	12.7	6T	23.5	34T	8.5	34	12.6	13	15.9	1	4.1	41	11.7	21	11.7	41	2.5	31	8.4	13T
High Income	Europe and North America	Switzerland	7.0	14T	23.5	34T	10.7	28T	12.9	12	15.5	2	11.7	24	17.9	2	17.9	24	0.0	42T	0.6	45
High Income	East and South Asia	Taiwan	1.7	40	24.7	30	4.2	46	8.6	28	8.5	5	10.0	8T	26.2	4	26.2	8T	14.4	4	1.8	36T
Middle Income	East and South Asia	Thailand	4.2	25	24.2	31T	24.5	8	8.0	35T	1.3	36	2.1	30T	22.0	30T	22.0	17	8.9	7	4.8	25
Middle Income	Europe and North America	Turkey	2.8	32	27.6	25	34.8	2	9.1	27	1.1	38T	4.3	20	17.5	20	17.5	25T	0.0	42T	2.9	33T
High Income	Middle East and Africa	United Arab Emirates	12.7	6T	38.3	14	20.4	13	7.4	37T	0.0	42T	2.3	34	15.1	28T	15.1	34	0.0	42T	3.9	30
High Income	Europe and North America	United Kingdom	8.9	10	23.8	33	2.8	48	19.6	3	5.7	12T	9.6	19	21.4	5	21.4	19	2.6	29T	5.6	23
High Income	Europe and North America	United States	6.7	17	29.0	23	6.9	39	11.0	18	5.4	16	6.0	13	24.0	13T	24.0	13	2.7	28	8.2	16
High Income	Latin America and the Caribbean	Uruguay	6.1	20	44.6	6T	13.4	20	8.4	30T	2.0	30	3.0	37	13.5	25	13.5	37	3.0	25T	6.0	22

Sources: GEM Global Report 2018/19

### 5. Entrepreneurial Motivation for TEA, GEM 2018 - Percentage of TEA

INCOME LEVEL	REGION	ECONOMY	NECESSITY-DRIVEN		OPPORTUNITY-DRIVEN		IMPROVEMENT-DRIVEN OPPORTUNITY		MOTIVATIONAL INDEX (IDO/NECESSITY)	
			SCORE	RANK/49	SCORE	RANK/49	SCORE	RANK/49	SCORE	RANK/49
Low Income	Middle East and Africa	Angola	38.8	4	57.0	46	36.3	42	0.9	45T
High Income	Latin America and the Caribbean	Argentina	27.9	15T	68.8	34	37.8	41	1.4	35T
High Income	Europe and North America	Austria	15.9	36	75.2	17	38.1	40	2.4	22
Middle Income	Latin America and the Caribbean	Brazil	37.5	6	61.8	44	50.4	17	1.3	39T
Middle Income	Europe and North America	Bulgaria	28.6	14	68.1	35	27.5	46	1.0	44
High Income	Europe and North America	Canada	13.7	38	79.3	12	44.6	26T	3.3	13T
High Income	Latin America and the Caribbean	Chile	23.6	22	74.1	20	59.7	8	2.5	20T
Middle Income	East and South Asia	China	27.8	17	70.5	28	25.5	48	0.9	45T
Middle Income	Latin America and the Caribbean	Colombia	12.2	41	85.5	3	43.4	32T	3.6	10T
High Income	Europe and North America	Croatia	32.3	9	61.9	43	44.3	28	1.4	35T
High Income	Europe and North America	Cyprus	11.5	43	84.6	5	65.5	5	5.7	5
Low Income	Middle East and Africa	Egypt	47.6	1	47.5	48	26.0	47	0.5	48T
High Income	Europe and North America	France	22.3	26	72.9	25	63.7	6	2.9	18
High Income	Europe and North America	Germany	16.7	32	69.8	30	52.8	15	3.2	15T
High Income	Europe and North America	Greece	15.6	37	81.3	7	47.4	21	3.0	17
Middle Income	Latin America and the Caribbean	Guatemala	37.7	5	62.2	42	46.1	25	1.2	43
Low Income	East and South Asia	India	46.3	2	43.2	49	25.4	49	0.5	48T
Low Income	East and South Asia	Indonesia	25.2	19	73.0	24	44.2	29	1.8	29T
Middle Income	Middle East and Africa	Iran	36.4	7	61.0	45	46.3	24	1.3	39T



Low Income	Europe and North America	Ireland	19.5	30	76.2	15	43.4	32T	2.2	25
High Income	Middle East and Africa	Israel	16.4	34	70.4	29	43.9	30	3.3	13T
High Income	Europe and North America	Italy	11.4	44	81.0	8	31.2	44	2.7	19
Middle Income	East and South Asia	Japan	20.2	29	69.5	32	39.1	39	1.9	27T
Middle Income	East and South Asia	Korea Rep.	21.0	27	77.7	14	67.1	4	3.2	15T
High Income	Middle East and Africa	Lebanon	36.1	8	63.7	40	47.5	20	1.3	39T
High Income	Europe and North America	Luxembourg	12.0	42	80.2	10	55.7	12	4.6	7
Middle Income	Middle East and Africa	Madagascar	31.3	10	67.2	37	42.5	34	1.4	35T
Middle Income	Middle East and Africa	Morocco	31.2	11	64.5	39	41.0	35	1.3	39T
High Income	Europe and North America	Netherlands	8.9	46	80.5	9	69.3	2	7.8	2
High Income	Latin America and the Caribbean	Panama	13.0	39	85.2	4	70.4	1	5.4	6
Low Income	Latin America and the Caribbean	Peru	23.1	23	73.2	23	53.1	14	2.3	23T
High Income	Europe and North America	Poland	8.4	47	90.9	1	55.1	13	6.6	4
High Income	Latin America and the Caribbean	Puerto Rico	22.9	24	71.2	26	39.7	38	1.7	31T
High Income	Middle East and Africa	Qatar	16.5	33	74.2	19	56.0	11	3.4	12
Middle Income	Europe and North America	Russian Federation	39.8	3	54.2	47	31.6	43	0.8	47
Low Income	Middle East and Africa	Saudi Arabia	29.9	12	69.4	33	44.6	26T	1.5	34
Low Income	Europe and North America	Slovak Republic	27.0	18	63.4	41	49.6	18	1.8	29T
Middle Income	Europe and North America	Slovenia	24.2	21	69.6	31	47.3	22	2.0	26
High Income	Europe and North America	Spain	22.6	25	70.7	27	43.8	31	1.9	27T
Low Income	Middle East and Africa	Sudan	27.9	15T	67.6	36	46.7	23	1.7	31T
High Income	Europe and North America	Sweden	9.3	45	73.4	22	40.9	36	4.4	8
High Income	Europe and North America	Switzerland	7.4	49	87.1	2	67.8	3	9.1	1

