GEM Global Entrepreneurship Monitor

Policy Briefs 2017

Mike Herrington

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2017 GEM POLICY BRIEFS AND ACKNOWLEDGEMENTS

Since 1999 the Global Entrepreneurship Monitor (GEM) has been collecting, analysing and interpreting data across the world on the perceptions, aspirations and intentions of individuals to act and behave entrepreneurially. By monitoring these attributes and activities both individually and globally, GEM provides a unique data base which allows organisations and policy makers to obtain insights on the entrepreneurial patterns that prevail in participating economies.

The GEM outputs are very valuable for governments' work in evidence-based interventions addressed to improve and enhance the entrepreneurial ecosystem as well as to assist educational institutions to offer research-based educational programmes.

Each year GEM countries use the data collected to compile national reports describing the entrepreneurial ecosystem and allowing for cross-country comparisons. Many provide recommendations as to what is both hindering and enhancing entrepreneurial activities and what could be done by policy makers to improve the levels of entrepreneurial activities and stimulate SMME development which is vital for the well-being and prosperity of a country.

This report, which is the second in the series, puts together a composite of policy briefs from a select number of countries highlighting an initiative in that country which has had a dramatic effect of improving entrepreneurship. It is hoped that other countries could learn from these initiatives, not necessarily by copying them but adapting them to their own environment.

My sincere thanks go to the GEM researchers in all the countries incorporated in this report who helped to provide some of the data for this publication. Without them this would not have been possible.

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ABOUT GEM

GEM is a worldwide study on entrepreneurship that was first conceptualized in 1997 by two academics, one from London Business School (Michael Hay) and the other from Babson College (Bill Bygrave) in the United States. In the late 1900s there was no recognized international research that focused on entrepreneurship and the word was not a recognized household name as it is today. It was only starting to become important as academics and policy makers recognized the importance of small, medium and micro-sized enterprises development to the overall well-being of an economy; towards decreasing the levels of unemployment and to fighting the abject poverty which at that time, prevailed in many developing, third world countries.

The first published reports came out in 1999 and involved just 10 countries, eight from the OECD, Japan and the United States. Now 18 years later, the Consortium of GEM countries has grown substantially. Now over 100 economies are participating from all levels of economic development and in almost all geographic regions. The GEM study now represents between 70% and 75% of the world's population and approximately 90% of the world's GDP. It can now rightfully claim to be truly global and the most authoritative and informative study on entrepreneurship in the world. Only a few areas of the globe are not represented such as certain countries in mid/central Asia, a few countries in South East Asian and some from West and Central Africa.

GEM is different from most current studies on entrepreneurship in that it does not just look at businesses but also at individuals between the ages of 18 and 64 years from a demographically representative portion of the population. GEM looks at individuals, their attributes, aspirations, attitudes, perceptions and intentions. It looks at what makes them think and do, and not do, as these indicators play an important part in the entrepreneurial pipeline moving from potential, to intentional to those entrepreneurs who actually start a business and those that become fully established and growing.

Mike Herrington
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ARGENTINA

COMPELLING BANKS TO LEND TO SMES

POPULATION
43.1 million (2015)*

GDP
$585.6 billion (2015)*

GDP PER CAPITA
$13,588.80 (2015)*

GEM TEA RATE
14.5% (2016)

SME CONTRIBUTION TO GDP
44% (2004)**

Figures from Global Competitive Index Report 2016/17
***From the National Economic Census 2004-2005: http://www.indec.mecon.ar/Economico2005/inc_presenta.asp*

ENTREPRENEURIAL ECOSYSTEM

Following the economic crisis in 2000 and 2001, entrepreneurial activity in Argentina has increased over the last decade in line with the economic recovery. The government has started working on national and local level initiatives with varying degrees of intensity ; however, the main challenge remains to how to implement these public policies and programmes in order to enable companies to grow.[1]

While many of Argentina's entrepreneurs (61.6%) believe that they have the skills and knowledge to start new ventures, there is a growing sense among the population of a lack of opportunities for entrepreneurship, primarily due to the economic crisis. The percentage of Argentines that perceive good business opportunities has declined – from 56% in 2011 to 32% in 2014.[2] Despite this over the same period the percentage of adults who intend to start up a business in the next three years has remained fairly stable at about 30%. Almost two-thirds of entrepreneurs are motivated by opportunity rather than by necessity. However, Argentina still has one of the more difficult business environments in the world, ranked at 121st (out of 189 economies) in the 2016 Doing Business report, having declined from 117th the year before.[3]

PRIORITY LENDING

Under a special initiative, the Line to Fund Productive Investment (Línea de Inversión Productivo) introduced in 2012 by Argentina's central bank, banks are authorised to set aside a certain percentage of loans for the productive sector.[4]

This measure is similar to an initiative in India which has been in place since 1969. Banks must by March 2016 ensure that they lend a minimum of 7% of their net credit to small businesses and a minimum of 7.5% by March 2017. Banks that fail to do so will be made to pay the shortfall into a rural development fund.[5]

The initiative obliges financial institutions, whose average private sector deposits over the last three months is equal to or greater than 1% of total bank credit, to allocate in the form of loans at least 16% of these deposits to SMEs to fund productive investments. The funds can't be used to fund land or to finance working capital.[6] The obligatory percentage is reviewed by the central bank every six months and adjusted if necessary.

In May 2016, Argentina's President Mauricio Macri announced new measures to support the country's SMEs, including raising the obligatory percentage of loans that banks must make to the sector from 14% to 16% of net credit. When this measure will come into effect in July 2016 it will ensure that about 137 billion pesos ($9.6 billion) will be channelled over a period of six months to SMEs. The measures are intended to offset Macri's vetoing of an earlier measure introduced in Argentina's congress to ban businesses from firing employees for three months.[7]

At the same time a number of other tax and finance measures[8] were also announced by Macri to support SMEs, including the creation of a fund (Mi Primer Crédito) by Argentina's Bank for Investment and Foreign Trade (Bice) to finance SMEs who have never received bank finance before.

IMPACT

A central bank report[9].reveals so far, that most banks have been able to meet the targets and credit to SMEs has increased - from 28% of all bank credit that went to businesses (excluding credit advanced on credit cards) in 2011, to 45% of credit in 2011.

Tourist shop in Alpaca, Salta Province, Argentina

Under central bank rules[10], banks that fail to adhere to the targets are to be fined or have their banking licence revoked (under Section 41 of Argentina's Law of Financial Entities[11]).

According to a recent report[12] there is a strong argument for the central bank's intervention. In 2014, Argentina only channeled 17% of GDP worth of finance to the private sector, compared to 69% in Brazil and 109% in Chile.

In addition, a report[13] in 2015 by the University of Avellaneda suggests there is space for more credit to be channelled to SMEs, as just 11% of small businesses use bank loans to fund investment, compared to 20% of large companies.

However, an earlier 2013 report[14] by Observatorio PYME noted at the time that the central bank initiative was not enough to spur lending to SMEs, with many small manufacturers holding off on investing because of the poor economic climate and unavailability of funds in the country at the time.

While the economy is still struggling and expected to contract by 0.7% in 2016, the new administration's move to settle Argentina's international debt and open the country's markets to global producers, bodes well for SMEs. With the economy set to rebound in 2017, small businesses will need all the help they can obtain finance.

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AUSTRIA

STIMULATING YOUTH ENTREPRENEURSHIP

POPULATION
8.6 million (2015)*

GDP
$374.1 billion (2015)*

GDP PER CAPITA
$43,724.00 (2015)*

GEM TEA RATE
9.6% (2016)

SME CONTRIBUTION TO GDP
60.6% (2015)**

**Figures from Global Competitive Index Report 2016/17*

***From European Commission's Small Business Act factsheet 2015: http://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/index_en.htm*

ENTREPRENEURSHIP ECOSYSTEM

Austria has seen a significant rise in early-stage entrepreneurial activity between 2007 and 2014 – from 2.4% to 8.7%[1]. In addition, the country's SME sector has been one of the most resilient in Europe during the Eurozone crisis. While Austria has been struck by low growth rates and increasing unemployment, SME value-add in the non-financial business economy has grown by 18% between 2009 and 2014, according to the European Commission.[2]

In 2014 the vast majority (82%) of those engaged in entrepreneurship were motivated by a desire to pursue an opportunity, rather than out of necessity, which helped to place Austria 10th among the innovation-driven economies . During the same period, 49% of the adult population believed that they had the capability and skills necessary to start and succesfully run a business.

Austria has good physical infrastructure that allows for the establishment of high-growth companies and a strong commercial infrastructure, with one of the highest concentrations of banks worldwide. Added to this, over the past years, experts have ranked Austria's governmental support and funding programmes for entrepreneurs as consistently favourable within Europe.

Despite this, cultural and social norms may prevent interested individuals from taking entrepreneurial risks, as entrepreneurial thinking as well as business and management basics are barely taught at school.[3]

SUPPORTING YOUNG ENTREPRENEURS

With its focus on research, technology and innovation, the Austrian government aims to significantly increase the country's innovation capacity up to 2020,[4] making use of a variety of innovative initiatives.[5] It requires, among other things, interventions to promote entrepreneurship as a career option among youth.

Currently only about one in 10 adults that are involved in early-stage entrepreneurial activity are aged between 18 and 24 years, a rate which has remained fairly stable since 2007. Over the same period, the rate has increased significantly for those aged 25 to 34. [6]

Under the Austrian Federal Promotional Bank's *(aws) aws First*[7] programme, launched in 2014, students between 18 and 26 years who are still at school or have completed their education can apply for training and tailor-made mentoring to help them find their footing as entrepreneurs

The programme is funded by the National Foundation for Research, Technology and Development. Participants are selected as teams and then assisted in a "start-up lab" setting to develop and refine their ideas into viable business models. The main focus is on personal development, strengthening of entrepreneurial skills, establishing a network and developing a successful business model as well as a well-engineered prototype.

The business lab runs for a period of one year with eight to ten teams being chosen to participate in the programme. The first half of the period is dedicated to developing a well-founded business model. All teams pitch their ideas and business models to a panel of judges, who assess the quality and viability of their ideas. Based on their assessment, the panel then decides how much project budget each team should receive. The teams devote the remainder of the programme to building and optimising their business idea or solution.

Street scene in Vienna, Austria

Young entrepreneurs admitted to the start-up lab receive a monthly scholarship to help cover their basic costs of living, allowing them to focus on and dedicate their energy towards their projects. Additionally, all teams are provided with a project budget (€20,000) enabling them to build a prototype and – in a second step – to refine and optimise it, after having tested it on the market.

An experienced mentor, who is also an entrepreneur, accompanies the team throughout the year and also introduces the potential entrepreneurs to their personal networks of founders and business professionals. Guided training sessions are designed to develop each team's business idea further, while additional workshops, covering all important entrepreneurial topics, are also provided.

To support participants further in connecting with other like-minded founders, while working on their project, office space in a local co-working space is made available to them. Different networking events also allow teams to gain first-hand insight into the start-up scene and to connect with other founders.

IMPACT

Based on the programme's first call in 2014/15, the initiative is showing some success. Half of the teams that took part (five of the 10) in the one-year programme expressed a strong interest in founding their own company[8]. Those teams continue to work on their business idea, which was developed and refined during the start-up lab. One team has already founded a company and is currently marketing its first product, which is ready for production. The team is currently searching for a partner to help efficiently scale up it's output.

By supporting young people with their innovative projects and ideas, as well as by actively promoting the benefits of the programme to youth, *aws First* has had a widespread positive effect on entrepreneurship awareness in the country, reaching out well beyond the initial target group.

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AUSTRALIA

HELPING THE UNEMPLOYED TO START A BUSINESS

POPULATION
24.0 million (2015)*

GDP
$1,223.9 billion (2015)*

GDP PER CAPITA
$50,961.90 (2015)*

GEM TEA RATE
14.6% (2016)

SME CONTRIBUTION TO GDP
57% (2012)**

**Figures from the Global Competitive Index Report 2016/17*
***From "Australian Small Business", Department of Industry, Innovation, Science, Research and Tertiary Education: http://www.treasury.gov.au/PublicationsAndMedia/Publications/2012/sml-bus*

HIGH NUMBER, QUALITY OF ENTREPRENEURS

Australia performs fairly well in terms of the number and quality of entrepreneurs, with strong perceived opportunities and capabilities reported for new business start-ups. A high number of firms are started out of opportunity (85.1%) rather than necessity (12.7%) and the country has a relatively high prevalence of innovative start-ups compared with the UK and other innovation-driven nations.

In addition the Global Entrepreneurship Monitor (GEM) finds that Australians have a high level of entrepreneurial employee activity (8.5% vs 2.3% for the region) (those helping start up new branches or product lines) – ranked second only to Norway in 2015[1]. GEM data also reveals that nearly half of Australians identify opportunities for a start-up venture (48.9%) and believe that they have the necessary skills to start a business (48.2%).[2] This could make them better equipped than those from many other countries to starting up a new business in the event of finding themselves unemployed.

However Australia has a relatively low number of youth entrepreneurs, a higher fear of failure and fewer entrepreneurs involved in international markets compared to some other developed countries.[3]

NEW ENTERPRISE INCENTIVE SCHEME

The Department of Employment's New Enterprise Incentive Scheme (NEIS) aims to help those unemployed in Australia to start a business through a year-long training programme.

The programme is one of four offerings that the Australian government has to support unemployed people. The remaining three are directed towards helping unemployed people find a job such as a chance to work in a non-profit organisation in return for an unemployment subsidy and work in fruit picking.[4]

To qualify for the programme, participants must first undergo three months of business training through one of 21 accredited training providers, at the end of which participants are required to submit a business plan. Those with the best business plans are then eligible for NEIS assistance.[5]

Participants are also offered an allowance for up to 39 weeks (52 weeks until 2014 when the department reduced the period after finding that many participants didn't need assistance for a full year[6]) and rental assistance if eligible, for up to 26 weeks. Participants can also get mentoring for the first year of their new business. About 6,300 places are available annually through the initiative.[7]

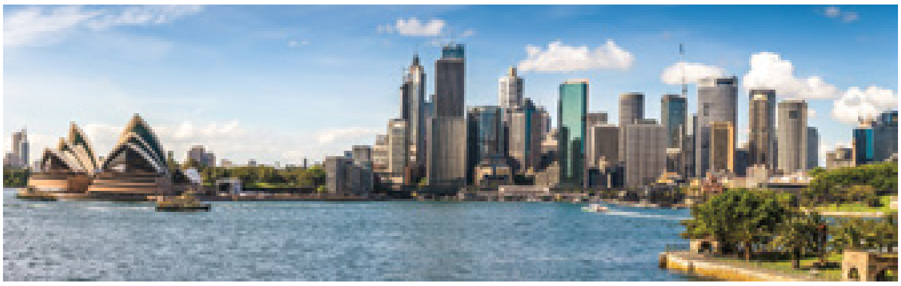
THOUSANDS HELPED

According to a 2008 evaluation, since 1985, when it was launched, the programme has helped 150,000[8] unemployed people to get training, of whom 83% have been able to either start a business or get a job within three months of graduating from the programme[9].

In the 2014/15 financial year alone, the programme helped 5,946 people to launch small businesses, down slightly from the 6,345 assisted in 2013/14[10].

Those who have enrolled in the programme have started businesses such as game development, an oilseed manufacturing firm, a wellness club for girls and a male grooming store.[11]

However despite its success, the 2008 evaluation[12], which surveyed a random sample of 695 participants, found that 16 months after leaving the programme those participants that started small businesses created an average of one permanent job per 10 enterprises. This was partly because just 46% firms survived after 16 months (lower than Australia's general



Sydney Downtown and Harbor Bridge, Australia

entrepreneur population survival rate for small businesses between 2007 and 2011 of 60%[13]).

Some beneficiaries who were no longer operating their NEIS business had since opened up another business, but most moved into other employment. The evaluation found that just over half of those whose NEIS business did not survive reported that it was due to not having enough capital or not being profitable. In addition 28% left their NEIS business due to another job offer.

A third of respondents indicated that they could have survived without NEIS assistance, which the evaluation said represented a dead-weight loss for the scheme.

These challenges, however, have not been enough to halt the programme. In 2008, shortly before the onset of the global financial recession, the federal government proposed cutting the scheme. However the decision was never enacted, while the government admitted that there was no suggestion that the programme was not working.[14]

Going forward, the NEIS is likely to continue to play an important role in Australia, if GEM 2014 results are anything to go by. GEM shows a doubling in the rate of necessity-driven entrepreneurship from 1.3% of the adult population in 2011 to 2.3% in 2014.

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BARBADOS

BOOSTING YOUTH ENTREPRENEURSHIP

POPULATION
300,000 (2015)*

GDP
$4.4 billion (2015)*

GDP PER CAPITA
$15,773.60 (2015)*

GEM TEA RATE
21.1% (2015)

SME CONTRIBUTION TO GDP
N/A

**Figures from Global Competetive Index Report 2016/17*

ENTREPRENEURIAL ECOSYSTEM

Entrepreneurship is seen as having a particularly high status in Barbados (69.8%), while adults on the Caribbean island had the lowest fear of failure (14.7%) among GEM countries in 2015 – a year in which the country's entrepreneurship activity recovered following a sharp decline between 2011 and 2014.

In 2015 adults who started a business in Barbados were over three times more likely to do so out of a desire to pursue an opportunity, rather than out of necessity. Yet, while three-quarters of adults believe they have the capabilities to start a business, a smaller 55% perceive there to be an opportunity to do so.[1]

The 2015 GEM findings suggest that Barbadians are developing less favourable attitudes toward entrepreneurship. This may be due to a number of factors, as the findings suggest.

Access to finance is one of the biggest constraints to entrepreneurship in Barbados. Many tend to rely on their own savings when starting a business. In addition, the process of setting up a business is seen as expensive, unclear and too time-consuming. Another main challenge is that too few start-ups are involved in new or innovative services or products.[2]

THE YOUTH ENTREPRENEURSHIP SCHEME

The high level of entrepreneurial activity among the country's youth (aged 18 to 35 years), however, is a key point of success. 51% of adults involved in starting a business in 2014 were under 35 years of age[3]. This may be due in large part to the creation of programmes and policies designed specifically to facilitate youth entrepreneurship.

The *Youth Entrepreneurship Scheme (YES)* [4] is a government-funded programme set up in 1995 that provides support for youth who are interested in starting a business. It is one of three departments within Barbados's Division of Youth Affairs : Ministry of Education, Youth Affairs and Sports.

Over the years the initiative has delivered a number of business development services, including entrepreneurial development training running for six months, a programme in schools and a summer camp (the 2015 edition focused on how to commercialise eco-friendly businesses[5]). The initiative also offers financial and direct technical assistance, as well as accounting and marketing services on a cost-sharing basis. These are complemented by a YES Magazine and a YES Business Directory.[6] To participate in the initiative, youth must be no older than 30 years old and have a strong desire to own a business.[7]

IMPACT

Between 2003 and 2010 YES assisted at least 200 young people per year who were interested in self -employment. In all, 40% of those who were supported started up a new venture or expanded an existing enterprise.[8]

In 2014 the programme reported an 88% success rate among start-ups that had been assisted since inception.[9]

In contrast to the rest of the Caribbean region, Barbados saw an increase in self-employment from nine percent of adults in 1980 and 1990 to 13% in 2000, growing to 15.3% by 2008 following the implementation of a number of government entrepreneurship programmes in the mid-1990s. Some have argued, however, that this may be due to self-employment in Barbados having grown from such a small base.[10]

Despite suggestions that the programme has had some success,

Fruit being exported in Barbados

the unemployment rate among youth in Barbados has recently grown, according to the Barbados government[11], with the percentage of the labour force aged 15 to 24 years listed as unemployed having risen from 19.4% in 2000 to 26.8% in 2014.[12]

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BRAZIL

NURTURING INNOVATION IN REMOTE REGIONS

POPULATION
204.5 million (2015)*

GDP
$1,772.6 billion (2015)*

GDP PER CAPITA
$8,670.00 (2015)*

GEM TEA RATE
19.6% (2016)

SME CONTRIBUTION TO GDP
27% (2015)**

**Figures from Global Competitive Index Report 2016/17*

***Note figures pertain to just small and micro enterprises, and do not include medium-sized firms. Sourced from Sebrae report February 2015, "Participacao das Micro e Pequenas Empresas na Economia Brasileira": http://www.bibliotecas.sebrae.com.br/chronus/ARQUIVOS_CHRONUS/bds/bds.nsf/55cdb1932bc40120b21f4d277bb6ea/$File/5307.pdf*

ENTREPRENEURSHIP ECOSYSTEM

Brazil is one of the most entrepreneurial countries in the world, with the percentage of Brazilians involved in starting and running both established and new businesses having risen year on year since 2011 to over 40% of adults, according to the Global Entrepreneurship Monitor (GEM).[1]

In addition, Brazilians are increasingly becoming even more positive about entrepreneurship[2], with the country ranked third for the percentage that view it as a positive career choice and ninth among 60 countries surveyed by GEM for those that see entrepreneurs as having high status.[3] In addition, about a quarter of adults plan to start a business in the next three years.

In 2015 the number of Brazilian entrepreneurs that started a business out of necessity increased from 30%, where it stood between 2012 and 2014, to 43.5%, likely caused by the recession which took hold in 2015.[4] An increase in registrations of a new form of company aimed at one or two-man micro entrepreneurs (known as *micro emprendedor individual*) has led to a spike in company registrations. But the recession has also led to significant job losses at small businesses. In addition, the country has too few high-growth companies.[5]

Crucially, despite their optimism, Brazilian entrepreneurs still face stifling red tape and high taxes. Although the number of days it takes to register a business has fallen, it still stands at an average of 83 days.[6] The government has launched an initiative to reduce red tape, but it has been slow to make many changes.[7] Entrepreneurs are also limited by poor infrastructure and a low transfer of research and development.[8]

THE CREATIVITY WAREHOUSE

In a bid to increase local innovation and to help retain critical talent in its remote interior, in 2015 the state government of Pernambuco in Brazil's northeast launched the Creativity Warehouse (Armazem de Criatividade)[9]. The initiative is run by the state's technology park Porto Digital[10] which is based in the capital of Recife.

Importantly, the initiative is the first of its kind in Brazil to bring together in the same space activities from a range of areas – including education, incubation, co-working and business offices, exhibition space and access to finance. The idea is that these will help foster the favourable synergy that can spur creative and innovative projects.

The initiative's current centre is located in Caruaru, a regional hub in the state's interior for textiles, with a deep heritage in the fields of music and crafts (a second centre is planned for the city of Petrolina, to focus on the development of games and music[11]).

