



GLOBAL ENTREPRENEURSHIP MONITOR





# THE INFLUENCE OF **GEM ON POLICY** 2017/18

# GLOBAL SPONSORS AND FOUNDING INSTITUTIONS



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# ABOUT GEM

**The Global Entrepreneurship Monitor (GEM) was first conceptualized in 1997 by two academics, one from London Business School and the other from Babson College. At that time, entrepreneurship was not a household name it is today and very little was known about the entrepreneurial eco-systems in countries around the world. The first reports were published in 1999 and involved ten countries, eight from the OECD together with Japan and the United States. Since then, GEM has grown to involve over 100 countries covering all geographic regions and all levels of economic activity. GEM can truly be considered to be global in its reach and currently covers 68% of the population which represent just over 86% of the world's GDP**

The core of GEM is the Adult population Survey (APS) and the National Expert Survey (NES) which involve structured and semi-structured interviews with a representative sample of the adult population in a country between the ages of 18 and 64 years and with key informant experts representing nine framework conditions of the entrepreneurial eco-system. For the APS, each country interviews a minimum of 2,000 respondents either face-to-face, by telephone or via the internet. The results are sent back to a GEM Data Team who harmonize the results, checks for validity and representation. By the end of 2017 GEM would have been in existence for 19 years and would have conducted APS interviews with just over 2,286,000 respondents asking in the region of 65 questions per interview and 28,000 interviews with key informant experts across 12 framework conditions.

The principle objectives of GEM are to:

- The levels of entrepreneurial activity vary from country to country
- To ascertain what factors in a country inhibit entrepreneurial activity and what factors enhance it, and
- What can be done to enhance entrepreneurial activity and SMME development in a country?

Each GEM country writes their own report which is normally done after the publication of a Global report that is launched at the GEM annual meeting in January/February following the year of collecting the data. In addition, over the past few years GEM has also published four special topic reports each year covering a wide range of topical subjects such as women entrepreneurship, youth entrepreneurship, entrepreneurship amongst seniors, entrepreneurial finance, social entrepreneurship, regional reports to name just a few.

GEM is widely used by academics to publish articles in accredited journals as well as for teaching purposes. Considerable media coverage in newspapers, social media and online is obtained after each report with public relations activities being covered by GEM global as well as by individual countries.

Academics and policy-makers, entrepreneurs and the businesses they create play a vital role in the development and well-being of society. They create much-needed jobs and, particularly in developing countries, play a critical role in the alleviation of poverty. As such there is an increased appreciation for and acknowledgement of the part played by small businesses in the economy. GEM contributes to this recognition with longitudinal studies and comprehensive analysis of entrepreneurial attitudes and activity across the globe. The GEM conceptual framework recognizes that entrepreneurship is part of a complex feedback system and that there are relationships between societal values, personal attributes and various forms of entrepreneurial activity. All these are influenced by the framework conditions (see GEM global report 2017/18) in the particular environment in which it takes place.

In 2016 and 2017 GEM published a series of Policy Briefs which looked at special initiatives that had taken place in a particular country that had had a pronounced influence of entrepreneurship and SMME development. These Briefs have been well received by policy-makers and businesses but they are not enough. A number of sponsors and potential sponsors of both national teams and GEM global have posed the question

*“...over the years you have compiled a huge repository of information on entrepreneurship and no doubt have the most authoritative and informative information on entrepreneurship in the world today. But, what has been done with this information apart from an academic perspective? Has GEM influenced policy in any way?”*

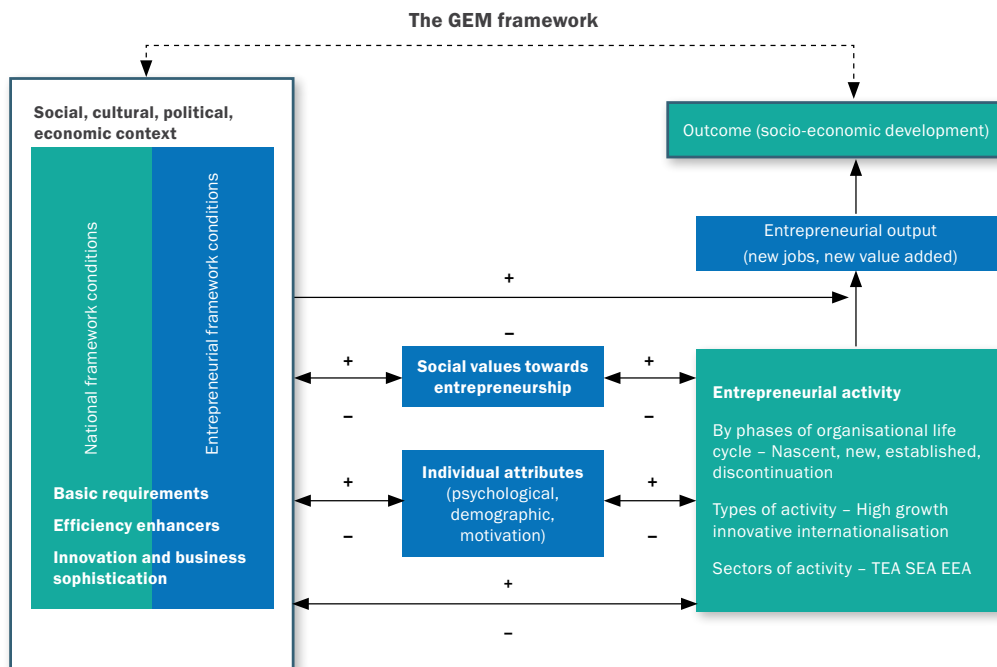
This is an extremely difficult question to answer as it is almost impossible to state that the results from GEM have categorically had a direct influence on policy in a country. However, we believe that there is evidence that it could have had an indirect influence on policy and this is the purpose behind this report.

*“Understanding causal influence is difficult in the best of circumstances for any activity as it is an especially complex task to assess impact and the role of research on public policy-making. Such assessments are difficult, first, because of the intrinsic nature of research and reed activities, and*

*second, because the goal is to achieve influence in dynamic processes with a multiplicity of actors”*

(Evert A. Lindquist: Discerning policy influence: framework for a strategic evaluation of the IDRC-supported research, September 2001).

It should be noted that the question of how research relates to the policy-making process is not a new one. Much has been written about this and the challenges faced of conducting policy-related research and discerning how influence is obtained in indirect and subtle ways.

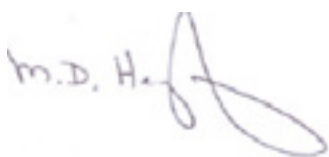


This led to the emergence of literature on “knowledge utilization” used extensively by social scientists.

Nowadays the situation with respect to policy making is more complex as there has been a significant change in the political landscape due to the growing number of specialist interests, business and other types of associations, lobbyists, think tanks and university-based research centres. To put a policy change down to one or two interventions is not possible as it could be due to a mixture of all inputs and interest groups that exert a strong influence on relevant government departments and international organizations. A wide range of participants could be involved in policy-making and could include:

- Government ministers, senior public servants and relevant departments either at a local, provincial, national or international level.
- Non-government participants such as businesses, associations, non-profit organizations and labour groups
- Participants outside of government or quasi-government such as academics, think tanks, university research centres, policy labs, media and journalists

All of which could overlap with one another.



Mike Herrington  
Executive Director : GEM Global

In addition, policy-making can be influenced by a multitude of different factors which could include;

- Changes in government
- Changes in the economy and technology, and
- Political and social unrest

No matter how complex the issue, it does not mean that GEM cannot have had some influence but we should have realistic expectations about the potential for influence.

We have selected a few GEM countries and tried to answer some key questions;

- Has GEM contributed to government policy either directly or indirectly?
- Who uses GEM information and where do they use it? Who are the stakeholders?
- Is GEM quoted on government and other stakeholder websites?
- Where has GEM been quoted in the media?

Nonetheless, it is fully recognized that it is not possible to show that GEM has had a direct influence on policy but there is sufficient evidence to show that it could have indirectly influenced certain policy decisions that have been taken.



# ACKNOWLEDGEMENTS

The author is indebted to the team leaders and members of the GEM countries who participated in this report and who have been mentioned at the beginning of each country summary. Without them the basic information required would not have been available and I hope this is of benefit to them.

My thanks go to Chris Aylett and Ingrid Copperman for their help in gathering information, to Francis Carmona and Alicia Coduras for help with collating the GEM data, to Marcia Cole and MeltWater for providing the media links and to Rothko Marketing for the design, layout and typesetting of this document.

## DEFINITIONS AND SOURCES OF INFORMATION

**Entrepreneurial Intentions** – Percentage of the adult population aged between 18 and 64 years (individuals involved in any stage of entrepreneurial activity excluded) who are latent entrepreneurs and who intend to start a business within three years.

**Total Early-stage Entrepreneurial Activity – TEA** - Percentage of the adult population between the ages of 18 and 64 years who are in the process of starting a business or already started a business (a nascent entrepreneur or owner-manager of a new business) which is less than 42 months old.

**Entrepreneurial Employee Activity – EEA** – Percentage of the adult population aged 18 to 64 years who as employees have been involved in entrepreneurial activities such as developing or launching new goods or services, or setting up a new business unit, a new establishment or subsidiary.

**Established Business Ownership Rate – EB** –Percentage of the adult population aged between 18 and 64 years who are currently an owner manager of an established business, i.e. owning and managing a running business that has paid salaries, wages or any other payments to the owners for more than 42 months.

**Entrepreneurial Spirit Composite Index** – on a national level is a composite index combining entrepreneurial awareness, opportunity perception and entrepreneurial self-efficacy. The factor score is presented by a numerical value indicating a country's relative spacing or standing on the "entrepreneurial spirit" (the latent factor). Countries with higher factor score are those for which the three underlying variables are also high. If and how this entrepreneurial spirit will be transformed into entrepreneurial activity depends on its interaction with societal values and national entrepreneurial conditions, as conceptualized in the GEM conceptual framework.

**T** – indicates that the ranking is the same for two or more economies



# Brazil

**GEM TEAM:** **Simara Greco** (team leader), Morlan Luigi Guimaraes, Paulo Alberto Bastos Junior, Vinicius Larangeiras de Souza

For more information about GEM Brazil, go to the link:

<http://gemconsortium.org/country-profile/46>



Brazil

**SMALL AND MEDIUM ENTERPRISES (SME) CONTRIBUTION TO GDP - 2015**

**27%**

The Brazilian economy is starting to emerge from a severe and protracted economic recession although it's emergence is projected to be both weak and slow. Consumer and business confidence is rising but unemployment remains high and is on the government's agenda for improvement. Nonetheless, the economy remains fairly closed which hampers competitiveness and limits access to important intermediary inputs. Domestic policy reforms are directed towards raising competitiveness including a major tax reform, lower administrative burdens and stronger infrastructure investment that should boost growth and ease the adjustment towards a more open economy. Strengthening vocational training will also help displaced workers to find new jobs.

In 2017, the total entrepreneurship rate in Brazil (TTE) was 20.3%, which means that approximately 48 million Brazilians were involved in the creation or maintenance of business, as an entrepreneur either in an early or an established stage. However, this rate is lower than when compared to 2015 at 39%.

The reason for this reduction could be attributed to the rate of established business ownership (EB), which changed from 19% in 2015 to 16% in 2017.

Entrepreneurial Intentions - 2017

**15.3%**

Total Entrepreneurship Activity (TEA) - 2017

**20.3%**

Entrepreneurial Employee Activity (EEA) - 2017

**0.7%**

Established Business rate (EB) - 2017

**16.5%**

## CONTRIBUTION OF GEM TO POLICY

The main contribution of GEM to policy in Brazil has been to stimulate the debate on the issue of entrepreneurship in the country and on the creation of employment and income distribution in society. SEBRAE (Serviço Brasileiro de Apoio às Micro e Pequenas Empresas), the main Brazilian institution to support and foster entrepreneurs and small businesses has an internal unit called the Strategic Management Unit (UGE) which conducts a large number of research studies of which GEM is one of their leading studies.

GEM data is used by several SEBRAE units as well as various government ministries including the Ministry of Planning and Economics and the Special Secretariat for Micro and Small Businesses.

It is difficult to identify the specific impact that GEM has had on policy but certain indicators such as opportunity/necessity, the participation of women, youth and seniors and TEA are often quoted. However, it can be said that the information provided by GEM has been used by SEBRAE that in turn contributes to public policy. For example, support for the approval of the *General Law on Micro and Small Enterprises*, the creation of the *Individual Micro Entrepreneur (MEI)* and the extensions of the limits of the *Super Simple*, an important SME tax framework legislation (complementary Law no. 155 of 2016) and the recent "renegotiation" of the SME debt campaign.

## WORLD BANK EASE OF DOING BUSINESS



## GEM ENTREPRENEURIAL SPIRIT COMPOSITE INDEX





## STAKEHOLDERS WHO USE GEM

SEBRAE is the major stakeholder and the results of GEM are made available to all their managers. Leading developers of services and products use the results to develop new products and to improve existing ones. For example, because of the strong interest in young people, SEBRAE offers several products to the public such as the *‘Entrepreneurship University Challenge’* a national competition operating through a virtual platform to stimulate entrepreneurial attitudes amongst young people. In addition, the SEBRAE National Entrepreneurship Education Program aims to expand, promote and disseminate entrepreneurial education at all levels of education.

## WHERE ARE ARTICLES PUBLISHED?

A number of media articles are published on the Brazilian GEM results. A few examples of these are given below:

### **The country registers an increase of 23% to 34.5% of Brazilians owners business**

<http://www.brasil.gov.br/economia-e-emprego/2015/04/campeao-em-empreendedorismo-brasil-gera-52-de-empregos>

### **Age group**

<http://www.brasil.gov.br/economia-e-emprego/2012/02/faixa-etaria>

### **Brazil entrepreneur in numbers**

<http://www.brasil.gov.br/economia-e-emprego/2012/02/brasil-empendedor-em-numeros>

### **Opportunity or necessity in Brazilian entrepreneurship**

<http://www.brasil.gov.br/economia-e-emprego/2012/02/opportunidade-e-necessidade>

## ENTREPRENEURSHIP PROGRAMS IN BRAZIL

Brazil has numerous programs for entrepreneurship of which a few (in Portuguese) are given below.

### **1. REDE SIMPLES**

This program is led by the Federal Government and aims to facilitate and simplify the process of formalizing micro entrepreneurs, as well as providing practical guidelines related to the “business life”, such as payment of taxes, certificate issues.

<http://www.portaldoempreendedor.gov.br/>

### **2. EAD SEBRAE**

This is a program of the Brazilian Service of Support to SME's - Sebrae, dedicated to the training of entrepreneurs with different profiles. It is an e-learning platform with numerous educational resources and a wide variety of topics.

<http://www.sebrae.com.br/sites/PortalSebrae/ead>

### **3. CREDIAMIGO**

It is South America's largest productive Microcredit program, which facilitates access to credit for thousands of entrepreneurs from the informal or formal sectors of the economy. It is managed by Banco do Nordeste and is part of the Federal Government's National Microcredit program.

<https://www.bnb.gov.br/crediamigo>

### **4. REDE MULHER EMPREENDEDORA – RME (WOMAN ENTREPRENEUR NETWORK)**

The RME works to empower and encourage women to realize their dreams of creating new businesses. It has several channels of information, content, tips and news about entrepreneurship.

<http://www.redemulherempreendedora.com.br/>



# Bulgaria

**GEM TEAM:** Veneta Andonova, Iskren Krusteff

For more information about GEM Bulgaria, go to the link:  
<http://gemconsortium.org/country-profile/139>

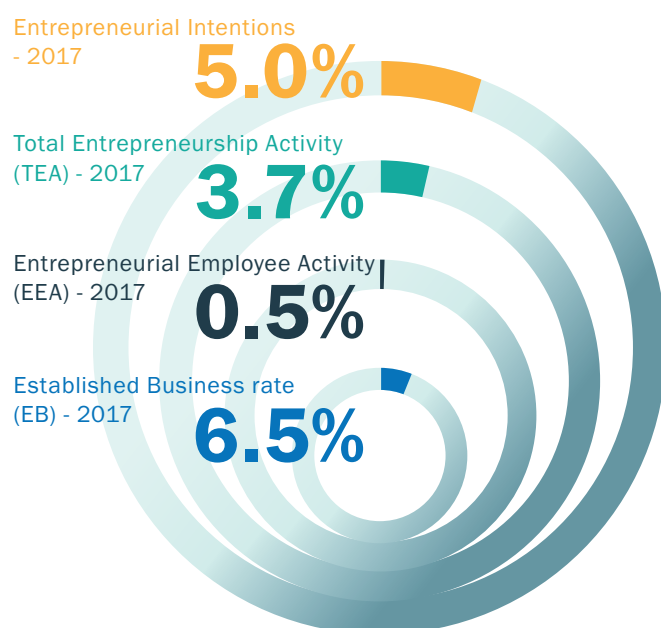


**SMALL AND MEDIUM ENTERPRISES (SME) CONTRIBUTION TO GDP - 2015**

**66%**

The current state of the entrepreneurial ecosystem in Bulgaria, a country with an efficiency driven economy, exhibits both positive and negative characteristics when compared with reference groups. Among the positive aspects are low levels of fear of failure, low taxes and good physical and commercial infrastructure and at least one sector, whose firms rely on advanced technology and innovation (IT).

The country is a member of the EU and has a relatively stable economic and political context. Aspects for improvement include one of the lowest early-stage entrepreneurial activity (TEA) rates combined with a low level of potential entrepreneurs; lack of effective programs for developing entrepreneurial skills and mindset in the primary and secondary education; businesses are concentrated mostly in retail and wholesale; entrepreneurship is not considered a national or local government priority; perceived corruption is high and the rule of law is perceived to be limited. None of the latter aspects have a quick or easy solution. However, the past year showed a slight increase in the early stage entrepreneurial activity.



## CONTRIBUTION OF GEM TO POLICY

GEM introduced the evidence-based multi-stakeholder dialogue for improving the economic environment and the entrepreneurial ecosystem in Bulgaria and recognized the key role of the entrepreneurship for the economy, demography, education reform and social change. Prior to GEM data collection and analysis, there was little primary entrepreneurship-specific comparable data and no multi-stakeholder dialogue or shared understanding about what entrepreneurship ecosystem is and what each actor's role is. The understanding of 'entrepreneurship' was also not consistent – google search primarily returned "construction entrepreneur" as a fit. As GEM Bulgaria's focus and activity advanced in focus and scale, the subject became better understood and talked about much more.

Public institutions, policy-makers, PhD students and media refer to the GEM report 2015/16, but its data is yet to be recognized as truly valuable and relevant by public stakeholders who create strategies and programs that are inspired by cross-country comparison and good practices.

## WORLD BANK EASE OF DOING BUSINESS



## GEM ENTREPRENEURIAL SPIRIT COMPOSITE INDEX



There are only a number of surveys related to entrepreneurship that get exposure in the media (directly or indirectly): The Innovation Index, the Global Competitiveness Index, GEDI which uses GEM data and the World Bank Doing Business ranking. The EU commission produced its annual Small Business Act Factsheets with GEM data in its Entrepreneurship chapter. Two years before

that Bulgaria had “n/a” in the factsheets as EC stopped using Eurostat.

GEM Bulgaria data is used by a number of researchers and we know that many Bulgarian graduate students accessed our data once it became available in 2016.

In 2016, organizations seeking funding through the EU operational programs administered by Bulgarian ministries relied on GEM data to support their bids.

The GEM Bulgaria 2015/16 highlighted the shortcomings of the local ecosystem regarding the quality of primary/secondary education, government support as well as lack of significant role models. The report also outlined creaky problems in the dominance of non-export oriented or innovation-driven businesses with ¾ not planning to create new jobs in the short term.

The GEM Bulgaria conference in October 2016 brought together high-profile members of other GEM teams, the Bulgarian president, a deputy prime minister and deputy ministers, mayors, CEOs, ambassadors, educators, entrepreneurs, media and students. The event was praised by many senior guests for its line-up, format, depth of discussion and relevance of topics: Stories of Growth - Scotland, Poland, UAE, Netherlands; Future: The high potential sectors for competitiveness; Keynotes on Finance, Human Resources, Culture, Public Policy, Support industries, Education; Balkans – a region of opportunity, as well as the reverse pitch Money talks.

The first GEM Bulgaria Awards acknowledged individuals, teams or organizations in six categories: Social entrepreneurship; Public sector project/initiative/instrument/practice with significant positive impact on the ecosystem; Partnership among public entities, private organizations and NGOs; Comeback of the year; Media product – product or initiative that has/had a positive impact on the societal perceptions about entrepreneurship and positive role models; NGO initiative led by a not-for-profit organization in support of the entrepreneurship. The inspiring and non-traditional award ceremony signaled to the ecosystem that each stakeholder can contribute and make a difference. The award ceremony was widely covered by the media.

In recognition of its impact, GEM Bulgaria was invited by the Norway Grants among a small number of organizations to consult on the final list of areas their next grant period will focus on.

A simple Google search on “data, entrepreneurship, Bulgaria” lists GEM Bulgaria as a top match.

GEM Bulgaria team members were invited to over 50 events over the past years as speakers, moderators, panelists, judges, mentors (10+ abroad), and also given 20+ interviews for newspapers, radio, TV and online media.

GEM educates local business leaders about the role they can play in the entrepreneurial community. Moreover, the financial model behind GEM requires much active networking and communications. This aspect is very hard to measure despite the fact that it expands bridges and builds a community around the idea that we need collective action to move things forward.

GEM provides legitimacy for the initiatives by other NGOs that focus on the promotion of entrepreneurship.

GEM Bulgaria helped to introduce entrepreneurship training in the School and Education Bill, which was successfully voted and adopted in 2015.

The JEREMY program of the European Investment Fund uses GEM data to benchmark the levels of innovation, technology and internationalization among Bulgarian entrepreneurs for the design of its entrepreneurship financing instruments.

GEM Bulgaria organized a joint event with The Netherlands Embassy to meet Bulgarian and Dutch entrepreneurs, discuss the similarities and opportunities in the two environments.

Thanks to the availability of data on the quality of entrepreneurial education at school in Bulgaria through GEM and access to good practices abroad, GEM Bulgaria has adapted and launched the “Entrepreneurs in class” initiative to support teachers and invite entrepreneurs in class;

Social Entrepreneurship is experiencing a hype in media, competitions and coincides with Operational program with EU funding. GEM Bulgaria had a very successful event for the launch of the Social Entrepreneurship report in June 2016 and added great value to the discussion of what SE is.

## STAKEHOLDERS WHO USE GEM

Many different stakeholders use GEM data and reports in Bulgaria as it is the only primary source of quantitative data that facilitates the analysis of entrepreneurship on an individual level and examines its evolution together with allowing cross-country comparisons

- Lawmakers
- Policy makers and administrators on national and local level
- Entrepreneurs
- Embassies
- Journalists
- Educational organizations
- Students in Bulgaria and abroad
- Business associations
- Think tanks



# Chile

**GEM team:** Vesna Mandakovic (team leader), Tomás Serey

For more information about GEM Chile, go to the link:

<http://gemconsortium.org/country-profile/50>



Chile has a comprehensive and well-recognized ecosystem to support entrepreneurship and innovation, with the active participation of a wide array of agencies and institutions ranging from government, the private sector, financial system and universities. Compared to other OECD (Organisation for Economic Co-operation and Development) countries, Chile ranks in the top position with respect to the pillars relating to public policies and regulations that facilitate the creation of new companies, and in government support programs to foster entrepreneurial activities.

Although declining slightly, GEM figures for 2017 confirm that Chile is a very entrepreneurial country: almost one third of the adult population declares to be participating in an entrepreneurship initiative, either in early stage or established business, and among those non-entrepreneurs, 45.8% indicate the intention to start a new business in the next three years.

**SMALL AND MEDIUM ENTERPRISES (SME) CONTRIBUTION TO GDP - 2015**

**20%**

Entrepreneurial Intentions - 2017

**45.8%**

Total Entrepreneurship Activity (TEA) - 2017

**23.8%**

Entrepreneurial Employee Activity (EEA) - 2017

**4.5%**

Established Business rate (EB) - 2017

**9.9%**

However, within the context of a contraction in the rate of growth of economic activity, 1.8% estimated GDP growth in the period 2014-2017, compared to an average growth of 5.3% in the previous years- the expectations are becoming less optimistic: while in 2013-2014, 67% of entrepreneurs had the perception of good business opportunities, this rate has decreased to 55% in 2017.

## CONTRIBUTION OF GEM TO POLICY

Entrepreneurship and innovation have become activities that are considered to be key factors to improve productivity and economic development. Over the years different governments have focused policy measures and support to foster entrepreneurship in different ways. In this way, GEM plays the role of being the only comprehensive and longitudinal study regarding these issues. Each year the Ministry of Economics attends the launch of the GEM report but it is difficult to categorically link GEM with actionable government policies. The primary concern and initiative of policy-makers was the need to improve regulations and hence GEM could have played a role in validating the importance of moving forward and changing things in the country.

Over the last decade a significant number of regulations have been implemented, covering a wide variety of topics related to entrepreneurship and innovation ranging from making it easier to start and close a business, seed capital, funding venture capital, vouchers for innovation, tax credits and R&D incentives to name a few.

## WORLD BANK EASE OF DOING BUSINESS



## GEM ENTREPRENEURIAL SPIRIT COMPOSITE INDEX





National Congress of Chile Building, Valparaíso.

## STAKEHOLDERS WHO USE GEM

GEM is used by scholars involved in academic research in the field of entrepreneurship especially at the Universidad del Desarrollo (UDD) where a number of papers have been published in world renowned academic journals.

## WHERE ARE ARTICLES PUBLISHED?

GEM Chile has received considerable coverage in the media, some examples of which are given below:

El Mercurio - Lunes 03 de julio de 2017

<http://www.economiaynegocios.cl/noticias/noticias.asp?id=375436>

El Mercurio - Lunes 20 de marzo de 2017

<http://www.economiaynegocios.cl/noticias/noticias.asp?id=345384>

El Mercurio - Lunes 27 de febrero de 2017

<http://www.economiaynegocios.cl/noticias/noticias.asp?id=339280>

## ENTREPRENEURSHIP PROGRAMS IN CHILE

Several programs aimed at improving the rate of entrepreneurship in the country, have been implemented in Chile. The programs introduced by the government include funding and training as well as bringing together the public sector, the private sector and universities.

Funds are provided mainly by Sercotec and Corfo with resources being between 3,5 million pesos to 200 million

pesos for each company, generally as non-refundable co-funded subsidy. For example, seed capital provided by Sercotec gives 3,5 million pesos for training, consultancy and investment in assets.

<https://www.corfo.cl/sites/cpp/emp-2016-semilla>

Development capital provided by Corfo gives up to 10 million pesos, focused on small companies with annual sales under 100 million pesos.

Start Up Chile (Corfo) is an accelerator focused on early stage companies with high international orientation provides 20 million pesos.

<http://www.startupchile.org/>

The S Factory (Corfo) a pre-acceleration program for startups led by female founders provides 10 million pesos.

<http://www.startupchile.org/es/programs/the-s-factory-3/>

Scale Up (Corfo) directed towards top performing companies incorporated in Chile and looking to scale in Latam and globally , provides 60 million pesos.

<https://www.corfo.cl/sites/cpp/emp-2016-scaleupexpansion?resolvetemplatefordevice=true>

Innovation (Corfo) provides financial support (up to 200 million pesos) to develop new products and services.

Training is provided by universities, foundations, incubators, co-work spaces, financial companies and government agencies, generally focused on young entrepreneurs, women, scholars, and early stage entrepreneurs.





# China

**GEM TEAM:** Jian GAO (team leader), Rui MU

For more information about GEM China, go to the link:  
<http://gemconsortium.org/country-profile/51>



Over the past two decades, entrepreneurship in China has grown at an exponential rate. It is bringing forth disruptive changes not only to China but increasingly also to the rest of the world.

In 2000, total revenues earned by Chinese state-owned industrial enterprises and those in the non-state-owned sector Chinese private enterprises were roughly the same at about 4 trillion yuan each. By 2013, while total revenues at state-owned companies had risen just over six fold, revenues in the non-state sector had risen by more than 18 times. Profits in the same period showed an even more remarkable difference, with state-owned companies showing a sevenfold increase but profits at non-state-owned ones increasing nearly 23 times.

**SMALL AND MEDIUM ENTERPRISES (SME) CONTRIBUTION TO GDP - 2015**

**58%**

China's entrepreneurial spirit runs deeper than just in business. It manifests itself in the government and in the desires of ordinary people. Premier Li Keqiang called for "mass entrepreneurship and innovation" and made it the leading agenda of China's national economic strategy. In his work report speech at this year's National People's Congress, Premier Li mentioned the word "innovation" 59 times and "entrepreneurship" 22 times. (source: Forbes Magazine).

Entrepreneurial Intentions - 2017

**15.3%**

Total Entrepreneurship Activity (TEA) - 2017

**9.9%**

Entrepreneurial Employee Activity (EEA) - 2017

**1.4%**

Established Business rate (EB) - 2017

**6.8%**

Over the past decade from 2007 to 2016, China has experienced an average total early-stage entrepreneurial activity level (TEA) of over 15%. Based on statistics from the State Administration for Industry and Commerce of China, an average of 15,000 new enterprises were registered every day during 2016. In addition, the socio-economic policies adopted by China have significantly improved the conversion of necessity-driven entrepreneurs to opportunity-driven entrepreneurs. In 2002, only 40% of entrepreneurs in China were opportunity-motivated and this has increased to 64% in 2016.

Youth have become more active in entrepreneurship in China. For example 42% of the entrepreneurs in 2016 were aged 18-34 years and now more than 70% of all entrepreneurs in China are considered to be youth. Importantly approximately 33% of entrepreneurs consider that they are innovative (ranked 12<sup>th</sup> worldwide in 2016), and around 37% of entrepreneurs expect more than 5 employees in the next five years (10<sup>th</sup>).

**WORLD BANK EASE OF DOING BUSINESS**



**GEM ENTREPRENEURIAL SPIRIT COMPOSITE INDEX**



**CONTRIBUTION OF GEM TO POLICY**

China joined the GEM consortium in 2002 and for the past 15 years has been considered to be the most authoritative and influential study on entrepreneurship in China used by policy makers and academics. With the implementation of the mass entrepreneurship and innovation programs in 2015, GEM reports and data have attracted even more attention. From the perspective of the government, GEM provides the government with all



the information necessary to compare entrepreneurial activities and environments with other innovation-driven economies. For academia, GEM has for the last 15 years, been the only database that monitors the development of entrepreneurship in China enabling them to make both vertical and horizontal analysis.

## STAKEHOLDERS WHO USE GEM

GEM has been used by many stakeholders in China, including the academic researchers, policy makers, as well as the entrepreneurs and investors.

The Chinese national GEM report series have been cited over 200 times in the CSSCI (Chinese Social Science Citation Index). Including the GEM global reports, GEM Chinese reports and the GEM related research papers together in the CNKI (Chinese Citation Database), increases to 3812.

The Chinese government considers GEM as an important data source for the international comparison of the entrepreneurship. Based on the GEM framework and national data, the Ministry of Human Resources and Social Security in China designed the regional entrepreneurial environment evaluation system. Moreover, the “TEA” index has been included in the “core index of the national talent development” by the Organization Department of the Central Committee of the CPC.

Following from the G20 Hangzhou Summit 2016, the Entrepreneurship Research Center on G20 Economies was established at Tsinghua University, currently the GEM partner in China. During the G20 Labour and Employment Ministerial Meeting in 2016 and the BRICS Labour and Employment Ministers’ Meeting in 2017, the GEM China team presented the background and data relating to entrepreneurship in G20 and the BRICS based on the GEM data.

## GOVERNMENT WEBSITES

A number of government websites use and quote the data from GEM China (many of these articles are written in Chinese):

1. The State Council of the People’s Republic of China has forwarded the entrepreneurship news based on the GEM data on its website.

<http://sousuo.gov.cn/s.htm?t=govall&q=%E5%85%A8%E7%90%83%E5%88%9B%E4%B8%9A%E8%A7%82%E5%AF%9F>

[http://www.gov.cn/xinwen/2016-03/23/content\\_5056910.htm](http://www.gov.cn/xinwen/2016-03/23/content_5056910.htm)

2. The Ministry of Commerce of the People’s Republic of China has released many news articles to introduce

the situation of entrepreneurship worldwide and in China based on the GEM global report and the GEM China report.

<http://search.mofcom.gov.cn/swb/searchList.jsp#>

<http://tzswj.mofcom.gov.cn/article/f/201603/20160301281386.shtml>

<http://www.mofcom.gov.cn/article/i/jy-jl/m/201001/20100106746261.shtml>

3. The Ministry of Human Resource and Social Security of the People’s Republic of China has introduced a report on entrepreneurship research in Shanghai based on the GEM framework and methodologies.