High Income	East and South Asia	Taiwan	24.5	20	75.5	16	56.8	9	2.3	23T
Middle Income	East and South Asia	Thailand	17.9	31	80.0	11	63.6	7	3.6	10T
Middle Income	Europe and North America	Turkey	16.3	35	74.5	18	28.2	45	1.7	31T
High Income	Middle East and Africa	United Arab Emirates	20.6	28	73.9	21	51.0	16	2.5	20T
High Income	Europe and North America	United Kingdom	12.9	40	84.2	6	48.2	19	3.7	9
High Income	Europe and North America	United States	8.1	48	78.3	13	56.4	10	6.9	3
High Income	Latin America and the Caribbean	Uruguay	29.4	13	66.3	38	40.0	37	1.4	35T

Sources: GEM Global Report 2018/19

## 6. Industry Distribution of TEA, GEM 2018 – Percentage of TEA

INCOME LEVEL	REGION	ECONOMY																					
		AGRICULTURE	MINING	MANUFACTURING	TRANSPORTATION	WHOLESALE/RETAIL	INFOR/COMMUNICATIONS TECH	FINANCE	PROFESSIONAL SERVICES	ADMINISTRATIVE SERVICES	HEALTH, EDUCATION, GOVERNMENT AND SOCIAL SERVICES	PERSONAL/CONSUMER SERVICES											
Low Income	Middle East and Africa	0.8	42	2.6	39	3.2	44	4.0	11T	73.8	1	3.0	28	1.0	39	0.9	46T	0.9	44	7.5	46	2.4	20T
High Income	Latin America and the Caribbean	2.6	30T	4.5	23T	11.6	11	4.0	11T	45.9	22T	1.2	37T	3.5	20T	5.6	25	1.1	41T	18.7	11	1.2	37
High Income	Europe and North America	2.9	28T	1.9	42T	4.3	42	1.5	42T	33.2	34	8.6	5T	2.9	24	8.8	17	3.0	26T	23.6	4	9.4	1
Middle Income	Latin America and the Caribbean	0.5	44	6.7	13	12.8	9T	9.2	1	46.0	21	4.1	22	0.6	43	3.3	35	3.8	22	12.4	30	0.5	46
Middle Income	Europe and North America	11.6	3	3.3	34T	9.3	21	2.5	28T	47.4	18T	0.0	47T	4.2	14	4.1	31T	5.8	8	11.0	37	0.8	42T
High Income	Europe and North America	5.8	15	5.4	17	5.6	38	3.7	15	31.0	36	6.7	16	3.6	18T	11.5	11	5.0	14	16.1	17	5.5	7
High Income	Latin America and the Caribbean	3.7	24T	5.2	20T	12.9	8	7.6	4	43.2	25T	1.2	37T	1.2	35T	6.0	24	8.9	4T	9.2	43	1.0	40T
Middle Income	East and South Asia	1.4	38	2.0	41	6.9	32	2.3	32T	62.1	7	1.6	35	3.6	18T	7.4	21	0.8	45T	9.8	40	2.1	25T
Middle Income	Latin America and the Caribbean	3.4	26	4.4	25	15.4	3	3.2	18T	43.2	25T	4.2	21	1.8	33	6.3	23	4.2	18T	11.5	36	2.4	20T
High Income	Europe and North America	8.3	8T	8.1	10	10.0	14T	2.3	32T	26.1	40	10.4	3	4.5	12	4.8	28	10.7	2	12.8	28	2.1	25T
High Income	Europe and North America	0.0	47T	0.0	49	2.6	46	2.6	26T	46.1	20	4.0	23	8.0	3	8.7	18T	5.1	13	13.6	26	9.3	2

Low Income	Middle East and Africa	Egypt	8.3	8T	2.4	40	12.8	9T	3.8	14	61.5	8	0.3	45T	0.0	48T	2.2	38	0.7	47T	5.6	48	2.4	20T
High Income	Europe and North America	France	5.2	17	11.8	5	1.9	47	3.0	22	25.3	42	5.2	17	5.2	10	9.4	15	4.8	15T	26.0	2T	2.2	24
High Income	Europe and North America	Germany	6.9	14	4.8	22	7.4	29	1.8	38T	25.0	43	7.0	14	6.3	4T	5.3	27	5.6	9T	26.5	1	3.5	14
High Income	Europe and North America	Greece	7.9	11	3.9	31T	5.9	33T	2.5	28T	53.1	14	1.7	32T	0.9	40	4.4	30	5.5	12	12.5	29	1.6	32
Middle Income	Latin America and the Caribbean	Guatemala	2.9	28T	1.6	44T	10.1	13	2.1	34	64.8	6	3.3	25T	1.6	34	2.9	36	2.0	37	7.2	47	1.5	33T
Low Income	East and South Asia	India	5.0	18	0.2	48	5.0	41	5.3	5T	60.4	10	0.7	41	0.2	44T	0.9	46T	2.6	31T	18.5	12	1.1	38T
Low Income	East and South Asia	Indonesia	1.8	36T	0.7	47	9.2	22	1.0	45	70.5	2	3.1	27	0.1	47	1.7	39T	0.0	49	11.9	33	0.0	48T
Middle Income	Middle East and Africa	Iran	7.4	13	3.9	31T	11.5	12	1.6	41	31.6	35	7.6	8	3.7	17	8.9	16	4.8	15T	14.3	25	4.6	8T
High Income	Europe and North America	Ireland	1.9	33T	5.3	18T	2.9	45	2.0	35T	33.3	32T	13.2	1	2.7	26T	7.7	20	3.7	23T	20.8	7	6.3	3
High Income	Middle East and Africa	Israel	3.7	24T	11.2	6	14.8	4	1.9	37	24.1	44	3.7	24	5.6	7	16.6	4	3.7	23T	13.0	27	1.9	29
High Income	Europe and North America	Italy	9.6	5	3.3	34T	5.9	33T	1.3	44	38.9	27	3.3	25T	5.8	6	11.8	10	6.3	7	12.0	32	1.8	30
High Income	East and South Asia	Japan	5.5	16	2.7	38	1.8	48	2.8	24	35.6	30	10.6	2	3.2	23	12.3	7T	4.7	17	16.3	16	4.6	8T
High Income	East and South Asia	Korea Rep.	0.3	45T	4.5	23T	14.1	5	8.9	2	47.4	18T	1.7	32T	2.8	25	1.7	39T	0.7	47T	16.4	15	1.4	35
Middle Income	Middle East and Africa	Lebanon	1.9	33T	1.1	46	10.0	14T	2.7	25	58.6	12	0.6	42	1.2	35T	1.2	43	1.9	38	18.3	13	2.5	19
High Income	Europe and North America	Luxembourg	0.3	45T	5.5	15T	9.6	18T	5.3	5T	22.8	47	9.9	4	6.3	4T	10.7	12	12.0	1	15.5	18	2.0	27T
Low Income	Middle East and Africa	Madagascar	21.3	1	3.7	33	9.6	18T	4.8	9T	53.2	13	0.4	43T	0.2	44T	0.1	49	1.1	41T	1.2	49	4.3	10
Low Income	Middle East and Africa	Morocco	4.4	19	4.3	26	10.0	14T	0.0	48T	67.2	4	0.0	47T	1.1	37T	0.5	48	2.3	36	9.4	42	0.8	42T
High Income	Europe and North America	Netherlands	3.2	27	12.0	4	4.1	43	2.0	35T	21.8	48	7.1	13	4.9	11	8.7	18T	8.9	4T	26.0	2T	1.3	36
High Income	Latin America and the Caribbean	Panama	1.9	33T	1.9	42T	7.0	31	4.8	9T	61.1	9	0.4	43T	0.7	42	1.1	44T	3.0	26T	15.2	20	3.0	16T
Middle Income	Latin America and the Caribbean	Peru	1.8	36T	1.6	44T	9.7	17	5.0	8	65.3	5	2.0	31	1.1	37T	1.1	44T	1.1	41T	8.4	44	3.0	16T
High Income	Europe and North America	Poland	1.0	40T	17.5	1	5.3	39T	3.3	17	33.3	32T	4.5	19T	4.3	13	9.6	13T	1.7	40	19.4	9	0.2	47
High Income	Latin America and the Caribbean	Puerto Rico	3.9	22T	10.2	7	5.3	39T	0.4	47	48.1	17	1.5	36	0.0	48T	2.4	37	5.6	9T	21.1	6	1.5	33T
High Income	Middle East and Africa	Qatar	1.2	39	4.2	28	8.7	23	3.2	18T	51.3	16	4.5	19T	2.7	26T	4.1	31T	9.1	3	10.9	38	0.0	48T