The Creativity Warehouse of Caruaru aims to not only boost local economic development but to act as an attractive opportunity for young people who complete technical training or higher education. This helps to reduce regional disparities by developing a new economy in the countryside.

The initiative's various labs are aimed at areas such as graphic prototyping, fashion prototyping, 3D prototyping, music production, imaging and film and photo editing. The labs help foster innovative solutions in the fashion sector from production planning to distribution – in the development of fashion collections, preparation of catalogues, fashion films, labels, brands and related activities of the chain.

The labs are aimed mainly at young people, who are college or university students, graduates of technical education or are already active entrepreneurs.

The Creativity Warehouse of Caruaru aims to ensure that by September 2019:

- 1 000 people get training qualifications;
- 18 enterprises are incubated and that a further 25 enterprises are attracted to corporate spaces from incubators,

Indigenous fruit being stacked to be sold in the harbor near the Mercado Ver o Peso, Brazil

universities or the market;

- 200 local companies are helped by high-tech laboratories to innovate;
- 28 events are held to exhibit projects and products in various stages of development;
- 500 users are put through co-working where they can meet and co-operate with other young entrepreneurs; and
- 40 companies are assisted in getting finance.

IMPACT

Since its launch in October 2015 the Creativity Warehouse of Caruaru has held 26 events that have mobilised 1,968 people. It has also helped 143 people to get training in eight different courses in the areas of business, technology and design.

Currently, five enterprises are receiving incubation in an 18-month programme in the areas of design, games, information technology and publicity. A new call for enterprises has been made for the Programme Mind the Bizz (it is a 10 week programme aimed at nuturing entrepreneur orientation and practice). It has 34 subscibers and eight continuous users. The labs support 22 companies.

So far one company has been assisted in getting finance of 12,000 reals ($3,700) through the Sebraetec programme.
In addition, the initiative has two agreements in place for technical and scientific co-operation with educational institutions aimed at helping students to solve real problems.

Most recently, the Creative Warehouse initiative was one of 10 finalists in the International Association of Science Parks (IASP) Inspiring Solution prize in 2016, with the winner set to be announced in September 2016.[12]

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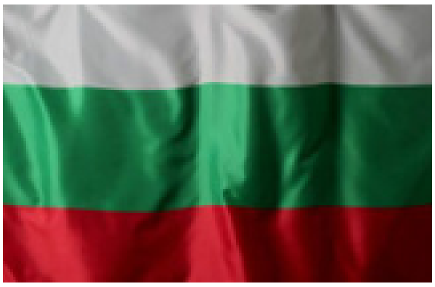
BULGARIA

KICK-STARTING RISK FINANCE FOR SMEs



POPULATION
7.2 million (2015)*

GDP
$49.0 billion (2015)*

GDP PER CAPITA
$6,831.70 (2015)*

GEM TEA RATE
4.8% (2016)

SME CONTRIBUTION TO GDP
62% (2015)**

**Figures from Global Competitive Index Report 2016/17*

*** From the European Commission's monitoring for 2015 for the Small Business Act: http://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/index_en.htm*

ENTREPRENEURSHIP ECOSYSTEM

Bulgaria fares poorly in terms of the number of adults involved in early-stage entrepreneurial activity. In 2015, among 60 countries measured by GEM, this East-European country had the second lowest rate of adults involved in starting a business (3.5%). It also has one of the smallest percentages of entrepreneurs who start a business motivated by opportunity rather than by necessity.

In addition, just 5.3% of adults expect to start a business in the next three years (placing it 59th out 60 countries ranked by GEM on this measure). Few report seeing any opportunities to start a business in Bulgaria (just 15.8%), while just over a third believe they have the capabilities to do so. However, despite this 71.5% of Bulgarians rate entrepreneurship as having high status, while 57.5% believe it to be a good career choice. Also on the positive side, internet connectivity is world class and Bulgaria traditionally boasts a highly skilled IT labour force. Bulgaria has a number of initiatives aimed at boosting the public image of entrepreneurship – for example Start it Smart, an NGO started by students which aims to inspire potential entrepreneurs and provides high quality pre-accelarator programmes, as well as ABLE and StartUP.

Bulgaria performs poorly when it comes to entrepreneurship support programmes offered by the government, research and development transfer and entrepreneurship education. However, in 2016 the new Educational Act is set to introduce entrepreneurial education in schools for the first grade. GEM experts rate it relatively favourably for commercial and legal infrastructure and physical infrastructure and low levels of red-tape.[1]

Small businesses are still struggling. While value-add by SMEs in 2014 returned to pre-2008 crisis levels, small firms had not recovered jobs lost during the crisis – with employment in SMEs in 2014 at seven percent below the 2008 level. Forecasts predict a further five percent increase in value-add and a moderate one percent rise in employment until 2016.[2]

IMPROVING ACCESS TO FINANCE

Bulgaria has been able to help about five percent of its small and medium enterprise (SME) population to get funding through an EU-funded initiative which aims to improve the access to finance for SMEs using various financial instruments.

The Joint European Resources for Micro to Medium Enterprises (*JEREMIE*[3]), a European Commission and European Investment Bank initiative implemented by the JEREMIE Holding Fund (JHF), was launched in Bulgaria in 2010 and is financed with €349 million (US$388m) from EU funds.

The investment strategy of the JEREMIE initiative in Bulgaria uses a mixture of seed funding, venture capital, private equity, debt and credit guarantee instruments to boost access to finance for Bulgarian SMEs in order to address market gaps between the supply of and demand for financial instruments.

IMPACT

Under the initiative, €900 million has been disbursed to more than 9,300 SMEs as of 2016 with the addition of private funds helping to leverage the EU's initial €349 million almost three times. Most of the finance disbursed to SMEs was by way of credit guarantees and portfolio risk-sharing loans via local banks (credit guarantees helped reduce the amount of collateral that beneficiaries require to borrow from a bank in Bulgaria from

120% to 48%[4]). Smaller amounts of seed funding and venture capital were disbursed via private funds and venture capital funds.

The number of SMEs that have benefitted equates to roughly five percent of the country's active SMEs population in Bulgaria in less than four years.[5]The initiative has provided access to finance to SMEs which otherwise would not have been considered due to the high risk they represent to traditional finance forms such as banks.

The initiative also helped put the foundations of a modern venture capital (VC) and private equity eco-system in place in Bulgaria by supporting the launch of five funds. These cover the needs of the entire life cycle of an SME – from pre-seed funding to seed fund and finance for expansion.

Through the initiative, Bulgaria was able to establish the first of its kind acceleration and seed fund model in 2011/12 when the acceleration industry and segment was developing in Europe and especially in Eastern Europe. The two funds established at two accelerators – *Eleven*[6] and *LAUNCHub*[7] (both set up in 2012) – have funded close to 200 start-ups with €21m, the most successful of which have raised a further €20m from third-party investors, turning the capital Sofia into a hotspot for VC activity in Europe.[8]

As a result, Sofia was ranked among the top three European capitals for supporting start-up businesses with risk capital for the 2013 and 2014 years and declared the 10th best place in the world to launch a start-up by Forbes in November 2015[9]. By the same month Sofia had the third highest cumulative number of investments by European accelerators since 2004, after London and Dublin.

However, despite the deployment of various funding instruments under JEREMIE, the European Commission noted in 2015 that there had been a noticeable deterioration in the availability of bank finance and public financial support. It said the implementation of a late-payment directive should improve Bulgarian SMEs' liquidity.[11]

Bansko ski resort, Bulgaria

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BURKINA FASO

BOOSTING YOUTH ENTREPRENEURSHIP

Population
17.3 million (2015)*

GDP
$33.4 billion (2015)*

GDP per capita
$1,811.00 (2015)*

GEM TEA rate
33.5% (2016)

SME contribution to GDP
n/a

Figures from Wikipedia.org: https://en.wikipedia.org/wiki/Burkina_Faso

ENTREPRENEURSHIP ECOSYSTEM

In Burkina Faso the vast majority of adults are involved in starting or running a business (a total of 57.6% in 2015, up from 37.7% in 2014[1]).

This is not surprising in a country where entrepreneurship has an extremely positive association for many – 83.4% of adults regard entrepreneurship as high status and 73.8% see it as a good career choice.

This is complemented by the high number of adults that perceive there to be opportunities to start a business (58.1%) and believe they have the capabilities to start an entrepreneurial venture (78%). Less than a fifth of adults say they have a fear of failure.

Despite this, entrepreneurs have to battle the country's poor physical infrastructure (though the country scores better on its commercial and legal infrastructure), as well as a shortage of entrepreneurship education and technology transfer.[2]

Added to this, while Burkina Faso is ranked higher than many similar economies when it comes to starting a business (at 78 out of 189 countries), it came in a low 143rd out of 189 countries in the 2016 on the Ease of doing Business.[3]

In urban areas almost 30% of young people aged 15 to 24 are unemployed, while the rural areas are especially marked by a relatively high rate of under-employment (26.7%). There is also a great demand for public-sector jobs. In 2015, more than 200,000 people applied for 11,000 vacancies in the public sector. New jobs are therefore more likely to come from young people themselves starting their own companies.[4]

BOOSTING YOUTH ENTREPRENEURSHIP

Over the years the government and its international partners have undertaken a number of initiatives by offering, among other things, technical and financial support to help Burkinabes to start their own business.

One of these initiatives is the Fond d'Appui aux Initiatives des Jeunes (FAIJ) (or Support Fund for Youth Initiatives). Created in 2007 by the Ministry of Youth, Vocational Training and Employment, it targets young people who have successfully completed training in entrepreneurship. The fund provides loans of between 200,000 West African CFA francs ($350) and 2 million West African CFA francs ($3,500) for projects. Projects submitted by associations and non-profit organisations can receive up to 5 million West African CFA francs ($8,500).

To qualify for funding, applicants must be no older than 35 years, have received training in entrepreneurship, have a mentor or a sponsor and have formulated a draft of their project for selection.

The FAIJ differs from a bank as it offers flexible financing terms and levies an interest rate of five percent (in Burkina Faso banks charges interest rates of between seven percent and 13%). The fund grants a preferential rate of two percent for disabled young people and a rate of 3.5% for women recipients.[5]

IMPACT

Between 2008 and 2013 the fund backed 3 875 projects (a third of them initiated by women) amounting to 3.67 billion West Africa FCFA ($6.1 million). 43% of all applications received by the fund were awarded loans. The funding helped create 13 485 jobs in total (3 875 direct jobs and 9

610 indirect jobs). Women make up about a third of those who have received funding.

The bulk of the funds, or 45.6%, went to the agriculture sector, while 32% went to the craft sector. The funding is awarded primarily to productive sectors, enabling young entrepreneurs to make a major contribution to wealth creation in the country.[6]

However, despite these encouraging figures, there have been a number of criticisms of the programme. These include the poor technical and managerial support provided to young people by the fund – which means that less than half of all applicants submit a business plan to the fund. In addition, as the fund excludes young people who have not passed the equivalent of the third class of high school (Grade 9), about 85% of targeted young people are excluded from receiving support from the fund.[7]

A government training programme, however, might be able to address some of these concerns. In June 2016 the Ministry of Youth, Vocational Training and Employment launched the seventh iteration of the Programme Annuel de Formation de 5 000 Jeunes en Entrepreneuriat, which aims to put 5,000 youth a year through business training. Those that graduate from the programme can access various ministry funds, including the FAIJ.[8]

Ouagadougou skyline, Burkina Faso

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CAMEROON

ENCOURAGING ENTREPRENEURSHIP IN AGRICULTURE

POPULATION
23.1 million (2015)*

GDP
$28.5 billion (2015)*

GDP PER CAPITA
$1,232.40 (2015)*

GEM TEA RATE
27.6% (2016)

SME CONTRIBUTION TO GDP
36% (2015)**

**Figures from Global Competitive Index Report 2016/17*

ENTREPRENEURSHIP ECOSYSTEM

According to the results of the first Global Entrepreneurship Monitor survey conducted in the country in 2014, Cameroon presented the highest rate of Total Early-stage Entrepreneurial Activity (TEA) among 70 countries. One in every four adults is involved in early-stage business activities (above the average for factor-driven economies of 21 %), while a further 12.8 % are established business owners/mangers. About a third of the adults population plans to start a business in the next three years.

Over 60% of Cameroonians perceive that the country has good conditions to start a business (driven in part by average economic growth of 4.7% between 2010 and 2014[1], while 73.1% believe they have the capabilities to undertake entrepreneurial activities. Only 23.9% of the adults population express a fear of failure when it comes to starting a business.[2] However, only 13% of entrepreneurs in the country believe that they will create six or more jobs over the next five years, which means that most of the businesses formed create minimal employment opportunities.

In spite of these success stories, the country does not have the environment conditions capable of promoting and sustaining the development of entrepreneurial activities. In fact, the country's business discontinuation rate is one of the highest in Africa. The country has also one of the lowest rates of opportunity – based early-stage entrepreneurial activity, which is below the African average, and has one of the lowest numbers of innovators in Africa.

Entrepreneurship in Cameroon is failing to thrive due to the entrepreneurial ecosystem; poor infrastructure, market entry barriers and poor internal market dynamics. However, the country fares well in terms of legal and commercial infrastructure, government support programmes and post-school entrepreneurial education.[3]

ENCOURAGING ENTREPRENEURSHIP IN AGRICULTURE

The agricultural sector offers a real chance for Cameroon to promote opportunity-driven entrepreneurship, with a large percentage (43.3% in 2014) of youths aged 15 and above employed in this sector.

The latest evaluation of trade policies in Cameroon by the World Trade Organisation (WTO) in 2013 revealed that agriculture offers the highest opportunities capable of improving exports growth. The WTO also noted that the country had begun diversifying it's activities, mainly in cocoa nurseries, the supply of seeds, and the cultivation and transformation of cassava.[4]

The government has put in place a number of programmes to promote entrepreneurship in agriculture. Recently, the state launched *Agropoles programmes* which aim to promote second-generation agriculture. The government provides various support to the farmers that use modern techniques to improve their production.[5] This programme created in August 2012 by the Ministry of the Economy, Planning and Regional Development, offers support in different agriculture sectors namely plant sectors, livestock, fisheries and forestry. Government subsidies to run the programme amount to over 11 billion CFA francs (US$18.6 million) for the year 2016.[6]

IMPACT OF THE PROGRAMME ON THE AGRICULTURAL INDUSTRY

Despite the fact that *Agropoles* is still in its early stages, the programme has been created more than 20 operational *agropoles* activities and at least 250 companies in different sectors.[7] While the promotion of agriculture can improve the development of entrepreneurship in the country, its success is reliant on the government. By making it easier for entrepreneurs to access financial support. The agricultural bank, which was created in 2013, aims to reduce farmers' difficulties to access required financial resources, but the bank is not yet operational. Currently, farmers struggle to access financial resources despite the creation of a microfinance institution by the chambers of commerce.

In addition, there is a need to put in place better strategies for the monitoring of projects[8], to ensure the development of entrepreneurial activities in the country.

Douala Harbor, Cameroon

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CANADA

TECHNOLOGY VOUCHERS FOR SMES

POPULATION
35.8 million (2015)*

GDP
$1,552.4 billion (2015)*

GDP PER CAPITA
$43,332.00 (2015)*

GEM TEA RATE
16.7% (2016)

SME CONTRIBUTION TO GDP
27%**

**Figures from Global Competitive Index Report 2016/17*

***Figures from the Canadian government, Innovation, Science and Economic Development: https://www.ic.gc.ca/eic/site/061.nsf/eng/02812.html*

ENTREPRENEURIAL ECOSYSTEM

Canada offers a highly supportive culture for entrepreneurship. Successful entrepreneurs enjoy a high status and the Canadian media are seen to report fully on entrepreneurship. The conviction that there is opportunity and that the skills and knowledge required are widely distributed leads to a low rate of Canadians inhibited by fear of failure.

In this climate, the total early-stage entrepreneurial activity (TEA) rate has grown in recent years – from 12.2% in 2013 to 14.7% in 2015 (among its provinces, Alberta has the highest TEA rate – in 2014 it was over 18%[1]). In addition, opportunity-driven entrepreneurial activity leads necessity-driven activity by a ratio of 4 to 1. In this respect Canada compares favourably to other innovation-driven economies, such as the UK, US and Australia.

The country, however, needs to improve its capacity to transfer knowledge from research and development to small and growing firms, and attend to entrepreneurship in the education system.[2]

VOUCHERS, ADVISORS

The Alberta provincial government in Canada offers technology vouchers and support to small growing technology firms, through its Alberta Innovates Technology Futures (AITF) programme, set up in 2010.

The programme offers vouchers to help fund technology interventions for small businesses. These come in two forms. One is a micro-voucher up to the value of 10,000 Canadian dollars (US$7,700), while another funds support of between 10,000 and 100,000 Canadian dollars. AITF pays the voucher directly to the service or product provider named in the application. In addition, the Product Demonstration Programme funds technologies interventions valued at between 100,001 and 300,000 Canadian dollars.

All three offerings operate on an open call basis, meaning applications are accepted and reviewed continuously, with applicants informed of the outcome of their applications within six to eight weeks after receipt of the application.

The micro-voucher is designed to support technologies in the early developmental stages and covers support from one service provider. Funds are to cover market assessments, industry development, corporate training, conferences, intellectual property assessment and acquisition of materials and equipment.

The 100 000 Canadian dollar voucher is designed to support technologies mainly in the mid-to-late developmental stages and to fund up to three service providers to advance the technology closer to commercialisation. Funds are to cover new product research and development, engineering and prototype development, product testing, patent development and other technology development activities.

The *Product Demonstration Programme* is designed to support technologies in the more advanced stages of development. It is aimed at funding three project partners for the purpose of showcasing the performance, method and features of a prototype in the market or validating its economic and technical feasibility.

In January 2016 the government announced that it was boosting support for high-tech innovation and research, with 5 million Canadian dollars in additional funding through the enhanced innovation voucher and small and medium-sized enterprises support programme. The programme helps small technology-based businesses access services such as marketing, planning, feasibility or business formation, as well as accelerated technology and product development activities.3

The AITF has five product development advisors located across Alberta, but in 2016 this is set to rise to 10. The Alberta government also offers Connectica4, an online service connecting innovators to service providers and funding options.

IMPACT

In the 2014/15 financial year the programme helped create 555 jobs, up from 414 the previous financial year.

In a client survey carried in the AITF's 2014/2015 annual report,[5] 82% of those assisted by the programme said they were "very satisfied" or "extremely satisfied" with the programme. In addition, 90% said the programme had proved "very helpful" or "extremely helpful". In all 65% of participants in the programme reported that they had developed new products or enhanced existing products or processes with the funding. However, only 55% said the programme was enough to service their requirements.

In the 2014/15 year a number of changes were initiated within AITF's commercialisation programmes to enhance service to SMEs. These include refocusing services around mentorship as well as operational and strategic guidance by leveraging technology development advisors and programme associates as key contacts in addition to providing funding.

A decision was taken to carry out periodic programme reviews under the continuous improvement umbrella and to move from a quarterly call to an open call approach, allowing ongoing submission for funding and other support. An online submission tool was also introduced to streamline applications.

Links have been added to its supply chain resources to support connectivity between customers and suppliers and accelerator pilots and inter-jurisdictional programmes have been implemented to enhance and accelerate commercialisation.[6]

In 2016, in response to the low oil price, the Alberta government announced that it was considering merging Alberta Innovates Technology Futures and three other programmes into one organisation.[7]

St. Jacobs farmer's market, Jacobs, Ontario, Canada

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CHILE

TAX INCENTIVE TO PROMOTE INNOVATION

POPULATION
18 million (2015)*

GDP
$240.2 billion (2015)*

GDP PER CAPITA
$13,340.90 (2015)*

GEM TEA RATE
24.2% (2016)

SME CONTRIBUTION TO GDP
20% (2015)**

**Figures from Global Competitive Index Report 2016/17*
***From the Third longitudinal study of businesses, Ministry of Economy: http://www.economia.gob.cl/wp-content/uploads/2015/07/Informe-de-resultados-productividad-por-sector-y-tama%C3%B1o-de-empresa.pdf*

ENTREPRENEURIAL ECOSYSTEM

In recent years Chile has experienced a boom in entrepreneurship, with the percentage of adults starting a new business increasing from 16% in 2010 to 25.9% in 2015. Much of this can be attributed to the increased status and media support given to entrepreneurship as well as the considerably improved support from the government. Chile also has good physical and socio-cultural infrastructures in support of entrepreneurship.

57.4% of the adult population in 2015 reported seeing good opportunities to start a business and of these entrepreneurs, 67.4% of early-stage entrepreneurs were driven by opportunity, rather than by necessity.

However, the country falls short in terms of access to funding and transfer of research and development (R&D). While there is growing positivity around entrepreneurship, better training programmes aimed at younger ages are also necessary, as this could help to improve success rates and lead to more sustainable ventures.[1]

R&D TAX CREDIT

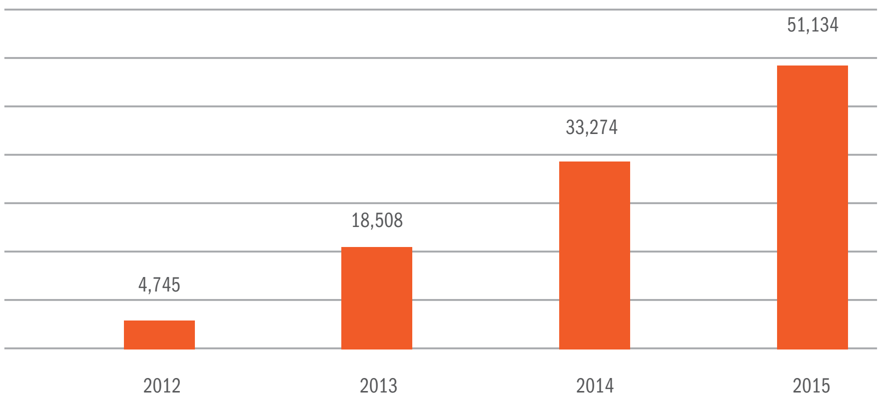
Chile has, during the last decade, reinforced and improved a wide variety of policies aimed at promoting entrepreneurship and innovation. These include programmes designed to attract foreign entrepreneurs (***Start-Up Chile***), grants for innovative projects through seed capital, the provision

Santiago cityscape, Chile

of government funding to the venture capital industry and many others.