[http://www.mohrss.gov.cn/SYrlzyhshbzb/dongtaixinwen/dfdt/gzdt/201604/t20160414\\_238033.html](http://www.mohrss.gov.cn/SYrlzyhshbzb/dongtaixinwen/dfdt/gzdt/201604/t20160414_238033.html)

## ENTREPRENEURSHIP PROGRAMS

The Mass Entrepreneurship and Innovation Strategy, which is considered very important to the Chinese government was launched in 2014. The strategy aims to provide a better environment for popular entrepreneurship and mass innovation by lowering entry barriers, strengthening public services and encouraging college students, scientists and engineers to start new innovative businesses. For more information, see the *2016 policy brief of China*.

- Besides the Mass Entrepreneurship and Innovation Strategy, there are many
- more detailed programs for the entrepreneurship supported by the government,
- such as the fast track for business registration, different levels of equity funds for
- entrepreneurship and the programs in universities to promote the
- entrepreneurship among college students.

The Ministry of Science and Technology is in charge of the national science parks, incubators and the innovation spaces. The Ministry has a program to evaluate the incubators and innovation spaces for a fixed period of time. Based on the level of evaluation, the ministry gives different preferential policies and support to the entrepreneurs.

[http://www.most.gov.cn/mostinfo/xinxifenlei/fgzc/gfxwj/gfxwj2016/201604/t20160407\\_125040.htm](http://www.most.gov.cn/mostinfo/xinxifenlei/fgzc/gfxwj/gfxwj2016/201604/t20160407_125040.htm)

[http://www.most.gov.cn/mostinfo/xinxifenlei/fgzc/gfxwj/gfxwj2015/201509/t20150914\\_121587.htm](http://www.most.gov.cn/mostinfo/xinxifenlei/fgzc/gfxwj/gfxwj2015/201509/t20150914_121587.htm)



# Colombia

**GEM TEAM:** **Rodrigo Varela Villegas** (team leader), Jhon Alexander Moreno, María Camila Franco, Liyis Gomez, Sara López, Moisés Galvis, Fabián Osorio, Fernando Pereira, Diana Riveros, Francisco Matiz, León Darío Parra, Jairo Orozco, Myriam Carrillo, Gustavo García, Hernán Perez, Piedad Buelvas.

For more information about GEM Colombia, go to the link:  
<http://gemconsortium.org/country-profile/52>



**SMALL AND MEDIUM ENTERPRISES (SME) CONTRIBUTION TO GDP - 2015**

**40%**

The first decade of the 21<sup>st</sup> century, were years of growth for the Colombian economy, mainly due to the high prices of petroleum, minerals and other raw materials that Colombia produce and a significant change in the foreign investment in different sectors of the economy. Several changes were introduced in bilateral commerce, in new free trade agreements and in the macroeconomic policies. But the second decade has shown slow growth rates due to the decrease of the prices of petroleum and minerals and other Colombian products.

For the following years the economic perspectives are positive and for 2018 the economic projections show a growth between 2,4% to 2,8% significant better than the 1,8% expected for 2017. Agriculture, infrastructural development, petroleum, mining and services will be the positive forces for growth. The peace agreement will be a positive force specially for foreign investment and it will require a significant social investment to fulfill the terms of the agreement. Inflation is under control and the cost of capital is decreasing.

Entrepreneurial Intentions  
- 2017

**52.5%**

Total Entrepreneurship Activity  
(TEA) - 2017

**18.7%**

Entrepreneurial Employee Activity  
(EEA) - 2017

**1.8%**

Established Business rate  
(EB) - 2017

**8.7%**

There are significant factors to be considered and solved by the new government: the tax regulations, the unemployment rate, the high Gini coefficient, the implementation of a peace agreement and the incentives for productive investment

Nonetheless, the Colombian entrepreneurial ecosystem has been improving over the last 10 years, possibly attributed to the “Entrepreneurial Law” of 2006 and the decision by several players in the market to work actively on entrepreneurship development at different levels. Initially universities decided to promote research and the teaching of entrepreneurship while at the same time all levels of government and some private organizations gave support to many Colombians who were interested in developing their ideas and intellectual property. The TEA in the last 10 years has been above 20%, but the established business rate has been below 9%. The socio-cultural acceptance of entrepreneurship, the potential entrepreneurs and specially the intentional entrepreneurs have been among the highest worldwide.

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However, the “entrepreneurial pipeline” shows that there are significant fall offs from the intentional to the nascent entrepreneur and from the nascent to new and finally from new to established firms. Consequently, more effort has to be directed towards developing programs that minimize these fall-outs.

## CONTRIBUTION OF GEM TO POLICY

GEM data has been used at a national level by a number of government institutions such as the Ministry of Industry, Commerce and Tourism, the Ministry of Education, the National Planning Department, the Ministry of Information and Communications and the Ministry of Foreign Relations. For example, the Ministry of Education developed a handbook called “The culture of entrepreneurship in education establishments” to guide teachers at the primary and secondary educational level; The Ministry of Commerce, Industry and Tourism has also used GEM data to develop the National Public Policy on Entrepreneurship.

(<https://www.dropbox.com/sh/71ob5ez1b4vb4yd/AABpmk4Q13-lwPiJVOZoMyo8a?dl=0>)

The National Planning Department has used GEM data to establish the “National Development Plan

2010 – 2014”. They also used GEM data to write their document “Recommendations about competitiveness and innovation in the elaboration of a Regional Development Plan.”

GEM information has been used by the state and local governments to develop public policy to foster entrepreneurship. For example, the City Council of Bogotá approved a municipal project for the creation of the “Capital Banking” entity which included information on financing entrepreneurs derived from GEM data. Data from GEM was also used to formulate another project called “Income generation for informal sellers”. At the Valle del Cauca region entrepreneurial policy was formulated using GEM data.

At the private level the Chambers of Commerce, the NGOs, the Universities and the investment promotion offices had been users of different elements of the GEM reports in different ways: to support proposals, to create new activities, for teaching purposes, for orienting research and for designing new projects and new entrepreneurial ecosystems.

## WHERE ARE ARTICLES PUBLISHED?

The National government has published news about GEM on their websites. Some examples (in Spanish) are given in the links below:

<http://www.urnadecristal.gov.co/gestion-gobierno/sabas-que-colombia-es-pa-s-con-m-s-emprendedores>

[http://www.mincit.gov.co/publicaciones/5025/colombia\\_el\\_pais\\_con\\_mas\\_emprendedores\\_gem](http://www.mincit.gov.co/publicaciones/5025/colombia_el_pais_con_mas_emprendedores_gem)

[http://www.mincit.gov.co/minindustria/publicaciones/16236/indicadores\\_de\\_emprendimiento](http://www.mincit.gov.co/minindustria/publicaciones/16236/indicadores_de_emprendimiento)

[http://www.mincit.gov.co/englishmin/publicaciones/5035/colombia\\_the\\_country\\_with\\_most\\_entrepreneurs\\_gem](http://www.mincit.gov.co/englishmin/publicaciones/5035/colombia_the_country_with_most_entrepreneurs_gem)

There are also a number of specific policy programs on entrepreneurship in Colombia a few of which are given below:

<http://www.icesi.edu.co/cdee/>

<https://www.innpulsacolombia.com/>

<http://www.fondoemprender.com/SitePages/Home.aspx>

<http://www.procolombia.co/>

<https://www.bancoldex.com/portal/default.aspx>

A vast number of articles have been published giving news about GEM in Colombia. Many of these are available on the GEM website [www.gemconsortium.org](http://www.gemconsortium.org) but are too many to publish in this report.

## ENTREPRENEURSHIP PROGRAMS IN COLOMBIA

Some of the programs that are supporting entrepreneurship development in Colombia are:

### 1. ENTREPRENEURSHIP PROGRAMS AT SENA (AT NATIONAL LEVEL)

<http://archivo.sena.edu.co/Portal/Portafolio+Programas+Estratégicos/Emprendimiento+innovador/>

SENA, a governmental institution supports the entrepreneur in all stages of the entrepreneurial process, from the conception of the idea to the consolidation of the business; through different programs. They handle the National System of Creation and Incubation of Business, with alliances between the public, private and educational sector. They operate the SBDC methodology, the Fondo Emprender, a seed capital mechanism to finance new entrepreneurial projects and special programs for underrepresented populations

## 2. APPS.CO PROGRAM (AT NATIONAL LEVEL)

<https://apps.co/>

The program designed by the Ministry of Information and Communication Technologies and the “Vive Digital” plan has been implemented by several institutions around the country. The objective is to promote the creation of businesses based in ICT, prioritizing the development of mobile applications, web platforms, software and digital content. A specific methodology has been developed to provide very high level specialized support.

## 3. 3. ALDEA PROGRAM (AT NATIONAL LEVEL)

<https://www.innpulsa.com.co/es/oferta/programaaldea>

This program was designed by iNNpulsa (government organization) to support innovative entrepreneurs to overcome the growing obstacles that the companies are finding. It provides financial resources for the improvement of the enterprises supporting consultants and training. The idea is to improve the regional environments of innovation and entrepreneurship, so that they can reach the maximum potential of their business, through a community in which they can find key connections.



Both houses of parliament, namely the Senate and the Congress, in Bogotá, Colombia.

## 4. 4. ALIANZAS PARA LA INNOVACIÓN PROGRAM (AT NATIONAL LEVEL)

<http://alianzasparalainnovacion.co/>

This program was designed by Colciencias and the Colombian Confederation of Chambers of Commerce “Confecámaras”. The objective of this program is to increase the number of business with innovative capacities to increase regional competitiveness, through the promotion of a business innovation culture, the generation of capacities in innovation and the development of incremental innovation projects.

## 5. ¡EMPRÉNDELO! PROGRAM (AT NATIONAL LEVEL)

<http://www.confecamaras.org.co/cooperacion-ycompetitividad/emprendimiento>

This program was designed by International Development Bank and the Colombian Confederation of Chambers of Commerce “Confecámaras”. The program provides support to young entrepreneurs from 18 to 35 years old in two broad lines: (a) counseling for better business management and (b) access to financing. The program has three components: (i) Strengthening Local Entrepreneurial Ecosystem, (ii) Offer of Business Services and (iii) Knowledge Management and Strategic Communication.

## 6. CENTRO DE DESARROLLO DEL ESPÍRITU EMPRESARIAL AT UNIVERSIDAD ICESI (AT LOCAL LEVEL)

<http://www.icesi.edu.co/cdee/>

Centro de Desarrollo del Espíritu Empresarial at Universidad Icesi offers different educational programs in each one of the stages of the entrepreneurial process: Generation and evaluation of ideas, Business Model Creation, Business Career Plan, Business consulting, and different assistance programs to help the creation and development of business. The Centro Alaya, the Start-Upcafe and the Propyme project are the main extension activities that the Center has to support entrepreneurs in different stages of development. The research activity has been mainly in the areas of: entrepreneurial education, development of entrepreneurship and entrepreneurial culture, business creation, entrepreneurial leaders, family business management, and SME management. It has several facilities and programs to support entrepreneur’s development. In 2017 they started a Master Program in Entrepreneurship, the first one in the country.

## **7. CENTRO DE EMPRENDIMIENTO AT UNIVERSIDAD DEL NORTE (AT LOCAL LEVEL)**

<http://www.uninorte.edu.co/web/centro-deemprendimiento/servicios>

The Centro de EMPRENDIMIENTO at Universidad Del Norte offers several activities of motivation and incubation through: entrepreneurship workshops, business fairs, calls for seed and growth capital, training to developed ideas, formulation of business plans.

## **8. RUTA N MEDELLÍN PROGRAM'S (AT LOCAL LEVEL)**

<http://www.rutanmedellin.org/es/oferta/empresarios-yemprendedores>

Ruta N Medellín offers several programs as: Vivelab Medellín, Financing for the Marketing of Technologies, Financing for Expansion, Financing for Growth, Ruta N Capital, and Innovation for All. These programs allow to entrepreneurs: create and strengthen their business through basic and advanced counseling, resources, training and financing.

## **9. ENTREPRENEURSHIP AND INNOVATION PROGRAM (AT LOCAL LEVEL)**

<https://hubbog.com/emprendimiento-innovacion/>

This program was designed by HubBOG. The program helps to entrepreneurs to: validate an innovative idea, increase network of allies, achieve exponential sales, expand in Colombia, make contacts with business from Asia, Europe and Latin America, find investors, and update the business model to reduce costs and provide better service.

## **10. ENTREPRENEURIAL PROGRAMS AT CHAMBER OF COMMERCE OF CALI (AT LOCAL LEVEL)**

<http://www.ccc.org.co/programas-y-servicioempresariales/centro-crecimiento-empresarial/>

These programs were designed by Chamber of Commerce of Cali that offers: accompaniment in the process of business creation, orientation in several business topics, advising to carry out registration procedures, accompaniment to connect business with new markets, strengthening of productive chains, and accompaniment to detonate the entrepreneurial and innovative potential.

## **11. CREATIVATE PROGRAM (AT LOCAL LEVEL)**

<https://www.comfandi.com.co/persona/cali/fomentoempresarial/emprendimiento>

The program was designed by Comfandi. The program offers training for the development of viable business ideas through theoretical - practical methodologies focused on strengthening competencies, innovation and creativity. Also, support to business with administrative, productive and commercial advises that allow the activation and acceleration to contribute to its strengthening and competitiveness.

## **12. BUSINESS DEVELOPMENT PROGRAM (AT LOCAL LEVEL)**

<https://www.comfatolima.com.co/talleres-gratuitos-eninnovacion-y-emprendimiento>

The program was designed by Comfatolima. It seeks to support entrepreneurs in the creation and promotion of business and labor formalization. Also, it helps businesses to Increase their productivity based on themes of creativity, innovation and technological development.

## **13. INNOVASUCRE AT CECAR (AT LOCAL LEVEL)**

<https://www.cecar.edu.co/cede>

This program was designed by Centro de Emprendimiento y Desarrollo Empresarial at Corporación Universitaria del Caribe (CECAR). This program of social innovation seeks the reduction of structural gaps that restrict the promotion of technology-based business, such as low appropriation of critical thinking, high rates of illiteracy, little promotion of ICT culture and entrepreneurship in educational institutions, low rates of appropriation of ICTs, gender inequality and child labor.

## **14. CAMPUS NOVA AT PONTIFICIA UNIVERSIDAD JAVERIANA DE CALI**

<https://www.javerianacali.edu.co/oficina-de-emprendimiento>

The entrepreneurship office of the Universidad Javeriana de Cali offers an accompanying model for entrepreneurial development. This model is composed of informative talks, workshops mentoring consultancies and spaces for coworking.





# Croatia

**GEM TEAM:** **Slavica Singer** (team leader), Nataša Šarlija, Sanja Pfeifer, Sunčica Oberman Peterka

For more information about GEM Croatia, go to the link:  
<http://gemconsortium.org/country-profile/54>



Since 2002 Croatia has been using the GEM conceptual framework to survey entrepreneurial potential in the country. Over this period it has provided useful insights about trends and patterns of entrepreneurial activity in Croatia which has attracted the attention of policy makers. Croatian GEM indicators are compared with EU averages in order to provide more meaningful information for policy decision makers.

A dramatic drop of perceptions about business opportunities in 2009 was followed by a very slow recovery – being on the level of only 25% in comparison with EU average of 37% (2016).

**SMALL AND MEDIUM ENTERPRISES (SME) CONTRIBUTION TO GDP - 2015**

**56%**

Entrepreneurial Intentions - 2017

**17.5%**

Total Entrepreneurship Activity (TEA) - 2017

**8.9%**

Entrepreneurial Employee Activity (EEA) - 2017

**4.8%**

Established Business rate (EB) - 2017

**4.4%**

## CONTRIBUTION OF GEM TO POLICY

GEM Croatia surveys are well referenced in several major Croatian strategic documents related to entrepreneurship development, women's entrepreneurship, social entrepreneurship and entrepreneurship education. In addition, GEM Croatia reports are used in studies/reports relevant to policy decision makers in specific topics, like SMEs policy reports, on consultancy services market for SMEs, or are used for sub-national (regional) development strategic documents. Referencing on GEM surveys covers a broad span, from definitions to indicators used for analytical and monitoring purposes.

### Croatian SME Observatory Report 2013

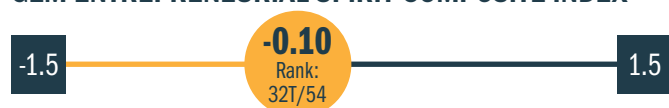
– in Croatian language only

**Izvešće opservatorija malog i srednjeg poduzetništva u Republici Hrvatskoj 2013** <https://www.mingo.hr/public/documents/Izvje%C5%A1taj%20opservatorija%20MSP%202013.pdf>

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This publication was produced by the Ministry of Entrepreneurship and Crafts with financial help from European Union as part of a technical assistance project to support Croatia in policy activities focused on strengthening the SME sector. GEM Croatia findings were used to complement data on demography and financial performance of SMEs. Specifically, data on cultural values, individual attributes (perception of opportunities and intentions to start a business) and entrepreneurial activity (TEA), differentiated according to age and gender,



constituted the main body of explaining why Croatia experienced one of the slowest exits from recession which started in 2009.

#### **Strategy of entrepreneurship development in the Republic of Croatia 2013-2020**

– in Croatian language only

**Strategija razvoja poduzetništva u Republici Hrvatskoj, 2013. – 2020.**

<https://poduzetnistvo.gov.hr/UserDocsImages/arhiva/Strategy-HR-Final.pdf>

In developing the basic strategic document on entrepreneurship, the Croatian Ministry of Entrepreneurship and Crafts used GEM Croatia reports as well as GEM 2010 Women's Report (<http://gemconsortium.org/report>) for identifying levels of entrepreneurial activities on individual level, as well as perception about the quality of entrepreneurial ecosystem. GEM data complemented statistical data on SMEs demography and its financial performance. This document also identified TEA indicator for monitoring changes in entrepreneurial potential of Croatia (connected to the Goal 3, Promotion of entrepreneurship)

#### **Strategy of women entrepreneurship development in the Republic of Croatia 2014-2020**

<https://poduzetnistvo.gov.hr/UserDocsImages/arhiva/Strategy%20of%20Women%20Entrepreneurship%20Development%20in%20the%20Republic%20of%20Croatia%202014%20-%202020.pdf>

Croatia is one of the few countries with a strategic document focused on women entrepreneurship. Major inputs for this document has been provided by GEM Croatia surveys. Identified trends and patterns of cultural values, individual attributes and entrepreneurial activity from the gender perspective built the framework for formulating vision, goals and strategic trajectories in order to close the existing gender gap.

This strategic document also identified the GEM TEA indicator as a key indicator for monitoring the process of strengthening women's entrepreneurship in Croatia, i.e. the closing the existing gender gap (connected to the Goal 4, Promotion of women's entrepreneurship).

#### **Strategy of social entrepreneurship development in the Republic of Croatia for the period 2015-2020**

– in Croatian language only

**Strategija razvoja društvenog poduzetništva u Republici Hrvatskoj za razdoblje 2015-2020**

<http://www.esf.hr/wordpress/wp-content/uploads/2015/02/Strategija-razvoja-dru%C5%A1tvenog-poduzetni%C5%A1tva-u-RH-za-razdoblje-2015-2020.pdf>

A key issue in working on the strategic document on social entrepreneurship was how to define social entrepreneurship. The working group finally decided to use the GEM definition of social entrepreneurship, acknowledged in the document.

#### **Strategy on learning for entrepreneurship 2010-2014**

– in Croatian language only

**Strategija učenja za poduzetništvo 2010. – 2014.**

[http://www.hzz.hr/UserDocsImages/Strategija\\_ucenja\\_za\\_poduzetnistvo\\_2010-2014.pdf](http://www.hzz.hr/UserDocsImages/Strategija_ucenja_za_poduzetnistvo_2010-2014.pdf)

The analytical part of this document is based on other sources as well as on recommendations from GEM Croatia's reports covering period 2002 - 2007 related to education for entrepreneurial competences. Since the strategy has been designed to support life-long education for entrepreneurship, the perception of experts about contribution of education in providing young people with entrepreneurial competences both at school stage (primary and secondary) and post-school stage (tertiary) was a very useful insight in this component of the entrepreneurship ecosystem. This component was evaluated as one of the weakest which led to recommendations emphasizing the need to expose all young people to entrepreneurial experiences during their formal school education, as well to provide such experiential learning across campus on post-school level, with adequate investment in providing teachers' skills for delivering experiential learning in the field of entrepreneurship.

#### **Strategic development documents on sub-national (local) level**

Many local governments are using GEM Croatia reports for assessing local entrepreneurial potential, based on indicators about individual attributes and activity. One example is the Development strategy of Osijek-Baranya County 2006-2010 (in Croatian language only: Strategija razvoja Osječko-baranjske županije 2006-2010)

<http://www.obz.hr/hr/index.php?tekst=216>

#### **GEM contribution to the country's policy monitoring and evaluation**

GEM indicator on Total early entrepreneurial activity (TEA) is specifically identified as a monitoring and evaluating tool in two strategic documents (**Strategy of entrepreneurship development in the Republic of Croatia 2013-2020** and **Strategy of women entrepreneurship development in the Republic of Croatia 2014-2020**) which significantly contributes to the visibility of the GEM survey in Croatia, not only by policy-decision makers but by implementing parties.

## **GEM CONTRIBUTION TO POLICY ORIENTED REPORTS OF INSTITUTIONS OUTSIDE OF THE GOVERNMENT**

GEM Croatia reports are very often used in policy oriented reports on SMEs or other various topics related to SMEs:

### **Small and Medium Enterprises Report – Croatia 2016, including the results of GEM – Global Entrepreneurship Monitor Research for Croatia for 2015**

<http://www.cepor.hr/wp-content/uploads/2015/04/Cepor-izvjesce-2016-ENG-web.pdf>

Such reports are published by the Policy Center for Entrepreneurship and SMEs – CEPOR from 2011 and can be found on the website:

<http://www.cepor.hr/publikacijepolicy-dokumentiprezentacije/izvjesce-o-malim-i-srednjim-poduzecima/>

## **CROATIA CONSULTANCY MARKET STUDY 2014**

[www.cepor.hr/wp-content/uploads/2015/07/EN-Croatia-Consultancy-Market-Study.pdf](http://www.cepor.hr/wp-content/uploads/2015/07/EN-Croatia-Consultancy-Market-Study.pdf)

Croatia Consultancy Market Study was produced by the Policy Center for Entrepreneurship and SMEs – CEPOR and was a part of the project for transferring knowledge, experience, and best practice of the European Bank for Reconstruction and Development's Business Advisory Services to HAMAG INVEST, the Croatian Agency for SMEs and Investments, after twelve years of activities in Croatia. GEM Croatia data were used to identify weak points in entrepreneurial ecosystem in order to identify gaps in demand and supply of consultancy services. The study has been intended to enable HAMAG INVEST to make further interventions in the process of development of SME consultancy market in Croatia.



# Ecuador

**GEM TEAM:** Virginia Lasio (team leader), Andrea Samaniego, Jack Zambrano, Guido Caicedo, Xavier Ordeñana & Edgar Izquierdo

For more information about GEM Ecuador, go to the link:

<http://gemconsortium.org/country-profile/57>



Despite the high entrepreneurial activity rates in Ecuador, the entrepreneurial ecosystem has only been moderately favorable over the years. According to the Ecuadorian experts' opinions, the lack of financial support followed by an onerous regulatory environment have been the main reasons for lack of growth and entrepreneurial activity.

The most favourable conditions in 2017 were physical infrastructure and cultural and social norms. Issues like labor flexibility, tax incentives, investment friendly regulatory framework, a legislation that incorporates new forms of funding, and the reduction of complexity and length of paperwork, were some of the recommendations given by the experts.

The impact of Ecuadorian businesses on job creation remains, in that 72.8% of the businesses have one owner and low expectations of job creation. For the next 5 years, almost 31% of nascent businesses, 48% of new businesses and 47% of those who have an established business do not expect to generate any jobs.

**SMALL AND MEDIUM ENTERPRISES (SME) CONTRIBUTION TO GDP - 2015**

**25%**

Entrepreneurial Intentions - 2017

**48.2%**

Total Entrepreneurship Activity (TEA) - 2017

**29.6%**

Entrepreneurial Employee Activity (EEA) - 2017

**0.5%**

Established Business rate (EB) - 2017

**15.4%**

## CONTRIBUTION OF GEM TO POLICY

GEM is the only formal study on entrepreneurship made by a university in Ecuador. The results contribute to universities who use the data for research purposes as well it being used by government institutions, Chambers of Commerce and private institutions.

The results from GEM Ecuador have led to changes in the way certain regulations have been enforced. For example, making it easier to start a business, to register a company and reducing red tape by relaxing certain labour laws that previously prevented businesses from expanding. GEM results have also helped to make it easier for businesses to obtain finance both to start and expand businesses. Publicity obtained through GEM has helped to make entrepreneurship a more acceptable and sought after career choice.

However, there is no direct correlation between GEM and the use of the results towards policy-making.

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## STAKEHOLDERS WHO USE GEM

The Entrepreneurship and Innovation Alliance (*Alianza para el Emprendimiento e Innovación - AEI*) uses the GEM Ecuador data to calculate the AEI index which analyses the entrepreneurial Ecuadorian ecosystem through seven domains ; financing, administrative

dynamization (policy and regulatory framework), culture, human talent, markets, innovation and support and entrepreneurial advice.

The San Francisco de Quito University (USQF) teaches entrepreneurship as an undergraduate subject and GEM is used as a vital input to provide information about the entrepreneurial ecosystem of the country.

The Centro de Competitividad (Competitive Centre) started a project called Innovative Women as a result of work done by Virginia Lasio, the dean of ESPAE

Unfortunately GEM results are not currently put onto government websites.

## WHERE ARE ARTICLES PUBLISHED?

GEM results are extensively quoted in both the public and private media. For example, in 2016 the results of 2015 report were quoted as shown in a few examples given below:

<http://www.elcomercio.com/actualidad/emprendimientos-candidatos-elecciones-presidencia-ecuador.html>

<http://www.eluniverso.com/noticias/2017/01/03/nota/5978173/emprendedores-tendran-espacio-convertir-ideas-negocios>

<http://www.eluniverso.com/noticias/2017/04/30/nota/6159832/pais-se-dificulta-sostener-iniciativa>

<http://www.eluniverso.com/noticias/2017/01/02/nota/5977213/perseverancia-fue-clave-emprendedores-que-lograron-consolidarse>

<http://www.eluniverso.com/noticias/2017/06/27/nota/6251794/es-posible-emprender-llegar-tener-libertad-financiera>

<http://www.eluniverso.com/noticias/2017/06/26/nota/6249571/ahorros-familia-se-apoyan-emprendedores>

<http://www.eluniverso.com/noticias/2017/06/15/nota/6231883/ecuador-continua-tope-emprender>

<http://www.elcomercio.com/opinion/analisis-economia-necesidad-emprendimientos-opinion.html>

<http://www.eltelegrafo.com.ec/noticias/economia/8/companias-grandes-y-pequenas-promueven-a-microempresarios>

<http://www.eltelegrafo.com.ec/noticias/economia/8/los-emprendedores-alternan-su-profesion-con-sus-microempresas>

<http://www.eltelegrafo.com.ec/noticias/economia/8/ecuador-sigue-con-la-tea-mas-alta-de-la-region>

<http://www.eltelegrafo.com.ec/noticias/economia/8/emprendimientos-tecnologicos-ganan-terreno-en-el-pais>

<http://www.eltelegrafo.com.ec/noticias/economia/8/emprendimientos-sirven-como-alternativa>

## ENTREPRENEURSHIP PROGRAMS

In Ecuador there are a number of government programs associated with entrepreneurship, links of which are:

### 1. BANCO DE IDEAS: GOVERNMENT PROGRAM - SENESCYT

<http://www.bancodeideas.gob.ec/>

### 2. EMPRENDE ECUADOR: GOVERNMENT PROGRAM - MCPEC

<http://www.emprendecuador.ec/>

Liga de Emprendedores Extraordinarios: Government program – CFN

<https://emprendedores.cfn.fin.ec/>

CRISFE – Private program – Banco del Pichincha

<http://www.crisfe.org/programas/emprendimiento/>



# Germany

**GEM TEAM:** Rolf Sternberg (team leader), Matthias Wallisch, Armin Baharian, Natalia Gorynia-Pfeffer, Johannes von Bloh

For more information about GEM Germany, go to the link:

<http://gemconsortium.org/country-profile/64>



**SMALL AND MEDIUM ENTERPRISES (SME) CONTRIBUTION TO GDP - 2015**

**53%**

Entrepreneurship in the form of new ventures is still a relatively rare event in Germany, even when compared to other innovation-driven economies. This is quite surprising considering the high priority the topic has been given over the last two decades by the Federal and Regional Governments. However, a booming economy with very low unemployment rates and excellent job opportunities in all segments of the labour market makes entrepreneurship and starting a firm a relatively less attractive option, given the high opportunity cost of leaving a well-paid and rather secure job.

In Germany, entrepreneurs who start a new business and become self-employed are more numerous than those who become self-employed due to a lack of employment alternatives. Migrant entrepreneurs in Germany show an especially high level of entrepreneurial activity in the first years of them becoming citizens as opposed to the indigenous population.

Germany's adult population is more pessimistic than the citizens of most comparable GEM countries as regards future entrepreneurial opportunities, and fear of failure is frequently cited as a reason for not wanting to start a business.

Entrepreneurial Intentions  
- 2017

**7.2%**

Total Entrepreneurship Activity  
(TEA) - 2017

**5.3%**

Entrepreneurial Employee Activity  
(EEA) - 2017

**5.7%**

Established Business rate  
(EB) - 2017

**6.1%**

Overall, Germany's strengths include its physical infrastructure, government programs and intellectual property rights. In contrast, the school-based preparation for self-employment, engagement of policymakers (regulations, taxes) as well as the social values and norms are assessed as rather negative.

## CONTRIBUTION OF GEM TO POLICY

GEM is considered to be a well-known, highly accepted and unique data source for cross country and intertemporal comparisons of entrepreneurial activities and entrepreneurial attitudes. The data is used by many German universities, non-university institutes, government policy agencies and economic support institutions at a federal level. Some examples of the contributions of GEM are given below.

### 1. UNIVERSITIES AND TECHNICAL COLLEGES:

HHL Leipzig Graduate School of Management: Analysis of entrepreneurial activities in Germany. Leipzig, 2016.

<http://fdp.fraktion.nrw/sites/default/files/uploads/2016/11/28/gruenderstudiehhlpdf28112016.pdf>

Institut für Mittelstandsforschung der Universität Mannheim (ifm Universität Mannheim), Institut für sozialpädagogische Forschung Mainz (ism Mainz): Gründungspotenziale von Menschen mit ausländischen

## WORLD BANK EASE OF DOING BUSINESS



## GEM ENTREPRENEURIAL SPIRIT COMPOSITE INDEX



## THE INFLUENCE OF GEM ON POLICY

Wurzeln: Entwicklungen, Erfolgsfaktoren, Hemmnisse.  
Studie im Auftrag des Bundesministeriums für Wirtschaft  
und Energie (BMWi). Mannheim 2017.

[http://www.existenzgruender.de/SharedDocs/Downloads/DE/Abschlussbericht-Gruendungspotenziale-von-Menschen-mit-auslaendischen-Wurzeln.pdf?\\_\\_blob=publicationFile](http://www.existenzgruender.de/SharedDocs/Downloads/DE/Abschlussbericht-Gruendungspotenziale-von-Menschen-mit-auslaendischen-Wurzeln.pdf?__blob=publicationFile)

## 2. NON-UNIVERSITY RESEARCH INSTITUTIONS:

Institut der deutschen Wirtschaft Köln (IW Köln):  
Entrepreneurial culture and start-ups. Could a cultural shift  
in favour of entrepreneurship lead to more innovative start-  
ups? Cologne, 2016

<https://www.iwkoeln.de/studien/iw-policy-papers/beitrag/klaus-heiner-roehl-unternehmensgruendungen-262911>

Institut der deutschen Wirtschaft Köln (IW Köln):  
Gründungsförderung in Deutschland. Ein Aktionsplan gegen  
sinkende Gründerzahlen, Cologne 2015

<http://doku.iab.de/externe/2015/k150707r01.pdf>

Zentrum für Europäische Wirtschaftsforschung (ZEW):  
Unternehmensdynamik in der Wissenswirtschaft in  
Deutschland 2014. Gründungen und Schließungen  
von Unternehmen. Gründungsdynamik in den  
Bundesländern. Internationaler Vergleich. Akquisition  
von jungen Unternehmen als Innovationsstrategie.  
Mannheim 2016

[http://www.e-fi.de/fileadmin/Innovationsstudien\\_2016/StuDIS\\_03\\_2016.pdf](http://www.e-fi.de/fileadmin/Innovationsstudien_2016/StuDIS_03_2016.pdf)

Brixy, Udo; Schrüfer, Lisa; Sternberg, Rolf; Bloh, Johannes  
von: Unternehmensgründungen in einer alternden  
Gesellschaft: Ungenutzte Potenziale bei Frauen und  
Älteren. Institut für Arbeitsmarkt- und Berufsforschung  
Nürnberg 2016 (IAB-Kurzbericht Nr. 27/2016).