Middle Income	Europe and North America	Russian Federation	8.9	6	9.9	9	9.6	18T	8.8	3	35.1	31	2.5	30	2.3	30	4.5	29	2.5	33	14.9	22	1.0	40T
High Income	Middle East and Africa	Saudi Arabia	0.0	47T	3.2	36	5.7	36T	0.6	46	67.9	3	0.8	39T	0.8	41	3.4	34	0.8	45T	14.4	24	2.3	23
High Income	Europe and North America	Slovak Republic	2.6	30T	15.5	2	8.2	25	2.6	26T	25.6	41	4.6	18	3.5	20T	9.6	13T	2.7	29T	23.4	5	1.7	31
High Income	Europe and North America	Slovenia	8.4	7	4.3	26T	7.8	26	5.2	7	23.9	45	6.8	15	3.3	22	20.1	1	4.2	18T	11.7	34T	4.2	11
High Income	Europe and North America	Spain	4.3	20	4.0	29T	7.2	30	4.0	11T	28.8	37	7.4	10	3.8	16	19.9	2	3.0	26T	15.0	21	2.6	18
Low Income	Middle East and Africa	Sudan	9.9	4	2.9	37	15.7	2	3.5	16	51.9	15	0.0	47T	2.4	28T	1.6	41	1.8	39	9.7	41	0.6	45
High Income	Europe and North America	Sweden	8.1	10	4.0	29T	8.6	24	1.8	38T	26.2	39	8.6	5T	5.4	8	12.1	9	2.7	29T	18.9	10	3.6	13
High Income	Europe and North America	Switzerland	0.7	43	5.5	15T	7.5	28	0.0	48T	27.4	38	8.3	7	11.9	1	15.3	5	3.1	25	14.5	23	5.8	5T
High Income	East and South Asia	Taiwan	3.9	22T	7.8	11	13.7	6	2.4	31	45.9	22T	2.9	29	2.4	28T	3.9	33	2.4	34T	10.7	39	3.9	12
Middle Income	East and South Asia	Thailand	13.7	2	5.3	18T	5.9	33T	2.5	28T	59.9	11	0.3	45T	0.2	44T	1.3	42	2.4	34T	7.7	45	0.7	44
Middle Income	Europe and North America	Turkey	7.8	12	10.0	8	17.7	1	3.1	21	36.7	29	0.8	39T	2.2	31	5.5	26	2.6	31T	11.7	34T	2.0	27T
High Income	Middle East and Africa	United Arab Emirates	0.0	47T	5.2	20T	1.2	49	1.5	42T	45.4	24	1.7	32T	5.3	9	17.7	3	3.9	21	16.9	14	1.1	38T
High Income	Europe and North America	United Kingdom	1.0	40T	12.4	3	5.7	36T	1.8	38T	21.2	49	7.2	12	3.9	15	12.3	7T	7.8	6	20.6	8	6.1	4
High Income	Europe and North America	United States	4.1	21	5.7	14	7.6	27	3.2	18T	23.4	46	7.3	11	8.8	2	13.2	6	5.6	9T	15.3	19	5.8	5T
High Income	Latin America and the Caribbean	Uruguay	2.6	30T	7.2	12	13.4	7	2.9	23	38.1	28	7.5	9	2.1	32	6.6	22	4.2	18T	12.2	31	3.3	15