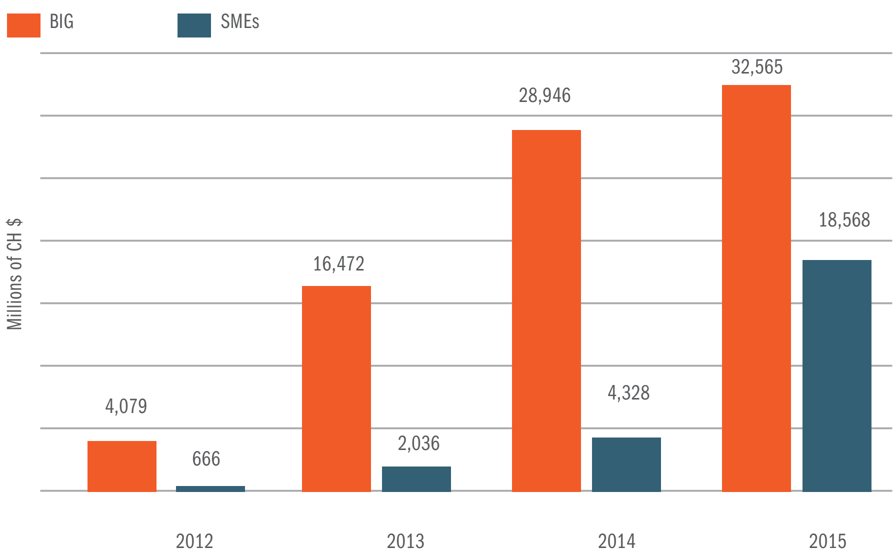
In 2008 a special programme was designed to promote R & D activities in companies by giving a tax credit of 35% of the expenses associated with the project and then allowing the remaining 65% to be deducted for the revenues when calculating corporate tax for the year. In order to qualify, these research projects had to be conducted by universities or registered research centres. However, this programme was amended in 2012 to also include research carried out by companies in-house. The annual cap of the tax credit was raised from US$0.4 million to US$1.2 million per company or legal entity. These tax benefits could be carried forward for 10 years and would remain valid until 2015[2].

Chart 1: Evolution of R&D tax credit benefit (millions of ch $)



Source: CORFO

Chart 2: Tax credit benefit by size of countries



Source: CORFO

IMPACT

According to a report from the OECD[3], following the 2012 changes the flow of new applicants increased five-fold. In addition results obtained in the period 2012 to 2015, presented in Chart 1 and 2 (amounts presented in millions of Chilean pesos) ,show that the scheme has experienced exponential growth.

The tax benefits claimed under the scheme have increased from 18,508 million Chilean pesos in 2012 to 51,146 million Chilean pesos in 2015. As of the end of 2015 a cumulative 181 companies had benefited from 191 projects under the scheme since 2008 – 73% of them micro and small enterprises.[4]

This is significant, particularly as the policy is still quite new. Given that not all companies are as yet likely to be familiar with the tax credit, the uptake is likely to grow further. In addition, the share of small and medium-sized enterprises (SMEs) that benefit from the tax incentive has notably increased from 16.3% of the total in tax credits under the scheme in 2012 to 36.4% in 2015.[5]

However, despite this progress, the OECD noted in a 2015 report that the 2012 changes to the tax credit are still most relevant for larger firms, since the credit can only be claimed against profits. Chile could offer refundable tax credits which could benefit smaller firms that are not registering a profit.[6]

Chile still spends very little on R&D, representing just 0.39% of GDP in 2013, against the OECD average of 2.4% of GDP. Although Chile's spending on R&D grew 36% between 2007 and 2012, less than a third of the increase in recent years can be attributed to businesses spending more on R&D.[7] The new changes in the R&D tax credit might help propel spending on R&D by businesses.

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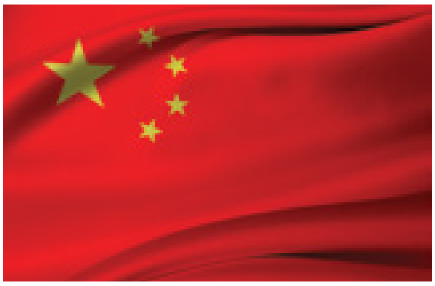
CHINA

MASS ENTREPRENEURSHIP AND INNOVATION



POPULATION
1,374.6 million (2015)*

GDP
$10,982.8 billion (2015)*

GDP PER CAPITA
$7,989.70 (2015)*

GEM TEA RATE
10.3% (2016)

SME CONTRIBUTION TO GDP
58.5% (2012)**

**Figures from Global Competitive Index Reprot 2016/17*
***From the Ministry of Commerce: http://english.mofcom.gov.cn/aarticle/zm/201205/20120508136044.html*

ENTREPRENEURSHIP ECOSYSTEM

Despite the early-stage entrepreneurial activity (TEA) in 2015 in China slipping to 12.8%, over a third of Chinese entrepreneurs believe they will create six or more jobs over the next five years (GEM places the country fifth out of 60 countries on this indicator).

Over the last decade there has been a growth in the number of Chinese that have chosen to start a business out of opportunity rather than out of necessity. Yet while the proportion of opportunity-driven entrepreneurship increased from 40% in 2002 to 58% in 2011, it had fallen slightly to 53% in 2015.[1]

China's entrepreneurial environment has seen slow improvement. The entrepreneurial environment index increased from 2.69 in 2002 to 2.87 in 2010, as rated by GEM experts. Physical infrastructure and market openness are the biggest enablers for entrepreneurship, while in 2015 it was ranked third among 60 countries assessed by GEM for entrepreneurship programmes. The country's main constraints are the availability of financial support and entrepreneurial education.[2]

MASS ENTREPRENEURSHIP

In a bid to shore up local demand, as the economy slows and the Chinese government shifts the economy more towards consumer-driven growth, the government in 2014 launched a new policy to promote entrepreneurship and innovation – dubbed the mass entrepreneurship and innovation strategy.

The strategy (see infographic alongside[3]) 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.

In addition, the government plans to optimise its institutional support mechanism and improve financial policies and public services. More specifically, it plans to encourage fair competition and strengthen intellectual property protection, increase government purchasing, expand access to finance for entrepreneurs, develop more incubators and professional services and encourage more people to start businesses and innovate.[4]

It is hoped that the strategy will help steer manufacturing towards new technologies – such as data computing, big data, industrial internet, and 3D printing – while energising the market.

In 2015 and 2016 China's State Council introduced new measures to promote innovation and entrepreneurship and cut red tape[5], made it easier to register companies, offered start-ups tax breaks ($10 billion in 2014 alone[6])and raised the turnover threshold at which businesses must pay tax[7,8] In addition, government-backed venture capital funds raised about 1.5 trillion yuan in 2015 – three times the amount in any previous year. Since the launch of the policy the country has opened 1 600 high-tech incubators for start-ups.[9]

IMPACT

Following a series of support measures introduced by the government, efforts look to be paying off, with statistics showing an increase in newly registered companies and patents.

From the implementation of the strategy at the end of 2014 to the end of November 2015, the number of new company registrations grew to over 10.6 million and registered capital reached 20.7 trillion yuan (US$3.24 trillion), a 15.8% and 40.9% growth year on year, respectively. In addition, the number of patent applications rose to 1.87 million – a growth of 22% year on year.

[10] Furthermore, a total of 558 000 university students started their own business in 2015 – a 17% increase on the previous year.[11]

Strategic emerging industries – which include new-generation information technology, biology, energy conservation and environmental protection, new energy, new material technology, high-end equipment, and new energy vehicles – accounted for 1.4% of GDP growth in the first eight months of 2015, and fixed asset investments in ten key areas saw a 16.6% rise year on year.[12]

During the 12th Five-Year Plan (2011-2015), average annual growth in seven strategic emerging industries was almost double that of overall growth in gross domestic product (GDP). It is estimated that the added value of strategic emerging industries will account for 8% of GDP by the end of 2015.[13]

However, to encourage more innovation experts believe that the Chinese should also cultivate a culture of curiosity and a higher tolerance for failure.[14]

People buying and selling flowers at the Kunming Dounan Flower Market, one of the biggest flower markets in Asia

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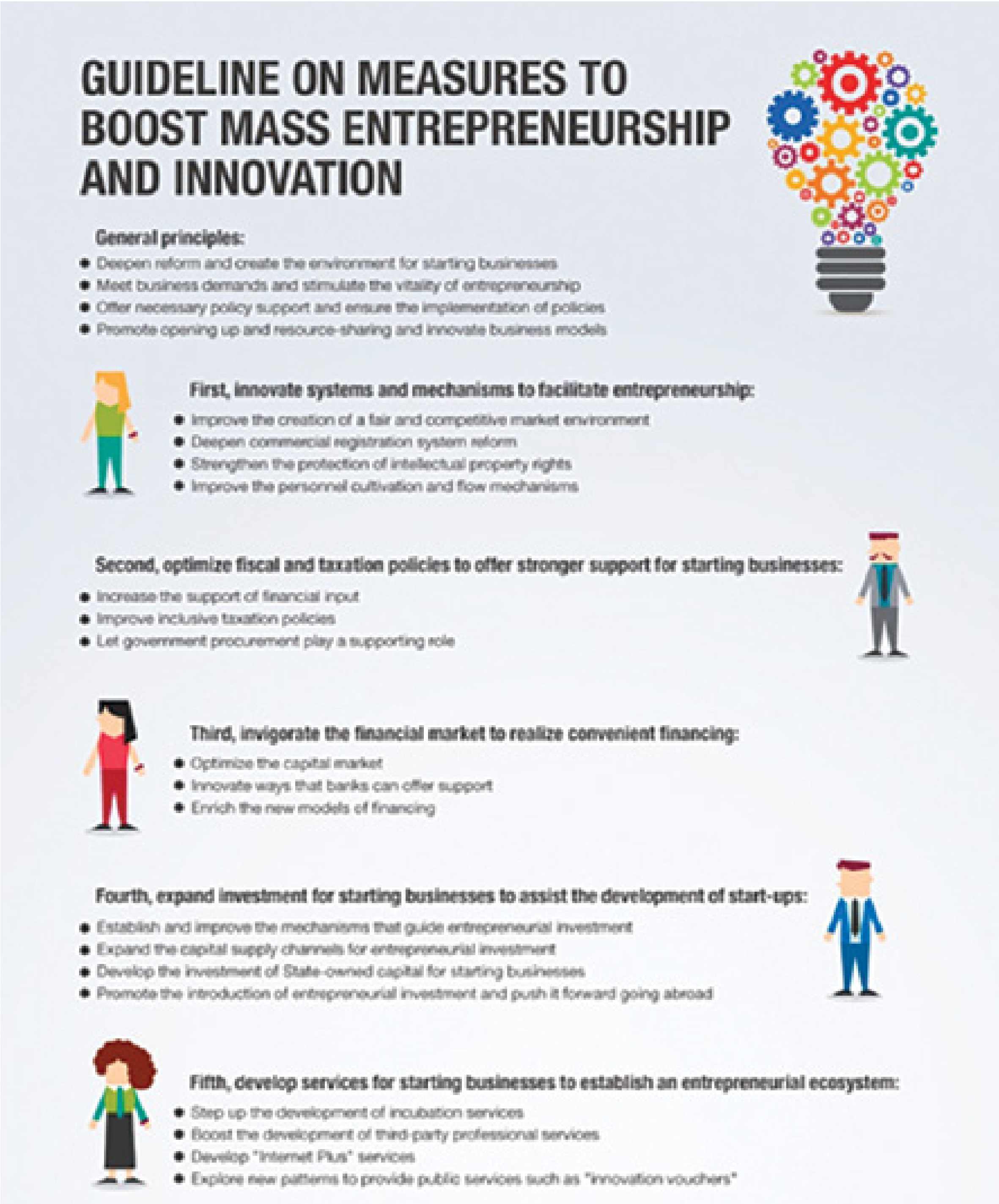
GUIDELINE ON MEASURES TO BOOST MASS ENTREPRENEURSHIP AND INNOVATION
General principles:
Deepen reform and create the environment for starting businesses
Meet business demands and stimulate the vitality of entrepreneurship
Offer necessary policy support and ensure the implementation of policies
Promote opening up and resource-sharing and innovate business models
First, innovate systems and mechanisms to facilitate entrepreneurship:
Improve the creation of a fair and competitive market environment
Deepen commercial registration system reform
Strengthen the protection of intellectual property rights
Improve the personnel cultivation and flow mechanisms
Second, optimize fiscal and taxation policies to offer stronger support for starting businesses:
Increase the support of financial input
Improve inclusive taxation policies
Let government procurement play a supporting role
Third, invigorate the financial market to realize convenient financing:
Optimize the capital market
Innovate ways that banks can offer support
Enrich the new models of financing
Fourth, expand investment for starting businesses to assist the development of start-ups:
Establish and improve the mechanisms that guide entrepreneurial investment
Expand the capital supply channels for entrepreneurial investment
Develop the investment of State-owned capital for starting businesses
Promote the introduction of entrepreneurial investment and push it forward going abroad
Fifth, develop services for starting businesses to establish an entrepreneurial ecosystem:
Step up the development of incubation services
Boost the development of third-party professional services
Develop "Internet Plus" services
Explore new patterns to provide public services such as "innovation vouchers"


Sixth, establish new platforms to boost support for starting businesses:
Create the public platform for innovation and entrepreneurship
Make good use of the technology platform
Develop the regional platform
Seventh, stimulate creative vitality and develop innovative entrepreneurship:
Encourage scientific research personnel to start businesses
Encourage college students to start businesses
Encourage overseas talent to start businesses in China
Eighth, expand the channels for urban and rural entrepreneurship to boost employment:
Support the expansion of electronic commerce to grassroots
Encourage the agglomeration development of those who return home to start their businesses
Improve the supportive services for grassroots entrepreneurship
Ninth, strengthen coordination and improve the supportive mechanisms:
Strengthen guidance
Enhance the coordination of different policies
Ensure and supervise the implementation of policies
KANG CHAO/ ENGLISH.GOV.CN

COLOMBIA

SEED FUNDING FOR START-UPS

POPULATION
48.2 million (2015)*

GDP
$293.2 billion (2015)*

GDP PER CAPITA
$6,083.50 (2015)*

GEM TEA RATE
27.4% (2016)

SME CONTRIBUTION TO GDP
40%**

**Figures from Global Competitive Index Report*
***Figures from Colombia's economic census: http://www.mintic.gov.co/portal/604/w3-article-14809.html*

ENTREPRENEURIAL ECOSYSTEM

Colombia has a relatively high rate of adults involved in new entrepreneurial activities, which in the last decade has largely stayed above 20% of adults.

More adults, on average, view entrepreneurship as a good career option (72%) and see the country as having good business opportunities (58%) than in other Latin American or Caribbean economies)or efficiency-driven economies globally, for that matter). In addition, twice as many Colombians start a business out of opportunity (67%) rather than necessity (33%).

However, the rate of adults running established business has fallen significantly in recent years – from 14.2% of adults in 2008 to 5.2% in 2015. In addition, in 2014 only half of all established firms with employees reported that they expect to grow in the next five years.

The vast majority of Colombian firms employ old technologies.[1] Colombia's National Development Plan[2] for 2014-2018 notes that between 2010 and 2014 the economy grew at about 5% a year, but the increase in productivity was only about 0.4% across the same period. To tackle this, Colombia's 2014-2018 national development plan places a focus on investing in measures to improve firm competitiveness and innovation.

FUNDING FOR START-UPS

Fondo Emprender is a seed capital fund created by the Colombian government in 2002 to fund entrepreneurial projects in the productive sector.

While it largely helps the country's national apprenticeship service *(Sena)* to finance businesses developed by trainees, professionals, artisans and university students can also apply to the fund, as can those from vulnerable populations and youth programmes. Business owners with firm that have been registered less than one year are also included.

The fund runs by way of regular national or regional seed funding calls and is offered through Sena's 117 entrepreneurship units and through entrepreneurship units at universities and incubators. The fund is capitalised by 80% of the monetisation of the apprenticeship fees (from employers that opt not to take on apprenticeships), as well as contributions from the general budget and various from other sources. [3]

To quality for funding, applicants must first draw up a business plan to outline how the funding they want will benefit their business. Those businesses that are then funded but that do not meet the objectives of their business plan have to repay the fund the money they loaned, over a period of three years. But if the entrepreneur is able to comply with the objectives in the business plan, the funding becomes a non-reimbursable loan, subject only to a tax of 33% (as it's treated as income).[4]

IMPACT

As of March 2016, the fund had supported 4,909 business plans with 342,000 million pesos ($112m) in seed capital, generating 17,000 jobs in 630 municipalities.[5]

A 2014 evaluation[6] reported that in 10 years the fund had supported 12,728 projects, of which one third (3,832) were rated as viable, receiving 212,000 million pesos ($70m) in all (about 41 million pesos or $13,500 each).

Of the projects submitted, about 43% came from poor Colombians. Three-quarters of projects were by solo entrepreneurs, whilst the rest were to teams of two or more. An average of 133 million pesos ($45,000) was requested per project and most of the projects supported were in the manufacturing sector.

69% of the projects funded between 2003 and 2013 were still in existence when the evaluation took place, which the evaluation noted is substantially higher than the 12.6% survival rate of Colombian firms after 3.5 years, according to GEM data.

Viable projects were more likely to come from older, more educated and experienced students and beneficiaries. However, projects from poorer municipalities were more likely to be granted higher amounts of funding per project than projects from richer municipalities.

The evaluation calculated that for every peso invested by the fund, society benefited by the equivalent of 1.21 pesos, with an average of three jobs (in addition to the entrepreneurs themselves) generated per project.

Coffee bean farmer, Colombia

The evaluation recommended that the fund adjust its processes such as increasing support to business advisors, improving feedback to applicants, increasing its communication outreach and engaging more with other programmes to enhance impact.

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ECUADOR

STIMULATING INNOVATION

POPULATION
16.3 million (2015)*

GDP
$98.8 billion (2015)*

GDP PER CAPITA
$6,071.01 (2015)*

GEM TEA RATE
31.8% (2016)

SME CONTRIBUTION TO GDP
25% (2015)**

**From the Global Competitive Index Report 2016/17*
***From the Ministry of Commerce and quoted in a 2015 report in El Telegrafo: http://www.eltelegrafo.com.ec/noticias/economia/1/las-pymes-aportan-el-25-del-pib-no-petrolero/*

ENTREPRENEURSHIP ECOSYSTEM

Among efficiency-driven countries, Ecuador has one of the highest percentages of adults involved in new entrepreneurial activities in the world (33.6% of all adults between the ages of 18 and 64 years of age). One in three adults in the country are starting up or running a business no older than 42 months – a rate which has remained fairly stable over the last three years.[1]

Nevertheless, the percentage of adults that start a business out of opportunity is below the average for efficiency-driven economies and countries in the Latin America and Caribbean region[2]. In 2015, on average, twice as many entrepreneurs in efficiency-driven economies said they were motivated to start a business to pursue an opportunity rather than out of necessity. In Ecuador only 1.1 times as many said they started a business out of opportunity.[3]

Government policies are considered the biggest constraint on entrepreneurship. There is a need for integrated policies that promote entrepreneurial activity, in particular to support businesses that are innovative and have the potential to grow.[4]

However, during the past year several changes in the entrepreneurial ecosystem have taken place. Since 2014, the number of entrepreneurs offering new products or services has doubled, while the number of nascent and new businesses that use innovative technology has also increased. [5]

Also, a number of events and organisations have taken root in Ecuador to help develop innovative business ideas. Entrepreneurial communities, hosting pitch nights and meetups, and events such as Startup Weekend[6], Lean Startup Machine[7] and MIT´s Emerging Technologies Conference[8] have all sprung up in recent years.

As the country's entrepreneurial capacity has improved, several co-working spaces, incubators, accelerators and angel investors come to the fore, which has led to the emergence of new funding initiatives such as Startup Ventures and Angeles EC and new government programmes such as *Banco de Ideas*.

BANCO DE IDEAS

Seeking to foster innovative businesses, the Secretary of Higher Education, Science, Technology (SENESCYT) launched the *Banco de Ideas*[9] programme in July 2014. [10]

The programme consists of an online platform (www.bancodeideas.gob.ec) where entrepreneurs can register their ideas that are then adjudicated by a panel. Entrepreneurs with those ideas judged to be the best can get seed funding as well as business support from SENESCYT's network of 16 incubators. Various rounds are held in the year to select ideas.

To receive support, projects must be considered innovative (by introducing a new product or service that does not exist in the market), have export potential, or be applicable to the productive sector.

During each round a number of finalists are chosen. Their ideas are then evaluated further by national and international market experts, before a number are selected to receive seed funding as well as business support from incubators. [11]

IMPACT

By the end of 2015, the platform had more than 13,000 registered users and more than 5,000 ideas. In all, over 260 projects had received technical assistance and 40 of these had received more than $1.85 million in seed capital[12].

Winning projects have come from diverse fields such as Java2Ginga, a digital TV platform; Fayac, an educational spherical puzzle;[13] and *Seimo*, a project to enable mechanical and electronic adaptations to cars for people with disabilities[14].

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Ecuadorian Indian women in national clothes sells the weaving products, on a market in the Otavalo

GERMANY

HELPING IMMIGRANTS GET STARTED

POPULATION
81.9 million (2015)*

GDP
$3,357.6 billion (2015)*

GDP PER CAPITA
$40,996.50 (2015)*

GEM TEA RATE
4.6% (2016)

SME CONTRIBUTION TO GDP
53.1% (2015)**

**Figures from Global Competitive index Report 2016/17*
*** From the European Commission's monitoring for 2015 for the Small Business Act: http://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/index_en.htm*

ENTREPRENEURSHIP ECOSYSTEM

Germany has a relatively low level of entrepreneurial activity, even when compared with other developed countries. This can be attributed to the lack of entrepreneurial spirit among adults (only half of adults say entrepreneurship is a good career choice), rather than any shortage of support from the government.

In 2015 the total early-stage entrepreneurial (TEA) rate fell to its lowest in five years – even though the percentage of those who expect to start a business in the next three years grew to the highest it's been since 2002[1].

Compared to most other European countries, fewer Germans identify good business opportunities or believe they have the capabilities to carry these out. The country also ranks among the top six in Europe (of 24 countries surveyed by GEM in 2015) when it comes to the fear of failure expressed by adults with respect to starting a business.