<http://doku.iab.de/kurzber/2016/kb2716.pdf>

KfW Research: KfW-Gründungsmonitor 2016.  
Arbeitsmarkt trübt Gründungslust deutlich – Innovative  
Gründer behaupten sich

<https://www.kfw.de/PDF/Download-Center/Konzernthemen/Research/PDF-Dokumente-Gr%C3%BCndungsmonitor/Gr%C3%BCndungsmonitor-2016.pdf>

Hamburgisches Weltwirtschaftsinstitut gGmbH (HWWI):  
Gründungsgeschehen und -förderung in Hamburg.  
Hamburg 2016

<http://hwwi.org/fileadmin/hwwi/Publikationen/>

[Publikationen\\_PDFs\\_2016/Gruendungen\\_in\\_Hamburg\\_Abschlussbericht\\_260916\\_FINAL.pdf](#)

Handelsblatt Research Institut:

Eine Wachstumsstrategie für das digitale Zeitalter. Studie  
im Auftrag des Bundesministeriums für Wirtschaft und  
Energie. November 2016.

[http://research.handelsblatt.com/assets/uploads/Wachstumsstrategie\\_Digitales\\_Zeitalter.pdf](http://research.handelsblatt.com/assets/uploads/Wachstumsstrategie_Digitales_Zeitalter.pdf)

A recent paper published entitled “the Effects of  
Digitalization on Gender Equality in the G20 Economies  
(May 2017)

[http://www.w20-germany.org/fileadmin/user\\_upload/documents/digital\\_women-final\\_report.pdf](http://www.w20-germany.org/fileadmin/user_upload/documents/digital_women-final_report.pdf)

The section on gender gaps in entrepreneurial activities  
is based almost entirely on GEM data.

It was published to coincide with the recent G20 summit  
in Hamburg, and was a background document to the  
‘Women 20 Dialogue’ section. An executive summary  
was provided to participants of the W20, which included  
Christine Lagarde and Angela Merkel.

## STAKEHOLDERS WHO USE GEM

**There is a high probability that GEM data is used from  
time to time for policy discussions but the GEM team  
is not part of those government circles and there is no  
absolute proof that GEM plays an active role in policy  
formulation. However, there are numerous documents  
that have been published over the past 17 years that  
could indicate such influence:**

Expertenkommission Forschung und Innovation (EFI):  
Gutachten zu Forschung, Innovation und technologischer  
Leistungsfähigkeit Deutschlands. Berlin 2017

This important and highly acknowledged Commission has  
since 2008 provided, on behalf of the federal government,  
a report submitted to the German Bundestag on research,  
innovation and technological competitiveness of Germany  
compared with other countries. In several of these reports  
the researchers have used GEM data to compare the  
situation in Germany with other countries. Leader of GEM  
Germany has often been asked for additional data and  
small analysis based on GEM so that GEM is well-known  
and accepted within the Commission.

<http://dip21.bundestag.de/dip21/btd/18/112/1811270.pdf>

Deutscher Industrie- und Handelskammertag (DIHK):  
Gründungsinteresse sinkt auf neuen Tiefpunkt. DIHK-  
Gründerreport. Berlin 2016



The Association of German Chambers of Commerce and Industry (Deutscher Industrie- und Handelskammertag, DIHK) is the central organisation for 79 Chambers of Commerce and Industry, CCI (Industrie- und Handelskammern, IHKs) in Germany. All German companies registered in Germany, with the exception of handicraft businesses, the free professions and farms, are required by law to join a chamber. In their annual start-up reports, the DIHK usually refers to GEM data and to the most recent GEM country report

[http://www.leipzig.ihk.de/fileadmin/user\\_upload/Dokumente/EuU/DIHK-Gruenderreport\\_2016.pdf](http://www.leipzig.ihk.de/fileadmin/user_upload/Dokumente/EuU/DIHK-Gruenderreport_2016.pdf)

Chambers of Commerce and Industry refer also to the GEM country report on their websites:

<http://www.hannover.ihk.de/ihk-themen/gruendung-sicherung-nachfolge/aktuell-gruendung-nachfolge/motive.html>

Federal Ministry of Economic Affairs and Energy (BMWi): Unternehmensgründungen und Gründergeist in Deutschland, Zahlen und Fakten. Berlin 2015.

[http://www.exist.de/SharedDocs/Downloads/DE/Zahlen-Fakten-Unternehmensgruendungen-Deutschland-2015.pdf?\\_\\_blob=publicationFile](http://www.exist.de/SharedDocs/Downloads/DE/Zahlen-Fakten-Unternehmensgruendungen-Deutschland-2015.pdf?__blob=publicationFile)

## GOVERNMENT WEBSITES

In addition to the examples given above there are others.

[https://www.bmbf.de/pub/gesichter\\_und\\_geschichten.pdf](https://www.bmbf.de/pub/gesichter_und_geschichten.pdf)

[https://m.bundesregierung.de/Content/Infomaterial/BPA/IB/11-Lagebericht\\_09-12-2016.pdf?jsessionid=3FF2B7A40095DCCA0BB6B466D489DB9B.s2t1?\\_\\_blob=publicationFile&v=6](https://m.bundesregierung.de/Content/Infomaterial/BPA/IB/11-Lagebericht_09-12-2016.pdf?jsessionid=3FF2B7A40095DCCA0BB6B466D489DB9B.s2t1?__blob=publicationFile&v=6)

<http://www.exist.de/SharedDocs/Downloads/DE/Gru->



German parliament building in Berlin.

[enderkongress-15-Jahre-EXIST-Referenten.pdf?\\_\\_blob=publicationFile](#)

[http://www.exist.de/SharedDocs/Downloads/DE/Mediathek/Das-ist-EXIST-2016.pdf?jsessionid=5263539466DE858C512746FB0530C559?\\_\\_blob=publicationFile](http://www.exist.de/SharedDocs/Downloads/DE/Mediathek/Das-ist-EXIST-2016.pdf?jsessionid=5263539466DE858C512746FB0530C559?__blob=publicationFile)

## WHERE ARE ARTICLES PUBLISHED?

The media in Germany regularly report on GEM findings especially just after the annual launch of the country report. Members of GEM Germany are often interviewed when specific aspects of entrepreneurship are dealt with, such as the fear of failure debate, refugees as founders of new firms, entrepreneurial education at primary and secondary schools, and entrepreneurship amongst the unemployed.

F.A.Z Wirtschaft: Wie Schüler zu Unternehmern werden. 26.07.2017

Spiegel: Investoren geben selten Geld für Start-ups von Frauen. 26.07.2017,

<http://www.spiegel.de/karriere/start-ups-investoren-geben-selten-geld-an-frauen-a-1159800.html>

Handelsblatt Global: Down on Startups.7.06.2017  
<https://global.handelsblatt.com/companies-markets/down-on-startups-777577>

Der Technologie Presseservice für Journalisten und Meinungsmacher: Selbstständigkeit im Fokus: Gründungskultur fördern, Berlin, 4.04 2017

<https://www.pressebox.de/inaktiv/zentralverband-der-ingenieurvereine-zbi-ev/Selbststaendigkeit-im-Fokus-Gruendungskultur-foerdern/boxid/846220>

Wirtschaftswoche: Start-up-Mythen: Gründer sind jung, by Maximilian Nowroth in Know-How — 13.02.2017

<http://gruender.wiwo.de/gruendermythen-i-gruender-sind-zu-jung/>

The Economist: Immigrants are bringing entrepreneurial flair to Germany, 4.02.2017

<http://www.economist.com/news/europe/21716053-while-native-germans-are-growing-less-eager-start-businesses-new-arrivals-are-ever-more>

Süddeutsche Zeitung: Das eigene Ding wagen, 21.10. 2016,

<http://www.sueddeutsche.de/karriere/unternehmer-und-techniker-das-eigene-ding-wagen-1.3210469>

Die ZEIT: Deutschlands Chance. von Jens Tönnemann, 2.10. 2015.

<http://www.zeit.de/2015/40/gruenderszene-fluechtlinge-unternehmensgruendung-deutschland-aufstieg>

Wirtschaftswoche: Wie “German Angst” geringe Gründungs-raten erklärt –27.04.2015

<http://gruender.wiwo.de/german-angst-wie-risiko-furcht-geringe-gruendungs-raten-erklaert/>

Die ZEIT: Gut fallen. von Jens Tönnemann, 23.04. 2015.

<http://www.zeit.de/2015/15/scheitern-gruender-angst-pleite>

Die ZEIT: Krise - aber nicht überall! von Christian Tenbrock und Wolfgang Uchatius, 22.11. 2001.

[http://www.zeit.de/2001/48/200148\\_regionen.xml/seite-3](http://www.zeit.de/2001/48/200148_regionen.xml/seite-3)

## ENTREPRENEURSHIP PROGRAMS

Germany has many support programs dedicated to entrepreneurship which can be found at each spatial level, i.e. at a federal level with the Ministry of Economic Affairs and Energy, at the level of the six federal states and at the level of the cities and local communities.

Among the programs dedicated to innovative entrepreneurs and high-tech start-ups the following ones at the federal level are worth mentioning:

**EXIST:** co-financed by the European Social Fund (ESF), technology- and knowledge-based spin-offs from universities and research institutions in Germany are supported.

**Start-up contest IKT Innovativ:** an industry-specific support scheme dedicated to start-ups in information and communication technologies, based upon prize money and start-up-specific coaching instruments that should enable the transfer from a start-up idea towards the actual start-up event.

**The European Angels Fund (EAF):** provides equity capital to business angels and other non-institutional investors in order to fund innovative SME.

**The High-Tech Gründerfonds (HTGF):** addresses young technology firms. The latter have their own research and development activities and are supported by HTGF with seed capital, targeting at a marketable product. Beside financial support coaching is provided.

**nexxt:** a portal that intends to connect potential buyers and sellers in the event of a take-over of a firm.

**German Accelerator:** a platform, that supports networking between young German IT-firms and Know-How-holder in the US.

It is also worth mentioning the initiative “*Neue Gründerzeit*”. Developed by the federal Ministry of Economic Affairs and Energy the initiative intends to strengthen entrepreneurship and entrepreneurial spirit in Germany as well as to make self-employment more attractive in Germany. Hitherto underrepresented target groups of government’s entrepreneurship support policies like women (see also the initiative “*FRAUEN unternehmen*”) or citizens with a migration background are in the focus.

<http://www.existenzgruender.de/EN/Home/inhalt.html;j-sessionid=FC455F40464BFFE8DED2345365B4CE3E>

<http://www.existenzgruender.de/DE/Service/Neue-Gruenderzeit/inhalt.html>

<http://www.bmwi.de/Redaktion/DE/Dossier/politik-fuer-den-mittelstand.html>

The initiative “*Unternehmergeist in Schulen*” (entrepreneurial spirit at schools) intends to support entrepreneurship and self-employment (as an alternative to employment) in primary and secondary schools in Germany.

<https://www.bmwi.de/Redaktion/DE/Artikel/Mittelstand/staerkung-des-unternehmergeistes01>

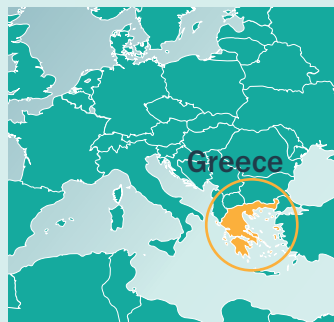


# Greece

**GEM TEAM:** Aggelos Tsakanikas (team leader), Ioannis Giotopoulos, Evaggelia Valavanioti and Sofia Stavraki

For more information about GEM Greece, go to the link:

<http://gemconsortium.org/country-profile/66>



## SMALL AND MEDIUM ENTERPRISES (SME) CONTRIBUTION TO GDP - 2015

**75%**

Since 2008, Greece has suffered from a severe recessionary cycle which has resulted in a contraction of almost 25% of its gross domestic value-add since 2015. Greece has had to recapitalize its banking sector three times, despite the significant consolidation achieved using state of the art resolution schemes while more than € 50 billion in deposits were withdrawn from the Euro system. At the same time, unemployment increased to 27%, as the business sector suffered from serious financial and demand constraints.

In 2017, the percentage of the population aged 18-64 years, which were consider early-stage entrepreneurs was reduced from 6,7% (450 thousand people) in 2015 to 4,8% (approximately 380 thousand people). The percentage of the population that has ceased or suspended its entrepreneurial activity in 2017 amounts to 5,1% of the population (about 300,000 persons), higher than 2015 (3.0%), but much higher than the average for the innovation-driven economies (1.9%). Female early-stage entrepreneurship decreased to 3.9% (about 175,000 women) from 6% in 2015, while the male early stage entrepreneurship decreased to 5.7% (about 220,000 men) from 7.5% in 2015. Some 41% of early stage entrepreneurs define

Entrepreneurial Intentions  
- 2017

**7.1%**

Total Entrepreneurship Activity  
(TEA) - 2017

**4.8%**

Entrepreneurial Employee Activity  
(EEA) - 2017

**0.9%**

Established Business rate  
(EB) - 2017

**12.4%**

themselves as necessity- driven entrepreneurs while 36% of them as opportunity-driven entrepreneurs. Almost two out of five entrepreneurs (42%) have at least a higher education degree and 10% have a postgraduate degree. Although nearly 75% of early-stage entrepreneurs believe that they can employ at least one person within the next five years, most of them (58%) believe that they will not be able to offer but up to five jobs.

These results indicate that although the economy has been stabilized during 2017 the business environment in Greece still remains less favorable compared to most European countries.

## CONTRIBUTION OF GEM TO POLICY

The impact of GEM in the Greek research and policy area has shown a growing level of importance since its launch in 2003 by FEIR (IOBE). The annual results are distributed in electronic format to many departments and ministries in the government, to academic institutions and to agents and organizations that assist entrepreneurs. However, the usage of the GEM results remains limited possibly due to the current financial crisis.

There is a large amount of competition by various agencies who do surveys on an *ad hoc* basis to try and attract money and attention, consequently GEM cannot be attributed to any specific intervention although it is thought that the

## WORLD BANK EASE OF DOING BUSINESS

1

**61**

190

## GEM ENTREPRENEURIAL SPIRIT COMPOSITE INDEX

-1.5

**-0.25**

Rank:  
53/54

1.5

## THE INFLUENCE OF GEM ON POLICY

research has contributed to a common understanding of entrepreneurship in the country.

However, a specific program approved by the European Commission called the ‘*Competitiveness, Entrepreneurship and Innovation*’ for the period 2014 – 2020 has used GEM data

[https://www.espa.gr/elibrary/Antagonistikotita\\_2014GR16M20P001\\_1\\_3\\_el.pdf](https://www.espa.gr/elibrary/Antagonistikotita_2014GR16M20P001_1_3_el.pdf)

## MEDIA COVERAGE

GEM Greece receives media coverage after the publication of their report. Some examples of this are given below many of which are in Greek.

<http://www.kathimerini.gr/910405/article/oikonomia/epixeirhseis/h-proklhsh-ths-yhfi-akhs-allaghs-twn-epixeirhsewn>

<http://www.zougla.gr/politiki/article/vouleftes-nd-teras-tia-oliguria-sti-dioxetefsi-evropaikon-poron>

<http://www.thetoc.gr/oikonomia/article/g-stournaras-i-el-lada-den-exei-epistrepsei-akomi-se-diatirisi-anaptuksi>

<http://www.insider.gr/eidiseis/oikonomia/47642/stoyrnaras-empodio-stin-anakampsi-tis-oikonomias-ta-kokkina-daneia>

[http://www.argolikeseidhseis.gr/2017/02/blog-post\\_933.html](http://www.argolikeseidhseis.gr/2017/02/blog-post_933.html)

<http://magnesianews.gr/volos/mideniki-i-aporrofi-si-ton-poron-epanek-gia-tin-tonosi-tis-epichirima-tikotitas.html>

<http://www.worldenergynews.gr/index.php/2016-09-23-09-20-28/item/7967-stoyrnaras-aneparkhs-h-es-wterikh-apotamieysh,-h-ellada-na-proselkysei-ependyseis>

<http://www.netweek.gr/default.asp?pid=9&arId=34110&la=1>

<http://www.netweek.gr/default.asp?pid=9&la=1&arId=34110>

<http://www.infomarine.net/news-in-greek/106-next-deal/87787-kampanaki-stoyrnara-gia-ta-kokkina-daneia.html>

<https://fotavgeia.blogspot.no/2017/04/entrepreneurship-engine-for-job.html>

## ENTREPRENEURSHIP PROGRAMS IN GREECE

In Greece there is a specific program called “*Competitiveness, Entrepreneurship and Innovation*” which is one of the five sectoral operational programs of the Partnership and Cooperation Agreement (the new NSRF) for the period 2014-2020, funded by the European Commission. The relevant link is:

[http://www.antagonistikotita.gr/epanek\\_en/index.asp](http://www.antagonistikotita.gr/epanek_en/index.asp)

For people interested in starting a business in Greece the following link is the most appropriate to follow:

<http://startupgreece.gov.gr/>

For more information on the various policy measures and calls that deal with various aspects of entrepreneurship (R&D, funding, investments) follow this link:

<https://www.espa.gr/en/pages/default.aspx>

For more information about doing business in Greece, there is also the “Invest in Greece” Agency, which is the official agency of the Greek State, under the supervision of the Ministry of Economy and Development.

<http://www.enterprisegreece.gov.gr/>



# Guatemala

**GEM TEAM:** **Mónica de Zelaya** (team leader), Carolina Uribe, Susana Garcia-Prendes, Jershem David Casasola & Andrés Marroquín

For more information about GEM Guatemala, go to the link:

<http://gemconsortium.org/country-profile/67>



The business environment in Guatemala remains unfriendly towards entrepreneurship. For example, the cost to register a business represents approximately 82% of the average initial investment made. In spite of this there is a presence of high-impact entrepreneurs and small businesses that are starting to make an impact on the economy. However, in recent years this has slowed down in that every year, over 200,000 Guatemalans enter the job market and only 20,000 are able to obtain a job in the formal market place. People recognize that entrepreneurship is the answer and many consider entrepreneurship as a good career choice.

GEM has awakened the necessity to use quantitative methods to analyse the topic to such an extent that more than half of all research done on the subject uses results gathered via GEM .

**SMALL AND MEDIUM ENTERPRISES (SME) CONTRIBUTION TO GDP - 2009**

**40%**

Entrepreneurial Intentions - 2017

**46.5%**

Total Entrepreneurship Activity (TEA) - 2017

**24.8%**

Entrepreneurial Employee Activity (EEA) - 2017

**1.3%**

Established Business rate (EB) - 2017

**12.3%**

## CONTRIBUTION OF GEM TO POLICY

Through GEM research, Universidad Francisco Marroquín is facilitating the understanding of entrepreneurial action in Guatemala and helping entrepreneurs expand their freedom of action, through promoting the respect of private property and rule of law.

GEM has changed the focus on how entrepreneurship is addressed in Guatemala. It has awakened a necessity to use quantitative methods when analyzing the topic. When searching for information about entrepreneurship on the internet, over half of the research results display content where information provided by the GEM team in Guatemala has been used.

In 2010 when the first report for GEM Guatemala was published, it clearly stated that the environment for doing business greatly influences the ability of entrepreneurs and businesses to grow and develop. Elements such as taxes, labour and trade regulations represented a challenge to entrepreneurs. Probably due to this and subsequent report the Ministry of Economy in 2015 developed a policy of ease regulations and in 2017 the Legislative Commission of Small and Medium Enterprises introduced a bill that contains elements to simplify the legal procedures that entrepreneurs have to follow to register and close businesses.

The impact of GEM has been so significant that the Deputy Minister of Support to Small and Medium Enterprises (the entity responsible of drafting the National Entrepreneurship

## WORLD BANK EASE OF DOING BUSINESS



## GEM ENTREPRENEURIAL SPIRIT COMPOSITE INDEX



## THE INFLUENCE OF GEM ON POLICY



Policy) wrote a personal thank you note for the support that the GEM has contributed for the development of entrepreneurial activities in the country.

The Deputy Minister, Sigfrido Lee, sent a thank you letter to the Dean of the School of Economic Sciences, Universidad Francisco Marroquín (Mónica de Zelaya, leader of the GEM team in Guatemala):

*“The purpose of the following letter is to recognize the work that you and the Universidad Francisco Marroquín have taken in the development of the Global Entrepreneurship Monitor –GEM– for Guatemala. During my tenure as Deputy Minister of Economy from 2012 to 2016, we took the responsibility of elaborating the National Entrepreneurship Policy –EMPRENDE–. This is the result of a regional effort at the Central American Integration System (SICA), particularly led by the Regional Development Center of MSME –CENPROMYPE–, which in the past developed the Regional Strategy for Entrepreneurship. It is important to mention that the efforts, at the national and regional level, to boost entrepreneurship through public policy would not have reached the impact they have had if timely and reliable information on entrepreneurship would not have existed. It is in this area that the GEM had a fundamental role and I would like to add that it is not only in the design of the policies but also in the implementation.”*

## STAKEHOLDERS WHO USE GEM

There are many different stakeholders who use GEM in Guatemala, as it is the only existing source with quantitative data that facilitates the analysis of entrepreneurship and examines its evolution together with allowing cross country comparisons.

Educational institutions at all levels use GEM to learn more about entrepreneurship in the country as well as use the results for teaching purposes. GEM information has been included in a book about entrepreneurship for high school students. Academics have used GEM data for writing papers and for research which has contributed to reducing barriers for entrepreneurial action. GEM information has been shared with the media and opinion leaders as a source of relevant data for editorials and articles as well as think tanks.

## GOVERNMENT WEBSITES

The information collected by GEM was used by the Ministry of Economy to prepare the National Entrepreneurship Policy. The link from page 31 to 33 it shows that the source of information is the GEM:

<http://www.mineco.gob.gt/sites/default/files/PoliticaEmprendimiento.pdf>

In the memorandum for the proposed Entrepreneurship Support Bill, page 2 to page 5, information gathered by GEM is used to support the proposed bill, that is highlighted in the following link:

<http://old.congreso.gob.gt/archivos/iniciativas/registro5241.pdf>

In addition, the Department of Commerce has established entrepreneurship centers, where entrepreneurs can find support. To justify the existence of this program, one of the most important elements used is the information acquired by the GEM, as seen in the following link:

<http://www.mineco.gob.gt/centros-de-emprendimiento>

## ENTREPRENEURSHIP PROGRAMS

The Ministry of Economics has a program which offers support to entrepreneurs in different geographical locations in Guatemala. The program website is:

<http://www.mineco.gob.gt/centros-de-emprendimiento>

The School of Economic Sciences of the Universidad Francisco Marroquín created the Kirzner Entrepreneurship Center. The center promotes several projects and activities with the aim of promoting the knowledge and practice of entrepreneurship. The program website is:

<http://kec.ufm.edu>





# Israel

**GEM TEAM:** Ehud Menipaz (team leader), Yoash Avrahami

For more information about GEM Israel, go to the link:  
<http://gemconsortium.org/country-profile/73>



**SMALL AND MEDIUM ENTERPRISES (SME) CONTRIBUTION TO GDP - 2012**

**45%**

Since the beginning of the 21<sup>st</sup> century Israel's early-stage entrepreneurial activity (TEA) has more than doubled. Currently this "start-up" nation has a TEA of over 12%, and is characterized by high-tech, export-oriented ventures in the areas of digital technology, cyber security, medicine, defense, water technology, irrigation systems and agriculture. The high-tech economic sectors account for approximately 10% of TEA. Of note is the marked increase in the rate of entrepreneurship of the Arab minority, orthodox Jews and females. There is also an increase in the rate of the established businesses (EB) category, where the greatest increase is in the Russian immigrants and Arab men sector. As to employee entrepreneurial activity (EEA), Israel is ranked 5th in this category worldwide, which results in a total entrepreneurship rate (EEA+TEA) of 16.5%. It should be noted that during 2016 there was a lower expectation for growth in job creation – down to 17.4% from 19.6%, placing Israel at the 29th place worldwide. In addition, Israel dropped from 21st to 38th place in the expectations of EB for high growth.

Generally, all levels of government, federal, local, regional and municipal, are engaged in promoting entrepreneurship and innovation through a variety of channels.

## CONTRIBUTION OF GEM TO POLICY

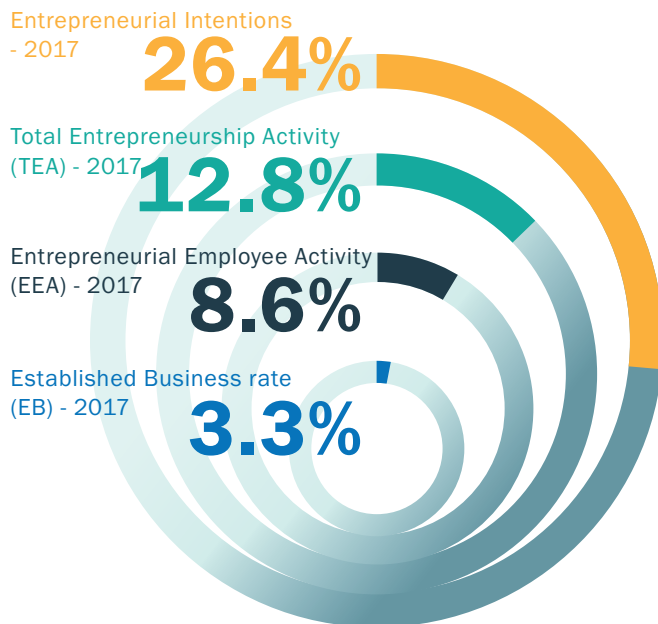
The Israeli government, its ministers, members of the Knesset (the Israeli Parliament), public policy officers and industry executives have regularly been briefed and exposed to GEM initiatives since 1999 when Israel, as one of the founding members, joined GEM.

Israel is a highly innovative society and there are many examples of policy initiatives regarding entrepreneurship of which a few are given below:

### 1. THE ANGEL'S LAW

On the 1<sup>st</sup> January 2015, the new "Angel's Law" was passed. The law provides tax advantages for Angel investors in the high-tech, clean-tech and bio-tech sectors by offering an added advantage to these investors. Its objective is to support a main "engine" of the export industry, which provides 40% of total national exports.

GEM's early APS findings were that the transformation rate of nascent start-ups into mature businesses was relatively low, compared to other countries. A further understanding, based on the analysis of NES questionnaire's results, showed that the amount of capital appropriated to start-ups was limited and relatively low by Angel investors, especially in the high-tech sector, where the business risk is relatively high. The law was



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enacted for an initial period and was later extended to an annual basis. The tax benefit allows for a complete write off of the whole investment in a start-up during the first year in which the funds are committed, even though the actual funds may be infused over a number of years (maximum five years). This tax benefit is intended for individual Angels as opposed to funds and Venture Capital companies. During the first year only eight requests were forwarded and only three were approved but this has substantially increased over the years. The application process involves confirmation of criteria applied towards the nascent business as well as the Angel investor, including confirmation by the Chief Scientist. The amount of investment allowed by each Angel investor is up to US\$1,000,000 and allows for share purchase only.

More information on the current law is available in the following link:

<https://www.worcel.co.il/income-taxes/%D7%97%D7%95%D7%A7-%D7%94%D7%90%D7%A0%D7%92%D7%9C%D7%99%D7%9D/>

The law is undergoing continuous modifications, the latest was enacted on 12<sup>th</sup> January 2016. During the first year of this law, only 8 requests were forwarded and only 3 were approved. However, in time more applications were forwarded. More information on the current law is available in the following link:

<https://www.worcel.co.il/income-taxes/%D7%97%D7%95%D7%A7-%D7%94%D7%90%D7%A0%D7%92%D7%9C%D7%99%D7%9D/>

## 2. THE SMALL AND MEDIUM SIZE BUSINESSES AUTHORITY

A major development that was partially attributed to new insights in the area of Small and Medium Size businesses (SMB), through GEM's APS and NES, was the creation of the government unit entitled the Small and Medium Size Businesses' Authority on 3rd July 2011 (Government Decision Number 3409, 2011). Information about this law may be found in the link:

<http://www.pmo.gov.il/Secretary/GovDecisions/2015/Pages/des727.aspx>

As part of the government initiative regarding entrepreneurship it decided to focus its programs on nascent, small and medium businesses especially those businesses that have up to 100 employees and annual revenues of up to IS100, 000,000 (Approximately US\$25 million). This sector of the economy constitutes approximately 450,000 businesses, representing almost 99% of all businesses

in Israel and employing 55% of the workforce. They account for most new jobs in the country but still face many regulatory and financial barriers. In particular:

- Slow rate of innovation and low productivity
- Financing and cash flow difficulties
- Dependence on numerous government offices the SMB needs to deal with
- Low participation in export activities
- Low rate of participation in government purchasing
- Lack of "safety net" in case of failure



Street view of the Knesset (Israel Parliament) in Jerusalem, Israel.

- Lack of credit and loan venues
- Government bureaucracies
- Lack of management skills
- Lack of national policies that relate to EMB's

The site of the Small and Medium Size Businesses Authority is:

<http://sba.economy.gov.il/Pages/default.aspx>

## 3. GOVERNMENT DECISION TO SUPPORT NASCENT BUSINESSES

Probably due to the APS and NES findings of GEM and the recommendations of 2013 and 2014 reports, the Government of Israel decided to articulate a set of laws and regulations to support nascent businesses.

The government decision is number 890 of the 27<sup>th</sup> December 2015 which was passed by the 34th cabinet of Prime Minister Benjamin Netanyahu. Details may be found in the link:

<http://www.pmo.gov.il/Secretary/GovDecisions/2015/Pages/dec890.aspx>

The overarching goal of this compendium of policies, laws and regulations is to implement policies to help new businesses (under 60 months since start-up) become sustainable, improve their survival rate and help them grow and expand.

For example, if a nascent business broke the law and is subject to fine, the extent of fine will not be more than 5% of the annual revenue within 24 month since start-up and not more than 7% during the following 36 months. This government decision further improves many regulations pertaining to the different government ministries and authorities. It is further requested that simplified manuals regarding government regulations will be developed to help managers of SMB's.

In addition, there are discounts on various government permits and license' fees, procedures regarding hiring and firing employees will be simplified and make easier to name just a few.

## WHERE ARE ARTICLES PUBLISHED?

Numerous examples of media reports about GEM are available some of which are given below:

<http://www.globes.co.il/news/article.aspx?did=1000933035>

[http://www.limudim-info.co.il/one\\_study.asp?IDNews=6760#.WYxvAU26y1s](http://www.limudim-info.co.il/one_study.asp?IDNews=6760#.WYxvAU26y1s)

<http://economy.gov.il/Publications/PressReleases/Pages/2014/April/Entrepreneurship-Growth.aspx>

## ENTREPRENEURSHIP PROGRAMS

The following site provides an overview of entrepreneurship programs in Israel, published by The Small and Medium Size Businesses Authority, Government of Israel:

<http://sba.economy.gov.il/Pages/default.aspx>

A most current analysis of the small and medium size businesses and entrepreneurial programs in Israel was made by the OECD in 2016 and appears in:

<http://sba.economy.gov.il/About/Researches/Pages/sn58.aspx>



# Malaysia

**GEM TEAM:** **Siri Roland Xavier** (team leader), Leilanie binti Mohd Nor, Mohar bin Yusof and Samsinar Md. Sidin

For more information about GEM Malaysia, go to the link:

<http://gemconsortium.org/country-profile/86>



The state of entrepreneurship in Malaysia is best described as being vibrant probably as a result of the numerous activities and incentives available for new start-ups. Training programs and upskilling courses have been in place for over ten years. Now the emphasis is to commercialize and grow these local ideas and businesses. This involves adding value through technology, collaborations and expansion both regionally and globally with greater emphasis being placed today on SME's. This is because the latest government analyses show that SME's make up 97% of all businesses in Malaysia.

They provide 65% of the country's employment but make up only 36% of the country's GDP and 18% of Malaysia's exports. In this regard the entrepreneurial endeavors are now focused to grow these businesses and thereby contribute to making Malaysia a high income and innovation nation by year 2020.

**SMALL AND MEDIUM ENTERPRISES (SME) CONTRIBUTION TO GDP - 2014**

**36%**

Entrepreneurial Intentions - 2017

**17.6%**

Total Entrepreneurship Activity (TEA) - 2017

**21.6%**

Entrepreneurial Employee Activity (EEA) - 2017

**1.4%**

Established Business rate (EB) - 2017

**3.8%**

## CONTRIBUTION OF GEM TO POLICY

GEM's unique contribution is that it provides a fair overview of entrepreneurial aspirations and actions that are not linked to government mandated measures.