Sources: GEM Global Report 2018/19

## 7. Job Creation Expectations for TEA, GEM 2018 - Percentage of TEA

INCOME LEVEL	REGION	ECONOMY	0 JOBS IN 5 YEARS		1-5 JOBS IN 5 YEARS		6 OR MORE JOBS IN 5 YEARS	
			SCORE	RANK/49	SCORE	RANK/49	SCORE	RANK/49
Low Income	Middle East and Africa	Angola	44.5	26	31.2	26	24.3	16
High Income	Latin America and the Caribbean	Argentina	36.4	39	51.9	4	11.7	37
High Income	Europe and North America	Austria	56.8	13	27.3	30T	15.9	31
Middle Income	Latin America and the Caribbean	Brazil	81.0	1	12.9	48T	6.1	44T
Middle Income	Europe and North America	Bulgaria	72.2	4	25.3	35	2.5	47
High Income	Europe and North America	Canada	57.1	12	22.2	42T	20.7	22
High Income	Latin America and the Caribbean	Chile	19.1	48	47.3	9	33.5	7
Middle Income	East and South Asia	China	66.7	5	12.9	48T	20.4	24
Middle Income	Latin America and the Caribbean	Colombia	11.3	49	38.9	14	49.9	2
High Income	Europe and North America	Croatia	39.9	32	33.6	25	26.5	15
High Income	Europe and North America	Cyprus	43.6	28	34.0	24	22.4	20
Low Income	Middle East and Africa	Egypt	58.5	10	22.2	42T	19.3	26
High Income	Europe and North America	France	40.3	31	30.6	27	29.1	9
High Income	Europe and North America	Germany	48.1	21	23.0	40	28.9	10
High Income	Europe and North America	Greece	44.9	25	45.4	10	9.7	39
Middle Income	Latin America and the Caribbean	Guatemala	20.4	47	52.6	2	27.0	13
Low Income	East and South Asia	India	39.2	34	52.4	3	8.4	43
Low Income	East and South Asia	Indonesia	75.6	2	22.8	41	1.6	49
Middle Income	Middle East and Africa	Iran	40.6	30	23.4	38T	36.0	6

High Income	Europe and North America	Ireland	29.7	41	26.6	32	43.7	4
High Income	Middle East and Africa	Israel	52.5	17	24.6	37	22.9	19
High Income	Europe and North America	Italy	60.4	9	26.3	33T	13.3	34
High Income	East and South Asia	Japan	56.7	14	21.6	44	21.6	21
High Income	East and South Asia	Korea Rep.	37.6	36	49.6	6	12.8	35
Middle Income	Middle East and Africa	Lebanon	58.3	11	38.0	15	3.7	46
High Income	Europe and North America	Luxembourg	48.6	20	34.8	23	16.6	30
Low Income	Middle East and Africa	Madagascar	61.1	8	36.6	18	2.3	48
Low Income	Middle East and Africa	Morocco	64.0	6	27.3	30T	8.7	41T
High Income	Europe and North America	Netherlands	75.0	3	15.4	46	9.5	40
High Income	Latin America and the Caribbean	Panama	43.7	27	50.2	5	6.1	44T
Middle Income	Latin America and the Caribbean	Peru	27.2	45	57.4	1	15.3	32T
High Income	Europe and North America	Poland	43.4	29	45.1	11	11.5	38
High Income	Latin America and the Caribbean	Puerto Rico	26.4	46	49.4	7T	24.2	17
High Income	Middle East and Africa	Qatar	49.9	19	23.4	38T	26.7	14
Middle Income	Europe and North America	Russian Federation	63.5	7	16.6	45	19.8	25
High Income	Middle East and Africa	Saudi Arabia	38.4	35	49.4	7T	12.2	36
High Income	Europe and North America	Slovak Republic	46.6	23	26.3	33T	27.1	12
High Income	Europe and North America	Slovenia	47.0	22	37.7	16	15.3	32T
High Income	Europe and North America	Spain	56.2	15	35.1	20T	8.7	41T
Low Income	Middle East and Africa	Sudan	39.5	33	37.4	17	23.1	18
High Income	Europe and North America	Sweden	55.6	16	27.8	29	16.7	29
High Income	Europe and North America	Switzerland	36.6	38	34.9	22	28.5	11



High Income	East and South Asia	Taiwan	27.3	44	35.1	20T	37.6	5
Middle Income	East and South Asia	Thailand	45.4	24	35.5	19	19.1	27
Middle Income	Europe and North America	Turkey	29.1	42	25.0	36	45.9	3
High Income	Middle East and Africa	United Arab Emirates	31.9	40	14.8	47	53.3	1
High Income	Europe and North America	United Kingdom	51.0	18	28.4	28	20.5	23
High Income	Europe and North America	United States	28.3	43	40.0	13	31.8	8
High Income	Latin America and the Caribbean	Uruguay	36.8	37	44.4	12	18.8	28

Sources: GEM Global Report 2018/19

### 8. Solo Entrepreneurship, Innovation level, Internationalization for TEA, GEM 2018 – Percentage of TEA

INCOME LEVEL	REGION	ECONOMY	NO CO-FOUNDERS OR EMPLOYEES, NO JOBS PROJECTED IN 5 YEARS		INNOVATION (PRODUCT IS NEW TO ALL OR SOME CUSTOMERS AND FEW NO BUSINESSES OFFER THE SAME PRODUCT)		INTERNATIONALIZATION (MORE THAN 25% SALES TO CUSTOMER OUTSIDE HOME ECONOMY)	
			SCORE	RANK/49	SCORE	RANK/49	SCORE	RANK/48
Low Income	Middle East and Africa	Angola	2.1	40	17.8	37T	1.8	45
High Income	Latin America and the Caribbean	Argentina	13.8	12	32.2	14	3.0	42T
High Income	Europe and North America	Austria	7.8	20	37.0	8	43.0	6
Middle Income	Latin America and the Caribbean	Brazil	53.2	1	3.7	49	0.3	48
Middle Income	Europe and North America	Bulgaria	4.1	33T	14.9	42T	7.4	39
High Income	Europe and North America	Canada	3.4	36	41.3	5	43.8	5
High Income	Latin America and the Caribbean	Chile	4.1	33T	47.6	2	-	-
Middle Income	East and South Asia	China	1.3	42	33.1	12	8.8	35
Middle Income	Latin America and the Caribbean	Colombia	0.1	45	16.1	40	9.6	33
High Income	Europe and North America	Croatia	0.0	46T	24.6	28	40.3	8
High Income	Europe and North America	Cyprus	2.4	39	38.6	7	38.2	10