Despite this, the level of opportunity-driven entrepreneurship is high – 3.7 times more adults start a business to pursue an opportunity, than out of necessity. One fifth of German entrepreneurs also expect to create six or more jobs over the next five years. [2]

In addition, unlike a number of other European countries hit by the Euro crisis, the number of SMEs in Germany rose from 1.87 million in 2008 to almost 2.2 million in 2014 while value-add from the sector was up 16% in the same period.[3]

The country has good physical infrastructure and support for entrepreneurs from the government, but has a lack of good entrepreneurship education and poor cultural and social values related to entrepreneurship.[4]

HELPING IMMIGRANTS

Germany is home to a high number of migrants and refugees. Germany has long welcomed migrant labour and with the recent influx of migrants to Europe over a million refugees had entered the country as of March 2016.[5]

Migrant entrepreneurs are a valuable source of employment in Germany. A 2014 study by the Friedrich Ebert Foundation revealed that migrant entrepreneurs create 2.2 million jobs in Germany and that one in six businesses in Germany is owned by someone with an immigrant background.[6] Importantly, migrants found about half of all start-ups in the country.[7]

The Netzwerk IQ's Integration through Qualification[8] programme is a country-wide initiative with regional nodes. Run since 2005, it is funded by two federal ministries, the Federal Ministry for Labour and Social Affairs, and the Federal Ministry for Education and Research. The initiative receives about €7 million a year. [9]

The programme provides information and support to immigrants, who often battle with language difficulties or with their work qualifications not being recognised in Germany. The idea is that helping them to source work and get started in entrepreneurial activities may help immigrants to integrate into the German society. Among other things, the initiative develops modules and curricula for language classes which can be adopted by companies and advice centres, and facilitates access to training opportunities.

In addition, the initiative's platform "We're Setting up Business in Germany"[10] provides prospective entrepreneurs with information in a number of languages on how to start a business. Complementing this, an expert forum on migrant economy associated with the initiative provides policymakers with insight into the current issues and developments relating to migrant entrepreneurship in Germany.[11]

IMPACT

Between the initial years of 2005 and 2007, IQ network supported more than 12,500 migrants to improve their work situation.[12] Between August 2012 and September 2015 about 55,000 people used the programme to get help on the recognition of foreign qualifications.[13]

Manager and employee in factory warehouse, Germany

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GUATEMALA

MAKING IT EASIER TO REGISTER A BUSINESS

POPULATION
16.3 million (2015)*

GDP
$63.9 billion (2015)*

GDP PER CAPITA
$3,929.10 (2015)*

GEM TEA RATE
20.1% (2016)

SME CONTRIBUTION TO GDP
40% (2009)**

**Figures from Global Competitive Index Report*
***From Federación de la Pequeña y Mediana Empresa de Guatemala: http://www.integrarse.org/noticias/16-guatemala/27-impacto-de-la-pyme-en-el-mercado-economico-guatemalteco*

ENTREPRENEURSHIP ECOSYSTEM

Over the past two decades Guatemala has experienced an average economic growth rate of 3.7%, single digit inflation and a stable exchange rate. The fiscal deficit has averaged 2.1% of gross domestic product (GDP) during the last 10 years.[1]

Despite this, there has been no major improvement in the living conditions of the population. In 2014, 59.3% of the population was living below the poverty line.

One challenge faced by the country is the absence of formal job opportunities. Every year 200 000 Guatemalans enter the labour force, but only 20 000 are able to get a formal job[2]. In 2014, 67.6% of the total working population were located in the informal sector[3].

To generate income and improve their living conditions, many Guatemalans have turned to starting their own business. A high percentage of adults have a strong desire to be an entrepreneur (79.8% of the adult population, which places Guatemala in 10th place of 60 countries surveyed). In part this is due to the lack of employment opportunities in the country – with 38.7% of the economically active population considered self-employed.

In general, Guatemalans have an optimistic view of business opportunities, with 47.9% of the adult population perceiving good opportunities to start a business in the area where they live, and strong entrepreneurial capabilities – 60% of the adult population consider that they have the knowledge, skills and experience required to start a new business. Guatemala is also ranked top out of 60 countries when it comes to those that see entrepreneurship a good career choice (95.6%).

Possibly one of the biggest enablers of entrepreneurship in Guatemala is its affordable telecommunications. It has the lowest cost per minute of mobile telephone service in Latin America ,while internet access is good and reliable.[4] Among the constraints on entrepreneurship, are a lack of financing options for small entrepreneurial ventures, the high crime rate, a lack of specialised human capital, high red tape and unfavourable social and cultural norms towards entrepreneurship.

The Francisco Marroquín University -UFM- is the institution with the responsibility of implementing the GEM project in Guatemala[5]. Through the GEM project the University has been able to launch several projects to promote awareness about the entrepreneurial activity. For example, in 2015 the UFM published the first textbook for students in high school. Through a variety of public events the GEM has been able to reach an audience of 1.4 million people in Guatemala every year.

FACILITATING BUSINESS REGISTRATION

Guatemala, like several Latin American countries has a large informal sectors, with many refraining from registering their business because of the high amount of red tape involved.

To address this, the Guatemalan government has over the last two years focused on reducing the number of processes involved in registering a business. In the World Bank's Doing Business 2016 Guatemala is ranked 81st out of 189 economies[6].

With the aim of facilitating the business registration, the Ministry of Economy in 2013 launched a website that contains all the necessary steps required to register a formal business *("Así se hace"[7])*. The development of the site was funded by UNCTAD's Business Facilitation programme[8].

As a result of the initiative, Guatemala improved its position in the World Bank's *Doing Business Report* for the category of starting a business – from a ranking of 172nd in 2013[9] to 99th in 2015[10]. During this period the government also halved the number of procedures needed to register a business to six, which lowered the average time it takes to register a business from 40 to 18 days (a web government portal allows businesses to register online[11]).

Despite these improvements Guatemala still fairs poorly in the protection of minority investors, enforcing contracts and resolving insolvency. Resolving a commercial dispute, for example, takes an average of 1,402 days, according to the Doing Business 2016 report.[12]

To further boost entrepreneurship in Guatemala the government in 2015 implemented an entrepreneurship policy for 2015 to 2030[13], with the aim of coordinating the public and private initiatives related to entrepreneurship promotion.

The policy is based on five pillars, namely: the provision of business and technical support, creating funds and tax incentives for entrepreneurs, improving co-ordination between institutions supporting entrepreneurs, developing a campaign to promote entrepreneurship and introducing entrepreneurship among students and school learners.

People bargaining at the marketplace in the village of Chichicastenango, Guatemala

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INDIA

DRIVING A START-UP CAMPAIGN

POPULATION
1,292.7 million (2015)*

GDP
$2,090.7 billion (2015)*

GDP PER CAPITA
$1,617.30 (2015)*

GEM TEA RATE
10.6% (2016)

SME CONTRIBUTION TO GDP
37.5% (2012/13)**

**Figures from Global Competitive Index Report 2016/17*
***From India's MSME ministry's 2015/16 annual report: http://msme.gov.in/WriteReadData/DocumentFile/MEME%20ANNUAL%20REPORT%202015-16%20ENG.pdf*

ENTREPRENEURSHIP ECOSYSTEM

The percentage of adults in India involved in starting a business has grown to the highest it's been in almost three years, while the percentage of adults who say they expect to start a business in the next three years increased from 7.7% in 2014 to 9.2% in 2015.

However, the percentage of adults who view entrepreneurship as a desirable career choice fell in 2015 (from 58% the year before)[1] Over a third of adults who start a business do so out of necessity, rather than to pursue an opportunity. Only 3.5% of entrepreneurs expect to create six or more jobs over the next five years – one of the lowest rates among the 60 countries measured by GEM. Despite this, about half of all entrepreneurs report that they have innovative services or products.

The major constraints on entrepreneurship in India are government regulation and policies, entrepreneurial education and the transfer and commercialisation of research and development (R&D) into new know-how and technologies.

The major enablers include government support (ranked fifth out of 60 countries), access to entrepreneurial finance (ranked second) and cultural and social norms (though fear of failure remains high, at 44% of adults according to GEM) towards entrepreneurship.[2]

START-UP INDIA

To provide a further boost to India's burgeoning start-up scene, in January 2016 the country's Prime Minister, Narendra Modi, launched *Startup India*[3]. The initiative is overseen by the Department of Industrial Policy and Promotion.

An action plan [4] details the assistance the government plans to offer start-ups, described as firms of less than five years old and with annual sales of about up to $3.6 million. The action plan includes among other things (which are described in more detail in a list of notifications[5] on the *Startup India* website):

Less red tape: A number of measures will be put in place to make it easier to do business as a start-up. These include a three-year tax exemption for start-ups, a three-year exemption from labour and environment inspections, subsidised patent applications, relaxed state procurement norms and a faster process that will allow a start-up to close down in 90 days. Start-ups are also able to register their businesses via an app and interact with the authorities via an online portal.

Funding support : A $1.5 billion government venture capital (VC) fund in the form of a fund-of-funds will invest in registered VC funds. It will add to a fund-of-funds launched in August 2015 by the state. A $75m credit guarantee fund will also be available.

Business support : The government also aims to hold start-up festivals to among other things connect investors and start-ups, andestablish more incubators while incentivising the private sector to do the same by covering part of the set-up costs. It also in the process of building innovation centres at training institutes of technology and launching an innovation fund for students.

Tax breaks : In May 2016 the government inserted an amendment in the country's Finance Bill to exempt investors that invest in start-ups from paying capital gains tax on the sale of capital assets for start-ups – provided that they hold shares of an unlisted company for more than two years.[6]

In addition the Indian government has also launched two complementary schemes – *Stand up India*[7] and Micro Units Development and Refinance Agency (Mudra) bank[8].

Stand Up India, also launched in January 2016, obliges every bank branch across India to fund at least one woman and one person from the weaker section of the society, described as a scheduled caste/tribe member, with loans of up to 10 million rupees.[9]

The Mudra scheme, launched in April 2015, provides loans of up to $15,000 to business owners via banks and other participating institutions.[10] In the 2015/16 financial year, banks disbursed over 34.8 million loans (just over a third of which went to new entrepreneurs) worth $19.7 billion to micro enterprises.[11]

Furthermore, the Ministry of Rural Development has initiated the Start-up Village Entrepreneurship Programme to create sustainable self-employment opportunities for a rural youth. The programme will also attempt to bring banks and financial institutions closer to village entrepreneurs.

The government has also set up the Atal Innovation Mission (AIM)[12] – an innovation promotion platform involving academics, entrepreneurs, and researchers. An initial sum of $22 million has been earmarked by the government for the platform, which will draw upon national and international experiences to foster a culture of innovation.

A new Ministry of Skill Development and Entrepreneurship has been formed which aims to create an enabling ecosystem for entrepreneurship development through policy guidelines, capacity building, handholding, mentoring and supporting research and publications. The Ministry has planned shortly to launch a national project called "*Pradham Mantri Udyamita Yojang*" (Prime Minister's Entrepreneurship Scheme) which aims at promoting business and social entrepreneurship acroos the country.

Street traffic blurred in motion at evening in Kolkata, India.

IMPACT

In a June 30, 2016 progress report the government noted, that it had set up the Startup India Hub to resolve queries from start-ups. The hub has been able to resolve over 12,000 queries by telephone, email and Twitter, since its launch on April 1. Proposals have been received to set up seven new science parks, 16 business incubators and 13 start-up centres. In addition the promised $1.5 billion government venture fund-of-funds has been set up and will be managed by the Small Industries Development Bank of India (Sidbi).

Up to June 2016 Sidbi had approved $138 million in funding from its $300 million fund-of-funds it launched in August 2015 to support venture capital funds for start-ups.

In June, in response to the low number of successful applications for incentives available under the programme (just seven start-ups had qualified for incentives from 571 applications between

April and June 2016), the Department of Industrial Policy and Promotion announced it would overhaul the initiative. Among other things the department planned to introduce workshops, drop some requirements and speed up the processing time of applications.

India's start-ups are growing thanks to a booming domestic market hungry for new services. A 2015 report by India's IT association NASSCO ranked the country's number of start-ups behind only the US, the UK and Israel, while another study from the same year reported a 100% growth in the number of private equity investors, venture capitalists and angel investors and a 125% growth in funding last year over 2014.

However, India's entrepreneurs are still constrained by a shortage of skilled workers, according to a recent survey, as well as by poor infrastructure, red tape and low internet adoption. Because of this many start-ups are forced to register abroad to avoid complex regulations in the country.

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IRELAND

NURTURING NEW ENTREPRENEURS

POPULATION
4.6 million (2015)*

GDP
$238.0 billion (2015)*

GDP PER CAPITA
$51,350.70 (2015)*

GEM TEA RATE
10.9% (2016)

SME CONTRIBUTION TO GDP
46.7% (2015)**

**Figures from Global Competitive Index Report 2016/17*
***From the European Commission's monitoring for 2015 for the Small Business Act: http://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/index_en.htm*

ENTREPRENEURSHIP ECOSYSTEM

The percentage of adults involved in starting a business in Ireland grew in 2015[1] to 9.3%, with the renewed growth of the economy. Since 2001 the rate of adults in Ireland involved in early-stage entrepreneurial activity has fluctuated between about 6% and 11%.

Out of all the European countries, Irish entrepreneurs have among the highest job creation expectations (a third of entrepreneurs expect to create five or more jobs over the next five years) and entrepreneurs are twice as likely to start a business to pursue an opportunity rather than out of necessity.

Despite this, just 39% believe there are good opportunities to start a business (this is up from 28% in 2013 during the recession but lower than 2007 when it stood at 45%[2]). Successful entrepreneurs are held in very high regard in Irish society, although just half of adults in Ireland believe that being an entrepreneur is a good career choice.[3]

Ireland is highly ranked by experts on a number of measures, including government policies (the European Commission rates it second to Estonia among European members for its public administration being responsive to SMEs' needs[4]) and entrepreneurial finance, but less favourably when it comes to the provision of entrepreneurship education and the country's internal market dynamics.

NEW FRONTIERS PROGRAMME

The policy of the Irish government for a number of years has been to create an ecosystem supportive of entrepreneurial activity in which sustainable new businesses can be established.

Writing in the foreword to a recent GEM annual report, Richard Bruton, the then Minister for Jobs Enterprise and Innovation, said : *"The challenge for Ireland is to sustain and build on this entrepreneurial effort so that businesses can emerge which are innovative, capable of growth and able to match international competition on home and export markets. These are the types of businesses that will be key drivers of employment creation."*[5]

It is against this background that the New Frontiers Programme [6], which aims to develop sustainable new businesses with strong job creation and growth potential, was developed. The programme evolved from the Enterprise Platform Programmes which had operated at the Institutes of Technology[6] between 2001 and 2011. In 2012 the programme was transferred to Enterprise Ireland and revised to create a single national programme delivered across 17 locations by nine Institutes of Technology (with participating universities).

Each year the programme helps 150 entrepreneurs to start new businesses, providing a mix of funding and support, while annually more than 700 applications are received from potential entrepreneurs.

The programme operates in three phases:

Phase 1 enables the entrepreneurs to test their business idea on a part-time basis over a two-month period. It serves as a pre-screening for the second phase, which makes up the core of the programme.

Phase 2 requires a six-month fulltime commitment on the part of participants. Participants that are selected for this phase receive intensive training and development, a hot desk at the Institute's incubation facility, mentoring and a stipend of €15,000 from Enterprise Ireland (which is subject to satisfactory progress against their business development targets). Depending on their progress, participants can also get access to networking opportunities with potential investors and Enterprise Ireland staff. Participants don't necessarily have to attend Phase 1, if they can successfully pass the selection process for Phase 2. However, generally, in excess of 80% of Phase 2 participants will come from the preceeding Phase 1 of the programme.

Phase 3 of the programme provides an opportunity for entrepreneurs to remain for up to three months within the Institute of Technology, while implementing their business plans, generating revenue and raising finance. No further stipend is provided for this phase.

As part of the programme, the Institutes of Technology are funded and contracted by Enterprise Ireland to manage the processes of recruitment, application selection, training, and other programme duties.

Enterprise Ireland staff are involved in the selection process at Phase 2, while also carrying out ongoing progress reviews and mentoring of participants. They also help participants to access further Enterprise Ireland funding. Enterprise Ireland promotes the programme nationally and hosts networking events and guest speakers for participants.

A competitive recruitment process and a pre-screening phase, together with rigorous progress reviews, ensures that only high calibre participants are selected and retained on the programme.

The programme differs from privately-funded accelerator programmes in that its main focus is initially on the entrepreneur rather than on the business. Consequently, the programme does not take equity. The objective is to progress the entrepreneur's business concept to the stage where it can be viewed as an investable business.[7]

Shoppers in the pedestrianised Grafton Street, one of the main shopping streets in central Dublin

Those who have successfully completed New Frontiers are in a strong position to apply for further support from either Enterprise Ireland or their Local Enterprise Offices.

Funding has been approved to continue the programme over a five-year period between 2016 and 2020, with an annual programme budget of €4.25 million ($4.8m).

OUTCOMES

Between 2013 and 2015, 750 entrepreneurs participated in the programme, establishing over 300 new business start-ups and creating over 750 jobs. The number of women on the programme has grown to about 35% of participants. Over two- thirds of participants on New Frontiers are based outside the Dublin region.[8]

In the coming years it is projected that New Frontiers will produce 100 sustainable businesses annually, of which 15 to 20 will also receive additional support from Enterprise Ireland[9] as designated High Potential Start Ups (HPSUs).[10] The remainder will most likely receive support from their respective Local Enterprise Offices.[11]

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3. GEM Global Report 2015/16
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6. There are 14 Institutes of Technology across Ireland, which operate a unique system in that they allow students to progress from two year (associate degree programmes) through primary degree to Masters and PhD. http://www.ioti.ie/ Candidates for participation in a New Frontiers programme do not have to be current or past students of an Institute to apply, as an open call for applicants is made.
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11. With 31 dedicated teams across the Local Authority network in Ireland, Local Enterprise Offices offer a wide range of experience, skills and services. The Local Enterprise Office is for people interested in starting up a new business or already in business including entrepreneurs, early stage promoters, start-ups and small businesses looking to expand: https://www.localenterprise.ie/

ITALY

BOOSTING START-UPS

POPULATION
60.8 million (2015)*

GDP
$1,815.8 billion (2015)*

GDP PER CAPITA
$29,866.60 (2015)*

GEM TEA RATE
4.4% (2016)

SME CONTRIBUTION TO GDP
67.3% (2015)**

**Figures from Global Competitive Index Report*
*** From the European Commission's monitoring for 2015 for the Small Business Act: http://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/index_en.htm*

ENTREPRENEURSHIP ECOSYSTEM

Italy has been hit hard by the Eurozone crisis in recent years, which is reflected in the fact that only one in four adults perceive there to be good business opportunities (placing it at 53rd out of 60 countries) and just 30.5% believe they have the capabilities to start a business (ranked 56). Both figures have fallen marginally since 2014[1].

The country also has one of the highest rates for fear of business failure among GEM countries (ranked 59 out of 60), climbing to 57.5% of adults in 2015 from 49% the previous year. 8.2% of adults plan to start a business in the next three years – the lowest it has been since 2012. Five percent of entrepreneurs expect to hire six or more employees in the next five years.

Italy ranks lowest of all the big European countries (and some emerging economies) across almost all aspects of the entrepreneurial ecosystem, with government policies and programmes and entrepreneurial education singled out as particularly lacking.[2]

While Italy's TEA rate has improved since the economic downturn in 2008, when it was measured at 5%,[3] SME value-add in 2014 was still about 10% lower than in 2008. Value-add is expected to fall by a further two percent and employment to drop by another four percent between 2014 and 2016.[4]

SUPPORT FOR START-UPS

Since 2012 Italy has developed a number of initiatives to support and promote innovative start-ups (defined as, among other things, as an enterprise in operation for less than five years with revenue of less than five million euros).[5] These initiatives include:

The Italia Start-up Visa[6] and Italia Start-up Hub:[7] To attract innovative start-ups to Italy, the government in June 2014 introduced a special centralised fast-track mechanism for granting entry visas to self-employed persons and to those who intend to set up an innovative start-up . The *Start-up hub* was launched in December 2014, to assist non-EU citizens who already have a valid residence permit (such as a study visa) and who want to remain in the country after expiry of the permit to establish an innovative start-up. It allows applicants to convert a residence permit to a "self-employment start-up permit" without having to leave Italy.

The Investment Compact Decree-Law, which was passed into law in March 2015, allows entrepreneurs to establish innovative start-ups online and without the use external professionals, with lower costs and the use of digitally-signed articles of incorporation.[8]

Supporting venture capital investments: To encourage more investment in high-growth companies, the then Minister of Economic Development, Federica Guidi, on 29 January 2015 passed a decree to allocate a share of the resources in the Fund for Sustainable Growth of €50 million ($55m) to the Italia Venture I fund which is managed by *Invitalia Ventures*.[9] The fund co-invests with other funds in high-growth companies.[10]

Zero-interest loans: Invitalia's Smart&Start Italia scheme was launched in 2015 to grant zero-interest loans to start-ups.[11]

Research and development (R&D) tax credits: With the Stability Law of 2015, the government introduced significant tax benefits for companies that co-operate with research centres, laboratories and start-ups to conduct research and development (R&D).[12]

Guarantee finance: Italy's Guarantee Fund for SMEs (*Fondo di Garanzia*)[13], which has been in operation since 2000, also assists start-ups by guaranteeing 80% of a bank loan.[14]

A vendor loading vegetables at an outdoor market in downtown Catania

Tax incentives: Article 29 of Growth Decree 2.0 allows individuals who invest in innovative start-ups to deduct 19% of the amount invested from their taxable income, up to a maximum amount of €500,000. Companies can deduct 20% of the amount invested in share capital from their taxable income, subject to a maximum of €1.8 million. The deduction rate for persons increases to 25% and that for companies increases to 27% for investments in those innovative start-ups defined as having social goals, or those that exclusively develop and market innovative high technology products or services for the energy sector. [15]

IMPACT

The number of innovative start-ups has grown from 4 206 as of 30 June 2015 to 5 818 as of 13 June 2016 (as registered in the special section of the Companies Register of the Chamber of Commerce).[16]

As of 30 June 2015, innovative start-ups employed 20 800 workers[17] according to data from Italy's Chamber of Commerce. This was about 2 900 more than in the previous quarter and over 5 800 more when compared to late 2014.[18]

Amongst the innovative start-ups, a significant number (782) of companies declared that they possess a means of protecting intellectual property.[19]

When it comes to accessing finance, 461 start-ups were able to attract bank loans using the simplified and free procedure provided by the Guarantee Fund for SMEs, for a total amount of €198 million (at an average of €306 000 per loan).

When it comes to the tax incentives for investments in start-up equity, the results of the first year of the incentive in 2013 reveal that 844 taxpayers (individuals and companies), directly or indirectly, invested resources amounting to €28.2 million.[20]

In addition to this, in the first wave of Smart&Start Italia subsidies (between 16 February 2015 and 29 July 2015) 131 innovative start-ups received €65.8 million in grant funding. It is expected that the start-ups will trigger investments exceeding €63.2 million, of which nearly 75% will be for companies located in the Centre-North of the country. [21]

However, less successful so far has been the *Italia Start-up Visa* and *Italia Start-up Hub*. The latest ministry reports show that 61 applications were made for the visa up until the end of 2015, of which 40 were successful (11 were rejected as the business plan was too weak and six were considered inadmissible). In addition, five applications were made for the start-up hub regime – all of which were granted.[22]

SUMMARY OF RECENT REGULATORY CHANGES

Source: Italian Minister of Economic Development, *Report to Parliament on the implementation of policies in support of innovative startups and SMEs*, September 2015.