There is no direct link that GEM has any significant influence on government policies, although it is believed that information from GEM is used by government departments. For example, the Ministry of Higher Education (MOHE) used GEM when planning the *Strategic Action Plan for Institute of Higher Learning 2016 – 2020*.

TERAJU, a government agency used GEM information to promote bumiputera (ethnic Malay) entrepreneurs in their *Bumiputera Economic Transformation Roadmap 2.0*.

## GOVERNMENT WEBSITES

To the best of available knowledge, government websites do not refer to GEM data or to GEM reports.

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## WHERE ARE ARTICLES PUBLISHED?

The media publishes many reports on the findings of GEM, some examples of which are given below:

<http://www.bharian.com.my/node/267750>

<http://www.astroawani.com/berita-malaysia/8-realiti-mengapa-kerajaan-malaysia-wajar-biayai-pendidikan-tinggi-131276>

<http://www.theborneopost.com/2017/01/19/malaysia-digital-hub-to-be-launched-in-march/>

<http://english.astroawani.com/business-news/malaysia-digital-hub-be-launched-march-129387>

<http://english.astroawani.com/malaysia-news/8-realities-why-malaysian-government-should-fund-higher-education-131278>

<http://www.bernama.com/bernama/v8/bu/newsbusiness.php?id=1326909>

<http://wp.news365.my/?p=2613629>

<http://wp.news365.my/?p=2586748>

<http://wp.news365.my/?p=2573766>

<http://www.dailyexpress.com.my/news.cfm?NewsID=115308>

<http://www.mysinchew.com/node/116849>

<http://www.computerworld.com.my/tech/it-management/startup-rates-recorded-a-staggering-increase-in-hong-kong-and-shenzhen/>

<http://wargamarhaen.blogspot.no/2017/03/8-realiti-mengapa-kerajaan-malaysia.html>

<http://www.edisiviral.com/news/malaysia-digital-hub-to-be-launched-in-march?uid=40571>

<http://www.detikdaily.net/v6/modules.php?name=News&file=article&sid=46364>

## ENTREPRENEURSHIP PROGRAMS

Detailed below are links to some of the entrepreneurial programs currently being run in Malaysia.

<https://mymagic.my/programs/>

<http://www.smecorp.gov.my/index.php/en/all-programmes>

<http://www.teraju.gov.my/institut-keusahawanan-negara-insken/>





# Poland

**GEM TEAM:** Anna Tarnawa (team leader), Paulina Zadura-Lichota, Melania Nieć, Przemysław Zbierowski

For more information about GEM Poland, go to the link:

<http://gemconsortium.org/country-profile/99>



**SMALL AND MEDIUM ENTERPRISES (SME) CONTRIBUTION TO GDP - 2015**

**50%**

Entrepreneurship in Poland is characterized by relatively high levels of entrepreneurial activity throughout all its types and phases of the entrepreneurial process. Involvement of individuals in entrepreneurial effort is fostered especially by high levels of self-confidence, intense networks and improving (but still rather low) opportunity perception and social attitudes towards entrepreneurship. However, the overall high activity is unevenly distributed across age groups and genders.

Also, entrepreneurial environment in the country, despite some favourable conditions, shows generally insufficient support of entrepreneurial activity, especially for new and growing businesses. However, societal attitudes and cultural and social norms related to entrepreneurship do not stimulate but rather inhibit individuals from engagement in entrepreneurial efforts.

Entrepreneurial Intentions - 2017

**9.7%**

Total Entrepreneurship Activity (TEA) - 2017

**8.9%**

Entrepreneurial Employee Activity (EEA) - 2017

**3.2%**

Established Business rate (EB) - 2017

**9.8%**

## GEM POLAND 2017 SHORT OUTLINE

Twenty seven years ago when the economic system was first liberalized, Poles showed strong entrepreneurial tendencies and today they still exhibit the same desire to improve.

The country boasts a high rate of starting a business (8.9% in 2017), slightly higher than the average for Europe. The ratio of more mature (established) companies also rose in 2017. Together with those that are engaged in intrapreneurship there are approximately 23% of Poles who are involved in some form of entrepreneurial activity. This suggests that entrepreneurship in Poland is young and dynamic.

Poles are more eager to start a new company and have more faith in their capabilities to run their own business as compared to other Europeans. 9.7% of Poles declare the intention to establish a company in the next 3 years (in Europe 11%), while 52% think they have the necessary skills to do so as compared to the rest of Europe at 43%. The nation has become more optimistic in the last year when it comes to the identification of business opportunities - 69% of Poles compared to 41% for the rest of Europe perceive their environment as conducive to start a company in the next 6 months.

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## CONTRIBUTION OF GEM TO POLICY

The GEM Poland team consists of the Polish Agency for Enterprise Development (PARP) and University of Economics in Katowice. PARP has its own research activities in the area of entrepreneurship and also evaluates all the support programs that the Agency offers to entrepreneurs. Each year the Agency prepares a report on the SME sector and other publications.

Since 2011, the Agency has been engaged with GEM and this provides an important source of information that is used in various reports and hence contributes to policy development. However, although the Agency is very influential it is difficult to directly relate the results of GEM to policy making.

## STAKEHOLDERS WHO USE GEM

Since 2012, copies of the GEM report in both Polish and English were distributed to all the main institutions, universities and entrepreneurship centres, think tanks and at meetings and conferences attended by GEM members. It is also available on the website:

[badania.parp.gov.pl](http://badania.parp.gov.pl)

In addition, the results of GEM are presented in the Polish Parliament and its special committees on innovation, the economy and SMEs. PARP also uses GEM data to draw conclusions and recommendations for different economic policy objectives, especially for policies stimulating entrepreneurship and innovation capacity of Polish SMEs. Data is also presented at special meetings in the Ministry. For example, in 2016 when a new national strategy for responsible development was being discussed, information from GEM was used at this meeting.



The Sejm Parliament building in Warsaw, Poland.

## WHERE ARE ARTICLES PUBLISHED?

Considerable media coverage is obtained on the results published by GEM. Some examples of this coverage in 2017 is given below

<http://biznes.onet.pl/praca/parp-poprawila-sie-plynnosc-finansowa-malych-i-srednich-przedsiębiorstw/3m279v>

<http://msp.money.pl/wiadomosci/zarzadzanie/arttykul/parp-male-i-srednie-firmy,179,0,2262195.html>

<http://biznes.onet.pl/wiadomosci/kraj/parp-poprawila-sie-plynnosc-finansowa-malych-i-srednich-przedsiębiorstw/fyjet3>

<http://finanse.wp.pl/kat,1033681,title,PARP-poprawila-sie-plynnosc-finansowa-malych-i-srednich-przedsiębiorstw,wid,18700881,wiadomosc.html>

<http://www.bankier.pl/wiadomosc/PARP-poprawila-sie-plynnosc-finansowa-malych-i-srednich-przedsiębiorstw-3653968.html>

<http://www.polskieradio.pl/42/273/Artykul/1727182,PARP-poprawila-sie-plynnosc-finansowa-malych-i-srednich-przedsiębiorstw>

<http://tvn24bis.pl/z-kraju,74/parp-poprawila-sie-plynnosc-malych-i-srednich-przedsiębiorstw,715172.html>

<http://www.egospodarka.pl/141454,Wielka-Brytania-kusi-Brexit-nie-przeraza,1,39,1.html>

<http://nf.pl/przedsiębiorca/wielka-brytania-wciaz-przyciaga-inwestycje-firmy-i-polakow,,56389,227>

## ENTREPRENEURSHIP PROGRAMS

The entrepreneurship support system in Poland is based on the cooperation of various institutions on a national and regional level. PARP is one of the executive agencies operating on the national level and provides support from EU funds and state budget resources. The main areas of operation of the Agency include development of innovative entrepreneurship, investment in innovation, start-up market and internationalisation of enterprises, increase in competitiveness and innovation of the Eastern Poland macro-region, as well as adjusting the competences of employees to labour market needs. All activities of the Agency are implemented with particular consideration of the SME sector's needs. The 6 major areas of the activities implemented by the PARP are:

- Start-up market
- Training and skills improvement

- Investment in innovation
- Services for entrepreneurs
- Internationalisation and,
- Infrastructure for development.

According to the start-up market area PARP's proposals for new entrepreneurs are for example:

## 1. INNOVATION LOAN FUND

The program is addressed to companies at the start-up stage that need stable financing for further development. The Innovation Loan Fund is a debt financial instrument aimed to solve the problem of the equity gap in the SME sector. The money from the Innovation Loan Fund is used to enable the development of new companies. However, the entrepreneur must find a private investor to co-fund. This investor could be a Venture Capital (VC) fund or a business angel.

## 2. SCALE UP – START IN POLAND

*Scale UP* is a pilot competition implemented within the framework of the InnoLAB program and the government *Start In Poland* program. It is focused on the acceleration, i.e. speeding up the development, of start-ups. The acceleration is a program dedicated to micro- or small entrepreneurs, lasting from 3 to 6 months, developed in cooperation with large companies and aimed at preparing a product or service for commercialization. It includes, in particular, advisory and mentoring support as well as financial support, with the aim of accelerating the process of creating a product or service that may be used by large enterprises.

Another example for entrepreneurs within the framework of PARP activities is support for entrepreneurs wishing to implement innovation.

## 3. RESEARCH TO THE MARKET

As part of the “*Research to the market*”, entrepreneurs from the SME sector receive support for implementing the results of R&D work carried out either by themselves or on their behalf. The result is to place new or significantly improved products (goods, services) on the market. In order to receive the co-financing, the entrepreneur must have an invention which is either protected or submitted for patent protection.



# Puerto Rico

**GEM TEAM:** Marines Aponte (team leader), Marta Alvarez & Manuel Lobato

For more information about GEM Puerto Rico, go to the link:

<http://gemconsortium.org/country-profile/101>

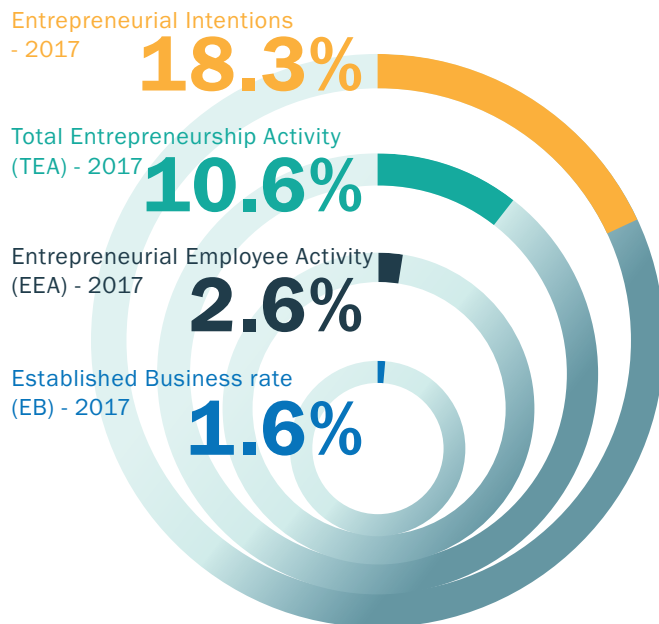


## SMALL AND MEDIUM ENTERPRISES (SME) CONTRIBUTION TO GDP

n/a

Over the last four years, Puerto Rico's average early-stage entrepreneurial activity (TEA) (9.3%) has been comparable with that of innovation economies but lower than that of the Latin American and Caribbean region. The principal concern with Puerto Rico's entrepreneurial activity is that although there is a reasonable activity of nascent entrepreneurship, the new and consolidated rates are very low. This may reflect the serious obstacles to the development of entrepreneurship in the ecosystem. These obstacles have been identified repeatedly as onerous bureaucracy, high taxes, lack of access to financing and poor entrepreneurship education at primary and secondary level.

Nonetheless Puerto Rico's entrepreneurs believe they are capable of starting and running a business but there are limited opportunities to do so possibly due to the long recession that has existed since 2006.



## CONTRIBUTION OF GEM TO POLICY

The main contribution of GEM is that it has created a dataset of entrepreneurial indicators which allows for the comparison of entrepreneurial activity and related factors with those of other countries. This possibly helps to contribute to public policy but there is no tangible evidence that it does.

GEM data has been used in publications submitted by different groups to proposed bills, examples of which include:

P. el S. 1456 (October 5, 2015):

[http://industrialespr.org/download/CongressionalTestimonies/PS\\_1456\\_Reforma\\_Educativa.PDF](http://industrialespr.org/download/CongressionalTestimonies/PS_1456_Reforma_Educativa.PDF)

P. del S. 972- (April 11, 2014):

<http://www.oslpr.org/2013-2016/ponencias/A346SVXF.pdf>

P. de C. 2941- (June 1, 2016)

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<http://www.oslpr.org/2013-2016/%7B91DA2ABA-585A-4AFD-A9DC-E8A94A911994%7D.doc>.

## STAKEHOLDERS WHO USE GEM

The results of the GEM national reports are used by academics for both teaching and research, non-profit organizations and members of other organizations such as the Puerto Rico Chamber of Commerce and Manufacturers Associations

## GOVERNMENT WEBSITES

The GEM National Report has been included in the website of the Government of Puerto Rico's Institute of Statistics. This institute is one of the sponsors of the Puerto Rico GEM study and has recognized the importance of the indicators generated.

<http://www.estadisticas.gobierno.pr/iepr/Estadisticas/Bibliotecavirtual/Estudiosespeciales.aspx>

## WHO USES GEM AND WHERE ARE ARTICLES PUBLISHED?

GEM results have been published widely in the media, some examples of which are given below:

<http://www.elnuevodia.com/negocios/finanzas/nota/carreraempresarialnoesbienvistaporlosboricuas-2088670/>

<http://www.primerahora.com/noticias/puerto-rico/nota/florece Lainventivaempresarialboricua-1103262/>

<http://newsismybusiness.com/upr-in-global-entrepreneurship-monitor-study/>

<http://www.telemundopr.com/noticias/Decrece-en-2015-la-actividad-emprededora-en-Puerto-Rico-379418311.html>

<http://elvocero.com/decrece-en-2015-actividad-emprededora-en-la-isla/>

<http://cb.pr/entrepreneurial-activity-in-puerto-rico-decreased-in-2015/>

<http://sincomillas.com/menor-la-actividad-de-emprededores-en-el-2015/>

<http://sincomillas.com/la-actividad-emprededora-en-puerto-rico-es-menor-a-la-del-resto-de-la-region/>

<http://lacallerevista.com/portada/se-reduce-en-el-2015-la-intencion-de-hacer-negocios-en-puerto-rico/32352>

## ENTREPRENEURSHIP PROGRAMMES

There are specific policy programs of Puerto Rico's governmental agencies or U.S. federal agencies in Puerto Rico that promote business development:

Parallel 18, Puerto Rico Science & Technology Trust:  
<http://www.parallel18.com/>

Departamento de Desarrollo Económico y Comercio: Empresarismo <http://ddec.pr.gov/es/empresarismo/ideas-de-negocio/>

Departamento de Desarrollo Económico y Comercio: Juventud Empresarial:  
<http://ddec.pr.gov/es/jovenes/juventud-empresarial/>

Banco de Desarrollo Económico para Puerto Rico (BDE):  
<https://www.bde.pr.gov/BDESite/index.html>

Compañía de Comercio y Exportación (CCE):  
<http://www.comercioyexportacion.com/>

Small Business Administration (SBA):  
<https://www.sba.gov/>





# Slovakia

**GEM TEAM:** Anna Pilikova (team leader), Zuzana Kovacicova, Marian Holienka, Jan Rohak & Jozef Komornik

For more information about GEM Slovakia, go to the link:

<http://gemconsortium.org/country-profile/106>

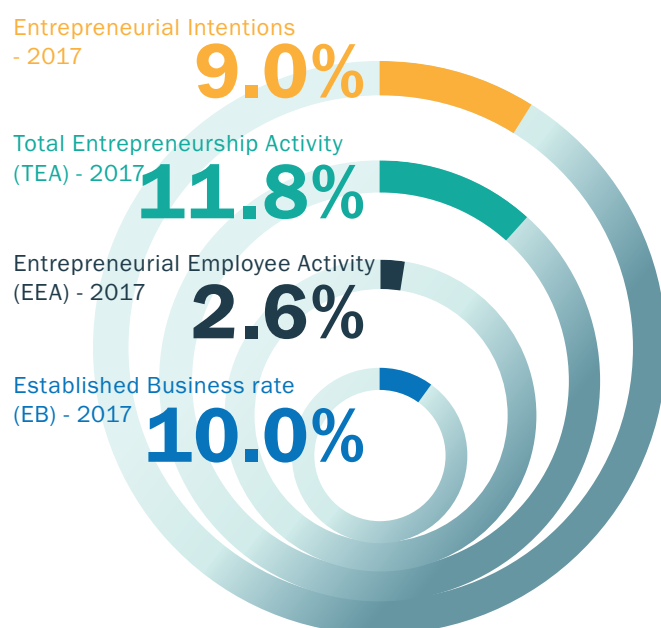


**SMALL AND MEDIUM ENTERPRISES (SME) CONTRIBUTION TO GDP - 2015**

**57%**

Slovakia continues to outperform most other EU members in terms of the percentage of adults involved in starting a new business (11.8%). It also has a healthy rate of established businesses (10.0%). In addition, there has been a recent increase in those businesses started out of opportunity, while almost a quarter of adults perceive good opportunities to start a business and more than 50% believe that they have the skills to do so.

However, Slovakia's entrepreneurship ecosystem still faces a number of challenges – including inadequate transfer of research and development (R&D), a lack of entrepreneurship skills development in the education system, and inadequate government entrepreneurship programmes. Additionally, it scores well below the average for government policies: taxes and bureaucracy at just 2.7 vs the European average of 4. These remain important foci for policy development.



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## CONTRIBUTION OF GEM TO POLICY

The most important contribution of GEM is the availability of the data to the main partner of GEM, the Slovak Business Agency, who is the key national agency in charge of SME development in Slovakia. It is through them that the information is disseminated to a number of other important agencies such as;

1. The European commission – for country benchmarks,.
2. The OECD at different programs for country comparison (e.g. LEED program)

## WHO USES GEM AND WHERE ARE ARTICLES PUBLISHED?

Numerous agencies and other interested parties use GEM, some examples of which are given below:

The Slovak government and governmental institutions use GEM as a basis for strategies, policies and programs preparation. Specifically the Slovak Business Agency has used it for:

- The preparation of a partnership agreement between the EU and Slovakia for EU funds for the period 2014 – 2020.
- The preparation of the operational program “Science and innovation” for 2014 -2020.



The Slovak National Council on the castle hill in Bratislava.

- The preparation of the Project for the “National Entrepreneurship Center” .
- A regular annual report on “Status of the Entrepreneurial Environment in Slovakia” which is prepared by Ministry of Economy in cooperation with the Slovak Business Agency. GEM findings are part of this report which has been submitted to government session. Such an example is given below which was from a document used at a session on the 11th January 2017

<http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=26170>

GEM data was used in preparation of the OECD Country notes on inclusive entrepreneurship policies and programmes, 2016 and its review in 2017.

Each year the Faculty of Management Comenius University in Bratislava in cooperation with the Slovak Business Agency organize a workshop to discuss the annual GEM results. Participants of this workshop come from the ministries directly involved in entrepreneurship agenda, academic institutions, non governmental agencies etc. Information of such a workshop can be seen on

<http://www.sbagency.sk/search/node/GEM>

<http://www.sbagency.sk/globalny-monitor-podnikania-gem-rok-2015-na-slovensku#.WQYgj4VOL4g>

In addition to GEM being used by government agencies, private organisations such as the VUB Bank who have requested specific analysis on disadvantaged groups especially women to help them in formulating their internal policies

GEM is used extensively for academic publications. For example, GEM team members have already issued four science monographies and one professional

monography based on GEM data. These monographies have significantly extended knowledge on theories of entrepreneurship and status of particular aspects of entrepreneurship in Slovakia

GEM team members have been invited to write chapter for the international scientific monography *Entrepreneurship in Transition Economies, Diversity, Trends and Perspectives*, to be published by Springer in June 2017. Two members of GEM team prepared chapter *Entrepreneurship development in Slovakia* which is based on GEM findings.

## WHERE ARE ARTICLES PUBLISHED?

An example of a media report published on the Slovakian GEM results is given below:

<https://dennikn.sk/654059/ako-stoji-slovensko-v-podmienkach-pre-biznis-4-rebrickyy/>



# Slovenia

**GEM TEAM:** Miroslav Rebernik (team leader), Polona Tominc, Katja Crnogaj, Karin Širec, Barbara Bradač Hojnik & Matej Rus

For more information about GEM Slovenia, go to the link:

<http://gemconsortium.org/country-profile/107>



**SMALL AND MEDIUM ENTERPRISES (SME) CONTRIBUTION TO GDP - 2015**

**63%**

In last years, the level of early-stage entrepreneurial activity in Slovenia increased, especially in 2016 when it reached the peak of optimistic 8 %. Even though TEA index declined in 2017 to 6.8 %, some indicators that show perception of societal values related to entrepreneurship and individual perceptions about entrepreneurship increased significantly. From record low 16% of adult population who in 2013 perceived promising business opportunities to start a new business, in 2017 this percentage rose to 25 %. Two thirds of adult population respects successful entrepreneurs and more than half believe they have the knowledge and skills to start a business.

The steady increase of entrepreneurial activity over the last 5 years and the improvement of social and individual perceptions is attributed to solid economic growth in Slovenia, decreasing financial crisis, and consolidation of banking system, as well as to a quality development of entrepreneurship ecosystem. To further the growth of entrepreneurship activity and its quality, a profound tax reform as well as the removal of administrative obstacles and the simplification of bureaucracy must be performed. Besides that, the quality of entrepreneurial education and training must be improved, and appropriate entrepreneurship-related content introduced to all levels of educational system.

Entrepreneurial Intentions - 2017

**14.2%**

Total Entrepreneurship Activity (TEA) - 2017

**6.9%**

Entrepreneurial Employee Activity (EEA) - 2017

**6.0%**

Established Business rate (EB) - 2017

**6.8%**

## CONTRIBUTION OF GEM TO POLICY

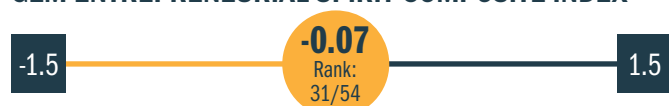
Slovenia joined the GEM consortium in 2002 and since then publishes annual national reports in the Slovenian language with an extensive executive summary written in English. Since inception GEM in Slovenia has established itself as a reliable source of data on Slovenian entrepreneurship, not only because it provides analysis of entrepreneurship in comparison to other countries, but also because policymaking suggestions are communicated in a clear and comprehensive manner. Every year GEM research results are published in numerous Slovenian media, portals and web pages. The website ([www.ipmmp.um.si](http://www.ipmmp.um.si)) of the Institute for Entrepreneurship at the University of Maribor, where GEM is based, had nearly 100,000 visitors in 2017. GEM results are also broadly used within academia in teaching and researching different entrepreneurship topics.

GEM research has brought into Slovenian policy discussions new and fresh insights about the entrepreneurial process in Slovenia. Policy makers and public administrators use GEM research findings when creating new or upgraded measures for enterprises, especially with respect to SMEs. Today, some of the most important Slovenian policy documents and entrepreneurship support programmes either refer to GEM data or use GEM indicators in the evaluation process of the successfulness of certain policy measure.

## WORLD BANK EASE OF DOING BUSINESS



## GEM ENTREPRENEURIAL SPIRIT COMPOSITE INDEX



## THE INFLUENCE OF GEM ON POLICY

## STAKEHOLDERS WHO USE GEM

In last decade, stakeholders at different levels of impact (government, ministries, agencies, chambers and other organisations) created many policy documents that use GEM research. The most common GEM indicators exploited are TEA index, TEA necessity, TEA opportunity, TEA female, TEA male, new and nascent entrepreneurs, established companies, opportunity recognition, self-perception and societal values indicators, and NES indicators.

### 1. GOVERNMENTAL POLICY DOCUMENTS

The *Slovenian Industrial Policy* sets priorities for the development of industry and the economy for the period 2014 to 2020. It contains a range of measures intended to increase the competitiveness in the business environment, to strengthen entrepreneurship and the innovative capability of the economy as well as activities for the sustainable development of industry.

[http://www.mgrt.gov.si/fileadmin/mgrt.gov.si/pageuploads/DPK/SIP/SIP\\_-\\_vkladni\\_dokument\\_EN.doc](http://www.mgrt.gov.si/fileadmin/mgrt.gov.si/pageuploads/DPK/SIP/SIP_-_vkladni_dokument_EN.doc)

The *Slovene Smart Specialisation Strategy* is implementing document relating to the already-adopted strategic documents on research and innovation, industrial policy and digital agenda, as well as other specific and relevant strategies in the field of nature protection, energy, education, etc.

[www.svrk.gov.si/fileadmin/svrk.gov.si/pageuploads/Dokumenti\\_za\\_objavo\\_na\\_vstopni\\_strani/S4\\_dokument\\_2015\\_ENG.pdf](http://www.svrk.gov.si/fileadmin/svrk.gov.si/pageuploads/Dokumenti_za_objavo_na_vstopni_strani/S4_dokument_2015_ENG.pdf)

The *Operational Programme for the Implementation of the EU Cohesion Policy in the Period 2014-2020*. The Programme plays a decisive role in encouraging economic development taking into account the specific characteristics of regions, and contributing to the achievement of the national targets for smart, sustainable and inclusive growth. Among others, the measures are designed to provide support to entrepreneurship.

[www.eu-skladi.si/sl/dokumenti/kljucni-dokumenti/operational-programme-english-version.pdf](http://www.eu-skladi.si/sl/dokumenti/kljucni-dokumenti/operational-programme-english-version.pdf)

The *Operational Programme for Human Resources Development for the period 2007-2013* was aimed at achieving higher employment, social inclusion, higher quality of life, and eliminate regional disparities, by increasing investment into human capital.

[www.eu-skladi.si/kohezija-do-2013/other/operational-programmes/op-rv\\_eng](http://www.eu-skladi.si/kohezija-do-2013/other/operational-programmes/op-rv_eng)

### 2. MINISTERIAL POLICY DOCUMENTS

Ministry of Economic Development and Technology designed *Programme of Measures to Promote Entrepreneurship and Competitiveness for the Period 2007 – 2013* as the action document for implementation of measures required by superior documents. More recently, the *Programme of implementing the financial incentives 2015-2020* has been prepared. The intention of latter document is to bind financial incentives of the Ministry by focusing on key development goals to achieve synergies in promoting the development of long-term economic growth.

[www.mg.gov.si/fileadmin/mg.gov.si/pageuploads/DPK/Program\\_DPK\\_za\\_usklajevanje\\_\\_17.5.2006.pdf](http://www.mg.gov.si/fileadmin/mg.gov.si/pageuploads/DPK/Program_DPK_za_usklajevanje__17.5.2006.pdf)

[www.mgrt.gov.si/fileadmin/mgrt.gov.si/pageuploads/Programi/Program\\_MGRT\\_22.4.2015\\_FINAL.pdf](http://www.mgrt.gov.si/fileadmin/mgrt.gov.si/pageuploads/Programi/Program_MGRT_22.4.2015_FINAL.pdf)

Ministry of Labour, Family, Social Affairs and Equal Opportunities uses GEM indicators in the policy document *Resolution on the National Programme for Equal Opportunities for Women and Men 2015–2020*, emphasising the need to promote female entrepreneurship.

[www.mddsz.gov.si/fileadmin/mddsz.gov.si/pageuploads/dokumenti\\_\\_pdf/enake\\_moznosti/NFMPublikacijaResolucijaAN.pdf](http://www.mddsz.gov.si/fileadmin/mddsz.gov.si/pageuploads/dokumenti__pdf/enake_moznosti/NFMPublikacijaResolucijaAN.pdf)

Ministry of Agriculture, Forestry and Food used TEA index in *Rural Development Programme of the Republic of Slovenia for the period 2007 – 2013*. The Programme is a uniform implementing document of the rural development policy applying to the whole territory of Slovenia.

[http://www.arsktrp.gov.si/fileadmin/arsktrp.gov.si/pageuploads/Aktualno/Aktualno/2010/RDP2007-2013\\_\\_en.pdf](http://www.arsktrp.gov.si/fileadmin/arsktrp.gov.si/pageuploads/Aktualno/Aktualno/2010/RDP2007-2013__en.pdf)

### 3. AGENCIES' AND CHAMBERS' DOCUMENTS

GEM research has had impact also at the level of different government agencies, chambers and other organisations. Few examples:

*SPIRIT Slovenia - Public Agency for Entrepreneurship, Internationalization, Foreign Investments and Technology* supports Slovenian entrepreneurship in named areas. It uses a whole range of GEM indicators when preparing and implementing programmes to facilitate the development of entrepreneurial sector in Slovenia and to measure the results of the programmes.

[www.spiritslovenia.si/resources/files/2016/Razpisi/Program\\_in\\_financi\\_nart\\_SPIRIT\\_Slovenija\\_2016\\_in\\_2017.pdf](http://www.spiritslovenia.si/resources/files/2016/Razpisi/Program_in_financi_nart_SPIRIT_Slovenija_2016_in_2017.pdf)

*IMAD - Institute of Macroeconomic Analysis and Development of the Republic of Slovenia* is an



independent government office, monitoring, analysing and evaluating current trends, as well as the economic, social and environmental dimensions of development. Their analyses that use also the GEM data serve as a basis for strategic decision-making and preparing economic and development policy measures.

[http://www.umar.gov.si/fileadmin/user\\_upload/razvoj\\_slovenije/2017/Angleski\\_grafi\\_indikatorji/apor2017\\_splet.pdf](http://www.umar.gov.si/fileadmin/user_upload/razvoj_slovenije/2017/Angleski_grafi_indikatorji/apor2017_splet.pdf)

*Employment Service of Slovenia* is the key national labour market institution. It is an independent legal entity with public institute status operating uniformly across the entire country. In the document *Evaluation of self-employment and active employment policy measures in the period 2007-2013* a range of GEM indicators was used.

[www.ess.gov.si/\\_files/9960/Koncno\\_vrednotenje\\_ukrepa\\_samozaposlovanja\\_2007\\_2013.pdf](http://www.ess.gov.si/_files/9960/Koncno_vrednotenje_ukrepa_samozaposlovanja_2007_2013.pdf)

*Chamber of Commerce and Industry of Slovenia* used GEM data as an argument in the *Agenda for Small Businesses 2016* demanding some changes and upgrades of current policy measures.

[www.gzs.si/Portals/SN-Staliska-In-Komentarji/Vsebine/novice-priponke/AgendaMG\\_2016\\_070616.pdf](http://www.gzs.si/Portals/SN-Staliska-In-Komentarji/Vsebine/novice-priponke/AgendaMG_2016_070616.pdf)

## WHERE ARE MEDIA ARTICLES PUBLISHED?

The media write numerous articles about the GEM research in Slovenia. Annual results of GEM study are published in all major daily newspapers in Slovenia, such as business journal "Finance", "Delo", "Večer" and "Dnevnik".

<https://live.finance.si/35257/Med-Slovenci-vec-zanimanja-za-podjetnisko-pot>

<https://manager.finance.si/8853868/V-Sloveniji-koncno-vec-zgodnje-podjetniske-aktivnosti>

<https://startaj.finance.si/8853737/Dobra-novica-Koncno-vec-zgodnje-podjetniske-aktivnosti>

<http://www.delo.si/gospodarstvo/podjetja/dve-tretjini-prebivalstva-ima-pozitiven-odnos-do-podjetnistva.html>

<http://www.delo.si/arhiv/vecje-zanimanje-za-podjetnistvo.html>

[www.vecer.com/podjetja-se-rojevajo-in-propadajo-6249150](http://www.vecer.com/podjetja-se-rojevajo-in-propadajo-6249150)



The National Assembly of the Republic of Slovenia, in Ljubljana.

<https://www.dnevnik.si/1042769764/posel/gazela/podjetnistvo-spostujemo-a-se-ga-se-bojimo>

<https://www.dnevnik.si/1042758929/posel/novice/konkurencnost-evropskega-gospodarstva-zvisujejo-skriti-podjetniki>

<http://svetkapitala.delo.si/aktualno/zanimanje-za-podjetnistvo-v-sloveniji-spet-vecje-1138>

GEM results are regularly reported also on the most visited Slovenian media portal *24ur.com*.