Low Income	Middle East and Africa	Egypt	3.3	37	27.5	23	22.3	20
High Income	Europe and North America	France	8.0	18T	28.1	21	19.9	22T
High Income	Europe and North America	Germany	16.5	8	30.5	17	18.9	26
High Income	Europe and North America	Greece	9.6	15	28.4	19	27.5	16
Middle Income	Latin America and the Caribbean	Guatemala	7.1	22	39.2	6	2.3	44
Low Income	East and South Asia	India	5.2	27T	46.9	3	25.4	17
Low Income	East and South Asia	Indonesia	0.0	46T	15.4	41	5.7	40
Middle Income	Middle East and Africa	Iran	4.6	30T	17.2	39	4.9	41
High Income	Europe and North America	Ireland	5.7	25	35.8	9	35.5	11
High Income	Middle East and Africa	Israel	4.0	35	32.9	13	30.2	14
High Income	Europe and North America	Italy	17.8	7	24.3	29	19.9	22T
High Income	East and South Asia	Japan	5.1	29	27.7	22	25.0	18
High Income	East and South Asia	Korea Rep.	8.0	18T	29.9	18	10.5	32
Middle Income	Middle East and Africa	Lebanon	14.3	11	41.9	4	59.3	1
High Income	Europe and North America	Luxembourg	5.2	27T	47.9	1	47.2	3
Low Income	Middle East and Africa	Madagascar	30.0	2	13.4	44T	1.1	47
Low Income	Middle East and Africa	Morocco	2.0	41	14.9	42T	54.9	2
High Income	Europe and North America	Netherlands	22.5	4	23.8	30	8.7	36
High Income	Latin America and the Caribbean	Panama	26.4	3	10.5	47	14.4	28
Middle Income	Latin America and the Caribbean	Peru	4.6	30T	21.9	34	8.1	38
High Income	Europe and North America	Poland	2.6	38	12.2	46	3.0	42T
High Income	Latin America and the Caribbean	Puerto Rico	7.6	21	26.1	25	23.8	19
High Income	Middle East and Africa	Qatar	0.4	44	26.9	24	41.8	7

Middle Income	Europe and North America	Russian Federation	9.8~	14	8.1	48	1.6	46
High Income	Middle East and Africa	Saudi Arabia	0.0	46T	23.3	31	40.0	9
High Income	Europe and North America	Slovak Republic	6.1	24	22.0	33	21.9	21
High Income	Europe and North America	Slovenia	9.5	16	25.5	26	28.7	15
High Income	Europe and North America	Spain	19.2	5	22.3	32	9.3	34
Low Income	Middle East and Africa	Sudan	5.3	26	13.4	44T	19.2	25
High Income	Europe and North America	Sweden	16.1	10	33.7	11	32.9	13
High Income	Europe and North America	Switzerland	4.2	32	31.7	15	33.3	12
High Income	East and South Asia	Taiwan	12.5	13	18.8	36	10.8	31
Middle Income	East and South Asia	Thailand	16.4	9	17.8	37T	18.6	27
Middle Income	Europe and North America	Turkey	0.5	43	30.8	16	14.2	29
High Income	Middle East and Africa	United Arab Emirates	0.0	46T	28.2	20	46.7	4
High Income	Europe and North America	United Kingdom	17.9	6	21.6	35	19.5	24
High Income	Europe and North America	United States	8.8	17	34.0	10	12.7	30
High Income	Latin America and the Caribbean	Uruguay	6.6	23	25.3	27	8.4	37

Sources: GEM Global Report 2018/19

## 9. Gender Distribution of TEA, Opportunity TEA & Necessity TEA, GEM 2018

INCOME LEVEL	REGION	ECONOMY	MALE TEA (% OF ADULT MALE POPULATION)		FEMALE TEA (% OF ADULT FEMALE POPULATION)		MALE TEA OPPORTUNITY (% OF TEA MALES)		FEMALE TEA OPPORTUNITY (% OF TEA FEMALES)		MALE TEA NECESSITY (% OF TEA MALES)		FEMALE TEA NECESSITY (% OF TEA FEMALES)	
			SCORE	RANK/49	SCORE	RANK/49	SCORE	RANK/49	SCORE	RANK/49	SCORE	RANK/49	SCORE	RANK/49
Low Income	Middle East and Africa	Angola	41.0	1	40.7	1	67.3	41	47.2	46	27.5	12	49.5	3
High Income	Latin America and the Caribbean	Argentina	10.1	34	8.1	29	76.4	16	59.8	40	21.4	21	35.7	9T
High Income	Europe and North America	Austria	13.9	23	7.9	30	74.3	24	77.0	16	16.5	38	14.9	36
Middle Income	Latin America and the Caribbean	Brazil	18.5	13	17.3	9	67.7	39	55.6	45	31.4	9	44.0	5
Middle Income	Europe and North America	Bulgaria	6.4	46	5.6	35	72.2	32	63.4	35	23.2	17	34.8	11
High Income	Europe and North America	Canada	20.4	8T	17.0	11	75.9	17	83.3	5	16.8	36	10.0	43
High Income	Latin America and the Caribbean	Chile	29.0	4	21.2	3	79.9	11	66.5	29	18.4	30	30.6	16
Middle Income	East and South Asia	China	11.4	30	9.3	18	68.9	38	72.4	22	29.4	10	25.9	24
Middle Income	Latin America and the Caribbean	Colombia	24.9	6	17.8	7	87.5	2	83.0	6	10.7	45	14.1	37
High Income	Europe and North America	Croatia	12.1	28	7.1	32	63.3	43T	59.6	41T	32.4	7	32.2	15
High Income	Europe and North America	Cyprus	4.8	49	2.9	48	83.4	7	86.6	2	12.4	41	9.8	44
Low Income	Middle East and Africa	Egypt	14.1	20	5.4	36T	48.4	48	45.0	47	47.3	1	48.5	4
High Income	Europe and North America	France	7.0	42	5.3	38	77.5	15	66.9	28	21.1	23	23.9	26
High Income	Europe and North America	Germany	6.6	45	3.3	47	69.9	36	69.7	25	17.1	33T	15.9	34
High Income	Europe and North America	Greece	8.8	38T	3.9	44T	87.3	4	67.7	27	10.4	46	27.1	21
Middle Income	Latin America and the Caribbean	Guatemala	30.8	3	24.5	2	67.4	40	56.1	43	32.3	8	43.9	6
Low Income	East and South Asia	India	14.0	21T	8.7	22T	45.0	49	40.2	48	44.2	2	49.9	2
Low Income	East and South Asia	Indonesia	14.0	21T	14.1	12	75.2	19T	70.8	24	22.4	19	28.0	18
Middle Income	Middle East and Africa	Iran	12.9	25	6.5	33	59.0	47	64.9	31T	39.6	3	29.8	17