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DATE OF REGULATION	DESCRIPTION
20 March 2014	Publication in the Official Gazette of the Ministerial Decree of 30 January 2014 concerning tax concessions for investment in innovative start-ups.
11 June 2014	Publication of Circular 16/E by the Italian Revenue Agency, giving details about the tax aspects of the “start-up package”.
24 June 2014	Launch of the Italia Start-up Visa Programme.
11 December 2014	Launch of the Decreto Flussi (Flows Decree) 2014, whose explanation circular introduces the Italia Start-up Hub programme.
13 November 2015	Publication in the Official Gazette of the Ministerial Decree of 24 September 2014 refinancing, as well as changing certain structural features, of the Smart & Start programme.
24 March 2015	Approval of Law 33/2015 converting Decree-Law No. 3 of 24 January 2015 (Investment Compact), introducing new benefits for innovative start-ups (6.a.), launching the policy on innovative SME’s (6.b) and other measures applicable to both categories (6.c.)
27 May 2015	A Decree from the Minister of Economic Development introduced the Technical Committee for the monitoring and evaluation of policies in favour of start-ups and innovative SME’s.
22 June 2015	A decree of the Directorate General for Market Competition, the Consumer, Supervision and the Technical Regulations of the Ministry of Economic Development changed the registration procedures for companies by introducing the special section of the Register of Companies dedicated to innovative SMEs and a new simplified mechanism for converting innovative start-ups into innovative SMEs.

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JAPAN

START-UPS STIMULUS

POPULATION
126.9 million (2015)*

GDP
$4,123.3 billion (2015)*

GDP PER CAPITA
$32,485.50 (2015)*

GEM TEA RATE
4.8% (2015)

SME CONTRIBUTION TO GDP
49.3% (2011)**

**Figures from the Global Competitive Index Report 2016/17*
***From the 2012 economic census by the Ministry of Economy, Trade, and Industry, METI: http://www.meti.go.jp/english/press/2013/0827_01.html*

ENTREPRENEURIAL ECOSYSTEM

The level of entrepreneurial activity in Japan has been disappointingly low ever since Japan joined GEM as one of the first members back in 1999. In 2014, the country's rate of early- stage entrepreneurial activity (TEA) was the second lowest after Suriname of all economies surveyed. In the last 14 years Japan's TEA has not risen higher than 5.4% (where it was in 2008). The low TEA rate could be because a small percentage of Japanese adults perceive that there are opportunities to start a business and that they have abilities to do so. Also, the average entrepreneur in Japan is over 45 years of age – far older than in most other countries that participate in GEM. Japan's established business rate, however, was at a reasonable 7.2% in 2014.

Japan's venture capital industry remains small, with investments making up a far smaller share of GDP than in other developed countries, such as Canada, the US and the UK.[1]

To a large extent, low entrepreneurial rates can be attributed to a culture that stresses conformity and is highly critical of failure. In addition, the country that gave birth to such names as Toshiba, Sony and Sharp has been stuck in an economic slump since the early 1990s, from which the country only recently began to emerge.

NEW FOCUS ON START-UPS

Under the economic policies advocated since the December 2012 general election by Prime Minister Shinzō Abe, private financial institutions have started to actively seek out new start-ups.[2]

Driving the change is the *Japan Revitalisation Strategy* or the *Industry Revitalisation Plan*[3] announced in June 2013. A number of initiatives are included in the plan to promote investments in start-ups. [4]

The initiatives to boost start-ups include cultivating personnel who can create new businesses; improving the tax system to encourage more angel investing[5]; encouraging the private sector to invest in business ventures by promoting risk investing by the Innovation Network Corporation of Japan; revising the personal guarantee system ; supporting spin-offs and procurement set-asides for small businesses ; and promoting open innovation.

The Abe administration is aiming to double the business entry rate recorded in the 2012 METI Economic Census from around 5% to 10% by 2020. It also plans to double the TEA rate from 4.8% in 2015 to around 7% in 2020.

During a visit to Silicon Valley in April 2015 – the first ever such visit by a Japanese head of state – the prime minister unveiled a project which he called the bridge of innovation (Kakehashi) between Silicon Valley and Japan.

The idea behind the project is to help 200 small and medium- sized enterprises (SMEs) and start-ups in sectors such as robotics, biotech and medical care. The initiative will also help big companies to set up new business units.

Incubators and accelerators will select and train participants and take the top ones on a visit to Silicon Valley. The initiative will also run conferences and meetings to bring together Japanese and American technology experts. It is also envisaged that multi-disciplinary research and development (R&D) centres will be set up.[6]

A total of 367 people applied for the programme in 2015 and 122 were chosen to take part in a three-month programme held in Japan, where they had the chance to refine their business plans through several workshops. In October 2015, 20 members were chosen to take part in the *SHIDO Next Innovator*, an initiative organised by METI, to pitch their business plans to investors in Silicon Valley. The participants also built ties with the network of investors and entrepreneurs in Silicon Valley.[7]

INITIAL IMPACT

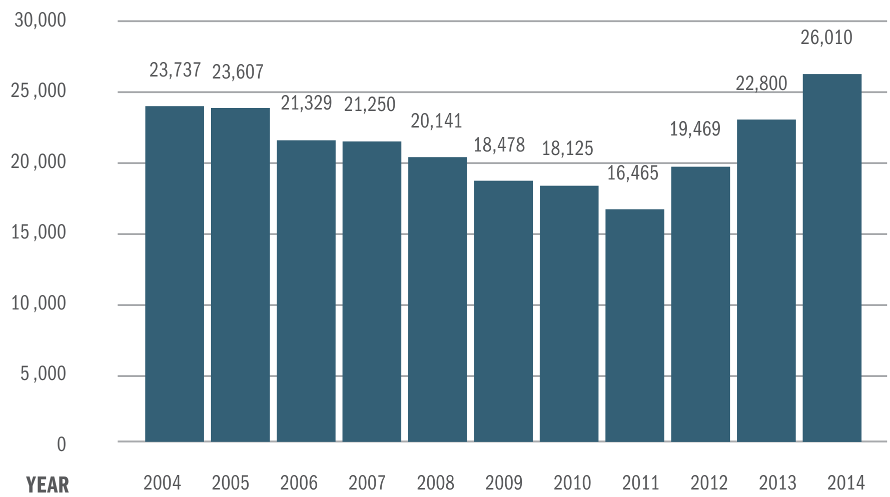
Some results are beginning to show. Between 2011 and 2014 the number of new enterprises financed by the Japan Finance Corporation (JPC), a government agency that specialises in funding small businesses, increased by 58%, to 26 010 (see the below graph).[8]

In addition the number of IPOs grew to 92 in 2015, after having dropped to 19 in 2009 (see the below graph), following the collapse of Lehman Brothers in 2008. The number of IPOs have begun to increase gradually since 2010, and have exceeded 90 in 2015 for the first time in six years[9].

Other measures taken to boost small businesses in Japan under the new plan include :

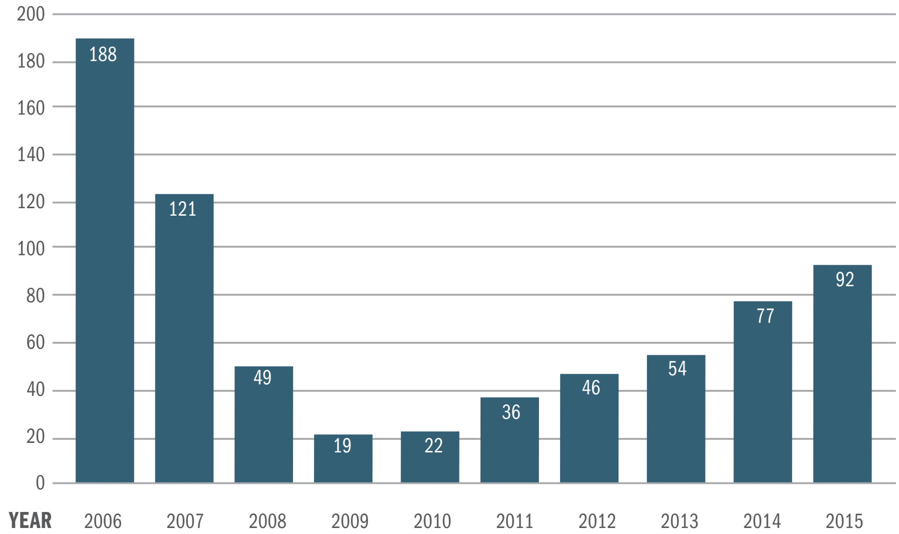
- A programme by the Japan External Trade Organisation (Jetro) to support SMEs, with 17 SME overseas expansion platforms operating in 12 countries as of 2015.[10]
- An initiative to support venture businesses, set up in 2014 with a budget of 1.16 billion yen ($10.5 million).[11]
- The hosting of the first *Creativity Unlimited: High School Student Business Plan Grand Prix* competition in 2013 by the Japan Finance Corporation[12]. Entries were received from 1,546 high school students.
- Changes were proposed in 2015 by the government to the Act for *Demand Creation* for SMEs to allow for more government purchases to be made from businesses of less than 10 years old.[13]

Cutting tuna at Tsukiji Fish Market. Tokyo, Japan



Despite these initiatives some experts believe the Japanese government would do better to encourage start-up activity by reducing red-tape (it takes 330 hours to complete tax returns compared to the OECD average of 176 hours. Japan is ranked 79th out of 189 countries in obtaining credit[14]).[15] A 2015 McKinsey report[16] echoed the need for a more supportive legal and regulatory framework for start-ups.

Since the 1990s Japan has been implementing measures to encourage start-ups – including the introduction of an angel tax incentive in 1997 and a 2002 drive to create 1 000 university-launched venture firms.



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MACEDONIA

ENTREPRENEURSHIP EDUCATION

POPULATION
2.1 million (2016)*

GDP
$9.9 billion (PPP 2016)*

GDP PER CAPITA
$4,786.80 (2016)*

GEM TEA RATE
6.5% (2016)

SME CONTRIBUTION TO GDP
67% **

**Figures from the Global Competitive Index report 2016/17*
*** http://www.worldeconomics.com/GrossDomesticProduct/Macedonia.gdp*
*** Figures from the European Commission, 2015 SBA factsheet: http://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/index_en.htm#sba-fact-sheets*

ENTREPRENEURIAL ECOSYSTEM

Macedonia may be one of the easiest places in the world to do business (ranked 12th by the World Bank[1]), but only if there are good opportunities. Over half (52.1%) of business owners start out of necessity, rather than out of opportunity.[2] However, the country's falling jobless rate (from 38% in 2006 to 24.6% by February 2016) offers some hope.[3]

SME employment and value-add is steadily growing, having increased by 14% and 9% respectively between 2008 and 2013. However, the productivity of SMEs in Macedonia is 80% below that of the EU average. Although Macedonia has less red tape and better access to finance than most other Balkan countries, firms perform poorly in terms of skills and innovation (0,44% GDP invested in R&D in 2013), while few do business outside its borders.[4]

ENTREPRENEURSHIP IN THE CURRICULUM

A recent drive to introduce entrepreneurship in schools means that today all students in both primary and secondary schools are involved in entrepreneurship education. Previously, only those that attended special economic schools were included.

The drive is linked to a move in 2006 when the Macedonian government began launching a number of initiatives to support SMEs. Among these has been the adoption of a national strategy for innovation[5] and introduction of courses related to innovation and entrepreneurship for primary and secondary education.

Following the failure of early attempts in 2007 to introduce entrepreneurship training for secondary school learners (not enough teacher training and/or suitable textbooks were provided), the first two-day teacher training course was carried out by the Macedonia's Bureau for Development of Education *(BDE)* and the *Business Start-Up Centre (UKIM-BSC)*. A textbook was also developed by the former. This was followed by the introduction in 2007 of the first national business plan competition among secondary schools (which since 2012 has been sponsored by the Prime Minister of the Republic of Macedonia).

In 2013 six regular courses in 9th grade for physics, chemistry, biology, informatics, art and mathematics were revised to include topics in entrepreneurship and two days of training for 300 primary school teachers were provided.

In 2014, with support from the European Training Foundation in 2014 the Government adopted National Strategy for Entrepreneurial Learning 2014-2020 together with an action plan that lays out the redesign of five curricula for courses. The Strategy aims to nurture an entrepreneurial mindset among youth which can help them find a job, take the initiative in their life and start a business if they wish to[6].

Each year of the five-year innovation and entrepreneurship course has a particular aim. For example, in the first year students are asked to design an event that showcases the economic opportunities they have discovered in Macedonia and beyond. In the second year of secondary school the students develop a business project that connects with global economic opportunities that they have discovered, while in the final year the students are required to apply all of their prior learning to developing a company.

The new courses[7] have been implemented since September 2015. New textbooks were prepared, while training for 1,500 to 2,000 teachers from primary and secondary schools, related to the new programmes, started in June 2015 and ended in October 2015.

Shops and street view in downtown of Skopje, Macedonia

The team that worked on the redesign of curricula also developed two guides : one for teachers and professors on how to teach entrepreneurship and another for school administrators and educational authorities on how to create an entrepreneurial school.[8,9]

More than 2,000 teachers from all primary and secondary schools in the country will undergo 2 to 5 days of training on topics related to innovation and entrepreneurship in 2016 and 2017.

Initially, the initiative encountered numerous challenges related to insufficient financial allocation, which meant schools often had to apply for additional monetary resources. This together with lack of appropriate textbooks and training materials, resulted in difficulties and delays in the beginning. In addition, the teacher training was initially not appropriately defined in terms of content and duration by relevant governmental institutions. However, with reviews held every two years, the problems were detected early on and potential defects could be fixed.

To enable teachers and professors of entrepreneurship in schools and universities to share experiences and best practices, the National Centre for Development of Innovation and Entrepreneurial Learning (www.ncdiel.mk) in 2011 established the National Entrepreneurship Educator Network (NEEN). The network began with 150 members and an inaugural meeting was organised under the auspice of the president of the country, with support of the Ministers for Economy and for Education and Science.

The state now aims to strengthen NEEN by developing online tools and resources to help teachers and students and facilitating international networking to enable teachers and students to communicate with peers from other countries and share resources, good practices and other materials.

IMPACT

In the first evaluation, conducted in 2009, only 40% of students, teachers and professors, and principals and administration staff from primary and secondary schools supported the initiative. However, by the second evaluation (2012) 70% of participants were in favour of the programme. Moreover, the initial governmental support was significantly lower at the beginning, due to the state's uncertainty of the initiative's success. At present, the initiative is wholly supported by the government, which has expanded its funding allocation.

Community stakeholders have also reacted positively to the initiative. Since 2014 the Ministry of Education and Science has been developing a database of entrepreneurs that would be willing to be guest speakers or to host study visits. Recently (January 2016), the Ministry of Local Self-development started development of regional innovative strategies based on smart specialisation in all eight Macedonian planning regions. Significant number of activities is planned towards strengthening entrepreneurial learning at the local (municipality) and regional level, and this should give an additional boost for strengthening local eco-systems in Macedonia.

It's still too early to ascertain what effect, if any, entrepreneurship education at schools will have on the country's overall rate and quality of entrepreneurs. Although it could take decades before a clear impact is shown, but Macedonia is boldly attempting to ratchet up support for entrepreneurs.

Integral to its success has been the Macedonian government, which together with non-governmental institutions, university bodies and international and national donors, helped drive the programme.

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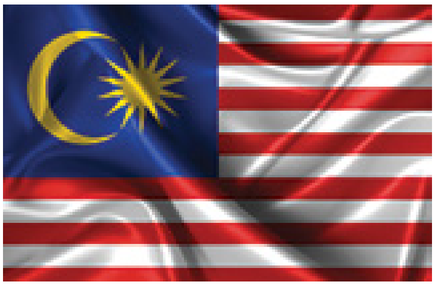
MALAYSIA

BOOSTING THE ECONOMY BY HELPING SMALL RETAILERS



POPULATION
31.0 million (2015)*

GDP
$296.2 billion (2015)*

GDP PER CAPITA
$9,556.80 (2015)*

GEM TEA RATE
4.7% (2016)

SME CONTRIBUTION TO GDP
35.9% (2014)**

**Figures from the Global Competitive Index Report*
***Figures from the SME Corp, 2014/15 annual report: http://www.smecorp.gov.my/index.php/en/resources/2015-12-21-11-07-06/sme-annual-report/book/7-annual-report-2014/2-annual-report*

ENTREPRENEURSHIP ECOSYSTEM

Malaysia is rated highly by Global Entrepreneurship Monitor (GEM) experts for its good infrastructure, access to finance and good internal market dynamics[1]. The SME sector has been growing in the last decade, having outpaced economic growth. This has helped push up the contribution the sector makes to the gross domestic product (GDP).[2]

Despite this, fewer Malaysians are starting new businesses. When compared to similar economies, the country has a low and declining early-stage entrepreneurship (TEA) rate, having fallen from 7.0% in 2012 to just 2.9% in 2015. This has been accompanied by a decline in the number of Malaysian adults that view entrepreneurship as a good career choice[3].

SMALL RETAILERS TRANSFORMATION PROGRAMME (TUKAR)

As part of a plan to continue growing the SME sector and to develop Malaysia's wholesale and retail sector (which contributes 12.7% to the country's GDP[4]), the Malaysian government is helping modernise small retail stores through its Small Retailer Transformation Programme (Tukar). It hopes the support will help steer the country towards becoming a developed, innovation-driven nation by 2030.

Launched in 2011 by the Domestic Trade, Co-operatives and Consumerism Ministry, the programme offers loans to small retailers to modernise their stores and to fund business support interventions to, for example, improve supply chain and business processes. The Ministry encourages bigger retailers (such as Tesco, Carrefour and Mydin) to help carry out the intervention with small stores as part of their corporate social responsibility.

The aim is to transform 5,000 small retail stores (10% of the estimated 50,000 small retail stores in operation)[5]. By doing so, the governments estimates that the programme will contribute 5.58 billion ringgit (US$1.43 billion) to Malaysia's gross national income and generate 51,540 jobs by 2020.[6]

To benefit, participating stores must have been in operation for more than a year, be wholly Malaysian owned, be less than 2,500 square feet in size, not be blacklisted by any bank and be a registered company with a valid licence or permit from the local authority.[7]

IMPACT

Between its launch in 2011 and the end of 2015, 2 216 retail stores were assisted by the programme. In all, 30 million ringgits has been allocated to the programme and participating stores have access to loans of between 20,000 to 80,000 ringgit. [8]

A 2013 survey by research group TNS of 616 stores that had been in the programme for over one year found that 77% of participants had been able to increase their revenue, while 45% of all participants experienced revenue increase of more than 40%.[9]

SOME CHALLENGES

However, there has been some criticism of the programme. A report by Malaysia's Auditor-General in April 2014 revealed that about 26% of 70 shops sampled under Tukar had registered a decline in sales while another 14% had to close down. The Auditor-General attributed the losses to competition from other retailers.

The Minister of Domestic Trade, Co-operatives and Consumerism, Datuk Hamzah Zainuddin, said the failure of some retailers under the programme was due to other factors, such as the way some participants ran their businesses and how they dealt with customers. He said 95% of those who signed up for Tukar had become successful.[10]

The programme has not made any real impact in the poorer states of Sabah and Sarawak, as at the end of 2014 there was only one Tukar consultant in these areas. The government has been engaging with relevant stakeholders to find ways to address this.[11]

The government's Performance Management Delivery Unit (Pemandu) said in 2016 that apart from determining opportunities to amplify the programme moving forward, it would clarify some criticism of the programme, where participants have complained of significant losses and inability to settle their loans.[12]

Kuala Lumpur Urban Scene, Malaysia

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MEXICO

BETTER GOVERNMENT SUPPORT

POPULATION
127.0 million (2015)*

GDP
$1,144.3 billion (2015)*

GDP PER CAPITA
$9,009.30 (2015)*

GEM TEA RATE
9.6% (2016)

SME CONTRIBUTION TO GDP
36% (2013)**

**Figures from the Global Competitive Index Report 2016/17*
*** From the National Institute of Statistics and Geography (INEGI) 2014 Economic census, cited in: http://www.inegi.org.mx/est/contenidos/Proyectos/ce/ce2014/doc/folleto/frrdf_ce2014.pdf*

ENTREPRENEURSHIP ECOSYSTEM

The percentage of adults involved in starting a business in Mexico has seen steady growth in recent years. In 2015 the early-stage entrepreneurial (TEA) rate stood at 21% of the adult population – double that of 2010. Today, Mexico's TEA rate is higher than both the average for Latin American countries (19.9%) and that of efficiency-driven economies (15%).

The TEA rate has grown with the recovery following the 2008 Global Economic Crisis and with the current presidential administration's focus on encouraging entrepreneurship. The government's emphasis on entrepreneurship began in earnest in 2001 with the launch of its Entrepreneurial Development Plan which, among other things, made it easier to start a business and introduced a number of support programmes including business incubators for SMEs. An OECD study found that the policies improved the business survival rate[1].GEM experts in 2015 ranked Mexico more favourably when it came to government policies and entrepreneurship programmes than experts did in Canada, Chile and the UK[2].

The confidence of Mexicans in their ability to start a business, however, has declined in recent years (the percentage of adults who believe they have the necessary skills to start a business is at just 45.8%, after reaching a high of 65% in 2010).[3]

NEW POLICIES

One of the first political decisions of Mexico's current administration – which took office in 2010 – was to set up the National Institute for the Entrepreneur (INADEM)[4] to oversee support programmes for small and medium enterprises (SMEs) that had previously been administered by the Secretariat of Economy.