<http://www.24ur.com/manj-kot-tri-odstotke-slovenk-je-podjetnic.html>

Besides mentioned media, GEM results are also published and summarized by different websites and portals:

STA – Slovenian Press Agency (for example: <https://www.sta.si/2379003/gem-slovenija-2016-dve-tretjini-prebivalstva-imate-pozitiven-odnos-do-podjetnistva>)



*siol.net* (for example: <http://siol.net/posel-danes/novice/raziskava-uspesni-podjetniki-v-sloveniji-uziva-jo-ugled-439828>)

*times.si* (for example: <http://www.times.si/gospodarstvo/kako-smo-pozabili-na-industrijski-potencial--b1ebbcd-4c47e9e719fb7943159fa691387c05cee/>)

*data.si* (for example: <http://data.si/blog/2016/02/11/podjetnistvo-v-sloveniji-slovinci-imajo-dovolj-znanja-a-se-za-podjetnistvo-ne-odlocajo/>)

*podjetniski-portal.si* (for example: <https://www.podjetniski-portal.si/e-publikacije/45571-GEM-Slovenija-2015-lzsla-je-znanstvena-monografija---Podjetnistvo-med-priloznostjo-in-nujo/>)

*podjetnik.si* (for example: <http://www.podjetnik.si/clanek/nezaznavanje-podjetni%C5%A1kih-prilo%C5%BEnosti-20130912>)

## INDIRECT POLICY IMPACT

The GEM Slovenia policy impact also stems from the research done by GEM team members, who are actively engaged in publishing their research in peer-reviewed journals, present papers at conferences, contribute book chapters, publish monographs, etc. In last 15 years, they published nearly 200 bibliographic units that were either directly based on GEM databases or used GEM own results as a part of discourse.

A long-run impact is also achieved in classrooms, as all team members are university teachers. Two doctoral dissertations were recently completed exploiting GEM data, as well as some master thesis and undergraduate diplomas.

## ENTREPRENEURSHIP PROGRAMMES

Slovenia has numerous programmes for entrepreneurship. Below are some examples.

The project “*Entrepreneurially into the world of business*” introduces a model of mentoring and additional training in order to prepare the participants to acquire the core competencies to develop their business ideas. The target group for this project are highly educated unemployed

individuals in Slovenia under 35 years old who have a higher education, master or doctoral degree, regardless of school, study programme or type of study. This scheme achieved increasing success rates at helping participants start a business. In recent cohorts, more than half of them successfully launched their ideas.

[http://www.oecd-ilibrary.org/industry-and-services/inclusive-business-creation/entrepreneurially-into-the-world-of-business-slovenia\\_9789264251496-21-en](http://www.oecd-ilibrary.org/industry-and-services/inclusive-business-creation/entrepreneurially-into-the-world-of-business-slovenia_9789264251496-21-en)

*Slovene Enterprise Fund* is a public fund with purpose of improving the access to financial resources of SMMEs. It offers different financial instruments, such as *Start Up Incentives* to young enterprises (start-ups less than 12 months old) in the first development phase, *Seed Capital* to young enterprises (less than 5 years old) in the second development phase and their entrance on the market, and *Venture Capital* for the fast-growing innovative enterprises in the third development phase. It also offers *Microcredits* at an affordable contractual interest rate and *Guarantees* as collateral for bank loans with interest rate subsidy.

[www.podjetniskisklad.si/en/](http://www.podjetniskisklad.si/en/)

There is also much useful information for entrepreneurs accessible through various web portals:

*Slovenia Business Point* (<http://eugo.gov.si/>)

*Entrepreneurship Portal* (*Podjetniški portal*, [www.podjetniski-portal.si](http://www.podjetniski-portal.si))

*I have an Idea! – the portal for innovators* (*Imam idejo! – portal za inovativne*, <https://www.podjetniski-portal.si/ustanavljam-podjetje/inovativno-okolje/Imam-idejo---portal-za-inovativne>)

*Initiative Start:up Slovenia* (<http://www.startup.si/en-us>)



# Spain

**GEM TEAM:** Ana Fernández Laviada, Federico Gutiérrez-Solana and Iñaki Peña

For more information about GEM Spain, go to the link:

<http://gemconsortium.org/country-profile/109>



Spain joined the GEM project in 2000 and since then now integrates 19 regional research teams and 22 universities representing 140 researchers working annually to deepen the entrepreneurial phenomenon from multiple points of view and in the different Spanish regions. GEM Spain, with the leadership of the International Center Santander Entrepreneurship (CISE), has 90 sponsors among them, as main sponsor, Banco Santander and 15 regional governments that finance the project to have access to the results.

GEM Spain widely publicized the results in the media in order to get the attention of policy makers, researchers, students at schools and universities, financial institution, entrepreneurs and employer associations.

**SMALL AND MEDIUM ENTERPRISES (SME) CONTRIBUTION TO GDP - 2015**

**62%**

Entrepreneurial Intentions  
- 2017

**5.6%**

Total Entrepreneurship Activity  
(TEA) - 2017

**6.2%**

Entrepreneurial Employee Activity  
(EEA) - 2017

**1.4%**

Established Business rate  
(EB) - 2017

**7.1%**

## CONTRIBUTION OF GEM TO POLICY

The main contribution of the GEM project is the ability to compare results with other countries and other regions within Spain. Although it is difficult to state that GEM has a direct influence on policy makers and policy, many regional governments are sponsors of GEM and their aim is to have priority access to the data in order to make economic policy decisions.

## STAKEHOLDERS WHO USE GEM

GEM Spain research results are published in the main national and regional media, social networks and web pages. Many prominent daily newspapers write articles about GEM amongst them *El Pais*, *ABC*, *Expansion* and *Cinco Dias*.

GEM has been used in Spain to fundamentally define policies for economic promotion and employment. For example, the Spanish Law (Law 14/2013 of 27<sup>th</sup> September 2013) used GEM at a regional level to justify and design measures to support entrepreneurship and to make a comparative diagnosis of entrepreneurial activity of the territories. Some examples of such laws are:

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## THE INFLUENCE OF GEM ON POLICY

## BASQUE COUNTRY

Interinstitutional Plan to Support Entrepreneurial Activity in the Basque Country (December 2013). Ten pages are devoted to the diagnosis of the situation of the enterprise in the Basque Country using the GEM report and several GEM indicators are proposed to assess policy results annually.

[http://www.euskadi.eus/contenidos/noticia/xleg\\_plan\\_departamento/es\\_p\\_depart/adjuntos/plan%20apoyo%20actividad%20emprededora%202014.pdf](http://www.euskadi.eus/contenidos/noticia/xleg_plan_departamento/es_p_depart/adjuntos/plan%20apoyo%20actividad%20emprededora%202014.pdf)

## CANARIAS

Regional Strategy for Research and Innovation for an Intelligent Specialization in Canarias (RIS3). RIS3 uses GEM regional and national data to follow up the regional strategy. It is also cited by its main documents and figures.

<http://www3.gobiernodecanarias.org/aciisi/ris3/>

[http://www3.gobiernodecanarias.org/aciisi/ris3/images/documents/ris3\\_canarias\\_v2.0.pdf](http://www3.gobiernodecanarias.org/aciisi/ris3/images/documents/ris3_canarias_v2.0.pdf)

## CANTABRIA

RIS3. Regional Strategy for Research and Innovation for an Intelligent Specialization in Cantabria (January 2014). RIS3 cited GEM data to justify the regional and comparative entrepreneurial activity.

<http://www.redidi.es/sites/default/files/biblioteca-documentos/ris3cantabria.pdf>

## GALICIA

Law on entrepreneurship and economic competitiveness of Galicia. Law 9/2013, dated 19<sup>th</sup> December, 2013. Global Entrepreneurship Monitor is cited in the explanatory statement that justifies the Law.

<https://www.boe.es/boe/dias/2014/01/29/pdfs/BOE-A-2014-883.pdf>

## MADRID

Resolution of 6<sup>th</sup> September, 2013, of the director of the Economic Development Agency, Madrid Emprrende, which approves the public call for the granting of financial aid aimed at encouraging economic activities in the city "Madrid Tax-Free". GEM is used to justify the fiscal and bureaucratic burdens of the entrepreneur.

[https://www.bocm.es/boletin/CM\\_Orden\\_BOCM/2013/09/09/BOCM-20130909-30.PDF](https://www.bocm.es/boletin/CM_Orden_BOCM/2013/09/09/BOCM-20130909-30.PDF)

This legislation was completed with Law 11/2013, of 26<sup>th</sup> July, on measures to support the entrepreneur and stimulate growth and job creation.

<https://www.boe.es/boe/dias/2013/07/27/pdfs/BOE-A-2013-8187.pdf>

In recent years, the use of GEM has been strengthened by the justification of national and regional policies promoting entrepreneurship and for the monitoring their results. The most recent examples are:

## ANDALUCIA

Draft Andalusian Law for the Promotion of Entrepreneurship. Law of 12<sup>th</sup> June, 2017. There are several references of GEM in the introductory section.

<https://www.parlamentodeandalucia.es/webdinamica/portal-web-parlamento/pdf.do?tipodoc=bopa&id=121336>

## ARAGÓN

The Aragonese Strategy of Entrepreneurship 2015-2020 uses the GEM project as one of the relevant tools to define this Strategy.

Besides, the "Fundación Emprender en Aragón" the entrepreneurial unit of the Government of Aragón, support and funds the GEM-Aragón and uses it widely in their policy decisions.

Aragonese Strategy of Entrepreneurship 2015-2020: [https://www.iaf.es/download/Plan\\_Estrategico\\_2015\\_2020.pdf](https://www.iaf.es/download/Plan_Estrategico_2015_2020.pdf).

Fundación Emprender en Aragón:

<http://www.aragonemprendedor.com/contenido.php?modulo=contenido&padre=1%7C69&IDContenido=69>

## CATALONIA

Regulatory bases for the granting of subsidies for the financing of the Comprehensive Program to support entrepreneurs, Catalunya Emprèn program, in the years 2015, 2016 and 2017. Official Journal of the Generalitat de Catalunya (2017). Catalonia Government uses several GEM indicators to make a comparison of entrepreneurial activity in the EU context. They also use data about entrepreneur and company profile, motivations, opportunity, need, as well as conclusions from different GEM Catalonia reports.

<https://app.vlex.com/#vid/586269114>

<https://app.vlex.com/#vid/644614721>

[http://dogc.gencat.cat/es/pdogc\\_canals\\_interns/pdogc\\_su-mari\\_del\\_dogc/?anexos=1&language=es\\_ES&numDOG-C=7414&seccion=0](http://dogc.gencat.cat/es/pdogc_canals_interns/pdogc_su-mari_del_dogc/?anexos=1&language=es_ES&numDOG-C=7414&seccion=0)

## MADRID

Madrid Emprende (2017) Resolution of 30<sup>th</sup> May, 2017 of the Technical General Secretary of the Area of Government of Equity, Social Rights and Employment. Call for the competition “The MAD + 2017 Awards, for a Madrid MORE fair and MORE solidarity “of the City of Madrid. Several GEM indicators of entrepreneurial activity are used in this resolution.

[http://www.madridemprende.es/images/public/source/Pre-miosEmprendimiento/boam7916\\_1189.pdf](http://www.madridemprende.es/images/public/source/Pre-miosEmprendimiento/boam7916_1189.pdf)

In addition, the GEM report has been used in the Basque Country by the Women’s Institute to define the *Map for the Support of Women’s Entrepreneurship in Basque Country* (Emakunde, 2015). The document references GEM Basque Country to show the greater fear of failure of enterprising woman.

<http://www.laudiogarapen.eus/docs/41543/mapa.ayudas.apoyo.emprendimiento.mujeres.cae.cas.pdf>

The Generalitat de Catalunya, the Department of Agriculture, Livestock, Fisheries and Food (2016), has also used GEM to define its development policy and cites it several times to justify the level of rural entrepreneurship in Catalonia.

<http://agricultura.gencat.cat/web/.content/01-departament/politiques-dones/enllacos-documents/fitxers-binariis/Programa-de-dones-2016-2020.pdf>

The different regional governments are asking to examine specific areas of entrepreneurship in order to improve their development policies. In fact, the Basque Country GEM team is working the provincial level with GEM Biscay and GEM Gipuzkoa.

In recent years, and derived from the recommendations and results of GEM Spain, different improvements have been observed: Reduction of bureaucratic procedures to start up, with the consequent reduction of the time necessary for the creation of companies. There are still improvements in the field of public policy along with fiscal policy. Diputy of Biscay has regulated tax incentives for Business Angels in the Income Tax of Individuals. GEM data were used in explanatory statement.

<https://apps.bizkaia.net/SIGP/servlet/MuestraArchivoServlet?archivo1=/var/bfaprog/DATOS/SIGP/Boletin/A/2/09/aii001a.pdf>

The interest in GEM Spain and its regional reports is growing, year by year, between different groups and for different uses: it is used by technicians of public programs to design programs, evaluate results before defining budgets, for the allocation of resources for universities and educational

centers, to prioritize regulatory measures and even to request European programs.

As mentioned above, GEM Spain is composed of 18 research teams at 22 universities using the research results of GEM Global, GEM Spain and other regional reports in their different areas of action: teaching, researching and transferring.

Most of the 140 researchers of GEM Spain are also professors of subjects of entrepreneurship, innovation, strategy, commercial direction or finances in different University degrees, fundamentally in Economy and Business Degrees, and in Master Programs.

In the different universities GEM is used for university teaching, usually in subjects of entrepreneurship. GEM allows covering three teaching objectives: 1) To evaluate the regional and national entrepreneurial ecosystem 2) To study the different factors that influence countries and regions to have different entrepreneurship rates 3) To identify strengths and weaknesses of the regional and national entrepreneurial ecosystem, comparing it with others.

The 140 researchers of GEM Spain also promote and direct Entrepreneurship Master’s Programs:

UC:  
<http://www.masterenemprendimiento.cise.es/>

UCA:  
<https://posgrado.uca.es/master/up?curso=2017/18>

UCLM:  
<https://mumie.masteruniversitario.uclm.es/presentacion.aspx>

UMH:  
[http://www.umh.es/contenido/Estudios/tit\\_fpo\\_8864/datos\\_es.html](http://www.umh.es/contenido/Estudios/tit_fpo_8864/datos_es.html)

UNEX:  
[https://www.unex.es/organizacion/servicios-universitarios/servicios/servicio\\_becas/funciones/Masteres/masteres-oficiales-fichas/master-universitario-en-creacion-de-empre-sas-e-innovacion](https://www.unex.es/organizacion/servicios-universitarios/servicios/servicio_becas/funciones/Masteres/masteres-oficiales-fichas/master-universitario-en-creacion-de-empre-sas-e-innovacion)

UNIZAR:  
<http://www.campusiberus.es/master-en-emprendimiento/>

UPV/EHU:  
<https://www.ehu.eus/es/web/ieae/mbae3>

The objective of these Entrepreneurship Master’s Programs is to train and help young entrepreneurs to test prototypes of products and services, design business models and build their business plans to start-up young innovative companies.



# South Korea

**GEM TEAM:** Siwoo Kang, Chaewon Lee, Brungheon Lee, Dohyeon Kim, Choonwoo Lee, Sunghyun Cho & Moonson Kim

For more information about GEM South Korea, go to the link:

<http://gemconsortium.org/country-profile/125>



Korea has been progressing exceptionally well when it comes to a rapid economic growth, and has now become one of the stronger traders in the world. Especially amid a worldwide economic crisis, there were many successful entrepreneurs who helped to bring the Korean economy out of crisis. Now Korea has a policy to foster the entrepreneurial ecosystem, which is expected to overcome the current global economic downturn and make quantum leap. There is also an effort to raise the entrepreneurs for generations to come, as well as enhancing the environment.

There is, however, still a long way to go in terms of TEA (ranked 21<sup>st</sup> in 2017), Social environment and infrastructure (ranked 55<sup>th</sup>) and entrepreneurship education (ranked 54<sup>th</sup>), on the other hand, the government policy and support system are highly placed.

Entrepreneurial Intentions  
- 2017

**22.8%**

Total Entrepreneurship Activity  
(TEA) - 2017

**13.0%**

Entrepreneurial Employee Activity  
(EEA) - 2017

**1.9%**

Established Business rate  
(EB) - 2017

**11.4%**

## CONTRIBUTION OF GEM TO POLICY

GEM data is used to measure the status of entrepreneurship in Korea and to estimate the results of relevant policies. The Korea Institute of Startup and Entrepreneurship Development (KISED), who is one of the representatives of GEM Korea is annually evaluated as a public institution in which improvement-driven opportunity entrepreneurship is one of their performance indicators.

The results from the National Expert surveys (NES) showed that entrepreneurship education from elementary through to universities was insufficient. As a result, entrepreneurship classes were incorporated into regular courses and will now be expanded from a few grades to all educational levels by 2020.

The Korea Entrepreneurship Foundation (KEF) has worked with many partner organizations especially in the public sector when designing new projects in entrepreneurship education and have used GEM data in the discussions.

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## GEM ENTREPRENEURIAL SPIRIT COMPOSITE INDEX







The National Assembly of South Korea, situated in Yeouido, Seoul.

## STAKEHOLDERS WHO USE GEM

The Ministry of SMEs and Startups(MSS), the Ministry of Science and ICT(MSIT), the Ministry of Education and other government departments are the main entities that use the results of GEM. For example, TEA (Early-stage entrepreneurial activity) is one of the key indicators that are used to evaluate the effectiveness of certain government policies. This is especially the case with the current government who are wanting to improve and enhance the entrepreneurial ecosystem. For example:

<http://news.mk.co.kr/newsRead.php?no=895619&year=2016>

GEM is also used by academics from universities for research and presenting papers at conferences and seminars.

## GOVERNMENT WEBSITES

The official blogs operated by The Ministry of Science and ICT(MSIT) use GEM data

[http://blog.naver.com/with\\_msip/220836716647](http://blog.naver.com/with_msip/220836716647)  
(official blog)

<http://www.msip.go.kr/web/msipContents/contents.do?mId=NzQ=> (official page, needed searching in Korean)

<http://www.smba.go.kr/site/smba/ex/bbs/View.do?cblIdx=86&bcIdx=31775> (Source: GEM 2011)

## WHERE ARE ARTICLES PUBLISHED?

GEM reports are frequently cited in the media as well as in editorials, opinion pieces and analytical articles. Some examples of news written in 2016 and 2017 are:

<http://platum.kr/archives/75836> (English)

[http://khnews.kheraldm.com/view.php?ud=20170215000743&md=20170218003659\\_BL](http://khnews.kheraldm.com/view.php?ud=20170215000743&md=20170218003659_BL) (English)

<http://news.mk.co.kr/newsRead.php?no=895620&year=2016>

[http://www.dt.co.kr/contents.html?article\\_no=2016112902102351607001](http://www.dt.co.kr/contents.html?article_no=2016112902102351607001)(An Essay)

[http://superich.heraldcorp.com/superich/view.php?ud=20160921000008&sec=01-74-01&jeh=0&pos=\(TEA,Prospectofincreaseinemployee\)](http://superich.heraldcorp.com/superich/view.php?ud=20160921000008&sec=01-74-01&jeh=0&pos=(TEA,Prospectofincreaseinemployee))

## ENTREPRENEURSHIP PROGRAMS

MSS and MSIT promote startup policies which tend to fall into four main categories, i.e. entrepreneurship education, mentoring and consulting, providing facilities and space and small business support. The link for this is:

[http://www.smba.go.kr/site/smba/supportPolicy/supportPolicyList.do?cmm\\_code=BB020200](http://www.smba.go.kr/site/smba/supportPolicy/supportPolicyList.do?cmm_code=BB020200)



# Sweden

**GEM TEAM:** Pontus Braunerhjelm (team leader), Carin Holmquist, Ylva Skoogberg & Per Thulin

For more information about GEM Sweden, go to the link:

<http://gemconsortium.org/country-profile/1110>



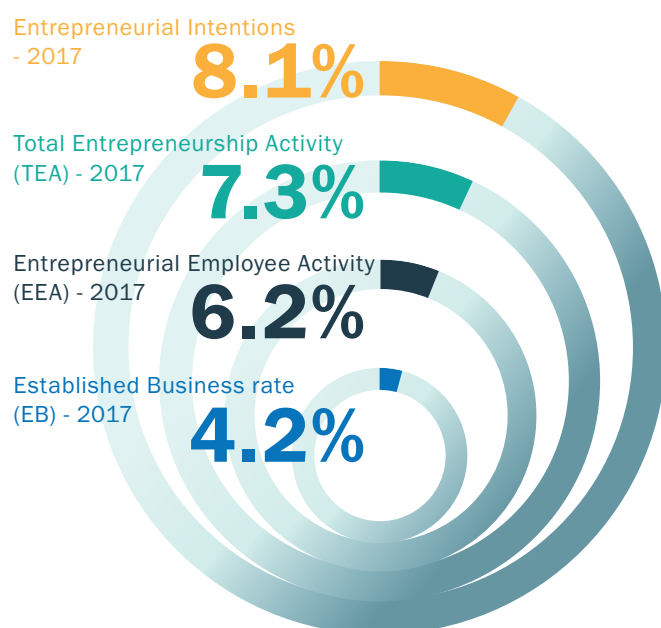
**SMALL AND MEDIUM ENTERPRISES (SME) CONTRIBUTION TO GDP - 2015**

**61%**

In 2017 the level of entrepreneurship remained constant in Sweden. 7.3% of the Swedish population was active at an early-stage or operating a young company. Women and older people, were the main drivers for the increase in entrepreneurship between 2015 and 2017. Despite this positive development, the level is still below the average of other innovation-driven countries.

A large proportion of Swedes who run and start businesses are over 50 years old, many over 65 years old. They are less risk avert and more optimistic than their younger business colleagues.

Swedish entrepreneurs have a problem with growth as shown by GEM. The proportion of entrepreneurs who plan to employ more than 20 people within five years (gazelle companies), is estimated at 6.3% as compared with 10% in 2015.



Sweden has for a decade witnessed a trend-wise increase in entrepreneurship, re-positioning Sweden from a very modest position among innovation-driven countries to a considerably more prominent rank. Parallel to this development a few young firms valued at US\$41 billion or more have emerged, suggesting that the increase is not only quantitative but also qualitative. The Swedish GEM-studies have been pivotal in describing and encouraging this process.

## CONTRIBUTION OF GEM TO POLICY

GEM is considered to be a well-known, highly accepted and a unique data source for cross country and intertemporal comparisons of entrepreneurial activities and entrepreneurial attitudes.

The Swedish GEM report is widely used among governmental authorities as a vehicle to understand the entrepreneurial process, identify the bottlenecks for entrepreneurial success and ultimately designing policies.

## WORLD BANK EASE OF DOING BUSINESS



## GEM ENTREPRENEURIAL SPIRIT COMPOSITE INDEX



## 1. UNIVERSITIES AND TECHNICAL COLLEGES

The GEM-report is frequently used in teaching. For example, at the Stockholm School of Economics, but also a number of other academic institutions such as the Royal Academy of Engineering Sciences. The data is also used in research and often pooled with other data at a more aggregated level.



Riksdag Parliament Building, Stockholm, Sweden.

## 2. NON-UNIVERSITY RESEARCH INSTITUTIONS

Different private research institutes occasionally use the data. Also private industry and small business associations have an interest in the GEM reports/database.

### STAKEHOLDERS WHO USE GEM

GEM data is discussed and used by politicians and policy makers. However, policy conclusions and recommendations are not always implemented on the political agenda.

Different political parties use the GEM results as is evident when promoting politics and their agenda.

<https://www.centerpartiet.se/download/18.59ee6f-e15822a5c9933a0/1478092112915/Liberal+feminism.pdf>

GEM Sweden's team leader, Professor Pontus Braunerhjelm, was head of the latest Official Report of the Swedish Government (SOU) on entrepreneurship.

Utredning om Utveckling av innovations- och entreprenörsklimatet i Sverige (Dir. 2015:10) med professor Pontus Braunerhjelm som särskild utredare.

This Report was handed over to the Ministry for Enterprise in October 2016.

### WHERE ARE ARTICLES PUBLISHED?

The media in Sweden regularly report on GEM findings especially just after the annual launch of the country report. In 2017 three of the largest newspapers covered the news from the GEM-launch.

<http://www.di.se/nyheter/ny-rapport-sverige-far-fler-foretagare-men-inte-tillrackligt-snabbt/>

<https://www.svd.se/fortsatt-bra-fart-pa-nyforetagandet>

<http://www.gp.se/nyheter/debatt/svenska-entrepren%C3%B6rskapet-drivs-fram%C3%A5t-av-kvinnor-och-%C3%A4ldre-1.4354390>

The GEM-team also published debating articles in local papers with regional data.

<http://nwt.se/asikter/debatt/2017/06/09/lagst-entreprenorsvilja-i-varmland>

<http://www.kuriren.nu/opinion/hur-star-det-till-med-entreprenorskapet-i-lanet-nm4566099.aspx>

<http://www.op.se/opinion/debatt/debatt-entreprenorer-ar-viktiga-for-tillvaxt-och-arbetsstillfallen>

<https://www.sn.se/ledare/entreprenorsviljan-i-%EE%80%82sodermanland-ar-%EE%80%82-nast-lagst-i-landet/>

<http://www.na.se/opinion/debatt/rad-at-finansdepartementet-se-vikten-av-entreprenorer-och-uppfinnare>

## ENTREPRENEURSHIP PROGRAMS

Sweden has support programs dedicated to entrepreneurship which can be found at each spatial level, i.e. a Federal level with the Swedish Agency for Economic and Regional Growth, the County Councils and at municipal level. There is also a governmental funding program for entrepreneurs conducted by Almi.



# Thailand

**GEM TEAM:** Ulrike Guelich

For more information about GEM Thailand, go to the link:

<http://gemconsortium.org/country-profile/114>



Thailand

**SMALL AND MEDIUM ENTERPRISES (SME) CONTRIBUTION TO GDP - 2015**

**37%**

The terms *entrepreneur* and *entrepreneurship* in Thailand were introduced at roughly the same time as when the GEM research project first took place in the country in 2002. It changed the way in which people viewed small business owners and as a result politicians started targeting entrepreneurship as an important topic to support SME and economic development. GEM was instrumental in providing the necessary facts and figures for the Thai entrepreneurial activities such as their attitudes, activities and aspirations.

With the continuous exposure of GEM information that has been published in the media and discussed in forums, GEM has become a valuable and highly accepted source of information for many stakeholders in Thailand. Knowledge has been exchanged between GEM, government agencies, business associations, universities and national and international organizations.

GEM findings have been used to suggest policies for SMEs, to create training programs on gaps found in the expert survey and to empower women entrepreneurs across the ASEAN region to benefit from the ASEAN Economic Community (AEC).

Entrepreneurial Intentions - 2017

**37.4%**

Total Entrepreneurship Activity (TEA) - 2017

**21.6%**

Entrepreneurial Employee Activity (EEA) - 2017

**4.5%**

Established Business rate (EB) - 2017

**15.2%**

However, as in many other countries it is difficult to show a direct correlation and link between GEM and government policy decision making.

## STAKEHOLDERS WHO USE GEM

Different stakeholders in Thailand refer to GEM data to suggest policies, conduct research and to draw conclusions on the entrepreneurial landscape in Thailand. Examples of this are given below:

### 1. OFFICE FOR SMALL AND MEDIUM ENTERPRISES PROMOTION (OSMEP)

In its "*Thailand's SME White Paper 2015*", the government agency OSMEP (Office for Small and Medium Sized Enterprise Promotion) has one full chapter (Chapter 10) on GEM findings and also refers to GEM as a source of information in its foreword. The chapter "*A Comparative Study for Development (Global Entrepreneurship Monitor: GEM)*" utilizes both APS and NES data collected in 2014. This study was conducted with the objective of studying the status and evaluating the degree of Thailand's entrepreneurship, attitudes, attentiveness and participation of population in terms of entrepreneurial activities, classified by group and region. In addition, the purpose was to study the supportive surrounding factors of the growth of entrepreneurs, guidelines for defining policy and measures supporting the

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## GEM ENTREPRENEURIAL SPIRIT COMPOSITE INDEX



development of an entrepreneurial society, and the creation of a new generation of quality entrepreneurs.

The study includes a comparative study of entrepreneurial activity in Thailand versus other countries (Philippines, Vietnam, Malaysia, Indonesia, China, Singapore, South Korea, Taiwan, Poland, Germany, the United Kingdom and the United States), women entrepreneurship and Thailand, a comparative study between TEA and established business owners, differences between business operations of small and medium enterprises in Thailand, the capacity of the entrepreneurial society in Thailand, obstacles affecting the development of entrepreneurship in Thailand, suggestions and promoting measures to strengthen the entrepreneurship society of Thailand in the future.

Chapter 10:

[http://www.sme.go.th/eng/images/data/SR/download/2015/report\\_year/ExecutiveSummary/Chapter%2010.pdf](http://www.sme.go.th/eng/images/data/SR/download/2015/report_year/ExecutiveSummary/Chapter%2010.pdf)

Foreword:

[http://www.sme.go.th/eng/images/data/SR/download/2015/report\\_year/ExecutiveSummary/Foreword.pdf](http://www.sme.go.th/eng/images/data/SR/download/2015/report_year/ExecutiveSummary/Foreword.pdf)

Full Report:

<http://www.sme.go.th/eng/index.php/data-alert/alert/report-smes-year/137-cat-white-paper-old-2015>

OSMEP also provides a link on its webpage ([www.sme.go.th](http://www.sme.go.th)) to GEM as one of its international agencies, along with UNDP, OECD, Economic Research Institute for ASEAN and East Asia (ERIA), Deutsche Gesellschaft fuer Internationale Zusammenarbeit (GIZ), World Bank, International Finance Corporation IFC, International Institute for Sustainable Development iisd, SME Toolkit, Committee for Economic and Commercial Cooperation of the Organization of Islamic Cooperation COMCEC.

In an earlier OSMEP White Paper in 2005, Chapter 8 about “The Strengthening of Entrepreneurial Society: Status and Guidelines” refers to GEM Thailand APS and NES data 2002 and 2005, the first two years, when GEM was conducted in Thailand.

Chapter 8:

[http://www.sme.go.th/SiteCollectionDocuments/White%20Paper/2548/chapter\\_8\\_ENG\\_VER.pdf](http://www.sme.go.th/SiteCollectionDocuments/White%20Paper/2548/chapter_8_ENG_VER.pdf)

## **2. ASIAN-PACIFIC ECONOMIC COOPERATION (APEC)**

The Asia-Pacific Economic Cooperation (APEC) in its introduction to the Thai economy refers to the 2013 GEM Thailand Report and cites “According to a 2013 Global Entrepreneurship Monitor (GEM) report, representation of male and female entrepreneurs at all

stages of business activity is roughly equal: intending to start a business, starting and sustaining the business, and becoming an established owner and creator of jobs. Women-owned enterprises in Thailand are typically small, and rely on a variety of funding sources to become established, chiefly funds from their own savings and from family and friends. The GEM reports that more than 70 percent of Thai women-owned businesses operate as microenterprises.”

<http://www.we-apec.com/economies/thailand>

## **3. THE UNITED NATIONS ESCAP (ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC)**

United Nations ESCAP (Economic and Social Commission for Asia and the Pacific) published a report on women entrepreneurship in 2017, based on data extracted from the Global Entrepreneurship Monitor (GEM) Surveys for 2013/2014 and 2014/2015 for the six ASEAN countries Indonesia, Malaysia, the Philippines, Singapore, Thailand and Viet Nam, among other sources. The primary source of data for this report is GEM, particularly the GEM ASEAN Regional Entrepreneurship Reports for 2014/2015 and 2015/2016, and the GEM Adult Population Survey of Thailand and other ASEAN countries 2013 and 2014.

The report was specifically based on GEM data because the GEM Research Project covers both formal and informal entrepreneurs, thus reports significantly greater levels of early-stage entrepreneurship than other sources because it captures informal activity as well, which is extensive within ASEAN.

Full report:

<http://www.unescap.org/resources/fostering-womens-entrepreneurship-asean-transforming-prospects-transforming-societies>

Overview report:

<http://www.unescap.org/resources/fostering-womens-entrepreneurship-asean-overview>

## **4. UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT (UNTAD)**

UNCTAD (United Nations Conference on Trade and Development, New York and Geneva) refer to GEM data in their “Science, Technology & Innovation Policy Review Thailand” (2015): “Thailand has a dynamic SME and business sector but with limited appetite and capacity for innovation. Two key obstacles to the emergence of innovative SMEs and entrepreneurs in Thailand are the lack of relevant entrepreneurial education and training, and limited capacities to incorporate S&T in new ventures



(GEM et al., 2012)..... It will be necessary to supplement the teaching of science, technology, engineering and mathematics with training in business management, while also fostering the individual and collective attitudes that foster entrepreneurship”.