High Income	Europe and North America	Ireland	11.9	29	7.5	31	75.2	19T	77.8	14T	19.6	28	19.3	31
High Income	Middle East and Africa	Israel	12.8	26	9.1	19	69.0	37	72.2	23	20.6	26	10.6	42
High Income	Europe and North America	Italy	5.5	48	2.8	49	82.2	8	78.6	12T	11.5	42	11.3	41
High Income	East and South Asia	Japan	6.7	44	4.0	42T	73.3	28T	62.8	36	18.1	32	23.8	27
High Income	East and South Asia	Korea Rep.	17.0	15	12.2	16	77.6	14	77.8	14T	21.9	20	19.6	30
Middle Income	Middle East and Africa	Lebanon	31.3	2	17.4	8	63.3	43T	64.3	34	36.4	4	35.7	9T
High Income	Europe and North America	Luxembourg	12.7	27	8.7	22T	78.8	13	82.4	8	17.1	33T	4.2	48
Low Income	Middle East and Africa	Madagascar	20.4	8T	21.1	4	70.3	34	64.4	33	28.5	11	33.9	13
Low Income	Middle East and Africa	Morocco	9.2	37	4.3	41	62.6	45T	68.3	26	32.8	6	27.7	19
High Income	Europe and North America	Netherlands	16.2	16	8.3	28	79.3	12	82.8	7	8.6	47	9.7	45
High Income	Latin America and the Caribbean	Panama	13.8	24	13.9	13	85.6	6	84.8	4	13.7	39	12.3	38
Middle Income	Latin America and the Caribbean	Peru	23.9	7	20.9	5	73.3	28T	73.1	21	23.1	18	23.1	28
High Income	Europe and North America	Poland	6.0	47	4.5	40	87.9	1	95.0	1	10.8	44	5.0	47
High Income	Latin America and the Caribbean	Puerto Rico	15.2	17T	8.4	25T	75.0	22T	64.9	31T	20.9	24	26.2	23
High Income	Middle East and Africa	Qatar	8.6	40	8.4	25T	73.1	30	78.6	12T	16.7	37	15.8	35
Middle Income	Europe and North America	Russian Federation	7.3	41	3.9	44T	62.6	45T	39.8	49	33.1	5	51.1	1
High Income	Middle East and Africa	Saudi Arabia	14.7	19	8.5	24	73.6	26T	59.6	41T	26.1	14	39.0	7
High Income	Europe and North America	Slovak Republic	15.2	17T	9.0	20	64.4	42	61.7	38	26.6	13	27.6	20
High Income	Europe and North America	Slovenia	8.8	38T	3.8	46	72.6	31	62.4	37	20.7	25	32.7	14
High Income	Europe and North America	Spain	6.8	43	6.0	34	75.2	19T	65.7	30	18.9	29	26.7	22
Low Income	Middle East and Africa	Sudan	27.5	5	17.1	10	75.0	22T	55.9	44	21.2	22	38.3	8
High Income	Europe and North America	Sweden	9.5	36	4.0	42T	70.7	33	80.0	10	12.5	40	1.3	49
High Income	Europe and North America	Switzerland	10.0	35	4.7	39	87.4	3	86.4	3	5.5	49	11.5	39

High Income	East and South Asia	Taiwan	10.2	33	8.8	21	75.6	18	75.3	18	24.4	16	24.7	25
Middle Income	East and South Asia	Thailand	20.1	10	19.3	6	80.3	10	79.6	11	17.1	33T	18.7	32
Middle Income	Europe and North America	Turkey	20.0	11	8.4	25T	73.6	26T	76.7	17	18.3	31	11.4	40
High Income	Middle East and Africa	United Arab Emirates	11.0	32	10.1	17	73.9	25	73.8	20	20.3	27	21.4	29
High Income	Europe and North America	United Kingdom	11.1	31	5.4	36T	85.7	5	81.0	9	11.1	43	16.6	33
High Income	Europe and North America	United States	17.7	14	13.6	14	81.1	9	74.7	19	8.5	48	7.7	46
High Income	Latin America and the Caribbean	Uruguay	19.4	12	12.3	15	70.2	35	60.5	39	25.7	15	34.7	12

Sources: GEM Global Report 2018/19

### 10. TEA by Age Group, GEM 2018 - Percentage of Population Aged 18-64

INCOME LEVEL	REGION	ECONOMY	TEA - 18 - 24 YEARS			TEA - 25 - 34 YEARS			TEA - 35 - 44 YEARS			TEA - 45 - 54 YEARS			TEA - 55 - 64 YEARS		
			SCORE	RANK/49	SCORE	RANK/49	SCORE	RANK/49	SCORE	RANK/49	SCORE	RANK/49	SCORE	RANK/49	SCORE	RANK/49	
Low Income	Middle East and Africa	Angola	38.9	1	51.0	1	39.8	1	31.6	1	28.2	1	28.2	1			
High Income	Latin America and the Caribbean	Argentina	8.9	31	10.5	35T	9.1	33	10.5	25	5.1	27T	5.1	27T			
High Income	Europe and North America	Austria	14.0	15	15.1	22	13.0	22	9.7	27	3.5	38	3.5	38			
Middle Income	Latin America and the Caribbean	Brazil	21.2	6	20.2	12	19.5	12	15.6	10	9.7	14	9.7	14			
Middle Income	Europe and North America	Bulgaria	3.8	43	8.0	41T	7.7	39	7.3	33	2.4	44T	2.4	44T			
High Income	Europe and North America	Canada	27.3	3	26.1	7	20.1	9	14.7	12	9.3	15	9.3	15			
High Income	Latin America and the Caribbean	Chile	18.8	8	26.6	5	31.1	2	26.3	3	19.6	2	19.6	2			
Middle Income	East and South Asia	China	10.9	25	12.0	30	13.2	21	10.8	23	5.1	27T	5.1	27T			
Middle Income	Latin America and the Caribbean	Colombia	17.1	9	24.3	10	26.2	6	21.2	6	13.9	10	13.9	10			
High Income	Europe and North America	Croatia	11.7	21T	19.0	13T	11.5	25	4.9	43	2.3	46	2.3	46			
High Income	Europe and North America	Cyprus	1.7	48	4.0	49	4.0	49	5.2	41	3.7	37	3.7	37			