Following the establishment of INADEM in January 2013 as an agency of the Secretariat of Economy, [5] the Mexican government created a number of entrepreneurship support programmes and platforms. These are:

- **The Entrepreneur Support Network[6]:** An initiative set up by the government and private-sector organisations, which offers one central place for entrepreneurs to access a range of business services and assistance. After registering, entrepreneurs can get in touch with a range of organisations and programmes. Currently over 870 000 entrepreneurs participate in the network through 82 000 active networks, 291 member organisations and 465 mentors.
- **The National Entrepreneurship Observatory[7]:** An information platform that disseminates statistics, studies and research for the development of the entrepreneurial ecosystem.
- **Everyday Justice for SMEs[8]:** As part of the government's broader Everyday Justice (*Justicia Cotidiana*) initiative, this chapter, launched by INADEM in February 2016 is aimed at protecting the rights of entrepreneurs, particularly micro, small and medium enterprises. It includes an analysis of existing regulations to determine whether any negatively affect small over large firms.
- **The National Programme for the Formalisation of Employment[9]:** The initiative aims to decrease the rate of informality by 1% a year by helping firms to increase their productivity and competitiveness through a mix of training, social services and pensions. The first phase between 2013 and 2016 resulted in the creation of 1.9 million new formal jobs.[10]
- **The simplified joint stock company[11]:** As of September 2016, a new legal business registration type will be

available for companies with annual sales of under 5 million pesos (US$260 000). At no cost, it will allow the new entities to establish as a single-member company without needing to provide the necessary minimum capital that is usually required to list a company. It is hoped that this will help more entrepreneurs to formalise their business in an affordable way. In this way, Mexico will join the group of countries that already have the online procedure to create express companies, such as the US, Spain, Australia, Chile and others.

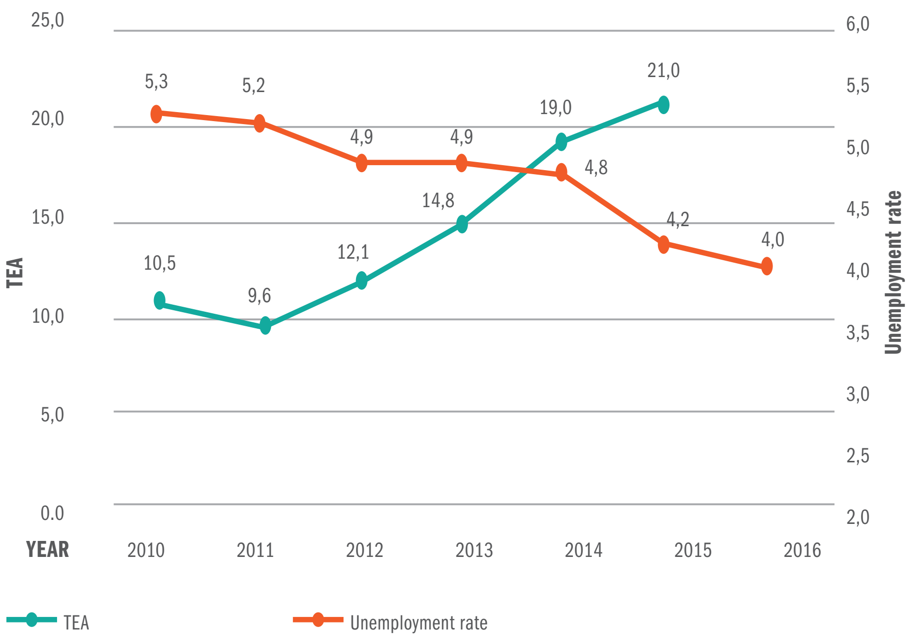
ECONOMIC IMPACT

The government's recent focus on entrepreneurship appears to be having an impact on economic development –not only as it has resulted in the creation of a number of new businesses, but because these businesses add new jobs to the economy, increase competition, innovation and, productivity.

In Mexico, the growing percentage of adults involved in starting a business can be paired with the decline in the unemployment rate for the period 2010 to 2015[12]. The graph below shows the presence of an inverse correlation between the TEA and unemployment rates.

While the increase in the TEA rate is associated with a decrease in unemployment, it is important to distinguish entrepreneurship from self-employment which has remained at 22% of employed people during this period, while the rate of informality has fallen (from 59.1% in 2013[13]), even though it is still high at 57.4%.

Despite the increase in entrepreneurship, business creation, employment and specifically formal employment in Mexico, the economy in Latin America's second biggest economy is not growing fast enough (it grew at just 2.5% in 2015), mainly because of low labour productivity.



*Note: Unemployment rate on first quarter of each year.

According to the OECD[14], in the last 25 years labour productivity in Mexico has increased from $17.20 to $18.50 per hour in 2015 (US dollars, 2010 constant prices, PPP). In comparison, labour productivity is $24.10 per hour in Chile and $62.40 per hour in the US.

In addition, many entrepreneurial initiatives in Mexico are not aimed at the promotion of high-impact, high-value firms and technology businesses. The main challenge now for policymakers is to increase productivity and competitiveness in a higher number of businesses.

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Baker in her kitchen, Mexico

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NORWAY

R&D TAX INCENTIVE

POPULATION
5.2 million (2015)*

GDP
$389.5 billion (2015)*

GDP PER CAPITA
$74,822.10 (2015)*

GEM TEA RATE
5.7.% (2015)

SME CONTRIBUTION TO GDP
71%**

**Figures from the Global Competitive Index 2016/17*
***Figures from the European Commission, 2014 SBA factsheet: http://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/index_en.htm*

NORWEGIAN ECO-SYSTEM

Entrepreneurial activity in Norway has been declining from the relatively high levels seen in previous years to more moderate levels (from 9.1% of adults starting firms in 2005 to 5.7% in 2015), similar to those seen in other innovation-driven economies.

Despite an increase in early-stage entrepreneurial activity (TEA) among young adults (25-34 years old), fairly high levels of identified opportunities for entrepreneurship and a highly educated population, many Norwegians describe themselves as lacking the skills and competences relevant for starting a business. Norway's small domestic market is a constraint, but its relatively wealthy population supports innovative products and services.[1]

The distribution of SMEs across sectors in Norway differs from that in the EU, as 38% of the value-add accounted for by SMEs is generated in the mining sector, compared to 1% in the EU. This reflects the fact that Norway is a major oil and gas producer.[2] In recent years the low price of oil has led to increased unemployment and this, combined with the high immigration rate of refugees, has reduced the amount of capital available for government spending.

To address this the government has recently launched a plan[3] to boost entrepreneurship in Norway, which focuses on three areas: improved access to capital in the early stage, better access to entrepreneurial competences and making Norway a more attractive country to encourage entrepreneurs.

R&D SCHEME

SkatteFUNN is a tax credit scheme for businesses doing research and development (R&D) run by the Norwegian government's trade department and launched in 2002. In order to decrease the uncertainty for firms, *Innovation Norway* makes a pre-assessment of whether a project qualifies for support from the scheme.[4]

Between 2002 and 2013 *SkatteFUNN* approved 13,1 billion krone on 24 619 projects (76% of all applications) from 10 250 companies.[5]

Nearly half of the new *SkatteFUNN* projects in 2014 were carried out in businesses with fewer than 10 employees. In all, 2,928 new applications were submitted in 2014 (a 16% increase over 2013), with tax deductions totalling 1.3 billion krone from the 7.6 billion kronor in R&D projects approved.[6]

A big attraction for small businesses is that firms can receive a cash-refund should the tax benefit exceeds the amount of tax liability, with about 75% of the value of incentives being paid out in this way to firms.[7]

Originally, only firms with fewer than 100 employees were eligible for the tax credit. They are allowed to deduct 20% of expenses related to an approved R&D project from taxes owed. However, the following year the government increased the threshold to include firms with up to 250 employees, which can deduct 18% of expenses related to an approved R&D project from taxes owed. [8]

IMPACT

Based upon data collected between 2002 and 2005,a 2007 evaluation found that the scheme seems to induce about two krone additional R&D per krone spent as tax subsidy. The evaluation also revealed that firms that previously did not invest in R&D were more likely to start investing in R&D after the incentive was introduced. It also found the effect of the incentive to be strongest in small, low tech and relatively low-skilled firms – firms that traditionally did little R&D.[9]

Alesund. Norway

However, a finding of a 2012 evaluation is that the scheme contributes more to the development of new production processes rather than to new products or patents.[10]

A 2007 study showed that the use of an R&D scheme itself seems to create more monetary benefits than grants. It found that each krone on tax credits spent induced private R&D to increase by 2.68 krone. This was higher than the additionality effect for subsidies awarded by Research Council and Innovation Norway (at a ratio of 2.07 and 1.53, respectively) and grants by ministries and other public agencies (0.64).

In addition, the study found that projects financed through direct subsidies have essentially zero private returns, while projects that were financed by R&D tax credits had slightly lower returns than projects financed by own funds – 16 percent and 19 percent, respectively.[11]

However, the country has yet to reach the target of 3% of GDP spend on R&D which motivated the formation of the scheme in the first place, reaching only 1.71% in 2014, slightly up on the 1.56% it was at in 2001.[12] It suggest that perhaps alone the scheme can't entice more firms to carry out R&D, but that other policies are required to complement such an incentive.

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PANAMA

IMPROVING ACCESS TO FINANCE

POPULATION
4.0 million (2015)*

GDP
$52.1 billion (2015)*

GDP PER CAPITA
$13,012.60 (2015)*

GEM TEA RATE
13.2% (2016)

SME CONTRIBUTION TO GDP
Unavailable

**Figures from the Global Competitive Index Report 2016/17*

ENTREPRENEURIAL ECOSYSTEM

Panama's economy has grown at an average of over eight percent in recent years, with per capita GDP more than doubling over the last decade.Despite this, the percentage of adults starting new businesses in the Central American nation is at its lowest since 2012, having peaked at 20.6% in 2013, according to Global Entrepreneurship Monitor (GEM) data.

In addition the percentage of those who expect to start a new business in the next three years has declined (at 13.9% in 2015, down from 27% in 2013). Furthermore, the country is ranked last out of 60 countries by GEM when it comes to job expectations – just 2% of business owners expect to create six or more jobs.

On a more positive note, the percentage of working-age adults involved in businesses older than 3.5 years has grown each year since 2012, climbing from 1.9% to 4.2% last year.[1] Fear of failure also remains low, with GEM ranking the country seventh in 2015 out of 60 countries on this measure. However, more than 40% of entrepreneurs start a business out of necessity, rather than to pursue an opportunity.

The country has good physical infrastructure, as well as welcoming cultural and social norms for entrepreneurship, and performs well when it comes to government policies to minimise tax and red tape. However, it performs poorly on government support policies and programmes, providing finance for entrepreneurs (although the World Bank in 2016 ranked Panama 19th out of 189 countries on the ease of accessing finance[2]) and on entrepreneurship education at schools and colleges.[3]

Despite its challenges, expectations are that following the completion of a number of large investments (including the expansion of the Panama Canal and a second metro line), entrepreneurship will play an important role in the economy. Its development should be accompanied by measures to facilitate access to new capabilities and accepting new challenges in different economic sectors other than the traditional ones.

THE TRUST FOR MICROCREDIT IN PANAMA

In order to improve access to finance, the country's Trust for Microcredit in Panama (Panama FIDEMICRO[4]) was developed by AMPYME[5], Panama's Small Business Administration. It is hoped that this will enhance the country's economic growth.

FIDEMICRO Panama lends to various micro-finance operators (banks, co-operatives, NGOs and financial entities), which in turn lend to small and micro businesses. The Latin American Confederation of Credit Unions (COLAC) is responsible for the management and disposition of the trust, in accordance with the terms and instructions given by the Trustor (AMPYME).

At the conclusion of the programme the trust provides refundable financial resources to micro-finance institutions to allow them to expand their coverage and consolidate their loan portfolios to micro and small enterprises. This improves the distribution of national income and reduces poverty levels.

IMPACT

Since its inception in 2012 to March 2016, a total of 16 financial institutions had received $25.9 million in credit lines to lend on to their small businesses, in 10 provinces in Panama.[6]

This has helped a total of 7,029 small businesses up to December 2015 to access $18.4 million in loans. 43% of borrowers are women business owners. In addition, 45% of beneficiaries are located in rural areas. The average loan size is $2,631.

Downtown Panama City Skyscrapers, Panama

About a third of the finance has gone to firms in the commercial sector, while those in services, transport, agriculture and industry account for the bulk of the remainder.[7]

SEED FUNDING

In 2005,Panama's National Secretariat of Science, Technology and Innovation (SENACYT[8]) launched a seed fund to support small businesses, that have a revenue of no more than $200,000, to develop innovative ideas. The funding is accompanied by an incubation and acceleration process, helping to steer participating firms towards global growth.

Participating incubators and accelerators help those entrepreneurs that apply for seed funding to validate their business idea and to develop and scale their idea.

Businesses related to 10 economic fields can participate in the public call, namely: environment and sustainable development, health sciences and biomedicine, agro-processing, logistics and transport, industry, renewable energy, information and communication technologies, tourism, gastronomy and biotechnology.

To be considered, projects submitted during the public call should run for no more than six months (including the period of incubation or acceleration). Support consists of three phases, namely:

Phase 1. Discovery: In which entrepreneurs should pose a problem to solve, the solution to offer and the potential market, through validation tools. This phase will last for up to one month.

Phase 2. Creation: In which the entrepreneur passes from idea to a prototype that can be sold. This phase will last for up to three months.

Phase 3. Scaling: In which business scalability is sought. The business model is validated to allow for growth. This phase lasts for up to two months.

The maximum amount of capital seed granted by SENACYT is $25,000. The amount includes the project development costs as well as the cost of incubation or acceleration (compulsory for all projects presented in the call). The funding should not be used to cover any sum greater than 30% of the total amount of the project cost.[9]

IMPACT

Since the programme began in 2005, and up to 2014, over 120 Panamanian companies have received seed grants to help them to strengthen their competitiveness and innovativeness.

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PERU

NURTURING HIGH-GROWTH ENTREPRENEURS

POPULATION
31.9 million (2015)*

GDP
$192.1 billion (2015)*

GDP PER CAPITA
$6,021.10 (2015)*

GEM TEA RATE
25.1% (2016)

SME CONTRIBUTION TO GDP
40% (2015)**

**Figures from the Global Competitive Index Report 2016/17*
***From the Association of Entrepreneurs Peru: http://asep.pe/mypes-aportan-el-40-del-pbi/*

ENTREPRENEURSHIP ECOSYSTEM

Peru remains one of the most entrepreneurial countries in the world (ranked ninth out of 60 economies by GEM), despite the country's total early-stage entrepreneurial activity (TEA) rate having fallen to 22.2%, from an eight-year high of 28.8% in 2014.[1]

The country, however, has one of the highest discontinuation rates, partly because of the poor profitability of many firms, although the rate has fallen in recent years, touching 8.8% in 2015.[2] The country's low percentage of firms older than three and a half years (6.6% in 2015) is indicative of the problem.

Despite this, adults in Peru are relatively positive about entrepreneurship – just over half believe there to be good opportunities to start a business and 65.3% say they have the capabilities to start a business. In addition, over twice as many entrepreneurs report starting a business out of opportunity than out of necessity – although only 16% of entrepreneurs expect to create six or more jobs over the next five years.

The three most significant factors positively influencing entrepreneurship in Peru are the economic climate and cultural and social norms, while the main factors constraining entrepreneurship are government policies, financial support, and education and training.[3]

START-UP PERU

In a bid to promote the high-growth entrepreneurship needed for Peru to transition to a more innovative economy, the Ministry of Production in December 2013 launched *Start-up Peru*[4] – initially as a US$20-million programme aimed at financing and supporting 200 high-impact entrepreneurs over five years.[5] Subsequently the ministry was able to secured a further 52 million soles, which could enable the initiative to run a total of 10 calls.[6]

Peruvian government officials were inspired by the early impact that neighbour Chile made with *Start-Up Chile*[7] after launching in 2010. In putting together the programmme, Peru's Ministry of Production also drew on input from entrepreneurs, incubators, accelerators, investors, universities and consultants from several international organisations.[8]

Entrepreneurs that qualify for seed funding are eligible for support from local business incubators (also backed by government funding) for up to 18 months.[9] There are two funding channels. One fund offers grants up to 137 000 soles to fund high-impact and dynamic enterprises that are no older than five years to develop innovative products or services. Another provides grants of up to 50 000 soles for the development and validation of business models, developed by innovative entrepreneurs in teams of between two to five members.[10] Foreign entrepreneurs can also apply for support, but are required to open a branch of their business in Peru before they can receive funding.[11]

In addition to the support provided by *Startup Peru*, the country's lawmakers in March 2015 passed a law to increase tax incentives for research and development (R&D). It will allow companies to deduct up to 175% of R&D costs from their income tax, after prior approval of the project from the national science council.[12] In addition in the same year the Ministry of Production, with the support of the Andean Development Corporation (CAF), launched a project to prepare a policy proposal for the promotion of high-growth enterprises.[13]

IMPACT

As of June 2016 Startup Peru has held four rounds. Although it is still too early to evaluate the full impact of the programme, in the first three rounds 172 start-ups received a total of 8.5 million soles ($2.6 million).[14]

Aerial view of Lima Peru Miraflores coastline cityscape

In the fourth call, initiated in January 2016, *Startup Peru* received almost 2 000 applications, of which 640 projects were selected for evaluation, with 218 passing the final stage of pitches. Of these 68, were chosen to receive finance. These were presented before a panel of investors and entrepreneurs, whose final evaluation was ratified by the Board of Innovate Peru.[15]

The programme is expected to produce significant returns for the government, as for each one sole that the state invests in an innovative firm, it will be able to get a seven soles return in taxes, estimates Start-Up Peru's head Alejandro Bernaola.[16]

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PORTUGAL

BOOSTING YOUTH ENTREPRENEURSHIP

POPULATION
10.4 million (2015)*

GDP
$199.1 billion (2015)*

GDP PER CAPITA
$19,121.60 (2015)*

GEM TEA RATE
8.2% (2016)

SME CONTRIBUTION TO GDP
67% (2015)**

**Figures from the Global Competitive Index Report 2016/17*
*** From European Commission's Small Business Act factsheet 2015: http://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/index_en.htm*

ENTREPRENEURSHIP ECOSYSTEM

The number of adults involved in early-stage entrepreneurship in Portugal has grown in recent years, from a low of 4.4% in 2010 to 9.5% in 2015, following the implementation of the economic and financial adjustment programme in the country. This comes as austerity measures have driven unemployment levels to record highs, with many responding by turning to entrepreneurship.[1]

Despite this, the weakened economy has not resulted in an increase in necessity-motivated entrepreneurship (Portuguese adults are 1.5 times more likely to start a business out of opportunity than out of necessity[2]). More than 63% of adults consider entrepreneurship as a good career choice, reflecting the rising impact that entrepreneurship is having among adults there[3].

In addition, since 2004 GEM experts have increasingly reported consistent improvement in entrepreneurship framework conditions – including in social norms and education related to entrepreneurship. In terms of government policies on taxes and bureaucracy, Portugal is ranked by GEM experts second (behind only Switzerland) in 2015, first for entrepreneurial education and third for research and development (R&D) transfer. Significant efforts have been made to cut red tape, by making greater use of online platforms, among other things[4].

In recent years, entrepreneurship has also become deeply ingrained in the vocabulary of Portuguese policy makers as a way of solving unemployment issues, promoting innovation and driving SME development.

BOOSTING YOUTH ENTREPRENEURSHIP

Recently, the government of Portugal has launched various programmes in a bid to increase the number of young people that enter self-employment or start their own business. The initiatives include mentoring and technical support, funding and innovation support. They include:

- **The Programme of Support for Entrepreneurship and Creation of Employment** (PAECPE[5]): Launched by the IEFP (Employment and Vocational Training Institute) in 2009, the programme allows young entrepreneurs to access credit lines granted by banking institutions, providing the full unemployment subsidy in one instalment and technical support in the creation and consolidation of entrepreneurial projects. Those up to the age of 35 years are eligible to benefit (as are those of any age who are unemployed and those who are self-employed and whose income has been below the national minimum wage) and can receive up to 200,000 euros per company through two credit lines: Microinvest and Invest+.
- **Passport for Entrepreneurship** (**Passaporte para o Empreendedorismo**[6]*):* The initiative was launched in 2012 by IAPMEI (the Portuguese Agency for Competitiveness and Innovation). It is aimed at helping young entrepreneurs (up to the age of 34) to develop innovative entrepreneurial projects that are still at the concept phase, by providing technical and financial help. By the end of 2015, Passport for Entrepreneurship had received more than 3,500 applications, corresponding to more than 2,000 business ideas.[7] The programme provides a monthly scholarship of nearly 700 euros for a period of between four to 12 months, and includes access to mentoring through the country's National Network of Mentors (*Rede Nacional de Mentores*) as well as access to other technical assistance.

- **The Youth Invest Programme** (**Programa Investe Jovem**[8]): The Youth Invest Programme, launched by IEFP in 2015, aims to help young entrepreneurs and innovators to create their own companies. The initiative provides financial and technical support to help in the development of new skills. It is available for young unemployed people from 18 to 30 years, with financial support covering up to a maximum of 75% of the total eligible investment in the new company.
- **Ignition Programme***:* Launched in 2012 by the Portuguese government's venture capital firm Portugal Ventures, the programme aims to invest 20 million euros a year in high-tech start-ups.[9] The programme partners with a network of 48 organisations that include incubators and other business development providers. Projects selected can benefit from a capital investment of up to 750,000 euros, covering up to maximum of 85% of the total funding needs of each project. Up to June 2016, 15 calls for funding had been held. In all, 2,960 entrepreneurs took part in the first 14 calls, submitting 964 projects.[10] As of the end of 2014 the initiative had invested 25 million euros in 43 start-ups (which had grown to 60 start-ups by May 2016[11])[12].
- **Start-Up Portugal**[13]: The initiative, launched in March 2016, aims to support and create a new entrepreneurial ecosystem in Portugal that attracts new national and foreign investors to co-fund start-ups, as well as promoting them in international markets. The programme will offer a start-up voucher which will provide university students who are completing their courses or that have recently graduated with a monthly subsidy to start their own businesses. The Momentum Programme will offer young graduates that have benefited from a social action grant incubation space and a monthly allowance.[14]

Porto Portugal Old City

IMPACT

Between 2010 and 2012 the PAECPE programme gave out 7,940 grants totalling over 8.8 million euros and 4 423 loans totalling 10.5 million euros. Existing evaluations indicate that the programme has had some success in supporting the unemployed to create their own businesses.

A European Commission evaluation[15] noted that the design of PAECPE, in principle, allows significant success, particularly in relation to the mix of support measures: guaranteed loans plus conversion of unemployment subsidy plus training and counselling plus complementary subsidies.

In another evaluation,[16] 57% of the programme's beneficiaries reported that if it wasn't for the programme they would not have been able to start their own business, while the same evaluation also found that the survival rate of those assisted was about 90%.

Between 2009 and 2013 the programme benefited 1 705 businesses that created 3,973 jobs. Each job created by the subsidies or loans is expected to have a direct cost between 2009 and 2020 of between three to five months of the unemployment subsidy that the government would have spent over the same period.

However, the evaluation noted that the programme utilised just 57% of its budget between 2009 and the end of 2013, suggesting that it was difficult to find enough entrepreneurs to fund. It said that restricting the programme to only unemployed persons effectively limited the potential beneficiaries. In addition, the low interest rates offered by the programme might also have dissuaded banks from playing a bigger role in the programme.