[http://unctad.org/en/PublicationsLibrary/dt1st-ict2015d1\\_en.pdf](http://unctad.org/en/PublicationsLibrary/dt1st-ict2015d1_en.pdf)

## 5. UNESCO-APEID EE-NET FOR ENTREPRENEURIAL EDUCATION

GEM Thailand is part of the regional Entrepreneurship Education Network Asia-Pacific and contributes its annual findings to promote policies for entrepreneurship education, usually at the annual meetings of the EE-Net.

<http://www.unescobkk.org/education/apaid/entrepreneurship-education/4ee1015>

## 6. APO ASIAN PRODUCTIVITY ORGANIZATION

In discussions at the Academic Meeting on Entrepreneurship Development the adoption of the index developed by GEM to measure entrepreneurial activities was endorsed to be used in the “Report on Entrepreneurship Initiatives in APO Countries” (2016 Japan). The report covers the countries Cambodia, China, India, Indonesia, Japan, Pakistan, Philippines and Thailand and draws most entrepreneurship numbers for the countries Thailand, Philippines, Indonesia, India, Japan, and China from GEM.

<http://www.apo-tokyo.org/publications/wp-content/uploads/sites/5/Report-on-Entrepreneurship-Initiatives-in-APO-Economies.pdf>

## 7. OECD (ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT)

In their book “*OECD Studies on SMEs and Entrepreneurship Thailand: Key Issues and Policies*”, published as book and e-book end of 2011, the authors refer to GEM Thailand data.

<http://www.oecd.org/publications/thailand-key-issues-and-policies-9789264121775-en.htm>

## 8. JOINT FOREIGN CHAMBER OF COMMERCE THAILAND (JFCCT)

The Joint Foreign Chambers of Commerce Thailand will follow the Global Entrepreneurship Monitor guidelines, as stated in Agenda Item IV “SME committee focus for 2017 SME Policy recommendations for 2017”

[https://d2oc0ihd6a5bt.cloudfront.net/wp-content/uploads/sites/1871/2015/02/2017-02-06-Minutes\\_JF-CCT\\_SME\\_COMMITTEE-DRAFT.pdf](https://d2oc0ihd6a5bt.cloudfront.net/wp-content/uploads/sites/1871/2015/02/2017-02-06-Minutes_JF-CCT_SME_COMMITTEE-DRAFT.pdf)

Many other examples can be given of other stakeholders using GEM data but there is no direct link that this information has had an impact on regulations and legislation in Thailand. They are, however, an underlying source of information influencing the ecosystem and policy recommendations. There is a correlation between GEM and current and recent discussions and activities showing evidence that the government has been trying to increase innovative entrepreneurship which is in line with GEM Thailand findings and recommendations.

## WHERE ARE ARTICLES PUBLISHED?

GEM Thailand work and results are often featured both in the Thai and English national newspapers. Examples of a few are given below:

<http://www.ryt9.com/s/prg/2627568>

<http://www.newswit.com/gen/2017-04-04/c167a8aa718b039ff5e0449fe816e41c/>

<http://www.thailand4.com/gen/2017-04-04/c167a8aa718b039ff5e0449fe816e41c/>

<http://www.nationmultimedia.com/news/business/corporate/30310947>

<http://www.thailand4.com/gen/2017-03-31/ac2b-f16e3396d39d7db112d8dfd51bb6/>

<http://www.thaipr.net/general/767049>

<http://www.newswit.com/gen/2017-03-31/ac2b-f16e3396d39d7db112d8dfd51bb6/>

[http://www.nationmultimedia.com/news/life/art\\_culture/30310431](http://www.nationmultimedia.com/news/life/art_culture/30310431)

<http://destinationthailandnews.com/news/head-line-news/empowering-women-entrepreneurs-360-degrees.html>

<http://www.newswit.com/gen/2017-03-10/aafb7275e-3698666742ab17c277d9505/>

<http://www.ryt9.com/s/prg/2615244>

<http://www.thailand4.com/gen/2017-03-10/aafb7275e-3698666742ab17c277d9505/>

<http://www.ryt9.com/es/prg/193561>

<http://www.thaipr.net/general/762450>



<http://www.newswit.com/gen/2017-03-10/112f-f77a772c6249058fa342a44aaa82/>

<http://www.thailand4.com/gen/2017-03-10/112f-f77a772c6249058fa342a44aaa82/>

<https://boxkao.blogspot.jp/2017/02/joint-entrepreneurship-study-shows.html>

<http://www.thaipr.net/general/767047>

<http://www.thaipr.net/education/767884>

<http://www.thaipr.net/general/762448>

<http://www.eabizinfo.com/2017/08/10/uganda-banks-told-to-promote-youth-entrepreneurship/>

## ENTREPRENEURSHIP PROGRAMS IN THAILAND

There are a number of entrepreneurial programs in Thailand some of which are given below. The National Development Policy papers 9 and 10 specifically implement policies which target to foster entrepreneurship in combination with innovation.

[http://www.nesdb.go.th/ewt\\_dl\\_link.php?nid=3784](http://www.nesdb.go.th/ewt_dl_link.php?nid=3784)  
[http://www.nesdb.go.th/ewt\\_news.php?nid=5747&file-name=develop\\_issue](http://www.nesdb.go.th/ewt_news.php?nid=5747&file-name=develop_issue)

The King Prajadhipok's Institute (King Prajokklao Institute, [www.kpi.ac.th](http://www.kpi.ac.th)), a department under the House of Representatives Secretariat with its "New Leader in Democracy Program" is just one example for a program that aims to implement innovation/entrepreneurship policy and initiatives.

Government loan guarantees for entrepreneurs and start-ups are available through the Thai Credit Guarantee Corporation (<http://www.tcg.or.th/tips.php>) and most banks have their own specific entrepreneurship funding and training programs. Bangkok Bank is more focused on family businesses, providing training workshops for successors through CEDI, Creative Entrepreneurship Development Institute at Bangkok University with their FEF Future Entrepreneurs Forum (<https://www.facebook.com/CEDI.FEF/> or <http://cedi.bu.ac.th/>). Kasikorn Bank targets SMEs, and Siam Commercial Bank SCB provides bi-annual training through the YEP Young Entrepreneur Program and the IEP Intelligent Entrepreneur Program. The IEP aims to hone business management and problem solving skills for SME owners above the age of 35 while helping nurture a self-sustaining SME business network. Similarly, the Young Entrepreneur Program YEP aims to promote management skills and encourage budding entrepreneurs to participate in and eventually take over the reins of their family businesses (<https://scbsme.scb.co.th/iepyep>)

Government agencies such as the National Innovation Agency (NIA) and the NSTDA (National Science & Technology Development Agency) target the digital economy and innovative start-ups. NIA together with UNCTAD/WTO's International Trade Center also started to focus on innovation for agricultural entrepreneurs to help bring local organic products to international markets through an initiative entitled "Strengthening the Export Capacity of Thailand's Organic Agriculture", as organic agriculture offers high potential especially when it comes to exports. NIA's efforts have proven successful and helped to create a significant collaborative network among private sectors, researchers, and organic producers. The network has led to the development of over twenty organic-related innovation projects under NIA's technical and financial support schemes. In parallel, NIA also works with the Thai Organic Trade Association (TOTA) to promote and encourage organic business development in Thailand. NIA has set a target to support at least fifty more entrepreneurs in the next few years and help them to eventually produce and improve their organic products for exports.

<http://www.nia.or.th/organic/>

The ICT Ministry of Thailand, now Ministry of Digital Economy and Society (MDES), set up a 20 billion THB (570 million USD) startup fund for startups. 10 billion THB (285 million USD) are set up as Digital Economy Fund by the Ministry of ICT specifically for tech startups and the other 10 billion THB fund are set up by the Ministry of Finance for a broader group of startups in healthcare, finance, agriculture, tourism and digital technology. After the launch of the Digital Economy Fund in 2016, 40 universities across Thailand signed a Memorandum of Understanding with the Ministry to found tech start-up clubs in their universities to foster tech start-ups among their students, supported by these government funds. Several universities indeed offer entrepreneurship programs and provide incubators and incubation programs. However, one year after signing the MoU, many of these universities are still in their infant shoes in getting the tech start-ups set up and running. Government initiatives and programs cannot implement their programs on the ground, they can only provide the beneficial ecosystem in or the landscape of a country. It is up to other stakeholders involved, in this case universities and their professors, lecturers and incubators to act and execute upon the provided government programs, to be more entrepreneurial themselves and take matters into their hands to create the much demanded innovative digital Thailand.

<https://govinsider.asia/inclusive-gov/thailand-sets-up-570-million-startup-fund/>



# Turkey

**GEM TEAM:** Esra Karadeniz (team leader), Özlem Kunday, Thomas Schott, Maryam Cheraghi & Pelin Yüce

For more information about GEM Turkey, go to the link:

<http://gemconsortium.org/country-profile/116>



**SMALL AND MEDIUM ENTERPRISES (SME) CONTRIBUTION TO GDP - 2015**

**54%**

For the last 10 years entrepreneurship has been high on the government's agenda and has been seen as a solution for many of its economic challenges.

In 2016 the early-stage entrepreneurial activity rate in Turkey was relatively high at 16.4% which is above average among the 65 countries that participated in GEM for 2016 and the 32 efficiency-driven economies. The established business ownership, which has provided income for more than 42 months, is 9.4 % in Turkey. It is smaller than in the previous years.

The recognition of business opportunities is high among Turkish adult population. In all 49,5% of the Turkish adult population believe there are good business opportunities in the country and 36.7% believe they have the skills necessary to start and run a business. This bodes well for the economy which has been hampered by political unrest.

Over the last ten years, government programs, financial instruments and financial support to entrepreneurs and the level of R&D transference have improved the most in Turkey but teaching of entrepreneurship in primary and secondary schools still remains a problem.

Entrepreneurial Intentions - 2016

**30.3%**

Total Entrepreneurship Activity (TEA) - 2016

**16.1%**

Entrepreneurial Employee Activity (EEA) - 2016

**3.6%**

Established Business rate (EB) - 2016

**9.4%**

## CONTRIBUTION OF GEM TO POLICY

The Small and Medium Industry Development Organisation (KOSGEB) is attached to the Ministry of Industry and Technology, Republic of Turkey. The GEM project is conducted under the chairmanship of KOSGEB, academic support of Yeditepe University and contribution by TEB (Turkish Economy Bank).

[http://www.kosgeb.gov.tr/Content/Upload/Dosya/Mali%20Tablolar/KOSGEBN%20Stratejik%20Plan/KOSGEB\\_Stratejik\\_Plan\\_\(2011-2015\).pdf](http://www.kosgeb.gov.tr/Content/Upload/Dosya/Mali%20Tablolar/KOSGEBN%20Stratejik%20Plan/KOSGEB_Stratejik_Plan_(2011-2015).pdf)

It is difficult to state precisely where GEM has contributed to policy-making in Turkey although GEM first started in the country in 2006 and has been contributing to knowledge about entrepreneurship ever since. Very little can be found on government websites that show any links between GEM and various governmental papers and publications.

## STAKEHOLDERS WHO USE GEM

GEM is widely used by academics and post graduate students who are working in the field of entrepreneurship. The Turkish Economy Bank (TEB) operates the "TEB SME Academy" which is designed to meet the needs of SMEs and GEM data is used in many of these programs.

In addition, the Small and Medium Enterprise Development and Support Administration (KOSGEB) prepared the

## WORLD BANK EASE OF DOING BUSINESS



## GEM ENTREPRENEURIAL SPIRIT COMPOSITE INDEX



“Entrepreneurship Strategy and Action Plan” for 2014 – 2016 and 2015 – 2018 for Turkey which has six main strategic goals and 64 action strategies. Part of this is to use GEM to measure entrepreneurial indices at both regional and city levels.

[http://www.kosgeb.gov.tr/Content/Upload/Dosya/Mali%20Tablolar/Gisep\\_2015-2018\\_TR.pdf](http://www.kosgeb.gov.tr/Content/Upload/Dosya/Mali%20Tablolar/Gisep_2015-2018_TR.pdf)

The GEM 2006 and 2010 results had a significant impact which enabled policy-makers to create the Council for Entrepreneurship in which government and NGO non-government organizations work towards towards the development of entrepreneurship. The Entrepreneurship Advisory Council (of which the GEM team leader was a member) prepared a report about fostering entrepreneurship in Turkey and advised the government on entrepreneurship which was used in the 10th Development Plan Programme of 2014 -2018.

<http://www.kalkinma.gov.tr/Lists/zet%20htisas%20Komisyonu%20Raporlar/Attachments/242/giri%C5%9Fimcilik%C4%9Fin%20geli%C5%9Ftirilmesi%20OIK%C4%B1.pdf>

Many policy makers use the GEM model and GEM data during their speeches and presentations.

[http://edf.az/ts\\_general/download/SME\\_Conference\\_NECLA\\_19\\_12\\_2012\\_e.pdf](http://edf.az/ts_general/download/SME_Conference_NECLA_19_12_2012_e.pdf)

## WHERE ARE ARTICLES PUBLISHED?

The Small and Medium Enterprises Development Organization’s website refers to GEM data and reports.

Some of the articles published in the media in 2017 are given below:

<http://www.hurriyet.com.tr/kadin-girisimciliginde-surdu-rulebilir-buyume-k-40387808>

<http://www.sabah.com.tr/ekonomi/2017/02/07/turkiye-girisimcilikte-62-ulke-icinde-2-sirada>

<http://www.haberler.com/kadin-girisimciliginde-surdu-rulebilir-buyume-9344515-haberi>

<http://www.haberler.com/kadin-girisimciliginde-surdu-rulebilir-buyume-9344425-haberi/>

<http://www.haberler.com/kadin-girisimciliginde-surdu-rulebilir-buyume-9344406-haberi/>

<http://ekonomi.haber7.com/turkiye-ekonomisi/haber/2254283-turkiye-62-ulke-icinde-2-sirada>

[http://www.dha.com.tr/kadin-girisimciliginde-surdu-rulebilir-buyume-konferansi-istanbulda-duzenlendi--\\_1471747.html](http://www.dha.com.tr/kadin-girisimciliginde-surdu-rulebilir-buyume-konferansi-istanbulda-duzenlendi--_1471747.html)

<https://www.dailysabah.com/economy/2017/04/14/turkeys-referendum-a-lynchpin-for-more-economic-reforms>

<http://www.memleket.com.tr/turkiye-girisimcilikte-62-ulke-icinde-2-sirada-1053241h.htm>

<http://www.turk-internet.com/portal/yazigoster.php?yazi-id=55368>

## ENTREPRENEURSHIP PROGRAMS IN TURKEY

The list of incubators, accelerators and incentive programs for Turkish Start-ups:

1. ARI Çekirdek (Istanbul) - [itucekirdek.com](http://itucekirdek.com)
2. Avea Labs (Istanbul) - [avea.com.tr](http://avea.com.tr)
3. Bilkent Cyberpark (Ankara) - [cyberpark.com.tr](http://cyberpark.com.tr)
4. Embryonix (Izmir) - <http://usimp.org.tr/>
5. Etohum (Istanbul) - <https://www.etohum.com/startups>
6. Endeavor (Istanbul, International) - <http://endeavor.org.tr>
7. Girişim Fabrikası (Istanbul) - <http://girisimfabrikasi.com/>
8. Hacettepe Üniversitesi TTM (Ankara) - <http://www.hacettepettm.com/>
9. Hayal Et (Istanbul) - <https://hayalet.boun.edu.tr/>
10. Inovent (Istanbul) - <http://www.inovent.com.tr/tr/iq2ip.html>
11. Inventram (Istanbul) - <http://www.inventram.com/icerik/2/sirket-profil>
12. KOSGEB Girişimcilik Destek Programı (Turkey) - <http://www.kosgeb.gov.tr>
13. Metutech – ATOM (Ankara) - <http://atom.org.tr/tr>
14. Teknogirişim Sermayesi Desteği (Turkey) - <http://www.tubitak.gov.tr>
15. Turkish Spark (International) - <http://spark-syria.eu/turkey/>
16. Turk Tech Net (International) - <http://turktechnet.org/team/>
17. Viveka (Ankara) - <http://viveka.com.tr/accelerator/>
18. TEB-BNP Parisbas (Turkey) - [bnpparibas.com.tr](http://bnpparibas.com.tr)
19. TOBB Women Entrepreneurs Council - <https://www.tobb.org.tr/TOBBKadinGirisimcilerKuruluy/Sayfalar/AnaSayf>





# **GEM INDICATOR TABLES**

**(2001 - 2017)**

**Table 1:** Percent of the adult population between the ages of 18 and 64 years old who are in the process of starting a business or who have just started a businesses (a nascent entrepreneur or owner-manager of a business) which is less than 3 1/2 years of age.

**Table 2:** Percent of the adult population between the ages of 18 and 64 years old who are currently an owner-manager of an established business, i.e. owning and managing a running business that has paid salaries, wages or any other payments to the owner for more than 42 months.

**Table 3:** Percent of the adult population between the ages of 18 and 64 years old who as employees have been involved in entrepreneurial activities such as developing or launching new goods or services, setting up a new business unit, a new establishment or subsidiary.

**Table 4:** Percent of the adult population between the ages of 18 and 64 years old (individuals involved in any stage of entrepreneurial activity excluded) who are latent entrepreneurs and who intend to start a business within three years.

**Table 5:** Female TEA and Male TEA expressed as a ratio.

**Table 6:** Female TEA and Male TEA as two independent rates.

**Table 7:** Percent of the adult population between the ages of 18 and 64 years old who are running a mature business that has been in operation for more than 42 months.

**Table 8:** Percent of the adult population between the ages of 18 and 64 years old who are running a mature business that has been in operation for more than 42 months.

## GEM National Teams - Early Stage Entrepreneurial Activity (TEA) by Year

**Table 1:** Percent of the adult population between the ages of 18 and 64 years old who are in the process of starting a business or who have just started a businesses (a nascent entrepreneur or owner-manager of a business) which is less than 3 1/2 years of age.

Country	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Algeria									16.7		9.3	8.8	4.9				
Angola								22.7		31.9		32.4	22.2	21.5			
Argentina	9.9	14.2	19.7	12.8	9.5	10.2	14.4	16.5	14.7	14.2	20.8	18.9	15.9	14.4	17.7	14.5	6.0
Australia	14.7	8.7	11.6	13.4	10.5	11.9				7.8	10.5			13.1	12.8	14.6	12.2
Austria					5.3		2.4					9.6		8.7		9.6	
Azores										3.5							
Bangladesh											12.8						
Barbados											8.0	17.1	21.7	12.7	21.1		
Belgium	4.2	3.0	3.9	3.4	3.9	2.7	3.1	2.9	3.5	3.7	5.7	5.2	4.9	5.4	6.2		
Belize														7.1		28.8	
Bolivia								29.8		38.6				27.4			
Bosnia and Herzegovina								9.0	4.4	7.7	8.1	7.8	10.3	7.4			4.0
Botswana												27.7	20.9	32.8	33.2		
Brazil	13.8	13.5	12.9	13.5	11.3	11.7	12.7	12.0	15.3	17.5	14.9	15.4	17.3	17.2	21.0	19.6	20.3
Bulgaria															3.5	4.8	3.7
Burkina Faso														21.7	29.8	33.5	
Cameroon														37.4	25.4	27.6	
Canada	10.3	9.5	8.3	8.8	9.3	7.1							12.2	13.0	14.7	16.7	18.8
Chile		15.7	16.9		11.1	9.2	13.4	13.1	14.8	16.8	23.7	22.6	24.3	26.8	25.9	24.2	23.8
China		12.1	12.9		13.7	16.0	16.4		18.8	14.4	24.0	12.8	14.0	15.5	12.8	10.3	9.9
Colombia						22.4	22.7	24.5	22.6	20.6	21.4	20.1	23.7	18.5	22.7	27.4	18.7
Costa Rica										13.4		15.0		11.3			
Croatia		3.6	2.6	3.7	6.1	8.5	7.3	7.6	5.6	5.5	7.3	8.3	8.3	8.0	7.7	8.4	8.9
Cyprus																12.0	7.3
Czech Republic						7.8					7.6		7.3				
Denmark	7.2	6.5	5.9	5.3	4.7	5.3	5.4	4.0	3.6	3.8	4.6	5.4		5.5			
Dominican Republic							16.8	20.4	17.5								
Ecuador				27.2				17.2	15.8	21.3		26.6	36.0	32.6	33.6	31.8	29.6
Egypt								13.1		7.0		7.8			7.4	14.3	13.3
El Salvador												15.3		19.5		14.3	
Estonia												14.3	13.1	9.4	13.1	16.2	19.4
Ethiopia												14.7					
Finland	8.2	4.6	3.1	4.4	4.9	5.0	6.9	7.3	5.2	5.7	6.3	6.0	5.3	5.6	6.6	6.7	
France	5.7	3.1	1.6	6.0	5.4	4.4	3.2	5.6	4.4	5.8	5.7	5.2	4.6	5.3		5.3	3.9
Georgia														7.2		8.6	
Germany	6.3	5.2	5.2	4.4	5.1	4.2		3.8	4.1	4.2	5.6	5.3	5.0	5.3	4.7	4.6	5.3



Country	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Ghana										34.0		36.5	25.8				
Greece			6.8	5.8	6.5	7.9	5.7	9.9	8.8	5.5	8.0	6.5	5.5	7.9	6.8	5.7	4.8
Guatemala									19.2	16.3	19.3		12.3	20.4	17.7	20.1	24.8
Hong Kong		3.4	3.2	3.0			9.9		3.6							9.4	
Hungary	10.9	6.5		4.3	1.9	6.0	6.9	6.6	9.1	7.1	6.3	9.2	9.7	9.3	7.9	7.9	
Iceland		11.3	11.2	13.6	10.6	10.2	12.5	10.1	11.5	10.6							
India	10.8	16.0				10.1	8.5	11.5					9.9	6.6	10.8	10.6	9.3
Indonesia						19.3							25.5	14.2	17.7	14.1	7.5
Iran								9.2	12.1	12.3	14.5	10.8	12.3	16.0	12.9	12.8	13.3
Ireland	11.4	9.1	8.1	7.7	9.8	7.4	8.2	7.6		6.8	7.2	6.2	9.2	6.5	9.3	10.9	8.9
Israel	5.3	7.0		6.6			5.4	6.4	6.1	5.0		6.5	10.0		11.8	11.3	12.8
Italy	9.1	5.7	3.1	4.3	4.9	3.5	5.0	4.6	3.7	2.4		4.3	3.4	4.4	4.9	4.4	4.3
Ivory Coast																	
Jamaica					17.0	20.3		15.6	22.7	10.5	13.7		13.8	19.3		9.9	
Japan	3.1	1.7	2.8	1.5	2.2	2.9	4.3	5.4	3.3	3.3	5.2	4.0	3.7	3.8			4.7
Jordan				18.2					10.2							8.2	
Kazakhstan							9.4							13.7	11.0	10.2	11.3
Korea	14.3	14.5						10.0	7.0	6.6	7.8	6.6	6.9		9.3	6.7	13.0
Kosovo														4.0			
Latvia					6.6	6.5	4.5	6.5	10.5	9.7	11.9	13.4	13.3		14.1	14.2	14.2
Lebanon									15.0						30.2	21.2	24.1
Libya													11.2				
Lithuania											11.3	6.7	12.4	11.3			
Luxembourg													8.7	7.1	10.2	9.2	9.1
Macedonia								14.5		7.9		7.0	6.6		6.1	6.5	
Madagascar																	21.8
Malawi												35.6	28.1				
Malaysia						11.1			4.4	5.0	4.9	7.0	6.6	5.9	2.9	4.7	21.6
Mexico	17.9	12.4			5.9	5.3		13.1		10.5	9.6	12.1	14.8	19.0	21.0	9.6	14.1
Montenegro										14.9							
Morocco									15.7						4.4	5.6	8.8
Namibia												18.2	33.3				
Netherlands	5.9	4.6	3.6	5.1	4.3	5.4	5.2	5.2	7.2	7.2	8.2	10.3	9.3	9.5	7.2	11.0	9.9
New Zealand	15.5	14.0	13.6	14.7	17.6												
Nigeria											35.0	35.0	39.9				
Norway	7.4	8.6	7.4	6.9	9.1	8.9	6.2	8.7	8.5	7.7	6.9	6.8	6.3	5.7	5.7	13.2	
Pakistan										9.1	9.1	11.6					
Palestine												9.8					
Panama									9.6		20.8	9.5	20.6	17.1	12.8	25.1	16.2
Peru				40.3		40.1	25.9	25.6	20.9	27.2	22.9	20.2	23.4	28.8	22.2		24.6

Country	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Philippines						20.4							18.5	18.4	17.2		
Poland	8.0	4.0		8.8							9.0	9.4	9.3	9.2	9.2	10.7	8.9
Portugal	6.6			3.8			8.8			4.4	7.5	7.7	8.2	10.0	9.5	8.2	
Puerto Rico							3.1						8.3	10.0	8.5	10.3	10.6
Qatar														16.4		7.9	7.4
Romania							4.0	4.0	5.0	4.3	9.9	9.2	10.1	11.3	10.8		
Russia		2.5				4.8	2.7	3.5	3.9	3.9	4.6	4.3	5.8	4.7		6.3	
Saudi Arabia									4.7	9.4						11.4	11.5
Senegal															38.6		
Serbia							8.6	7.6	4.9								
Singapore	6.1	5.9	4.9	5.7	7.2	4.8					6.6	11.6	10.7	11.0			
Slovakia											14.2	10.2	9.5	10.9	9.6	9.5	11.8
Slovenia		4.6	4.0	2.6	4.4	4.6	4.8	6.4	5.4	4.7	3.7	5.4	6.5	6.3	5.9	8.0	6.9
South Africa	6.5	6.3	4.2	5.3	5.1	5.1		7.8	5.9	8.9	9.1	7.3	10.6	7.0	9.2	6.9	11.0
Spain	6.3	4.6	6.6	5.1	5.7	7.3	7.6	7.0	5.1	4.3	5.8	5.7	5.2	5.5	5.7	5.2	6.2
Suriname													5.1	2.1			
Sweden	5.7	3.9	4.1	3.7	4.0	3.4	4.2			4.9	5.8	6.4	8.2	6.7	7.2	7.6	7.3
Switzerland		7.1	7.3		6.0		6.3		7.7	5.0	6.6	5.9	8.2	7.1	7.3	8.2	8.5
Syria									8.5								
Taiwan		4.3								8.4	7.9	7.5	8.2	8.5	7.3	8.2	8.6
Thailand		18.9			20.7	15.2	26.9				19.5	18.9	17.7	23.3	13.7	17.2	21.6
Tonga									17.4								
Trinidad & Tobago										15.0	22.7	15.0	19.5				
Tunisia									9.4	6.1		4.8			10.1		
Turkey						6.1	5.6	6.0		8.6	11.9	12.2	10.0			16.1	
United Arab Emirates						3.7	8.4		13.3		6.2					5.7	9.0
Uganda			28.8	31.6					33.7	31.3		35.8	25.2	35.5			
United Kingdom	6.5	5.4	6.4	6.2	6.2	5.8	5.5	5.9	5.7	6.4	7.3	9.0	7.1	10.7	6.9	8.8	8.4
Ukraine																	
Uruguay						12.5	12.2	11.9	12.2	11.7	16.7	14.6	14.1	16.1	14.3	14.1	14.7
United States	11.1	10.6	11.9	11.3	12.4	10.0	9.6	10.8	8.0	7.6	12.3	12.8	12.7	13.8	11.9	12.6	13.6
Vanuatu										52.1							
Venezuela			26.8		24.9		20.2		18.7		15.4						
Vietnam													15.4	15.3	13.7		23.3
West Bank & Gaza Strip									8.6	10.4							
Yemen									24.0								
Zambia										32.6		41.5	39.9				

## GEM National Teams - Established Business Ownership Rate by Year

**Table 2:** Percent of the adult population between the ages of 18 and 64 years old who are currently an owner-manager of an established business, i.e. owning and managing a running business that has paid salaries, wages or any other payments to the owner for more than 42 months.