Low Income	Middle East and Africa	Egypt	10.7	27	11.2	33T	9.0	34T	7.4	32	9.0	16
High Income	Europe and North America	France	3.2	45	8.1	40	8.1	36T	6.2	37T	4.0	36
High Income	Europe and North America	Germany	6.0	39	6.6	47	6.1	44	4.6	45	2.4	44T
High Income	Europe and North America	Greece	11.5	23	7.0	46	4.1	48	4.7	44	5.4	26
Middle Income	Latin America and the Caribbean	Guatemala	27.4	2	30.0	3	30.7	3	25.6	4	14.7	7
Low Income	East and South Asia	India	12.3	19	13.3	29	9.6	30T	12.6	18T	6.9	21
Low Income	East and South Asia	Indonesia	13.6	16	14.6	24	16.9	13	12.6	18T	10.0	13
Middle Income	Middle East and Africa	Iran	7.2	34	15.2	21	10.2	27	5.4	39T	3.0	41
High Income	Europe and North America	Ireland	6.7	37T	13.4	27T	9.9	28T	9.1	29	7.6	19T
High Income	Middle East and Africa	Israel	11.7	21T	13.5	26	9.9	28T	11.0	22	7.6	19T
High Income	Europe and North America	Italy	4.4	42	6.4	48	5.0	47	3.6	47	2.1	48
High Income	East and South Asia	Japan	5.4	40	8.4	39	6.3	42T	4.5	46	2.6	43
High Income	East and South Asia	Korea Rep.	8.6	32	15.3	20	16.0	16	16.3	9	14.5	8
Middle Income	Middle East and Africa	Lebanon	15.9	10T	30.3	2	27.9	4	23.6	5	18.4	4
High Income	Europe and North America	Luxembourg	4.8	41	14.2	25	14.6	18	10.0	26	6.5	23
Low Income	Middle East and Africa	Madagascar	24.8	4	26.3	6	15.6	17	14.6	13	13.7	11
Low Income	Middle East and Africa	Morocco	7.1	35	7.8	44	7.8	38	5.1	42	3.3	39T
High Income	Europe and North America	Netherlands	15.9	10T	17.6	16	12.4	24	10.7	24	6.6	22
High Income	Latin America and the Caribbean	Panama	11.4	24	14.8	23	16.4	14	15.5	11	8.4	18
Middle Income	Latin America and the Caribbean	Peru	24.5	5	21.8	11	26.0	7	18.4	7	18.6	3
High Income	Europe and North America	Poland	1.2	49	9.8	37	8.1	36T	2.0	49	2.2	47
High Income	Latin America and the Caribbean	Puerto Rico	12.4	18	19.0	13T	13.8	19	8.3	30	4.6	32
High Income	Middle East and Africa	Qatar	6.7	37T	8.0	41T	9.3	32	11.6	20	6.0	25

Middle Income	Europe and North America	Russian Federation	6.9	36	9.7	38	5.6	45T	3.3	48	2.0	49
High Income	Middle East and Africa	Saudi Arabia	10.5	28	11.2	33T	12.7	23	12.8	16T	14.4	9
High Income	Europe and North America	Slovak Republic	19.2	7	16.8	19	13.7	20	8.2	31	4.9	29
High Income	Europe and North America	Slovenia	3.1	46	13.4	27T	6.3	42T	5.4	39T	2.8	42
High Income	Europe and North America	Spain	3.3	44	7.5	45	7.3	41	7.2	34	4.7	31
Low Income	Middle East and Africa	Sudan	14.7	12T	24.4	9	27.2	5	27.8	2	18.0	5
High Income	Europe and North America	Sweden	10.3	29	8.0	41T	5.6	45T	6.9	35	4.2	34T
High Income	Europe and North America	Switzerland	2.2	47	10.5	35T	7.6	40	9.6	28	4.2	34T
High Income	East and South Asia	Taiwan	10.8	26	16.9	18	10.9	26	6.2	37T	3.3	39T
Middle Income	East and South Asia	Thailand	11.9	20	27.2	4	21.7	8	17.5	8	17.4	6
Middle Income	Europe and North America	Turkey	14.3	14	17.2	17	16.2	15	11.2	21	8.7	17
High Income	Middle East and Africa	United Arab Emirates	9.0	30	11.9	31	9.6	30T	12.9	15	4.8	30
High Income	Europe and North America	United Kingdom	7.8	33	11.4	32	9.0	34T	6.5	36	6.2	24
High Income	Europe and North America	United States	14.7	12T	18.1	15	19.7	10	14.2	14	10.4	12
High Income	Latin America and the Caribbean	Uruguay	12.9	17	24.5	8	19.6	11	12.8	16T	4.5	33

Sources: GEM Global Report 2018/19



### 11. National Entrepreneurship Context Index (NECI) and its 12 Components – Scores for 54 Economies

		Entrepreneurship Context Framework Conditions Scores Re-scaled to 10 points)												
ECONOMY	NECI SCORE	RANK/49	GOVERNMENT POLICIES, TAXES AND BUREAUCRACY	GOVERNMENT POLICIES, SUPPORT AND RELEVANCE	GOVERNMENT POLICIES, TAXES AND BUREAUCRACY	GOVERNMENT PROGRAMS	ENTREPRENEURIAL EDUCATION AT SCHOOL STAGE	ENTREPRENEURIAL EDUCATION AT POST-SCHOOL STAGE	R&D TRANSFER	COMMERCIAL AND LEGAL INFRASTRUCTURE	PHYSICAL INFRASTRUCTURE	INTERNAL MARKET DYNAMICS	ENTREPRENEURIAL EDUCATION AT SCHOOL STAGE	ENTREPRENEURIAL EDUCATION AT POST-SCHOOL STAGE
Angola	4.13	50	4.06	4.06	4.06	3.48	3.57	4.28	3.02	5.05	4.41	5.54	3.97	5.21
Argentina	5.24	21	6.91	4.03	4.03	5.84	3.3	5.58	5	5.63	6.18	6.19	4.67	5.95
Austria	5.54	13	5.17	4.44	4.44	6.87	2.91	5.81	4.97	6.74	8.42	4.98	6.36	4.31
Brazil	4.18	48	3.07	2.25	2.25	3.72	2.46	4.53	3.78	5.02	6.02	6.45	4.05	3.76
Bulgaria	4.66	36	3.51	5.01	5.01	3.87	3.14	4.5	3.73	5.76	7.7	5.19	4.34	3.88
Canada	5.54	12	5.49	4.78	4.78	5.39	4.59	5.31	5.33	6.74	7.45	4.71	5.01	6.2
Chile	5.09	26	5.79	5.21	5.21	6.2	2.65	5.6	4.11	4.62	8.09	4.93	4.22	5.95
China	5.61	11	5.32	5.11	5.11	4.96	3.75	5.86	4.49	4.7	8.22	7.41	4.9	6.69
Colombia	4.79	32	4.31	4.05	4.05	5.06	3.77	6.34	3.7	4.73	7.02	4.61	4.59	5.9
Croatia	3.83	53	3.13	2.33	2.33	3.65	2.72	4.12	3.3	4.17	6.23	5.7	3.34	3.05
Cyprus	5.09	27	5.18	5.71	5.71	4.11	3.61	5.89	4.63	5.94	7.17	5.35	5.03	4.81
Dominican Republic	4.57	38	3.9	4.07	4.07	5.6	2.6	5.58	2.92	4.74	7.31	4.85	4.03	6.19
Egypt	4.72	34	4.74	3.88	3.88	4.42	2.58	4.13	3.84	4.97	7.24	5.7	4.86	5.07
France	5.62	10	6.51	5.94	5.94	6.27	3.21	6.27	5.32	5.93	8.5	4.77	4.36	5.23
Germany	5.36	19	4.76	4.82	4.82	6.46	3.36	5.06	5.08	6.32	6.74	5.63	5.71	4.95
Greece	4.34	42	3.66	2.86	2.86	3.71	3.07	4.43	4.38	4.95	7.05	4.98	4.14	4.65
Guatemala	4.33	44	2.36	3.94	3.94	3.34	2.54	6.24	3.65	5.22	6.89	4.44	4.15	5.61
India	6.19	5	7.04	5.23	5.23	6.33	5.02	5.81	5.81	6.36	7.36	7.17	5.85	6.2