Despite some success, Portugal continues to experience one of the highest levels of youth unemployment in Europe[17] – although this has fallen from a high of 40.7% in February 2013, to 29.9% in April 2016.[18] In addition, between 2012 and 2013 the percentage of adults involved in early-stage entrepreneurial ventures experienced a bigger increase among those aged 35 to 44, than it did for those aged 18 to 24 or 25 to 34, according to GEM data.[19]

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ROMANIA

FINANCING FIRST-TIME ENTREPRENEURS

POPULATION
19.9 million (2015)*

GDP
$177.3 billion (2015)*

GDP PER CAPITA
$8.906.30 (2015)*

GEM TEA RATE
10.8% (2015)

SME CONTRIBUTION TO GDP
49.6% (2015)**

**Figures from the Global Competitive Index Report 2016/17*
*** From the European Commission's monitoring for 2015 for the Small Business Act: http://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/index_en.htm*

ENTREPRENEURSHIP ECOSYSTEM

The percentage of adults involved in entrepreneurial activity in Romania has increased steadily in the last five years, with both the number of those involved in starting a company and those involved in running an established business having increased.

In 2015 almost 40% of entrepreneurs said they expected to create six or more jobs over the next five years – putting it fourth highest for this indicator among 60 countries.

About a third of Romanians perceive there to be good business opportunities and 46.3% believe they have the capabilities to start a business. Entrepreneurship also enjoys high status in the country and is seen as a good career choice by close to three-quarters of adults.

Good internal market dynamics, commercial and legal infrastructure and physical infrastructure are factors that positively affect the entrepreneurial environment in Romania. Among the biggest constraints are regulations and taxes, entrepreneurial education at the post-school level, and the availability of financial resources.[1]

While entrepreneurship has grown in Romania in the last half a decade, the SME value-add was still 12% lower in 2014 than before the 2008 Global Economic Crisis. Despite this, SME value-add is expected to rise by over eight percent between 2014 and 2016.

FUNDING NEW ENTREPRENEURS

While access to finance in Romania has improved since 2008[2], according to the European Commission, the high level of non-performing loans, especially in the SME sector, still makes getting credit difficult.

To address this the government has introduced a number of measures[3]. These include the rolling out of multiannual programmes, state aid schemes for investments, implementing standards, the development of regional business infrastructure and support for businesses in non-agricultural sectors of rural areas.[4]

The government aims to increase entrepreneurial activity, especially among young people – and wants to increase company registrations by 40% between 2014 and 2020.[5]

The downward trend which characterised Romanian entrepreneurship during the crisis period would have been more pronounced without government intervention, in particular the Ministry of Economy's SRL-D programme[6]. The programme, launched in 2011, introduced a new limited liability type of company (SRL-D[7]) for first-time Romanian entrepreneurs who are then eligible for financial support.

Entrepreneurs can receive grants of up to €10,000 to cover up to half the amount they require to be invested in their business. The programme also helps beneficiaries by granting them exemptions from company fees and social security contributions for up to four employees.[8] Beneficiaries are also entitled to a credit line of up to €80,000 for which the state makes available a guarantee via the Small and Medium Enterprises Guarantee Fund.

Initially the programme was aimed at youth under 35 years old, but it was subsequently extended to all who open a business for the first time

Those receiving finance must create at least four jobs and maintain these for a minimum of three years. Those that fail to do so are liable to pay back the subsidy received.[9]

Tourists shopping at a traditional craft market in the citadel of Sighisoara, Romania

IMPACT

Though no evaluation has yet been carried out on the programme, between 2011 and 2015 about 3,400 entrepreneurs were estimated to have benefited from funding under the SLR-D programme, according to the European Commission. In a 2014 report the commission said it regarded the measure as a success but that minimal budget allocations (in 2016 the government set aside €5 million for the programme[10]) kept its impact small.

However, the number of SRL-Ds registered has boomed. In the first three years of the programme – from 2011 to 2013 - more than 14,000 new businesses were registered as SRL-Ds, resulting in at least 26,000 new jobs created.[11] By February 2016 the number of businesses registered as SRL-Ds had grown 51.4% over the figures for the same month the year before, to 27,816.[12]

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SLOVAKIA

HELP FOR START-UPS

POPULATION
5.4 million (2015)*

GDP
$86.6 billion (2015)*

GDP PER CAPITA
$15,991.70 (2015)*

GEM TEA RATE
9.5% (2016)

SME CONTRIBUTION TO GDP
61.2%**

**Figures from the Global Competitive Reprot 2016/17*
***Figures from the European Commission: http://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/index_en.htm*

ENTREPRENEURIAL ECOSYSTEM

Slovakia outperforms most other EU members in terms of the percentage of adults involved in starting a new business (9.6%). In addition, there has been a recent increase in those businesses started out of opportunity (68.4%) while almost a quarter of adults perceive good opportunities to start a business.

Another positive is that the rate of entrepreneurial intentions among those not currently running a business has increased to 15.7%, after a three-year decline with a low of 10.6% in 2013. Since attitudes toward entrepreneurship have remained generally stable, one could attribute this reversal to increasingly positive views of the prevailing entrepreneurial ecosystem conditions.

However, Slovakia's entrepreneurship ecosystem still faces a number of challenges – including inadequate transfer of research and development (R&D) and a lack of entrepreneurship skills development in the education system. [1] A 2013 report also revealed that more SMEs in Slovakia struggle to access finance than those in other EU countries.[2]

START-UP SHARKS

The Slovak Business Agency offers specialised support to start-ups through a programme called Start-up Sharks launched in 2015. The initiative helps entrepreneurs that have been running a small business for less than three years to develop innovative and competitive business ideas. It also helps back IT businesses that are in their first year of start-up.

The programme also offers support through Start-up Pool which provides specific information and practical help, including training courses and webinars on starting a business. The agency provides individual counselling and support by professional experts, mentors and lecturers and helps entrepreneurs to take part in international start-up events (by covering transportation, accommodation, and entrance to business events for a start-up and up to three of their representatives[3]).[4]

Start-ups can also apply for international internships (3 weeks up to 3 months) in one of the world's leading start-up centres. This programme gives an opportunity to learn how business works abroad as well as to build a useful network of contacts.[5]

In 2015 the agency ran a Start-up Sharks roadshow[6] with lectures from international speakers which reached nearly 1,000 students and offered personal consulting for start-ups.7

The initiative is one of a number started by the government and private sector in the last five to seven years to assist the growing number of Slovak start-ups, many of them developing apps or providing hardware, equipment and e-commerce, according to KPMG's Start-up Survey 20148. The Slovak government also plans to support innovative entrepreneurs to the tune of 18 million euros between 2016 and 2018.9 This includes new funds to assist fast growing companies with risk capital.[10]

Bratislava, Slovakia

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SLOVENIA

BUILDING THE START-UP ECOSYSTEM FROM THE BOTTOM UP

POPULATION
2.1 million (2015)

GDP
$42.8 billion (2015)*

GDP PER CAPITA
$20,732.50 (2015)*

GEM TEA RATE
8.0% (2016)

SME CONTRIBUTION TO GDP
63%**

**Figures from the Global Competitive Index Report 2016/17*
***From the European Commission: http://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/index_en.htm*

THE START-UP ECOSYSTEM

Slovenia, a country with just 2 million inhabitants, is successfully building an effective start-up ecosystem in which hundreds of new prospective start-up companies develop every year. As the most recent study, Slovenian Startup Monitor[1] shows, these companies are increasingly successfully breaking through to global markets with their products, and strengthening the reputation and economic power of the Slovenian nation. In this, they are also supported by increasingly connected elements of the Slovenian entrepreneurship ecosystem, which are collaborating with the goal of creating a start-up ecosystem that will earn Slovenia a place on lists of successful start-up hubs.

Slovenians are beginning to become more entrepreneurial. While too few adults still view entrepreneurship as an attractive opportunity, the percentage involved in starting a business rose from 3.65% in 2011 to 6.45% in 2013, before slipping to 5.9% in 2015 (still below the European average).[2]

Slovenia's capital, Ljubljana, with its good internet connectivity and host of events, is also becoming increasingly popular with digital nomads (freelancer foreigners) who want to spend time in Eastern Europe. In 2016, the city has been listed by *Start-Up Blink* and *Nomadlist* as one of the six most popular cities for digital nomads.[3]

In recent years, the Slovenian government has made efforts to reduce red tape as well as become steadily more involved in promoting entrepreneurship. There is an active and well-developed ecosystem for start-ups in Slovenia, often tied to business and financial support.[4]

INITIATIVE START-UP SLOVENIA

Initiative Start:up Slovenia, a good case of bottom-up building of a start-up ecosystem, is developing key national programmes for promoting entrepreneurship and supporting start-up companies in all development stages. It was launched in 2011 by various partners[5] in the business sector with the idea of forming a comprehensive support for launching and building start-ups. The Initiative is financed by the Slovenian government's Ministry of Economic Development and Technology and other partners.

Since 2007, the non-profit organisation Tovarna podjemov (Venture Factory), which also serves as the University of Maribor's entrepreneurship incubator, and other stakeholders have been jointly running an annual national promotional campaign Start-up Slovenia including the selection of the best start-up company and many supporting activities. Even though incubators and technology parks, the Slovene Enterprise Fund, business angels and venture capital funds in Slovenia had already developed in the 90s, their offered services and activities were too fragmented and consequently ineffective. What was also missing were private initiatives and contents custom-made for the needs of start-up companies.

In 2011, Venture Factory strategically connected with Technology Park Ljubljana and designed Initiative Start-up Slovenia. Together they launched the *Slovenian Start-up Manifesto*[6]. It details various measures to boost start-ups' access to finance, nurture talent, commercialise technology, globalise companies and improve governance in start-ups. Its driving principle is that it is necessary

Outdoor street food vendor in Ljubljana, Slovenia

to move beyond the fragmentation of individual services and activities, and design joint national programmes for promoting and supporting start-up companies. The idea is that collaboration within the Initiative Start-up Slovenia prevents duplication of programmes and activities, and simultaneously enables good national coverage as well as regular development and upgrades to programmes in accordance with global developmental guidelines.

The annual competition Start-up Slovenia had connected with Slovene Enterprise Fund's programme *P2* through which every year, 40 Slovenian start-up companies in the earliest development stages receive non-refundable financial support of more than 50 thousand euros for finishing product development. The companies aren't selected by the Fund but primarily by entrepreneurs, investors and entrepreneurship consultants that the Initiative Start-up Slovenia organizes into the evaluation process. Besides money, the selected start-up companies are also exposed to intense training from entrepreneurship experts and mentorship by experienced entrepreneurs.

In 2014, two new financial and support programmes were added by partners – Start-up Geek House and Go:Global. They offer a convertible loan of 70,000 euros to start-ups in the stage of market breakthrough, and a seed capital investment of 200,000 euros to start-up companies in the growth stage. Both were combined with an intense programme of training, consultations, mentoring and connecting with private investors and other potential partners (Smart Money).

With such a bottom-up approach, the Initiative Start-up Slovenia (www.startup.si) has been able to get the main players in the Slovenian start-up ecosystem to work together. It advocates for better support for start-ups that will help turn Slovenia into a global region for fostering start-ups, which can drive the creation of new companies, technologies and ideas.

The initiative also hosts one of the largest annual start-up conferences in the region, the *PODIM Conference*[7], which includes internationally-renowned speakers, start-up stars and investors. Each year, the winner of the national competition Start-up of the Year is announced at the conference. The competition helps promote and support rising start-ups, and provides them with media visibility and contact with potential investors and business support.[8]

IMPACT AND FUTURE ORIENTATION

The coordinated action and synergies of connecting, with numerous activities and shared events, attracts thousands of participants and is already bringing good results, including:

- More than 100 awarded start-up subsidies and more than 40 investments of public seed capital into Slovenian start-up companies, including the connected support programme
- Birth of more new private initiatives for supporting entrepreneurship, such as the ABC Accelerator (www.abc-accelerator.com) ;
- Many angel investments into start-up companies, and
- Recognition of the the importance of start-up entrepreneurship by corporations that are increasingly connecting with the start-up ecosystem, also shown by the participation of 70 corporate representatives at the international PODIM Conference in Maribor in the year 2016.

Connecting activities within the national start-up ecosystem has also started to strongly echo across the borders of Slovenia, where partners of the Initiative Start-up Slovenia together with Austrian and Italian partners designed the initiative Start-up Alpe-Adria (www.startupalpeadria.eu/). This initiative is offering new opportunities for developing entrepreneurship in the region on the crossroads of Slovenian, Germanic and Roman markets, where the number of inhabitants exceeds 100 million.

The most active ecosystem stakeholders realise that there is a lot of space for improvements in the programmes and the start-up ecosystem itself. Based on this, a broader partner coalition started to form, sharing a joint vision of strengthening Slovenia as a country of start-ups. This was already reflected in the joint organization of the PODIM 2016 Conference (www.podim.org), attended by nearly 900 participants from 26 countries.

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SOUTH AFRICA

BOOSTING JOBS THROUGH A CHALLENGE FUND

POPULATION
55.0 million (2015)*

GDP
$313.0 billion (2015)*

GDP PER CAPITA
$5,694.60 (2015)*

GEM TEA RATE
6.9% (2016)

SME CONTRIBUTION TO GDP
36% (2015)**

**Figures from the Global Competitive Index Report 2016/17*
*** From Statistics South Africa: http://www.statssa.gov.za/?page_id=1854&PPN=P0044*

ENTREPRENEURSHIP ECOSYSTEM

South Africa has a low rate of entrepreneurial activity when compared to the average for efficiency-driven economies. Just 9.2% of adults were involved in starting up a business in 2015, compared to the average of 15% in efficiency-driven economies, while 3.4% of adults were involved in running existing firms, against an average of 8% for efficiency-driven economies.

In addition, while about 40% of the adult population is unemployed (if one includes those that have given up looking for a job), the level of necessity entrepreneurship is low (though it was up 18% in 2015 over 2014). Worryingly, just 10.9% of adults expect to start a business in the next three years – down from a high of 19.6% in 2010. On top of this, the perception of opportunities to start a business, and confidence in one's own abilities to do so, remains alarmingly low compared to other sub-Saharan African countries.[1]

Still, a high percentage of adults view entrepreneurship in a positive light – with 73.8% seeing it as a good career choice and 76.1% as high status. It is encouraging that over a quarter of entrepreneurs expect to create six or more jobs over the next five years (although the percentage of early-stage entrepreneurs who expect to create no jobs at all within the next five years has risen nearly four times since 2013, to 29.8%[2]).[3]

When compared to other countries, South Africa's entrepreneurial ecosystem is weighed down by red tape, poor government support programmes, low transfer of research and development (R&D), lack of entrepreneurial education at schools and poor cultural and social norms towards entrepreneurship. The country performs better in terms of physical as well as legal and commercial infrastructure.[4]

BOOST JOBS

The Jobs Fund was launched in June 2011 by the National Treasury, with an amount of R9 billion (US$620 million) set aside from the fiscus to fund projects that in total can create 150 000 jobs. The idea is that the government will be able to use the fund as an opportunity to learn what kinds of interventions work in helping to create more jobs.[5]

The fund operates as a challenge fund in that the National Treasury co-finances projects with private-sector and public-sector organisations through various calls it puts out (the sixth call was held in February 2016). Each project is funded for a fixed period, with the aim of creating a certain number of targeted jobs by the project's conclusion. The fund backs projects from four categories, namely enterprise development[6], infrastructure investment, support for work seekers and institutional capacity building.[7]

IMPACT

A total of 12,097 businesses had received funding valued at R973.3 million through the Jobs Fund projects by the end of April 2016.[8]

When considering just the category of enterprise development projects, the National Treasury and private-sector organisations had as of March 31, 2015 committed a combined R1.6 billion (US$111 million) to 18 projects (excluding emerging farmer programmes) to help small businesses to create a projected 69,067 permanent jobs. R1 billion was committed by the National Treasury, with the remainder committed by private-sector organisations. The funding is for business support, incubation, and to purchase machinery or equipment.

One of the most successful projects was run by the Cape Craft and Design Institute

(CCDI), which was able to meet 103% of its job-creation target. The organisation's interventions – which were part funded by R14.5 million from The Job Fund and a 20% own-contribution from participating companies (totalling R2.9m) – created 464 new permanent jobs in 45 enterprises in the craft and design sector in the country's Western Cape province.

Through an application and selection process, the CCDI identified suitable enterprises with potential to grow in sales and jobs. Beneficiary companies reported an average net profit of 5.9% following the interventions carried out – which included financing of new machinery and support to help improve marketing and export sales.[9]

But in general, meeting the jobs targets has not proved easy. Often, projections on expected job figures proved to be wrong. For some organisations, it seemed to depend a lot on the kind of business owner being supported. When job creation fell short of the target, some organisations responded by implementing stricter criteria for sourcing entrepreneurs. In addition, at least one of the projects was cancelled as the organisation lacked "institutional capacity".

The fund reported that in 2015/16 a total of R225 million was not spent, after many of the organisations running projects in various categories failed to meet its strict compliance criteria and the National Treasury then opted to suspend transfers to the programmes.[10]

Cape Town downtown business district, South Africa

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SPAIN

BOOSTING ENTREPRENEURSHIP

POPULATION
46.4 million (2015)*

GDP
$1,199.7 billion (2015)*

GDP PER CAPITA
$25,864.70 (2015)*

GEM TEA RATE
5.2% (2016)

SME CONTRIBUTION TO GDP
62.8% (2015)**

**Figures from the Global Competitive Index Report 2016/17*
*** From the European Commission's monitoring for 2015 for the Small Business Act: http://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/index_en.htm*

ENTREPRENEURSHIP ECOSYSTEM

While the percentage of adults in Spain involved in starting a new business has edged up since 2013, when the economy began recovering, it remainss lower than it was just before the start of the recession (7% in 2008).[1]

By 2014 small and medium-sized enterprises (SMEs) employed about a quarter fewer people and generated almost a third less value than before the 2008 Global Economic Crisis. Both value-add and jobs were not expected to recover before 2016.[2] Unemployment remains high – at 20% in the second quarter of 2016[3].

In addition, just 5.6% of adults intend to start a business in the next three years. While the percentage of adults that perceive there to be good opportunities to start a business is increasing, it stood at just over a quarter of adults in 2015. Worrying too is that fewer than half of all working-age adults in Spain view entrepreneurship as having high status.[4]

Entrepreneurship in Spain is constrained by a heavy tax burden and red tape. Despite this some progress has been made – with the number of days it takes to register a business falling to 14 days in 2015, from 35 days in 2007 and the time it takes to make tax payments declining from 298 to 158 days over the same period.[5]

In addition, Spain still has a fragile business structure characterised by sluggish economic growth, with innovation and internationalisation rates that lag behind other European countries.[6]

However, Spain has a growing number of initiatives which set out to promote entrepreneurship, from both public and private institutions.[7]

ENTREPRENEURSHIP LAW

To boost the country's business activity and drive entrepreneurship the government in 2013 introduced a law to support entrepreneurs and their internationalisation (Law 14/2013 or Ley de Emprendedores).

The law, which came into effect that same year, consists of 18 measures to improve entrepreneurship, ease taxation, increase financing, help more businesses to grow and to assist companies to go global. (A detailed evaluation of this law can be found as a special issue in the GEM Spain report for 2013.[8])

Some of the measures include:

- Boosting unemployment benefits for the self-employed, including a €50 flat rate social security contribution for new self-employed contributors under the age of 30.
- A tax reduction for new companies and entrepreneurs that start a business, for two tax years, as from the first positive tax year – with a reduced corporate income tax rate of 15% and a 20% reduction on net profit for personal income tax.
- Various funding initiatives, including 22 billion euros through Spain's finance agency ICO, aimed at SMEs.
- Tax deductions and benefits for (of up to €4,500) for SMEs that make new permanent hires and allow for an up to 100% reduction in corporate social security contributions for new hires recruited by the self-employed and micro-enterprises.
- A reform of the network of bodies that support internationalisation and measures to boost credit for exports.
- Attracting investment and talent to Spain, by facilitating and speeding up the issue of resident permits for investors and entrepreneurs engaged in innovative activities which particularly focus on job creation.

- Helping more companies to export by making new funds available and through the introduction of the Ventana Global[9] platform run by Spain's export and investment agency ICEX, which offers investors a response within 24 hours to trade queries.
- Cutting red tape by for example allowing for the formation of a new express form of limited liability company (the SLFS)[10] and offering a voluntary tax regime, which allows VAT to be paid when an invoice is collected rather than when it is charged.

The government has also pledged to reduce administrative burdens by holding a periodic review of the business climate and by ensuring that administrative burdens introduced must be offset by the removal of at least one burden with an equivalent cost.

In 2013 the government estimated that the planned tax incentives could benefit more than 75,000 new companies and self-employed workers to make annual savings of more than 180 million euros in total. In addition almost 1.3 million self-employed and more than 1 million SMEs are expected to benefit under the special voluntary tax regime for VAT.[11]

The 2013 Entrepreneur Law offers those outside the EU five visa categories covering investors who buy at least 500,000 euros of real estate; entrepreneurs who plan to establish businesses; highly skilled professionals; researchers, scientists and teachers; and employees and trainees.

Visa decisions are targeted at being made within 10 working days, and residence permit decisions in 20 (one US entrepreneur who applied said it took 24 working days[12]). Unlike in a number of other countries with similar such laws, entrepreneurs that apply for the special visa in Spain don't need to show a minimum investment (or jobs that will be created[13]) in their business. Applicants only have to write a business plan.

In addition, to Law 14/2013, the reform of the Spanish educational system through the Organic Law 8/2013 "to improve educational quality" proposed incorporating entrepreneurship training at all levels of education. There are numerous actions which aim to promote entrepreneurship both from public and private institutions. 80% of the Spanish universities are involved in developing activities in this area (see the GEM Spain 2014 Report[14] for more details).[15]

IMPACT

While it is still too early to make a full assessment of the impact of the law, there has been some progress. For example The Ventana Global Platform, which was launched in 2014, helped 20,597 companies with 59,175 trade enquiries in 2015.[16] However, Spain still needs to do more to cut exporting costs, which are about 30% higher than other EU members.[17]

An analysis in 2014 by a number of associations representing entrepreneurs found that little impact had been made one year after the law came into effect. Some conceded that the easing of administrative burdens may have helped, but that there were challenges – such as it being difficult for firms to access the employment tax incentive.