Country	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Algeria								4.7			3.1	3.3	5.4				
Angola								4.1		8.7		9.1	8.5	6.5			
Argentina	3.9	10.8	7.8	8.1	5.0	7.0	10.0	13.5	13.5	12.4	11.8	9.6	9.6	9.1	9.5	7.9	6.7
Australia	28.0	7.7	9.1	9.6	10.4	9.1				8.5	9.1			9.8	8.7	11.3	9.0
Austria					3.8		6.0					7.6		9.9		8.8	
Azores										6.2							
Bangladesh											11.6						
Barbados											3.9	12.2	12.4	7.1	14.1		
Belgium	3.0	2.2	2.2	4.0	5.6	2.1	1.4	2.6	2.5	2.7	6.8	5.1	5.9	3.5	3.8		
Belize														3.7		5.3	
Bolivia								19.1		18.2				7.6			
Bosnia and Herzegovina								8.7	3.9	6.6	5.0	6.0	4.5	6.7			1.4
Botswana												6.3	3.4	5.0	4.6		
Brazil	3.8	7.8	7.6	10.1	10.1	12.1	9.9	14.6	11.8	15.3	12.2	15.2	15.4	17.5	18.9	16.9	16.5
Bulgaria															5.4	6.2	6.5
Burkina Faso														17.7	27.8	28.0	
Cameroon														11.5	12.8	15.2	
Canada	3.9	6.5	3.9	7.0	7.4	5.1							8.4	9.4	8.8	6.8	6.2
Chile		6.8	6.5		3.8	6.8	8.7	6.7	6.8	6.0	7.0	7.8	8.5	8.8	8.2	8.0	9.9
China		10.6	13.8		13.2	12.9	8.4		17.2	13.8	12.7	12.5	11.0	11.6	3.1	7.5	6.8
Colombia						10.4	11.6	14.1	12.9	12.2	7.5	6.7	5.9	4.9	5.2	8.9	8.7
Costa Rica										4.8		3.3		2.5			
Croatia		2.2	2.5	2.1	3.7	4.1	4.2	4.8	4.8	2.9	4.2	3.1	3.3	3.6	2.8	4.2	4.4
Cyprus																8.2	8.9
Czech Republic						5.4					5.2		5.3				
Denmark	4.2	5.5	5.7	5.1	4.4	5.3	6.0	3.3	4.7	5.6	4.9	3.4		5.1			
Dominican Republic							7.6	8.2	11.4								
Ecuador				10.1				11.9	16.1	14.7		18.9	18.0	17.7	17.4	14.3	15.4
Egypt								8.0		4.5		4.1			2.9	6.1	5.7
El Salvador												9.4		12.7		11.5	
Estonia												7.2	5.0	5.7	7.7	7.8	11.4
Ethiopia												10.2					
Finland	7.5	8.5	0.5	7.5	8.6	8.2	7.6	9.2	8.5	9.4	8.8	8.0	6.6	6.6	10.2	7.3	
France	1.6	1.3	1.6	1.5	2.3	1.3	1.7	2.8	3.2	2.4	2.4	3.2	4.1	2.9		4.3	3.6
Georgia														7.3		8.6	
Germany	4.2	4.8	4.6	4.3	4.2	3.0		4.0	5.2	5.7	5.6	5.0	5.1	5.2	4.8	7.0	6.1

Country	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Ghana										35.5		37.7	25.9				
Greece			19.6	6.5	10.5	8.2	13.3	12.6	15.1	14.8	15.8	12.3	12.6	12.8	13.1	14.1	12.4
Guatemala									4.2	6.7	2.5		5.1	7.4	8.1	9.1	12.3
Hong Kong		2.6	3.5	2.7			5.6		2.9							6.1	
Hungary	5.9	5.5		2.2	2.0	6.7	4.8	5.3	6.7	5.4	2.0	8.1	7.2	7.9	6.5	5.5	
Iceland		10.4	7.3	7.3	7.3	6.7	8.8	7.1	8.9	7.4							
India	8.8	12.1				5.6	5.5	16.5					10.7	3.7	5.5	4.6	6.2
Indonesia						17.6							21.2	11.9	17.1	15.3	10.4
Iran								6.8	6.5	12.2	11.2	9.5	10.6	10.9	14.0	11.6	10.6
Ireland	4.5	8.0	6.7	6.5	8.1	7.8	9.0	9.0		8.6	8.0	8.3	7.5	9.9	5.6	4.4	4.4
Israel	0.0	5.7		3.9			2.4	4.1	4.3	3.3		3.8	5.9		3.9	4.0	3.3
Italy	3.6	3.6	2.3	4.7	6.4	3.0	5.6	6.5	5.8	3.7		3.3	3.7	4.3	4.5	5.3	6.0
Jamaica					9.5	10.3		9.1	16.3	6.9	5.1		6.3	14.4		8.2	
Japan	5.1	6.8	6.0	4.7	5.4	4.8	8.6	7.9	7.8	7.4	8.3	6.1	5.7	7.2			6.3
Jordan				21.9					5.3							2.7	
Kazakhstan							5.8							7.4	2.4	2.4	2.4
Korea		10.2						12.84	11.8	11.2	10.9	9.6	9.01			6.6	11.4
Kosovo														2.1			
Latvia					5.0	5.7	3.4	3.0	9.0	7.6	5.7	7.9	8.8		9.6	9.6	7.7
Lebanon									16.0						18.0	20.1	33.2
Libya													3.4				
Lithuania											6.3	8.2	8.3	7.8			
Luxembourg													2.4	3.7	3.3	3.2	3.3
Macedonia								11.0		7.6		6.7	7.3		5.9	7.2	
Madagascar																	29.4
Malawi												10.8	12.0				
Malaysia						7.3			4.3	7.9	5.2	7.0	6.0	8.5	4.8	4.7	3.8
Mexico	5.8	1.5			1.9	2.3		4.9		0.4	3.0	4.7	4.2	4.5	6.9	7.5	1.4
Montenegro										7.8							
Morocco									15.3						5.2	7.5	10.4
Namibia												3.2	7.9				
Netherlands	3.8	4.6	3.8	6.1	5.7	6.6	6.4	7.2	8.1	9.0	8.7	9.5	8.7	9.6	9.9	10.2	8.6
New Zealand	12.8	11.0	11.1	9.6	10.8												
Nigeria											9.6	15.7	17.5				
Norway	6.5	6.3	6.1	6.3	7.3	6.0	4.8	7.7	8.3	6.7	6.6	5.8	6.2	5.4	6.5		
Pakistan										4.7	4.1	3.8					
Palestine												3.0					
Panama									4.2		6.0	1.9	3.5	3.4	4.2	4.4	4.7
Peru				14.5		12.4	15.2	8.3	7.5	7.2	5.7	5.1	5.4	9.2	6.6	6.1	7.4
Philippines						19.7							6.6	6.2	7.3		

Country	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Poland	4.7	2.0		8.2							5.0	5.8	6.5	7.3	5.9	7.1	9.8
Portugal	4.7			7.3			7.1			5.4	5.7	6.2	7.7	7.6	7.0	7.1	
Puerto Rico							2.4						2.0	1.3	1.4	1.7	1.6
Qatar														3.5		3.0	1.3
Romania							2.5	2.1	3.4	2.1	4.6	3.9	5.3	7.6	7.5		
Russia		1.1				1.2	1.7	1.1	2.3	2.8	2.8	2.0	3.4	3.9		5.3	
Saudi Arabia									4.1	3.9						2.3	3.2
Senegal															18.8		
Serbia							5.3	9.3	10.1								
Singapore	5.4	3.1	1.8	3.9	4.7	3.4					3.3	3.1	4.2	2.9			
Slovakia											9.6	6.4	5.4	7.8	5.7	6.1	10.0
Slovenia		6.7	5.4	4.2	6.3	4.4	4.6	5.6	5.7	4.9	4.8	5.8	5.7	4.8	4.2	6.8	6.8
South Africa	0.8	1.1	1.1	1.4	1.3	1.7		2.3	1.4	2.1	2.3	2.3	2.9	2.7	3.4	2.5	2.2
Spain	4.7	8.4	4.0	7.8	7.7	5.4	6.4	9.1	6.4	7.7	8.9	8.7	8.4	7.0	7.7	6.2	7.1
Suriname													1.7	5.2			
Sweden	5.7	6.8	5.3	6.0	6.3	5.0	4.7			6.4	7.0	5.2	6.0	6.5	5.2	4.5	4.2
Switzerland		6.8	7.3		9.7		6.6		8.4	8.7	10.1	8.4	10.0	9.1	11.3	11.1	10.5
Taiwan		8.3								7.2	6.3	10.4	8.3	12.2	9.6	7.7	12.1
Thailand		13.3			14.1	17.4	21.4				30.1	29.7	28.0	33.1	24.6	27.5	15.2
Tonga									2.3								
Trinidad & Tobago										8.5	6.9	7.2	11.4				
Tunisia									10.2	9.0		4.4			5.0		
Turkey						11.4	5.5	4.8		10.7	8.0	8.7	5.7			9.4	
United Arab Emirates						1.4	3.4		5.7		2.7					1.9	5.6
Uganda			16.2	12.7					22.0	27.7		31.2	36.1	35.9			
United Kingdom	3.3	5.5	5.8	5.1	5.1	5.4	5.1	6.0	6.1	6.4	7.2	6.2	6.6	6.5	5.3	6.1	6.7
Ukraine																	
Uruguay						6.9	6.6	7.9	6.0	7.2	5.9	5.0	4.9	6.7	2.1	7.4	6.4
United States	5.8	5.7	5.4	5.4	4.7	5.4	5.0	8.3	5.9	7.7	9.1	8.6	7.5	6.9	7.3	9.2	7.8
Vanuatu										23.2							
Venezuela			9.6		8.6		5.4		6.5		1.6						
Vietnam													16.4	22.2	19.6		24.7
West Bank & Gaza Strip									6.9	2.0							
Yemen									2.9								
Zambia										9.6		3.8	16.6				



## GEM National Teams - Entrepreneurial Employee Activity (EEA) by Year

**Table 3:** Percent of the adult population between the ages of 18 and 64 years old who as employees have been involved in entrepreneurial activities such as developing or launching new goods or services, setting up a new business unit, a new establishment or subsidiary.

Country	2011	2012	2013	2014	2015	2016	2017
Algeria	0.8	0.6	0.6				
Angola				2.9			
Argentina	3.2			2.4	2.4	3.1	0.6
Australia	6.2			8.4	8.5	9.0	7.8
Austria				5.6		7.3	
Barbados	0.7			0.8	1.1		
Belgium	9.4	7.3		5.4	6.1		
Belize				4.6		8.0	
Bolivia				0.6			
Bosnia and Herzegovina	3.1	4.2	4.0	1.9			0.5
Botswana		2.1	0.9	2.7	1.6		
Brazil	1.0			1.0	1.0	1.5	0.7
Bulgaria					0.4	0.9	0.5
Burkina Faso				0.3	0.6	0.6	
Canada				4.8	7.1	5.9	8.2
Cameroon				1.9	0.7	1.2	
Chile	3.5	4.8	3.6	5.1	5.2	5.4	4.5
China	2.1	0.6	0.6	0.5	1.4	1.2	1.4
Colombia	1.7			3.7	2.3	1.2	1.8
Costa Rica		1.9		0.5			
Croatia	4.4	4.4		3.6	4.9	5.3	4.8
Cyprus						5.6	1.8
Czech Republic	3.8						
Denmark	15.1	12.6		11.4			
Dominican Republic							
Ecuador		0.9	1.9	0.3	0.9	0.7	0.5
Egypt		1.0			1.3	2.0	2.2
El Salvador				0.3		1.0	
Estonia		7.3		3.6	6.3	6.3	9.1
Ethiopia		0.6					
Finland	9.4		5.7	4.5	5.8	5.6	
France	4.7			3.8		3.6	3.9
Georgia				0.4		0.5	
Germany	4.8			4.5	4.5	5.1	5.7
Greece	1.6	1.6		0.8	1.0	1.4	0.9
Guatemala				0.5	1.2	1.7	1.3

Country	2011	2012	2013	2014	2015	2016	2017
Hong Kong						4.1	
Hungary	3.9	2.1	3.6	2.8	2.1	3.0	
India				0.1	0.3	2.5	0.2
Indonesia				0.5	0.2	0.7	1.8
Iran	0.4	0.7	2.5	1.4	1.0	1.2	1.2
Ireland	5.9			6.7	6.6	6.2	5.5
Israel		4.2			6.6	7.3	8.6
Italy				0.8	1.4	2.1	2.4
Jamaica	0.2			0.4		0.7	
Japan	3.4			1.1			2.8
Kazakhstan				1.1	1.0		4.1
Kenya							
Korea	2.6	2.1	4.0		2.4		1.9
Kosovo				0.2			
Latvia	3.0				3.3	4.5	4.4
Lebanon					3.3	2.6	1.4
Lithuania	4.9	5.8	6.8	5.1			
Luxembourg				7.3	6.4	7.3	8.0
Macedonia					2.3	1.4	
Madagascar							0.6
Malaysia	0.4	0.9	0.5		0.3	0.4	1.4
Mexico	0.9	1.2		0.7	1.2	4.8	1.0
Montenegro							
Morocco					0.4	0.5	0.5
Namibia		2.1	1.6				
Netherlands	7.8			7.0	6.3	7.6	7.6
New Zealand							
Nigeria	3.2	1.0	0.5				
Norway				7.9	9.9		
Pakistan	0.2	0.2					
Palestine		2.5					
Panama	0.2			0.2	0.5	0.2	0.2
Peru	1.4	1.7	0.9	1.7	0.7	0.8	0.9
Philippines			0.4	0.6	2.4		
Poland	2.8		4.3	3.4	4.0	5.2	3.2
Portugal	4.0			3.2	4.0	2.4	
Puerto Rico			2.5	1.8	0.6	1.8	2.6
Qatar				11.5		6.4	2.5
Romania	3.9	3.5	5.1	4.9	4.6		
Russia	0.6			0.5		0.7	
Saudi Arabia						4.7	2.4

Country	2011	2012	2013	2014	2015	2016	2017
Senegal					2.3		
Singapore	3.3			4.8			
Slovakia	3.4	4.6	4.4	4.9	3.6	2.2	2.6
Slovenia	5.1	5.9	6.1	4.7	5.6	4.7	6.0
South Africa	0.4	0.4	0.8	0.3	0.3	0.7	0.5
Spain	2.7			1.8	1.1	2.7	1.4
Suriname				0.4			
Sweden	16.2			5.8	6.4	6.1	6.2
Switzerland	4.6			6.1	6.5	6.1	4.8
Taiwan	2.0			7.6	4.1	5.7	8.1
Thailand	1.4	1.1	1.7	2.1	0.7	1.0	4.5
Trinidad & Tobago	1.2			1.6			
Tunisia		0.4			1.9		
Turkey	0.7	1.0				3.6	
United Arab Emirates	3.6					2.2	1.7
Uganda				2.3			
United Kingdom	5.3	10.1	8.5	7.0	4.1	7.0	8.0
Uruguay	5.2	5.0	6.7	3.8	4.2	2.6	3.5
United States	6.6			6.5	7.0	7.0	7.6
Vanuatu							
Venezuela	0.6						
Vietnam			2.7	0.3	0.6		0.6

## GEM National Teams - Entrepreneurial Intentions by Year

**Table 4:** Percent of the adult population between the ages of 18 and 64 years old (individuals involved in any stage of entrepreneurial activity excluded) who are latent entrepreneurs and who intend to start a business within three years.

Country	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Algeria								22.3		41.8	21.3	36.0				
Angola							27.5		54.6		69.6	38.3	39.3			
Argentina	10.8	17.1	19.5	17.6	13.4	20.0	15.3	14.2	21.0	29.9	29.2	31.0	27.8	29.1	23.9	13.4
Australia	7.8	11.8	15.5	12.0	10.6				8.7	12.3			10.0	14.4	9.5	13.2
Austria				4.9		5.3					8.6		8.1		10.1	
Azores									7.0							
Bangladesh										24.6						
Barbados										13.2	23.0	18.4	11.5	21.6		
Belgium	4.7	4.7	5.7	6.1	5.8	5.6	6.4	5.2	8.2	10.9	9.1	7.8	10.6	10.9		
Belize													10.1		42.9	
Bolivia							37.5		49.3				46.9			
Bosnia and Herzegovina							24.5	16.6	16.8	17.2	21.9	21.8	20.4			4.6
Botswana											71.9	59.2	63.4	61.9		
Brazil	36.7	34.5	32.7	21.0	19.1	21.4	26.2	20.7	26.5	28.2	36.5	27.2	24.5	24.4	27.5	15.3
Bulgaria														5.3	7.1	5.0
Burkina Faso													42.3	45.9	60.3	
Cameroon													55.6	33.1	32.3	
Canada	6.9	7.5	8.1	9.7	6.3							13.5	12.0	11.6	11.9	14.1
Chile	34.2	37.9		8.7	22.3	25.3	29.5	34.9	38.3	46.0	43.1	46.5	50.1	50.0	42.4	45.8
China	27.5	29.5		45.5	24.7	31.5		22.6	26.9	42.8	20.4	14.4	19.3	19.5	21.8	15.3
Colombia					62.6	60.1	60.5	57.2	41.3	55.8	56.7	54.5	47.0	48.2	48.2	52.5
Costa Rica									13.2		33.4		29.0			
Croatia	6.0	6.4	3.9	6.5	8.8	10.5	9.7	7.9	7.4	17.9	19.3	19.6	19.5	17.2	17.5	17.5
Cyprus															16.2	16.7
Czech Republic					9.0					13.9		13.7				
Denmark	6.2	5.1	6.5	7.2	6.5	6.2	5.5	2.6	5.9	6.7	6.6		6.9			
Dominican Republic						34.4	29.7	25.0								
Ecuador			40.6				37.3	31.0	46.3		51.0	39.9	43.1	46.3	33.7	48.2
Egypt							34.5		24.3		42.3			36.8	64.8	55.5
El Salvador											39.8		23.1		27.9	
Estonia											16.4	19.4	9.8	16.7	13.9	18.1
Ethiopia											23.8					
Finland	5.0	5.5	3.7	4.3	5.1	4.6	5.2	4.2	5.9	7.1	7.7	8.3	7.9	10.9	10.4	
France	3.0	5.8	11.6	11.4	13.3	15.3	12.7	15.9	14.2	17.7	17.3	12.6	14.2		12.1	17.6
Georgia													15.6		9.9	

Country	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Germany	4.5	5.6	4.2	5.3	5.3		4.2	5.3	6.4	5.5	6.0	6.8	5.9	7.2	6.8	7.2
Ghana									68.8		60.4	45.6				
Greece		11.4	11.4	14.7	12.5	11.8	12.6	14.6	12.8	10.5	9.5	8.8	9.5	8.3	8.1	7.1
Guatemala								10.3	30.7	26.4		39.0	35.8	36.9	36.9	46.5
Hong Kong	6.4	6.0	6.5			9.5		7.3							16.0	
Hungary	5.9		2.5	1.5	9.0	8.7	6.2	13.1	13.8	19.5	13.0	13.7	13.9	14.8	14.7	
Iceland	13.5	14.3	13.0	15.9	15.4	14.9	11.9	15.0	15.7							
India	30.0				31.3	49.7	32.9					22.8	7.7	9.2	16.6	10.3
Indonesia					30.2							35.1	27.4	27.5	20.7	28.1
Iran							35.8	22.3	31.4	29.9	22.8	30.6	25.5	35.0	45.1	38.8
Ireland	7.4	6.9	7.8	8.4	6.3	7.7	6.4		6.1	5.8	5.4	12.6	7.2	14.6	13.0	11.9
Israel	14.4		16.6			12.6	14.2	13.6	13.5		12.8	24.0		21.6	20.6	26.4
Italy	9.4	6.5	9.3	8.8	8.3	10.3	7.1	4.5	4.0		10.8	9.8	11.4	8.2	9.8	10.3
Jamaica				24.9	37.1		17.0	28.6	38.1	19.5		39.5	35.3		37.9	
Japan	0.9	1.9	0.7	0.8	2.0	2.3	3.8	3.0	2.9	3.8	2.5	4.1	2.5			3.7
Jordan			33.2					24.9							13.6	
Kazakhstan						13.2							15.4	17.5	17.4	46.2
Korea	19.7						17.2	11.4	10.1	15.7	13.0	12.1		6.6	27.5	22.8
Kosovo													6.3			
Latvia				10.6	12.5	4.3	6.6	9.8	21.4	24.8	21.9	22.7		22.2	14.6	17.3
Lebanon								22.4						44.0	39.6	32.5
Libya												62.1				
Lithuania										16.8	18.0	22.4	19.7			
Luxembourg												14.1	11.9	13.5	10.9	11.0
Macedonia							39.0		26.7		27.7	29.1		23.3	20.9	
Madagascar																39.8
Malawi											70.3	66.7				
Malaysia					9.1			5.1	5.1	8.7	13.3	11.8	11.6	5.6	4.9	17.6
Mexico	23.2			17.2	15.7		25.6		22.3	24.2	18.4	16.9	17.4	13.7	10.0	13.2
Montenegro									31.9							
Morocco								28.9						30.2	36.4	26.6
Mozambique																
Namibia											45.1	52.4				
Netherlands	3.7	4.4	4.6	4.1	3.8	4.0	3.6	5.5	5.5	8.5	8.6	9.1	9.3	9.4	6.7	8.1
New Zealand	14.2	12.9	12.7	11.2												
Nigeria										91.0	44.3	46.8				
Norway	8.7	6.6	7.6	7.3	6.2	5.6	7.0	7.7	7.6	8.7	4.9	5.2	5.0	4.8		
Pakistan									32.4	22.6	24.5					
Palestine											35.6					
Panama								10.5		20.9	12.1	27.0	19.7	13.9	9.7	20.8



Country	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Paraguay																
Peru			48.2		37.7	40.5	34.3	32.0	39.6	37.5	45.1	33.9	50.6	38.6	43.3	43.2
Philippines					48.4							44.1	42.8	37.1		
Poland	2.2		17.8							22.7	21.6	17.3	15.6	20.0	16.4	9.7
Portugal			2.2			9.8			8.8	12.2	14.4	13.2	15.8	16.2	13.4	
Puerto Rico						13.6						13.1	12.5	11.1	19.0	18.3
Qatar													50.4		37.3	15.7
Romania						11.7	8.5	6.3	8.6	24.7	27.0	23.7	31.7	29.0		
Russia	2.5				6.1	3.5	3.1	2.4	2.6	3.6	2.2	2.6	3.5		2.0	
Saudi Arabia								34.0	1.0						24.3	30.9
Senegal														66.6		
Serbia						32.9	30.8	22.2								
Singapore	9.1	8.8	10.5	12.8	9.4					11.7	16.1	15.1	9.4			
Slovakia										17.8	11.8	16.4	15.1	15.7	8.0	9.0
Slovenia	9.0	10.3	8.4	8.6	7.3	9.3	7.3	9.7	8.7	9.2	13.2	12.4	11.4	9.1	8.4	14.2
South Africa	3.6	10.4	13.3	8.7	6.8		13.4	10.9	16.7	14.3	12.0	12.8	10.1	10.9	8.5	11.7
Spain	7.0	4.9	4.3	4.2	4.4	4.3	5.0	4.3	5.8	8.0	11.1	8.4	7.1	5.6	4.8	5.6
Suriname												13.1	4.6			
Sweden	12.5	12.7	10.0	14.3	9.3	9.0			8.5	9.8	11.0	9.5	8.5	8.4	5.7	8.1
Switzerland	8.4	9.4		6.5		6.9		7.2	6.7	9.5	7.3	9.8	7.1	7.0	5.6	10.5
Syria								54.0								
Taiwan	16.2								25.1	28.2	25.5	27.8	25.6	26.1	25.7	25.7
Thailand	16.5			34.8	26.4	21.3				26.5	19.0	18.5	21.8	16.7	20.8	37.4
Tonga								5.7								
Trinidad & Tobago									30.4	35.2	37.5	28.7				
Tunisia								53.6	24.1		21.6			28.8		
Turkey					20.1	19.0	20.8		19.4	8.5	14.7	28.1			30.7	
United Arab Emirates					6.1	35.4		36.0		2.4					46.7	56.3
Uganda		47.1	40.1					58.4	77.1		79.1	60.7	60.2			
United Kingdom	4.2	5.4	7.4	6.7	5.6	5.6	5.3	4.3	5.1	8.9	9.5	7.2	6.9	8.2	6.4	7.3
Ukraine																
Uruguay					14.5	15.4	16.8	20.7	31.9	38.2	19.9	25.3	24.8	25.4	20.7	27.4
United States	9.2	9.0	8.0	9.0	7.1	8.2	6.9	6.9	7.3	10.9	12.5	12.2	12.1	12.4	10.6	14.5
Vanuatu									50.5							
Venezuela		37.3		40.0		20.7		28.7		20.2						
Vietnam												24.1	18.2	22.3		25.0
West Bank & Gaza Strip								23.7	28.3							
Yemen								9.0								
Zambia									67.1		55.3	44.5				

## GEM National Teams - Female/Male Early-Stage Entrepreneurial Activity by Year

**Table 5:** Female TEA and Male TEA expressed as a ratio.

Country	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Algeria									0.67		0.52	0.44	0.51				
Angola								1.24		0.94		0.89	0.84	0.89			
Argentina	0.38	0.69	0.49	0.54	0.64	0.47	0.65	0.92	0.64	0.76	0.69	0.59	0.67	0.63	0.79	0.82	0.83
Australia	0.48	0.48	0.70	0.70	0.54	0.69				0.99	0.67			0.65	0.65	0.65	0.60
Austria					0.53		0.60					0.74		0.68		0.72	
Azores										0.17							
Bangladesh											0.21						
Barbados											0.51	0.88	0.82	0.78	0.88		
Belgium	0.51	0.34	0.34	0.42	0.45	0.24	0.46	0.41	0.56	0.83	0.66	0.34	0.54	0.41	0.66		
Belize														0.83		0.89	
Bolivia								0.88		0.89				0.84			
Bosnia and Herzegovina								0.63	0.51	0.37	0.47	0.49	0.53	0.40			0.53
Botswana												0.85	0.91	0.89	0.82		
Brazil	0.62	0.70	0.82	0.72	0.92	0.70	1.00	0.85	1.07	0.88	0.95	0.91	1.01	1.03	0.94	1.04	1.04
Bulgaria															0.72	0.80	0.70
Burkina Faso														0.74	0.79	0.80	
Cambodia																	
Cameroon														0.83	0.87	0.92	
Canada	0.63	0.51	0.49	0.53	0.42	0.73							0.68	0.61	0.84	0.66	0.66
Chile		0.43	0.90		0.58	0.62	0.63	0.75	0.74	0.75	0.80	0.73	0.63	0.79	0.74	0.69	0.70
China		0.76	0.81		0.74	0.89	0.70		0.78	0.76	0.87	0.75	0.77	0.84	0.67	0.73	0.87
Colombia						0.62	0.70	0.63	0.79	0.80	0.61	0.77	0.57	0.64	0.68	0.82	0.95
Costa Rica										1.03		0.54		0.94			
Croatia		0.34	0.38	0.30	0.26	0.40	0.54	0.42	0.34	0.55	0.47	0.41	0.45	0.42	0.59	0.50	0.56
Cyprus																0.43	0.65
Czech Republic						0.46					0.38		0.39				
Denmark	0.43	0.48	0.33	0.43	0.47	0.45	0.73	0.50	0.53	0.44	0.46	0.41		0.53			
Dominican Republic							0.77	0.62	0.74								
Ecuador				0.81				0.86	0.97	0.81		1.07	0.83	0.97	0.95	0.90	1.06
Egypt								0.29		0.46		0.18			0.33	0.36	0.40
El Salvador												0.87		1.02		0.91	

Country	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Estonia												0.51	0.55	0.69	0.58	0.56	0.59
Ethiopia												0.78					
Finland	0.54	0.63	0.26	0.54	0.81	0.68	0.54	0.45	0.67	0.52	0.53	0.52	0.61	0.70	0.47	0.72	
France	0.43	0.50	0.95	0.46	0.45	0.40	0.53	0.41	0.30	0.68	0.34	0.63	0.50	0.60		0.47	0.44
Georgia														0.80		0.59	
Germany	0.44	0.49	0.47	0.42	0.61	0.45		0.84	0.81	0.54	0.66	0.50	0.65	0.61	0.54	0.52	0.59
Ghana										1.20		1.09	1.19				
Greece			0.42	0.33	0.35	0.42	0.43	0.64	0.52	0.59	0.58	0.51	0.41	0.59	0.79	0.73	0.68
Guatemala									0.87	0.81	0.99		0.73	0.69	0.63	0.68	0.78
Hong Kong		0.51	0.46	0.35			0.41		0.42							0.50	
Hungary	0.57	0.50		0.68	1.69	0.50	0.49	0.66	0.53	0.42	0.52	0.45	0.57	0.39	0.53	0.46	
Iceland		0.53	0.52	0.54	0.44	0.36	0.43	0.56	0.54	0.51							
India	0.31	0.63				0.79	0.79	0.45					0.49	0.54	0.58	0.57	0.80
Indonesia						0.94							0.96	1.15	1.01	1.24	0.69
Iran								0.33	0.40	0.25	0.24	0.38	0.36	0.49	0.48	0.54	0.65
Ireland	0.43	0.45	0.29	0.48	0.39	0.40	0.56	0.36		0.41	0.41	0.48	0.53	0.48	0.44	0.50	0.54
Israel	0.28	0.28		0.54			0.53	0.46	0.52	0.50		0.72	0.48		0.65	0.71	0.72
Italy	0.97	0.52	0.95	0.36	0.60	0.79	0.49	0.44	0.33	0.74		0.51	0.43	0.55	0.42	0.59	0.38
Jamaica					0.85	0.80		0.85	0.74	0.79	0.85		0.80	0.82		0.81	
Japan	0.46	0.18	0.31	0.69	0.38	0.81	1.50	0.39	0.31	0.30	0.44	0.35	0.55	0.25			0.44
Jordan				0.59					0.29							0.26	
Kazakhstan							0.68							0.92	0.84	0.87	0.99
Korea	0.42	0.42						0.34	0.33	0.19	0.32	0.21	0.40		0.72	0.66	0.66
Kosovo														0.69			
Latvia					0.59	0.42	0.18	0.38	0.55	0.50	0.53	0.43	0.61		0.52	0.51	0.63
Lebanon									0.51						0.69	0.61	0.69
Libya													0.49				
Lithuania											0.46	0.44	0.45	0.42			
Luxembourg													0.49	0.60	0.75	0.56	0.55
Macedonia								0.42		0.34		0.49	0.41		0.41	0.39	
Madagascar																	0.90
Malawi												0.82	0.95				
Malaysia						1.01			0.72	0.94	0.69	0.80	0.72	1.33	1.05	0.91	0.87
Mexico	0.51	0.70			0.62	0.73		0.83		0.95	0.78	0.99	0.77	0.93	0.83	1.08	0.64
Montenegro										0.54							

Country	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Morocco									0.59						0.47	0.67	0.37
Namibia												0.93	1.07				
Netherlands	0.50	0.61	0.50	0.44	0.31	0.50	0.56	0.47	0.70	0.43	0.58	0.48	0.58	0.63	0.32	0.65	0.89
New Zealand	0.76	0.60	0.58	0.70	0.63												
Nigeria											0.68	1.03	1.04				
Norway	0.45	0.36	0.36	0.34	0.33	0.47	0.45	0.43	0.36	0.33	0.44	0.36	0.41	0.55	0.51		
Pakistan										0.24	0.11	0.06					
Palestine												0.21					
Panama									0.75		0.89	1.23	0.73	0.90	0.90	0.87	0.78
Peru				0.94		0.96	1.01	0.86	0.78	0.89	0.71	0.77	0.72	0.94	1.03	0.92	0.87
Philippines						1.23							0.94	1.31	1.31		
Poland	0.65	0.69		0.39							0.39	0.49	0.50	0.48	0.48	0.61	0.78
Portugal	0.39			0.98			0.51			0.51	0.45	0.66	0.54	0.72	0.54	0.59	
Puerto Rico							0.94						0.57	0.81	0.71	0.58	0.63
Qatar														0.53		0.84	0.99
Romania							0.62	0.36	0.46	0.62	0.59	0.40	0.64	0.41	0.53		
Russia		0.42				0.35	0.43	0.56	0.71	0.79	0.79	0.64	0.86	0.64		0.82	
Saudi Arabia									0.09	0.49						0.76	0.83
Senegal															0.91		
Serbia							0.42	0.52	0.40								
Singapore	0.39	0.29	0.55	0.40	0.53	0.63					1.19	0.76	0.62	0.48			
Slovakia											0.40	0.49	0.62	0.52	0.50	0.68	0.71
Slovenia		0.45	0.26	0.44	0.50	0.33	0.39	0.46	0.32	0.45	0.59	0.32	0.46	0.51	0.39	0.47	0.46
South Africa	0.52	0.77	0.85	0.84	0.77	0.78		0.62	0.65	0.85	0.62	0.64	0.73	0.81	0.60	0.73	0.69
Spain	0.71	0.39	0.43	0.39	0.58	0.65	0.56	0.74	0.62	0.59	0.64	0.54	0.67	0.72	0.79	0.80	0.82
Suriname													0.51	0.58			
Sweden	0.59	0.48	0.34	0.42	0.59	0.55	0.43			0.56	0.63	0.61	0.61	0.40	0.51	0.72	0.65
Switzerland		0.51	0.42		0.67		0.65		0.74	0.80	0.99	0.85	0.97	1.02	0.54	0.48	0.53
Syria									0.23								
Taiwan		0.64								0.60	0.55	0.67	0.48	0.67	0.50	0.45	0.56
Thailand		0.95			0.87	0.87	0.93				1.16	1.19	0.96	0.90	1.16	0.83	0.86
Tonga									1.15								
Trinidad & Tobago										0.91	0.66	0.79	0.67				
Tunisia									0.37	0.50		0.43			0.36		
Turkey						0.41	0.28	0.26		0.27	0.44	0.39	0.47			0.45	

Country	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
United Arab Emirates						0.05	0.61		0.40		0.63					0.56	0.89
Uganda			0.63	0.67					0.79	0.95		0.99	0.99	1.10			
United Kingdom	0.39	0.42	0.43	0.46	0.43	0.46	0.49	0.46	0.47	0.52	0.56	0.54	0.63	0.55	0.53	0.47	0.46
Uruguay						0.51	0.42	0.56	0.45	0.58	0.60	0.50	0.46	0.69	0.45	0.53	0.62
United States	0.68	0.64	0.52	0.90	0.63	0.58	0.60	0.70	0.58	0.86	0.73	0.69	0.69	0.68	0.63	0.71	0.64
Vanuatu										0.78							
Venezuela			0.88		0.91		0.72		0.91		0.88						
Vietnam													0.83	1.02	1.34		1.14
West Bank & Gaza Strip									0.25	0.51							
Yemen									0.65								
Zambia										0.85		0.93	1.04				



## GEM National Teams - Female/Male Early-Stage entrepreneurial Activity by Year

**Table 6:** Female TEA and Male TEA as two independent rates.

Country	2001		2002		2003		2004		2005		2006		2007		2008	
	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA
Algeria																
Angola															25.2	20.3
Argentina	5.7	14.8	11.5	16.8	13.1	26.4	9.0	16.7	7.4	11.6	6.6	13.9	11.3	17.5	15.9	17.2
Australia	9.4	19.6	5.6	11.7	9.6	13.6	11.0	15.7	7.4	13.7	9.7	14.0				
Austria									3.7	6.9			1.8	3.1		
Azores																
Barbados																
Belgium	2.8	5.5	1.5	4.4	2.0	5.7	2.0	4.8	2.4	5.4	1.0	4.4	2.0	4.3	1.7	4.0
Belize																
Bolivia															27.9	31.8
Bosnia and Herzegovina															6.9	11.1
Botswana																
Brazil	10.2	16.4	11.1	16.0	11.7	14.2	11.3	15.7	10.8	11.8	9.6	13.7	12.7	12.7	11.0	13.0
Bulgaria																
Burkina Faso																
Cameroon																
Canada	8.0	12.6	6.4	12.6	5.4	11.0	6.1	11.5	5.5	13.1	6.0	8.3				
Chile			9.5	21.9	16.0	17.8			8.2	14.1	7.0	11.4	10.4	16.4	11.2	14.9
China			10.3	13.6	11.6	14.3			11.6	15.7	15.0	16.9	13.4	19.3		
Colombia											17.3	27.7	18.8	26.9	19.1	30.3
Costa Rica																
Croatia			1.8	5.4	1.4	3.7	1.7	5.8	2.6	9.8	4.9	12.1	5.1	9.4	4.5	10.8
Cyprus																
Czech Republic											4.9	10.7				
Denmark	4.3	10.1	4.2	8.8	2.9	8.8	3.2	7.4	3.0	6.4	3.3	7.3	4.6	6.2	2.7	5.4
Dominican Republic													14.5	18.9	15.5	25.0
Ecuador							24.4	30.1							15.9	18.5
Egypt															5.9	20.2
El Salvador																
Estonia																
Finland	6.0	11.1	3.5	5.6	1.3	4.9	3.0	5.7	4.4	5.4	4.0	5.9	4.8	9.0	4.5	10.1