Indonesia	6.57	2	6.57	6.97	6.07	6.27	5.69	7.08	6.07	7.18	7.38	6.03	7.17
Iran	4.29	46	4.24	4.25	3.26	3.23	3.21	4.18	3.67	6.35	6.29	4.3	4.65
Ireland	5.38	17	5.81	5.37	4.94	6.16	4.18	5.56	5.11	5.93	4.71	5.6	5.95
Israel	5.08	28	5.85	4.09	2.84	4.39	3.11	5.26	4.81	7.7	5.23	4.15	7.73
Italy	4.52	40	5.13	4.44	3.47	4.37	2.95	4.95	4.5	5.54	5.57	4.78	3.89
Japan	5.28	20	5.5	5.96	4.49	4.91	2.58	4.6	5.52	8.15	7.75	4.94	4.02
Kazakhstan	4.93	31	3.82	6.1	5.03	5.09	3.53	4.49	3.46	6.7	5.91	4.22	5.49
Latvia	5.21	22	5.31	4.64	4.05	4.95	4.59	5.29	4.42	7.8	4.78	5.06	5.26
Lebanon	4.67	35	5.25	3.66	3.81	4.17	4.42	5.32	3.65	4.37	4.75	4.19	7.22
Luxembourg	5.7	8	4.61	6.08	5.87	6.96	4.49	6.28	5.73	7.36	4.33	5.76	5.38
Madagascar	4.14	49	3.11	3.67	3.57	3.37	2.59	6.12	3.63	4.73	5.72	3.73	4.19
Mexico	5.21	23	4.44	5.14	4.08	5.63	3.37	6.45	4.68	7.46	6.26	4.1	6.21
Morocco	4.26	47	4	3.8	4.41	3.77	2.07	4.46	2.88	7.34	5	3.43	4.21
Mozambique	3.15	54	1.9	2.03	2.76	2.5	1.97	2.51	2.12	5.55	5.35	3.46	3.49
Netherlands	6.51	3	6.5	5.98	6	6.35	6	6.87	5.89	8.51	5.9	6.51	6.85
Panama	4.01	52	3.43	3.17	3.55	4.67	2.11	4.4	3.5	6.71	4.48	3.3	5.07
Peru	4.54	39	3.96	3.8	3.58	4.62	3.37	5.53	3.76	6.27	4.72	4.52	6.21
Poland	5.21	24	5.83	5.42	3.5	4.85	3.03	4.48	4.19	8.02	7.45	4.76	5.37
Puerto Rico	4.07	51	3.45	3.23	2.49	3.88	2.62	5.57	3.5	5.3	5.09	4	5.1
Qatar	6.69	1	5.81	6.89	6.44	6.57	6.76	7.3	6.41	8.01	7.16	5.91	6.81
Republic of Korea	5.49	14	5.18	6.83	4.94	5.72	3.77	4.84	4.46	7.43	8	4.19	5.69
Russian Federation	4.63	37	3.66	4.16	3.66	3.58	3.21	5.3	2.99	6.69	7.11	3.52	5.19
Saudi Arabia	4.4	41	3.57	4.94	4.03	4.43	1.94	3.46	3.09	6.89	5.51	4.06	6

Slovak Republic	4.34	43	5.32	2.68	3.21	3.81	2.97	4.34	3.64	5.91	7.9	4.77	5.08	3.16
Slovenia	5.18	25	5.52	4.88	3.7	5.51	3.47	5.3	4.77	5.53	7.68	5.92	5.32	4.13
Spain	5.38	16	4.95	5.23	4.41	6.19	3.9	5.87	5.15	5.78	6.99	5.37	5.15	5.64
Sudan	4.29	45	4.32	2.77	2.99	2.95	2.74	4.35	3.26	5.37	5.47	8.28	3.53	4.83
Sweden	5.37	18	5.31	4.39	4.07	5.3	4.36	5.08	4.6	5.6	7.95	6.46	5.47	5.43
Switzerland	5.68	9	5.1	5.11	5.29	6.32	3.78	5.84	6.03	6.4	8.72	4.98	5.37	5.09
Taiwan	6.33	4	5.99	6.68	6.18	6.09	4.25	6.04	5.62	6.39	9.03	6.51	6.57	6.25
Thailand	5.48	15	6.02	5.12	4.57	4.65	4.1	5.46	4.49	5.36	7.21	6.74	5.05	6.3
Turkey	5.05	29	5.28	5.04	3.86	4.65	3.06	5.61	5	6.15	6.75	6.91	4.65	5.55
United Arab Emirates	5.92	7	4.81	6.69	5.8	6.21	4.99	5.65	4.85	5.72	7.53	6.68	5.11	6.84
United Kingdom	4.94	30	5.53	3.77	5.43	4.46	3.27	4.84	4.64	5.74	6.22	5.46	4.93	5.36
United States	5.98	6	6.61	4.63	5.2	4.86	4.81	6.1	4.87	6.58	7.87	6.1	5.27	8.08
Uruguay	4.72	33	3.91	4.64	3.77	6.04	2.75	6.33	4.91	5.13	6.76	4.14	4.54	3.88

Sources: GEM Global Report 2018/19

NECI calculated in 10 point scale (1 = very bad e-ship context, 10 = very good e-ship context); EFCs average scores assessed in National Expert Survey in 9 point Likert scale (1=highly insufficient; 9=highly sufficient) re-scaled to 10 points for the purpose of NECI.

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