Table 6: Continued

Country	2009		2010		2011		2012		2013		2014		2015		2016		2017	
	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA
Algeria	13.4	19.9			5.6	10.8	5.4	12.1	3.3	6.4								
Angola			31.0	32.9			30.6	34.4	20.4	24.3	20.4	22.8						
Argentina	11.4	18.0	12.3	16.2	17.1	24.8	14.2	24.0	12.9	19.2	11.2	17.8	15.8	19.9	13.1	16.0	5.4	6.5
Australia			7.8	7.8	8.4	12.6					10.3	16.0	10.1	15.5	11.5	17.7	9.2	15.3
Austria							8.1	11.0			7.1	10.4			8.1	11.2		
Azores			1.0	6.0														
Barbados					5.5	10.7	16.1	18.2	19.6	23.9	11.2	14.3	19.8	22.4				
Belgium	2.5	4.5	3.3	4.0	4.5	6.9	2.6	7.7	3.4	6.4	3.1	7.6	5.0	7.5				
Belize											6.4	7.8			27.3	30.5		
Bolivia			36.5	40.9							25.0	29.9						
Bosnia and Herzegovina	3.0	5.9	4.2	11.2	5.2	11.0	5.1	10.4	7.1	13.4	4.3	10.6					2.7	5.2
Botswana							25.4	30.0	19.9	21.9	30.9	34.8	30.1	36.6				
Brazil	15.9	14.8	16.4	18.6	14.5	15.3	14.7	16.2	17.4	17.2	17.4	17.0	20.3	21.7	19.9	19.2	20.7	19.9
Bulgaria													2.9	4.0	4.3	5.4	3.0	4.4
Burkina Faso											18.7	25.4	26.7	33.6	30.2	37.6		
Cameroon											34.1	40.9	23.6	27.2	26.5	28.7		
Canada									9.9	14.5	9.9	16.2	13.5	16.0	13.3	20.3	15.0	22.6
Chile	12.6	17.0	14.4	19.2	21.0	26.3	19.1	26.2	19.0	30.0	23.7	30.1	22.1	29.7	19.8	28.6	19.6	28.0
China	16.5	21.1	12.4	16.3	22.4	25.7	11.0	14.7	12.2	15.8	14.2	16.8	10.3	15.3	8.6	11.8	9.2	10.5
Colombia	19.9	25.2	18.4	23.0	16.3	26.8	17.6	22.8	17.3	30.5	14.6	22.8	18.5	27.1	24.7	30.2	18.2	19.2
Costa Rica			13.6	13.2			10.7	19.7			11.0	11.7						
Croatia	2.8	8.4	3.9	7.2	4.7	10.0	4.9	11.8	5.1	11.5	4.7	11.3	5.7	9.7	5.6	11.2	6.4	11.5
Cyprus															7.3	17.0	5.8	8.9
Czech Republic					4.2	11.0			4.1	10.5								
Denmark	2.5	4.8	2.3	5.2	2.9	6.3	3.1	7.6			3.8	7.1						
Dominican Republic	14.9	20.1																
Ecuador	15.6	16.1	19.0	23.5			27.4	25.7	32.6	39.5	32.2	33.0	32.8	34.3	30.2	33.6	30.6	28.7
Egypt			4.4	9.5			2.4	13.1					3.7	11.1	7.5	20.9	7.5	18.8
El Salvador							14.3	16.4			19.7	19.3			13.6	15.0		
Estonia							9.7	19.1	9.4	17.0	7.7	11.2	9.7	16.7	11.7	20.8	14.4	24.5
Finland	4.2	6.2	3.9	7.5	4.3	8.1	4.1	7.8	4.0	6.5	4.6	6.6	4.2	8.9	5.6	7.8		

Country	2001		2002		2003		2004		2005		2006		2007		2008	
	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA
France	3.5	8.0	2.1	4.2	1.6	1.7	3.8	8.2	3.3	7.4	2.5	6.3	2.2	4.1	3.3	8.0
Georgia																
Germany	3.9	8.7	3.4	6.9	3.3	7.0	2.6	6.1	3.8	6.3	2.6	5.8			3.4	4.1
Ghana																
Greece					4.0	9.6	2.9	8.7	3.4	9.7	4.7	11.1	3.5	8.0	7.7	12.1
Guatemala																
Hong Kong			2.3	4.6	2.0	4.5	1.5	4.5					5.8	14.3		
Hungary	7.9	13.9	4.4	8.8			3.5	5.1	2.3	1.4	4.1	8.1	4.5	9.3	5.3	8.0
Iceland			7.9	14.8	7.6	14.7	9.5	17.5	6.4	14.7	5.4	14.9	7.4	17.4	7.2	12.9
India	4.9	15.7	12.3	19.6							8.9	11.2	7.5	9.5	7.1	15.7
Indonesia											18.7	19.8				
Iran															4.5	13.8
Ireland	6.8	16.0	5.5	12.4	3.7	12.5	5.0	10.4	5.5	14.2	4.2	10.5	5.9	10.6	4.0	11.2
Israel	2.3	8.4	3.1	10.9			4.6	8.6					3.7	7.1	4.0	8.7
Italy	9.0	9.3	4.0	7.5	3.0	3.2	2.3	6.3	3.7	6.2	3.1	3.9	3.3	6.7	2.8	6.4
Ivory Coast																
Jamaica									15.7	18.4	18.1	22.6			14.4	16.9
Japan	2.0	4.3	0.5	2.9	1.3	4.2	1.2	1.7	1.2	3.2	2.6	3.2	5.2	3.5	3.0	7.8
Jordan																
Kazakhstan													7.6	11.2		
Korea	8.5	20.1	8.6	20.3											5.0	14.8
Kosovo																
Latvia									5.0	8.5	3.9	9.3	1.4	7.7	3.7	9.6
Lebanon																
Libya																
Lithuania																
Luxembourg																
Macedonia															8.6	20.3
Madagascar																
Malawi																
Malaysia											11.1	11.1				
Mexico	12.6	24.7	10.3	14.6					4.5	7.4	4.5	6.1			11.9	14.4
Montenegro																
Morocco																
Namibia																
Nepal																

Country	2009		2010		2011		2012		2013		2014		2015		2016		2017	
	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA
France	2.0	6.7	4.8	7.0	2.9	8.6	4.0	6.4	3.1	6.1	4.0	6.7			3.4	7.3	2.4	5.5
Georgia											6.5	8.0			6.5	10.9		
Germany	3.7	4.5	2.9	5.4	4.5	6.7	3.5	7.2	3.9	6.0	4.0	6.5	3.3	6.1	3.1	6.0	3.9	6.6
Ghana			37.1	30.8			38.0	35.0	27.9	23.5								
Greece	6.0	11.6	4.1	6.9	5.8	10.1	4.4	8.6	3.2	7.8	5.8	9.9	6.0	7.5	4.8	6.6	3.9	5.7
Guatemala	17.96	20.60	14.70	18.09	19.20	19.43			10.52	14.36	16.85	24.43	13.90	21.90	16.4	24.2	21.8	27.9
Hong Kong	2.2	5.2													6.5	13.1		
Hungary	6.4	12.0	4.3	10.1	4.3	8.3	5.8	12.8	7.0	12.4	5.3	13.5	5.5	10.4	5.1	10.9		
Iceland	8.0	14.8	7.1	13.9														
India									6.4	13.2	4.6	8.5	7.9	13.7	7.6	13.5	8.2	10.3
Indonesia									25.0	26.0	15.2	13.2	17.8	17.6	15.6	12.6	6.1	8.8
Iran	6.5	16.2	4.1	16.4	4.6	19.6	5.9	15.6	6.5	18.1	10.5	21.4	8.5	17.5	8.9	16.6	10.5	16.1
Ireland			3.9	9.5	4.2	10.3	4.0	8.3	6.4	12.1	4.2	8.9	5.8	13.0	7.3	14.5	6.2	11.7
Israel	4.2	8.0	3.4	6.7			5.5	7.6	6.5	13.7			9.3	14.4	9.4	13.3	10.7	14.8
Italy	1.8	5.6	2.0	2.7			2.9	5.7	2.1	4.8	3.1	5.7	2.9	6.9	3.3	5.6	2.4	6.2
Ivory Coast																		
Jamaica	19.4	26.2	9.2	11.8	12.6	14.9			12.3	15.3	17.3	21.3			8.8	10.9		
Japan	1.5	5.0	1.5	5.1	3.2	7.2	2.1	5.9	2.7	4.8	1.5	6.1					2.8	6.5
Jordan															3.3	12.8		
Kazakhstan											13.2	14.3	10.1	12.0	9.5	10.9	11.3	11.4
Korea	3.5	10.4	2.1	11.0	3.8	11.7	2.3	10.8	3.9	9.7			7.7	10.7	5.3	8.0	10.3	15.5
Kosovo											3.3	4.8						
Latvia	7.5	13.7	6.5	13.1	8.3	15.7	8.2	18.9	10.1	16.6			9.8	18.6	9.7	18.9	11.0	17.4
Lebanon	10.2	20.2											24.6	35.7	16.1	26.2	19.8	28.8
Libya									7.2	14.8								
Lithuania					7.2	15.6	4.2	9.4	7.8	17.5	6.8	16.2						
Luxembourg									5.6	11.6	5.3	8.9	8.7	11.6	6.5	11.7	6.4	11.6
Macedonia			4.0	11.7			4.5	9.4	3.8	9.4			3.5	8.7	3.7	9.3		
Madagascar																	20.6	23.0
Malawi							32.1	39.3	27.3	28.9								
Malaysia	3.7	5.1	4.8	5.1	4.0	5.8	6.2	7.8	5.5	7.6	6.8	5.1	3.0	2.9	4.5	4.9	20.1	23.0
Mexico			10.2	10.7	8.5	10.9	12.1	12.2	13.0	16.8	18.3	19.7	19.2	23.0	10.0	9.3	11.2	17.4
Montenegro			10.5	19.6														
Morocco	11.8	19.9											2.9	6.1	4.5	6.7	4.7	12.9
Namibia							17.5	18.8	34.4	32.1								
Nepal																		

Country	2001		2002		2003		2004		2005		2006		2007		2008	
	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA
Netherlands	3.9	7.9	3.5	5.7	2.4	4.8	3.1	7.1	2.1	6.6	3.6	7.2	3.7	6.6	3.3	7.1
New Zealand	13.4	17.6	10.6	17.4	10.0	17.2	12.1	17.2	13.7	21.7						
Nicaragua																
Nigeria																
Norway	4.6	10.2	4.6	12.6	3.9	10.7	3.5	10.2	4.5	13.6	5.7	12.0	3.8	8.5	5.2	12.1
Pakistan																
Palestine																
Panama																
Peru							39.1	41.4			39.3	40.9	26.1	25.7	23.6	27.5
Philippines											22.5	18.3				
Poland	6.4	9.7	3.2	4.7			5.0	12.7								
Portugal	3.8	9.6					3.8	3.9					5.9	11.7		
Puerto Rico													3.0	3.2		
Qatar																
Romania													3.1	5.0	2.1	5.9
Russia			1.5	3.5							2.6	7.3	1.6	3.8	2.5	4.5
Saudi Arabia																
Senegal																
Serbia													5.1	12.1	5.2	10.0
Singapore	3.4	8.7	2.7	9.3	3.5	6.5	3.3	8.2	5.0	9.6	3.7	5.9				
Slovakia																
Slovenia			2.9	6.4	1.7	6.4	1.6	3.6	2.9	5.8	2.3	6.9	2.7	6.8	4.0	8.8
South Africa	4.5	8.7	5.5	7.2	3.9	4.6	4.8	5.7	4.5	5.8	4.5	5.8			5.9	9.6
Spain	5.2	7.4	2.6	6.6	4.0	9.3	2.9	7.4	4.2	7.2	5.7	8.8	5.5	9.7	6.0	8.1
Suriname																
Sweden	4.2	7.1	2.5	5.2	2.1	6.1	2.2	5.2	3.0	5.1	2.4	4.4	2.5	5.8		
Switzerland			4.8	9.4	4.3	10.2			4.9	7.2			4.9	7.6		
Syria																
Taiwan			3.3	5.2												
Tanzania																
Thailand			18.5	19.3					19.3	22.2	14.2	16.2	26.0	27.8		
Tonga																
Trinidad & Tobago																
Tunisia																
Turkey											3.5	8.5	2.4	8.7	2.4	9.4

Country	2009		2010		2011		2012		2013		2014		2015		2016		2017	
	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA
Netherlands	5.9	8.5	4.4	10.1	6.0	10.4	6.7	13.9	6.8	11.7	7.3	11.6	3.5	10.9	8.6	13.3	9.4	10.5
New Zealand																		
Nicaragua																		
Nigeria					28.1	41.4	35.6	34.5	40.7	39.0								
Norway	4.5	12.5	3.8	11.5	4.2	9.6	3.6	9.8	3.6	8.9	4.0	7.3	3.8	7.5				
Pakistan			3.4	14.4	1.7	15.9	1.2	21.3										
Palestine							3.4	16.0										
Panama	8.2	11.0			19.6	22.0	10.4	8.5	17.4	23.8	16.1	18.0	12.1	13.5	12.3	14.2	14.2	18.1
Peru	18.4	23.6	25.7	28.9	19.0	26.9	17.6	22.9	19.6	27.3	28.0	29.7	22.5	21.9	24.0	26.3	22.9	26.3
Philippines									18.0	19.1	20.8	15.9	19.5	14.9				
Poland					5.0	13.1	6.2	12.6	6.2	12.4	6.0	12.5	6.0	12.5	8.1	13.3	7.7	10.0
Portugal			3.0	5.9	4.7	10.5	6.2	9.3	5.8	10.8	8.4	11.7	6.7	12.4	6.1	10.4		
Puerto Rico									6.1	10.7	9.1	11.1	7.1	10.0	7.7	13.2	8.3	13.2
Qatar											10.3	19.3			6.8	8.1	7.4	7.4
Romania	3.2	6.9	3.2	5.1	7.3	12.5	5.3	13.2	7.9	12.4	6.6	16.0	7.5	14.2				
Russia	3.2	4.6	3.5	4.4	4.1	5.1	3.4	5.4	5.3	6.2	3.7	5.8			5.7	6.9		
Saudi Arabia	0.7	7.9	5.9	12.1											9.7	12.9	10.3	12.4
Senegal													36.8	40.5				
Serbia	2.8	7.0																
Singapore					7.2	6.0	10.0	13.2	8.2	13.2	7.2	14.8						
Slovakia					8.1	20.3	6.7	13.7	7.3	11.7	7.4	14.4	6.5	13.0	7.6	11.3	9.8	13.8
Slovenia	2.6	8.0	2.9	6.4	2.7	4.6	2.6	8.1	4.0	8.8	4.3	8.3	3.3	8.4	5.1	10.8	4.3	9.3
South Africa	4.7	7.2	8.1	9.6	7.0	11.3	5.7	8.9	9.0	12.3	6.3	7.7	7.0	11.6	5.9	8.0	9.0	13.0
Spain	3.9	6.3	3.2	5.4	4.5	7.1	4.0	7.4	4.2	6.2	4.6	6.4	5.0	6.4	4.7	5.8	5.6	6.8
Suriname									3.5	6.8	1.5	2.7						
Sweden			3.5	6.2	4.5	7.1	4.8	8.0	6.2	10.2	3.8	9.5	4.8	9.4	6.3	8.8	5.7	8.8
Switzerland	6.6	8.9	4.5	5.6	6.6	6.6	5.5	6.4	8.0	8.3	7.2	7.0	5.1	9.5	5.3	11.1	5.8	11.1
Syria	3.1	13.6																
Taiwan			6.3	10.5	5.6	10.2	6.0	9.1	5.3	11.1	6.8	10.2	4.9	9.8	5.2	11.3	6.2	11.0
Tanzania																		
Thailand					20.9	18.1	20.6	17.3	17.3	18.0	22.1	24.5	14.8	12.7	15.7	18.9	20.0	23.3
Tonga	18.6	16.2																
Trinidad & Tobago			14.3	15.7	18.0	27.4	13.2	16.7	15.6	23.3								
Tunisia	5.1	13.7	4.1	8.2			2.9	6.8					5.3	15.0				
Turkey			3.7	13.5	7.2	16.5	6.9	17.5	6.3	13.5					10.0	22.3		



Country	2001		2002		2003		2004		2005		2006		2007		2008	
	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA
United Arab Emirates											0.3	5.9	6.0	10.0		
Uganda					22.3	35.4	25.5	37.8								
United Kingdom	3.6	9.3	3.2	7.5	3.8	8.8	3.9	8.5	3.7	8.6	3.6	7.9	3.6	7.4	3.7	8.1
Ukraine																
Uruguay											8.5	16.6	7.2	17.3	8.6	15.3
United States	9.0	13.3	8.3	13.0	8.1	15.7	10.7	11.9	9.6	15.2	7.4	12.7	7.2	12.0	8.8	12.7
Vanuatu																
Venezuela					25.1	28.5			23.8	26.1			16.8	23.5		
Vietnam																
West Bank & Gaza Strip																
Yemen																
Zambia																

Country	2009		2010		2011		2012		2013		2014		2015		2016		2017	
	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA	Female TEA	Male TEA
United Arab Emirates	6.3	15.7			4.3	6.9									3.7	6.6	8.3	9.3
Uganda	30.0	37.8	30.5	32.2			35.5	36.0	25.1	25.3	37.1	33.7						
United Kingdom	3.7	7.8	4.4	8.4	5.2	9.3	6.3	11.6	5.5	8.8	7.5	13.8	4.8	9.1	5.6	12.0	5.3	11.5
Ukraine																		
Uruguay	7.5	16.9	8.7	15.0	12.8	21.2	10.0	19.9	9.0	19.7	13.2	19.2	9.1	20.1	9.9	18.7	11.3	18.4
United States	5.8	10.1	7.0	8.2	10.4	14.3	10.5	15.2	10.4	15.1	11.2	16.5	9.2	14.6	10.5	14.8	10.7	16.7
Vanuatu			45.4	58.6														
Venezuela	17.8	19.6			14.4	16.4												
Vietnam									13.9	16.8	15.5	15.1	15.6	11.6			24.8	21.7
West Bank & Gaza Strip	3.4	13.6	7.0	13.6														
Yemen	18.8	29.0																
Zambia			29.9	35.4			40.0	42.9	40.7	39.0								

**GEM National Teams** - Rate of business ownership: businesses 3.5-10 years old with 10 or more employees and projecting annual growth of 20%.

**Table 7:** Percent of the adult population between the ages of 18 and 64 years old who are running a mature business that has been in operation for more than 42 months.

Country	2009	2010	2011	2012	2013	2014	2015	2016	2017
Algeria	6.9		7.5	1.2	0.7				
Angola		8.1		1.5	5.8	7.9			
Argentina	1.4	0.6	1.5	1.1	1.7	1.5	0.7	0.8	0.8
Australia		2.8	3.1			2.1	1.9	5.5	4.9
Austria				1.6		0.6		0.6	
Azores		0.0						1.4	
Bangladesh			0.9					0.0	
Barbados			0.0	0.4	0.4	2.9	1.4		
Belgium	1.3	0.0	0.8	0.0	1.3	0.0	3.9		
Belize						1.5			
Bolivia		0.2				0.2			
Bosnia and Herzegovina	0.9	0.0	0.7	3.9	0.0	0.9			3.7
Botswana				1.9	2.9	4.7	1.0		
Brazil	3.0	0.7	0.7	0.5	0.5	0.1	0.0		0.3
Bulgaria							0.9	1.6	1.9
Burkina Faso						1.6	1.0	1.3	
Cameroon						0.8	0.3	2.2	
Canada					3.6	3.8	2.9	0.0	3.1
Chile	2.3	2.5	4.2	0.0	1.4	4.7	5.6	2.7	2.9
China	1.9	1.5	7.4	2.6	5.9	4.8	3.7	8.2	17.4
Colombia	4.5	1.1	1.0	2.5	8.8	4.3	4.1	1.9	2.2
Costa Rica		0.8		0.0		0.0			
Croatia	9.5	0.0	3.3	0.0	3.8	2.6	1.9	4.1	2.3
Cyprus								1.0	1.1
Czech Republic			2.2		0.8				
Denmark		0.0	2.8	2.5		1.0			
Dominican Republic	0.3								
Ecuador	1.0	1.1		0.3	0.6	0.0	0.0	0.0	0.3
Egypt		2.7		2.8			1.0	3.2	4.1
El Salvador				0.4		0.0		0.4	
Estonia				1.4	1.1	0.9	1.9	2.8	4.8
Ethiopia				1.5					
Finland	2.7	1.6	1.5	1.2	0.0	0.0	1.0	0.6	
France	0.0	4.9	0.0	4.7	0.0	0.0		1.4	1.3
Georgia						0.0		2.2	

Country	2009	2010	2011	2012	2013	2014	2015	2016	2017
Germany	1.4	1.3	1.4	1.6	2.3	1.1	2.4	1.0	1.2
Ghana		0.3		0.2	0.3				
Greece	0.7	0.0	0.0	0.5	0.0	0.0	0.0	0.7	0.0
Guatemala	0.0	1.9	0.0		0.0	0.6	1.1	0.0	0.0
Hong Kong	0.0							5.1	
Hungary	0.7	1.3	0.0	0.7	3.1	2.5	3.0	2.7	
Iceland	1.9	3.1							
India				0.0	1.9	3.7	0.3	0.0	0.0
Indonesia					0.1	0.1	0.7	0.1	0.0
Iran	0.5	0.7	2.1	1.8	2.0	0.7	1.0	3.1	5.7
Ireland		1.6	0.9	4.6	3.3	0.0	1.2	2.1	5.0
Israel	8.8	1.5		3.7	4.0		3.9	2.7	0.0
Italy	0.5	0.0		0.0	1.4	0.0	1.4	0.0	4.0
Jamaica	0.6	0.0	0.0	0.0	0.0	0.5		0.6	
Japan		1.8	3.2	4.0	1.3	1.1			2.0
Jordan	0.9							1.6	
Kazakhstan						9.6	4.0	5.2	7.6
Korea	3.1	1.8	1.6	1.0	3.9		0.0	0.0	0.0
Kosovo						0.0			
Latvia	3.3	0.7	3.5	4.6	1.9		2.8	0.0	
Lebanon	1.7						0.8	0.8	0.0
Libya					11.1				
Lithuania			4.3	4.8	4.5	1.2			
Luxembourg					0.0	0.0	1.5	1.4	1.3
Macedonia		3.6		3.6	2.8		2.3	1.9	
Madagascar									0.2
Malawi				0.0	0.0				
Malaysia	0.5	1.2	0.8	1.5	3.4	1.1	2.0	1.1	1.8
Mexico		7.0	1.3	1.7	0.0	0.0	2.3	0.3	0.0
Montenegro		0.5							
Morocco	0.4						2.1	0.8	0.3
Namibia				2.5	2.0				
Netherlands	4.7	2.9	2.8	1.3	1.3	2.6	0.0	0.6	2.4
New Zealand									
Nigeria			15.3	1.4	0.4				
Norway	3.2	1.0	4.5	0.9	1.6	0.9	4.0		
Pakistan		1.1	1.5	0.0					
Palestine				1.7					
Panama	0.0		0.0	0.0	0.0	0.0	0.0	0.0	2.1
Peru	4.5	5.5	1.4	0.0	1.6	0.0	2.1	0.0	0.3

Country	2009	2010	2011	2012	2013	2014	2015	2016	2017
Philippines					1.1	1.8	1.6		
Poland			0.6	4.6	3.2	1.0	1.7	2.6	1.1
Portugal		2.0	0.0	2.2	2.4	1.4	2.3	2.3	
Puerto Rico					0.0	0.0	0.0	3.1	0.0
Qatar						12.8		23.2	18.8
Romania	4.7	0.0	1.1	4.5	0.0	6.0	6.0		
Russia	4.5	2.3	5.5	2.8	4.2	2.6		6.6	
Saudi Arabia	26.4	16.1						19.6	9.5
Senegal							2.2		
Serbia	1.7								
Singapore			1.6	0.0	6.1	6.9			
Slovakia			0.6	3.0	1.8	0.6	3.5	1.6	3.0
Slovenia	2.5	0.7	1.6	0.7	2.7	1.1	2.4	2.6	2.9
South Africa	2.6	4.6	6.1	2.5	5.7	4.3	4.3	8.0	1.8
Spain	0.7	0.2	0.3	0.5	0.3	0.4	0.4	0.4	0.2
Suriname					0.0	0.0			
Sweden		6.1	0.0	2.7	1.5	0.0	0.9	1.0	1.8
Switzerland	2.6	1.6	0.6	0.7	0.0	2.8	1.1	1.7	3.3
Syria	3.5								
Taiwan		1.3	6.1	2.4	4.9	3.7	4.7	2.5	4.8
Thailand			1.1	1.3	0.3	0.6	0.8	0.3	4.2
Tonga									
Trinidad & Tobago		1.3	2.2	1.4	1.5	1.9			
Tunisia		0.6		2.5			4.1		
Turkey		5.2	5.4	1.9	4.2			6.6	
United Arab Emirates	15.2		10.4					40.9	29.5
Uganda	1.1	1.4		0.9	0.9	0.8			
United Kingdom	1.5	0.4	2.4	1.9	1.4	1.2	2.9	3.4	2.6
Ukraine									
Uruguay	1.9	1.9	2.8	2.0	0.0	7.4	7.5	0.8	0.9
United States	3.2	0.6	0.7	2.8	0.1	4.8	2.7	3.9	4.6
Vanuatu		0.3							
Venezuela	0.9		2.7						
Vietnam					1.8	1.8	1.8		3.3
West Bank & Gaza Strip	1.4	0.0							
Yemen									
Zambia		1.2		2.1	0.4				

**GEM National Teams** - Rate of business ownership: businesses 3.5-10 years old with 5+ employees and projecting to double their employees in the next five years.

**Table 8:** Percent of the adult population between the ages of 18 and 64 years old who are running a mature business that has been in operation for more than 42 months.

Country	2009	2010	2011	2012	2013	2014	2015	2016	2017
Algeria	0.0		5.0	1.4	2.2				
Angola		7.5		6.2	3.0	4.5			
Argentina	0.5	0.4	0.5	0.5	1.6	1.5	1.9	1.7	0.5
Australia		1.6	3.1			1.1	0.6	5.4	2.6
Austria				0.9		0.2		1.1	
Azores		0.0						4.9	
Bangladesh			1.5					0.0	
Barbados			0.0	0.8	0.8	3.6	0.7		
Belgium	0.0	0.0	0.8	0.0	0.0	0.0	1.0		
Belize						1.9			
Bolivia		0.3				4.0			
Bosnia and Herzegovina	0.0	0.8	0.7	1.9	2.2	1.4			3.7
Botswana				3.4	1.3	3.8	3.0		
Brazil	0.5	1.3	0.4	0.5	0.8	0.7	0.6		0.0
Bulgaria							0.0	1.6	1.7
Burkina Faso						2.7	1.6	1.2	
Cameroon						1.3	1.3	1.6	
Canada					2.1	1.3	1.6	0.9	4.0
Chile	0.6	4.2	4.2	2.5	4.3	5.0	9.4	3.1	7.0
China	1.9	1.5	7.1	1.9	4.2	1.7	3.6	5.2	8.9
Colombia	0.0	2.5	1.8	3.8	2.6	5.4	7.4	3.4	2.8
Costa Rica		0.8		0.0		0.0			
Croatia	0.0	2.4	0.0	1.9	1.0	3.3	1.9	4.3	4.0
Cyprus								1.0	
Czech Republic			2.2		0.2				
Denmark		0.0	2.0	2.5		0.0			
Dominican Republic	0.8								
Ecuador	0.0	0.6		0.5	0.9	0.3	0.3	0.4	0.3
Egypt		5.1		4.9			1.7	3.5	3.4
El Salvador				0.9		0.4		2.5	
Estonia				0.0	3.2	1.7	2.6	3.3	3.4
Ethiopia				2.6					
Finland	1.2	1.1	1.2	0.6	0.0	0.8	0.5	1.3	
France	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Georgia						0.0		0.0	



Country	2009	2010	2011	2012	2013	2014	2015	2016	2017
Germany	1.3	0.8	0.5	0.1	3.4	0.6	1.0	0.8	0.7
Ghana		1.5		1.1	0.4				
Greece	0.0	0.4	0.0	0.0	0.5	0.0	0.0	0.6	0.0
Guatemala	0.0	1.9	0.0		0.0	0.6	2.3	1.0	3.1
Hong Kong	3.6							3.8	
Hungary	1.1	2.4	2.1	1.2	2.3	2.9	0.7	2.8	
Iceland	1.8	2.5							
India				0.0	0.4	2.8	0.3	0.3	0.4
Indonesia					0.4	0.1	0.8	1.0	0.0
Iran	0.0	2.0	0.0	1.7	1.1	1.5	1.0	3.9	5.7
Ireland		1.9	0.8	4.1	2.7	0.6	2.2	2.2	1.9
Israel	2.7	1.5		1.3	3.0		1.1	2.0	0.0
Italy	0.0	0.0		0.0	0.0	1.0	0.0	0.0	0.0
Jamaica	0.0	0.9	0.0	0.3	0.0	0.8		0.0	
Japan		1.3	1.3	1.5	0.8	2.0			0.7
Jordan	0.0							0.0	
Kazakhstan						7.7	2.0	3.1	7.3
Korea	0.0	4.0	2.4	2.4	3.9		4.3	2.3	0.9
Kosovo						0.0			
Latvia	0.5	0.6	3.5	5.7	3.6		0.9	2.0	2.6
Lebanon	0.0						1.0	0.6	0.0
Libya					8.2				
Lithuania			4.8	4.8	4.2	1.4			
Luxembourg					0.0	0.0	0.0	1.4	0.0
Macedonia		1.6		1.6	2.9		1.2	1.5	
Madagascar									0.2
Malawi				0.6	0.4				
Malaysia	0.0	0.0	1.6	0.0	5.1	2.3	2.0	0.0	0.0
Mexico		7.0	1.3	4.2	0.9	0.0	1.4	1.7	2.3
Montenegro		1.4							
Morocco	0.0						2.0	1.5	1.7
Namibia				2.5	2.4				
Netherlands	2.8	1.3	2.3	1.1	1.4	2.0	0.3	2.6	0.3
New Zealand									
Nigeria			9.1	2.8	2.2				
Norway	0.8	0.5	1.5	0.9	0.0	1.9	1.4		
Pakistan		3.0	2.8	0.9					
Palestine				0.0					
Panama	0.0		0.0	2.7	0.0	0.0	0.0	0.0	4.2
Peru	0.0	7.2	2.9	2.8	0.0	1.0	1.8	0.3	1.5

Country	2009	2010	2011	2012	2013	2014	2015	2016	2017
Philippines					0.5	1.3	2.3		
Poland			0.5	2.1	4.5	3.6	0.8	1.7	1.1
Portugal		0.9	0.0	0.0	1.2	0.6	1.6	2.3	
Puerto Rico					0.0	0.0	0.0	3.1	3.1
Qatar						15.0		22.4	16.7
Romania	1.5	3.8	3.0	5.7	0.0	4.7	6.2		
Russia	0.0	3.9	5.9	2.7	2.9	3.7		4.3	
Saudi Arabia	3.5	11.1						9.2	7.3
Senegal							2.8		
Serbia	0.0								
Singapore			3.0	2.2	6.2	5.9			
Slovakia			1.5	1.5	2.7	0.6	2.6	2.5	2.0
Slovenia	0.4	0.7	0.0	2.6	0.8	2.3	3.6	4.7	3.9
South Africa	0.0	7.2	4.6	2.3	2.5	1.1	6.0	15.6	0.7
Spain	0.1	0.1	0.3	0.5	0.1	0.8	0.7	0.7	0.1
Suriname					0.0	0.0			
Sweden		0.0	0.0	1.2	1.1	0.0	0.9	1.0	1.0
Switzerland	1.0	0.0	0.6	1.5	0.0	0.7	1.6	1.7	0.9
Syria	0.8								
Taiwan		1.1	3.9	3.9	7.3	2.9	3.6	3.8	3.7
Thailand			1.4	1.4	1.3	0.9	0.1	0.9	4.4
Tonga									
Trinidad & Tobago		3.9	1.5	1.4	3.0	4.0			
Tunisia		2.0		2.5			5.9		
Turkey		6.3	5.5	3.9	5.0			5.6	
United Arab Emirates	1.9		12.3					47.5	9.6
Uganda	0.0	3.8		1.5	1.6	1.5			
United Kingdom	0.4	0.7	1.7	4.0	0.6	1.9	1.6	2.3	2.7
Ukraine									
Uruguay	1.1	2.6	1.4	2.0	2.6	3.5	4.5	1.7	0.9
United States	2.0	1.2	1.0	2.0	0.6	1.7	1.6	3.5	0.8
Vanuatu		0.0							
Venezuela	0.0		0.0						
Vietnam					1.8	0.5	1.0		2.4
West Bank & Gaza Strip	0.0	0.7							
Yemen									
Zambia		0.4		2.1	0.0				

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## NOTES

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## NOTES

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