However, the associations did indicate that some impact is being made with the new visa regime. In addition, National Federation of Autonomous Workers (ATA) said the extension of the flat rate of 50 euros to all entrepreneurs, regardless of age, had helped more to gain the courage to work for themselves.[18]

Market located in Valencia, Spain

When it came to the visa regime, a *New York Times'* report found that just over a year after the law came into effect fewer than 100 foreign entrepreneurs had been granted residency (this had risen to 165 by October 2015 or 2.5% of all visas granted under the Entrepreneurs Law[19]). The report noted that some critics have questioned both its impact and whether its measures go far enough. For example, no seed finance is offered to entice entrepreneurs to set up in Spain.[20] There has also been criticism over a rule in the visa system for entrepreneurs that provides that under certain conditions entrepreneurs who have been living in Spain and decide to move to another country must pay an exit tax.[21]

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SWEDEN

THE EFFECT OF INCENTIVES ON ENTREPRENEURSHIP

POPULATION
9.9 million (2015)*

GDP
$492.6 billion (2015)*

GDP PER CAPITA
$49,866.30 (2015)*

GEM TEA RATE
7.6% (2016)

SME CONTRIBUTION TO GDP
59.2% (2015)**

**Figures from the Global Competitive Index Report 2016/17*
*** From the European Commission's monitoring for 2015 for the Small Business Act: http://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/index_en.htm*

ENTREPRENEURSHIP ECOSYSTEM

The percentage of adults in Sweden involved in starting businesses has risen nearly year on year since 2010, declining only in 2014 before climbing again in 2015.[1]

Swedish adults have the highest percentage of perceived opportunities among those countries measured by the Global Entrepreneurship Monitor (GEM), with 70% in 2015 reporting having identified good business opportunities. In addition the country has one of the highest rates of entrepreneurs that start a business to pursue an opportunity rather than out of necessity (with an opportunity to necessity ration of 5.7 : 1).

Yhowever, Swedish adults were ranked among the lowest for perceived capabilities (at 51st out of 60 nations in 2015). Just 8.2% of adults reported in 2015 that they expected to start a business in the next three years – a figure which has fallen from 11% in 2012[2]. Still, things are improving, with fear of failure having decreased year on year between 2013 and 2015.[3]

While Sweden has good physical as well as commercial and legal infrastructure, more could be done to improve entrepreneurship training at colleges and universities, and to streamline government policies and programmes for small businesses (the country is ranked lower compared to a number of other European countries in these two areas).[4]

HOW A SUBSIDISED SAVING SCHEME AFFECTED ANGEL INVESTMENT[5]

Effective as of January 1, 2012, the Swedish government introduced a heavily subsidised saving scheme for individuals that invested in listed companies. Before the introduction of the initiative Sweden experienced a sharp increase in the share of the population engaged in angel investments.

Research by the Swedish Entrepreneurship Forum (based on GEM data) shows that the percentage of those aged 18 to 64 years old who personally provided funds for a new business started by someone else in the past three years leapt from just under 3% between 2004 and 2007 to over 6% in the period between 2008 and 2011.

However, in the period between 2012 and 2015 the rate slipped, to about 5.5%. Over the same period the percentage of the population involved in angel investments in the US, Germany and the UK as well as in small European countries all increased slightly.[6]

In addition, total investments by Swedish angel investors fell 17% in 2013 compared to 2012, the year in which the savings scheme was introduced – from 23.2m euros to 19.4m euros - while it grew by 8.7% for all angel investment in Europe, according to 2013 statistics from the European Business Angel Network (Eban).[7]

The level of angel investments appears only to have recovered after the government in December 2013, launched a tax incentive for individuals that invested in non-listed firms. The incentive allowed private investors to deduct half of the value of their investment, up to 1.3 million Swedish krona (about €140,000), from their taxable income.

Since the launch of the incentive, angel investments have increased. They were up 6% a year in both 2014 (20.6m euros) and 2015 (21.8m euros).[8] Yet, while angel investments bounced back in 2013, the level of investments remained significantly lower than in 2011.[9]

The differences in the treatment of various savings or investment vehicles is likely to have influenced the allocation of investments. Hence, neutrality is important, provided that such reallocation is not the objective of an implemented reform. Reforms should therefore be designed in a coherent way to avoid a less than optimal outcome or conflicting objectives.

Examples of reforms that appear to have increased access to capital, while deepening financial markets, can be found in Israel (the Yozma programme) and in the UK with regard to different tax reforms (for example tax deductibility of investments, postponing taxes if profits are re-invested and facilitating initial public offerings).

HOW POLITICAL UNCERTAINTY CAN AFFECT THE UPTAKE OF AN INCENTIVE

Sweden's RUT and ROT reforms, introduced in 2007, allows individuals who hire a firm to do repairs, conversions and extensions related to housing (ROT) or cleaning, maintenance and laundry (RUT) to get a tax reduction.

The ROT and RUT tax deductions are added over the year until the ceiling is reached (50 000 Swedish krona or €5 200 per person for ROT and 25 000 Swedish krona per person for RUT, with those older than 65 year entitled to a 50 000 Swedish krona deduction for RUT).[10]

The reforms –aimed at making it easier for women to stay working when they have had a child, instead of being tied up with unpaid household work and childcare – have propelled the creation of new firms, in particular RUT firms. Besides turning previously non-market activities to market activities, the initiative has helped marginalised groups to find regular jobs, while promoting fair competition.

GEM Sweden attributes the fall in the early-stage entrepreneurial activity (TEA) rate from 2013 to 2014 to the uncertainty over whether tax reductions associated with household services would continue after the elections in 2014. The uncertainty led consumer services to fall between 2013 and 2014. In 2015 the consumer service sector bounced back somewhat. This pattern can also be seen in the change in women's entrepreneurship (which also dipped against male entrepreneurship in 2014, before recovering in 2015[11]).

What it indicates is how sensitive potential entrepreneurs are to political signals. With the government having recently decided to extend the types of services entitled to tax deductions, the share of consumer services may thus start to grow in the coming years.

Gamla Stan in Stockholm, Sweden

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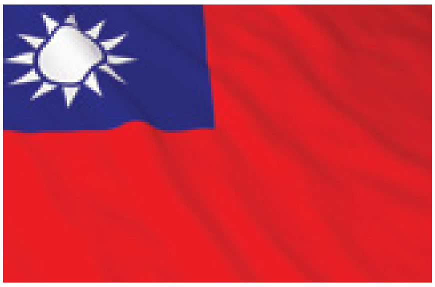
TAIWAN

NURTURING START-UPS



POPULATION
23.5 million (2015)*

GDP
$523.6 billion (2015)*

GDP PER CAPITA
$22,287.60 (2015)*

GEM TEA RATE
8.2% (2016)

SME CONTRIBUTION TO GDP
29.4% (2013)**

**Figures from the Global Competitive Index Reprot 2016/17*
*** From the Small and Medium Enterprise Administration, Ministry of Economic Affairs: http://www.moeasmea.gov.tw/ct.asp?xItem=770&CtNode=331&mp=2*

ENTREPRENEURSHIP ECOSYSTEM

Taiwan's total early-stage entrepreneurship (TEA) rate has remained fairly stable at between seven and eight percent over the last six years, although it did go down slightly to a low of 7.3% in 2015.

41.8% of entrepreneurs expect to employ at least six people in the next five years – the second highest among 60 countries surveyed by GEM in 2015. In addition, over a quarter of adults expect to start a business in the next three years (a rate that has remained fairly stable over the last six years).

While almost three-quarters of adults view entrepreneurship as a good career choice, the Asian country is ranked last out of 60 countries when it comes to perceived capabilities to start a business.

The biggest enablers of entrepreneurship in Taiwan are positive cultural and social norms, good access to physical infrastructure, and strong support for female entrepreneurship. Insufficient education and training at primary levels, and inadequate commercial and services infrastructure act as constraints on entrepreneurship.[1]

INNOVATIVE BUSINESSES

In recent years, Taiwan's Small and Medium Enterprise Administration (SMEA)[2], which falls under the Ministry of Economic Affairs, has launched seven programmes aimed at developing innovative businesses. These programmes are:

A Start-Up Taiwan Accelerator programme[3]*:* From 2014 SMEA began offering innovative start-ups acceleration support of between three and six months, including mentoring, funding and networking.[4] In 2015, the programme focused on five major emerging sectors – cloud-based internet services, the internet of things, biotechnology and medicine, green energy and environmental protection, and digital content.

Start-up Consulting Service Programme: Launched by SMEA in 2013, the initiative offers a hotline (0800-589168) to provide entrepreneurs with free-of-charge consultation services and a single portal platform. Over 100 consultants provide consulting services to assist entrepreneur to take advantage of various public and private sector resources. Consultants all have expertise in financial planning, finance, marketing, human resources, e-commerce, and skill matching. Some of the consultants are already successful SME owners.[5]

The Women Entrepreneurship Flying Goose Programme: Designed in 2013 for female entrepreneurs, the programme offers support through courses, consultation, model selection, resource integration and social networking.[6]

Technology start-up promotion programme: To help youth-run internet start-ups, the programme helps entrepreneurs to form a local hub in their respective industry, in a bid to stimulate more networking opportunities among business owners.

SME e-Learning promotion project (the SME University[7]*):* SMEs can boost their core competitive edge, while reducing their training costs, by using SMEA's free e-learning platform. The platform has been recognised as the first e-learning website developed for SMEs in Asia and boasts more than 1 100 free online courses. It has served over 470,000 SME employers and employees since its launch in 2003. Traffic to the site has climbed steadily, with 12 million visitors and an average of 40 minutes per visit as of the end of 2012.[8]

A+ Entrepreneurship Action Plan recruits industry experts as start-up mentors and service providers to help selected high-growth start-ups to turn their business models into marketable products.

New Business Actualisation Programme: Based on the sharing economy concept, the programme aims to helps entrepreneurs running start-ups to exchange mutual ideas through small group meetings, commercial exhibitions or forums. SMEA assists business owners to attend international commercial exhibitions, or to build a platform to host various entrepreneurial activities, and assists them in sharing resources and ideas with one another.

IMPACT

Over the last three years, Start-Up Taiwan has advised over 300 firms, and invested over 4.3 billion New Taiwan Dollars ($133 million), with orders now totalling over 2.8 billion New Taiwan Dollars ($87m). In addition, in 2015 the Flying-Goose Programme assisted 2 384 female to start a business.

On top of this, as of May 2015 (from January 2014) SMEA assisted 16 681 people with counselling, and helped 82 new businesses to start with the help of its Entrepreneurship Consultation Services (which includes SMEA's hotline as well as other services including an Entrepreneur Café to run start-up workshops, a Start-Up Taiwan Product Show which offers free marketing and business matching opportunities for entrepreneurs and various forums and newsletters.)

While the government has established a venture capital fund-of-funds to invest in start-ups, introduced a special visa regime and set up an innovation centre in Silicon Valley, Taiwan is faced with increasing competition from Chinese manufacturers and slowing growth. Critics also say that Taiwan's tech industry is built on a conservative business culture and an aging generation of industrialists.

Raohe Street Night Market in Taipei, Taiwan

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THAILAND

HOW THE STATE CAN PROMOTE A CULTURE OF INNOVATION AND DRIVE A LOCAL TECH START-UP ECOSYSTEM

POPULATION
68.8 million (2015)*

GDP
$395.3 billion (2015)*

GDP PER CAPITAL
$5,742.30 (2015)*

GEM TEA RATE
17.2% (2016)

SME CONTRIBUTION TO GDP
37.4% (2013)**

**Figures from the Global Competitive Index Report 2016/17*
*** OSMEP*

Innovation is one of the ASEAN's Achilles heels with Thailand being no exception (although ranking third in an ASEAN comparison after Singapore and Malaysia).

During the last 30 years, Thailand's economy has changed dramatically: from exporting primarily raw commodities such as rice and rubber to becoming one of the world's largest exporters of hard disk drives, integrated circuit packages, cars, and auto parts. Electrical, electronic and automotive products now comprise about 40% of Thailand's exports[1].

While facing increasing competition against lower cost locations in less skill-intensive production, Thailand's businesses lack the technological know-how and the human capabilities of moving up the value-chain into more sophisticated activities[2]. Both the overall weakness of Thai innovation systems as the lack of technological capacities in SMEs to absorb innovation from external sources and innovate incrementally hinders innovation and productivity increases[3]. Integration of the ASEAN Economic Community at the end of 2015 will be a great opportunity for foreign, especially Japanese, investors to expand their already existing investments in the automotive sector in Thailand.

The Office of SME Promotion (OSMEP) plays an important role in SME and entrepreneurship policy co-ordination and contributes to entrepreneurial development, as central planning arm, and in operational implementation of SME and entrepreneurship policies. In OSMEP's SME Promotion Master Plan for innovative SMEs, objectives include the expansion of the technology base and an increasing R&D intensity. Nevertheless, OSMEP's ability, as a government agency, to actually foster innovative entrepreneurship is limited[4].

INNOVATION IN THE VERGE OF THE ASEAN ECONOMIC COMMUNITY (AEC)

Since the overall ranking of the ASEAN member countries is more moderate (with the exception of Singapore), the ASEAN Committee on Science and Technology emphasises an ASEAN innovation for global markets by utilizing ASEAN indigenous capabilities in products and services[5]. Realising, that previous practices of the ASEAN scientific community meant that science and technology activities were mostly confined to academic domains, the Krabi Initiative in Thailand (December 2010 ff.) recommends a paradigm shift by various measures to bring the benefits of science to the ASEAN citizens. These include mainstreaming science, technology and innovation by creating innovative eco-systems at all levels and youth-focused innovation by implementing Young ASEAN Science, Technology and Innovation Awards and seed funding for youth-focused innovations.

HOW DOES THE THAI GOVERNMENT SUPPORT INNOVATION?

The GEM Thailand survey regularly reveals that R&D transfer is one of the main constraints for entrepreneurship in Thailand, with few linkages between university research and enterprises. Since 2001, an industrial cluster concept has become the main focus of industrial and innovation policies on all levels[6].

Building on the success of industry clusters, the current government is trying to stimulate and invest in kick-starting Thailand's R&D transfer. In September 2015, the Thai Board of Investment (BOI) created "super clusters" [7] including clusters of businesses using advanced technology, and future industries, e.g. Automotive and Parts Cluster, Electrical Appliances, Electronics and Telecommunication Equipment Cluster, Eco-friendly Petrochemicals and Chemicals

Train night market in Bangkok, Thailand

Cluster, Digital-based Cluster, Food Innopolis and Medical Hub[8].

Increasingly, government agencies try to foster innovativeness, both in start-ups and in established businesses. A combination of tax and other incentives aims to attract foreign researchers and to stimulate an increase in collaborative research in industry clusters, between large corporations, SMEs and researchers. Industries in super clusters will be entitled to full corporate income tax exemption for eight years and a 50% reduction for five years after that. One important objective of the implementation of the super clusters is to broaden the entrepreneurial value chains of enterprises and thus leading to more employment options at a higher skill level and to a higher overall prosperity in Thailand.

Additional current projects, targeted at fostering innovation in Thailand, to include:

- Since February 2016, the second phase of the National Innovation Agency's (NIA) "Innovation Coupon Project" provides a total of 85 million THB (2.4 million USD) with up to 1.5 million THB per company as subsidy for innovation investments[9].
- Businesses in Thailand can receive up to 100 million THB loans and up to 5 million THB interest-free loans per project for three years through Thai banks for innovation development[10].
- To enhance science, technology, R&D and innovation utilisation, the Ministry of Science and Technology grants corporate income tax exemption for R&D technology and innovation expenditures of 300% per project for companies and accelerates the corporate and personal income tax exemption for the contribution to research funds[11].

However, not only the Thai government supports innovativeness.To support innovative start-ups, Thailand-based electronics-part maker Delta Electronics, in collaboration with The Department of Industrial Promotion (DIP), has launched an "angel fund" in early 2016, providing a 70% support of the targeted investment of a maximum of 1 million THB (approx. US$28,000) to entrepreneurs with business ideas related to innovation[12]. The programme of initially 4 million THB (approx. US$112,000) for 2016 currently targets 50 candidates from public as well as from university projects and aims to develop them into successful and innovative new entrepreneurs.

THAILAND'S DIGITAL ECONOMY ROADMAP TO A TECH START-UP ECOSYSTEM

Enthusiasm for entrepreneurship is well represented in Thailand, being now home to a booming ecosystem supporting and revolving around start-ups and entrepreneurs in the tech sector as well as in several other industries.

In 2016, Thailand's policies to promote the tech start-up industry also aim to build and to promote the local tech ecosystem which consists of various stakeholders: start-ups in various stages and an interacting system of organisations – universities, funding organisations and support organisations such as incubators, accelerators and co-working spaces. The goal is to increase the current number of 2,000 local tech start-ups to 10,000 by the end of this year[13]. To successfully create a digital economy, the main focus is on the four aspects digital commerce, digital entrepreneur, digital innovation and digital content. A 10-year income tax waiver is already in place for those venture capital and private equity firms who invest in technology and innovation in the ten core industries: next-gen cars; smart-electronics; affluent, medical and wellness tourism; agriculture and biotechnology; food industry; robotics;

logistics and aviation; biofuels and biochemical; digital; and medical services.

The digital economy roadmap plans to turn Phuket, the tourism hotspot in South Thailand, into the first smart city in Thailand within the next three years[14]. Besides an innovation park located at a university and in cooperation with an infrastructure provider, training courses will be part of the digital entrepreneurship programme to develop entrepreneurial skills in Thailand with its often non-conducive culture towards hard work. "Phuket smart city" refers to the innovative use of digital technology to drive urban infrastructure and develop a smart -living community focusing on safety in land and marine areas. Matching between start-ups and investors and international research grants to attract innovative product generators are part of the roadmap.

Besides tech start-ups, other strategic areas to focus on are to promote technology use to existing SMEs and to develop local software. The Software Industry Promotion Agency (SIPA) is funding tech start-up clubs at universities throughout Thailand, providing programming and entrepreneurship education to support Thailand's start-up industry[15]. In addition, a series of start-up events, such as "Start-up Thailand 2016", held in June 2016, seek to especially promote tech-based start-ups to help drive the economy. It is apparent that the current efforts bring together various stakeholders to ensure that the policies and action plans will be a good fit with the needs of the industry. In Thailand, 80% of all start-ups do not survive; therefore it is the aim to create a strong local start-up ecosystem to make local entrepreneurs more competitive, including on a global scale.

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TURKEY

PROMOTING ANGEL INVESTING

POPULATION
77.7 million (2015)*

GDP
$733.6 billion (2015)*

GDP PER CAPITA
$9,437.40 (2015)*

GEM TEA RATE
16.1% (2016)

SME CONTRIBUTION TO GDP
53.9% (2015)**

**Figures from the Global Competitive Index Reprot 2016/7*
*** From the European Commission's monitoring for 2015 for the Small Business Act: http://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/index_en.htm*

ENTREPRENEURSHIP ECOSYSTEM

Turkey has experienced an entrepreneurial boom in the last decade. The number of adults involved in early entrepreneurial activity (businesses of up to three-and-a-half years old) has risen from six out of every 100 adults in 2006, to about 17 out of every 100 adults in 2015.[1]

Added to this, on the back of strong economic growth (a collective 24% between 2008 and 2012), between 2009 and 2012 the total value-add and employment of small and medium-sized enterprises (SMEs) grew by about 28% and 35% respectively.[2]

In general, conditions for entrepreneurship in Turkey improved during the period 2006 to 2012. There have been improvements in government support policy, as well as the financial environment related to entrepreneurship and government regulations and programmes. However, the large gap between male and female entrepreneurship is cause for concern.[3]

PROMOTING ANGEL INVESTING

In February 2013 the Under Secretariat of the Treasury launched the Law of Business Angels[4] which grants angel investors a 75% corporate tax reduction should they hold company shares in recipient businesses for at least two years. If a business angel invests in a Turkish venture company that undertakes a project supported by the Scientific and Technological Research Council of Turkey during the past five years, the angel investor will be granted a 100% tax deduction. To be classified as an angel investors one must be either an experienced investor or high-net worth individual.[5]

The tax exemption offered by Turkey, according to the Department of Economic Affairs, is higher than in Britain, Italy, Spain, Germany, France, Singapore, Israel and many US states.[6]

The law aims to help support new ventures and to increase the availability of financial sources for small enterprises. Since the enactment of the law and until February 2016 a total of 378 persons had been accredited by the Financial Markets Regulatory Department of Treasury to take advantage of the incentive.[7] The figure is ahead of a target to license 625 angel investors in the first five years of the scheme.[8]

In addition, in 2014 the Turkish stock exchange, Borsa Istanbul, launched an online matchmaking platform. The Private Market platform[9] allows entrepreneurs to find angel investors that have been registered and accredited by the stock exchange. It offers companies the opportunity to raise finance without going public while allowing company partners to sell their shares, and investors to liquidate their investments.

In March 2016 Borsa İstanbul and the Scientific and Technological Research Council of Turkey (TÜBİTAK) signed an agreement aimed at strengthening technology-focused entrepreneurship[10]. Nearly 25 companies that receive research & development (R&D) support from TÜBİTAK became members of the Private Market platform and came together with the investors in the Private Market. At the event, two new Private Market investments were announced and by March 2016, the number of investment contracts on the Private Market had increased to a total of six[11].

To galvanise support for innovative start-ups, the government has also invested in two venture capital funds which will co-invest with private-sector funds in early-stage ventures. As of May 2016 Turkey's treasury had committed 60 million euros to the European Investment Fund's Turkish Growth and Innovation Fund and another 16 million euros to the Turkish Investment Fund, run by the KOBI Venture Capital Trust[12]. The government plans to commit a further 84 million to both, while seeking to finalise crowdfunding legislation in 2016.[13]

IMPACT

In the first half of 2015 the amount invested in early-stage investments grew by more than 200% compared to the same period in 2014, with the number of investments growing from 22 to 33, according to figures from Tech EU, a tech blog[14]. In addition the volume of angel investment in 2013 stood at 14.7 million euros a year, making Turkey the eighth largest in the European region. The UK leads at 84.4m euros in investments. [15] However, Turkey's deputy prime minister Mehmet Simsek wants the country to be among the top three in the region in the next decade for such investments.[16]

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Workers seen through the windows working in a pastry store in Bursa, Tyrkey

URUGUAY

SUPPORTING INNOVATIVE ENTREPRENEURS

POPULATION
3.4 million (2015)*

GDP:
$53.8 billion (2015)*

GDP PER CAPITA
$15,748.20 (2015)*

GEM TEA RATE
14.1% (2016)

SME CONTRIBUTION TO GDP
40% (2015)**

**Figures from the Golabal Competitive Index Reprot 2016/17*
***From El Observador, 19 March 2015: http://www.elobservador.com.uy/santander-presento-advance-pymes-n300732*

ENTREPRENEURIAL ECOSYSTEM

Uruguayan entrepreneurs are optimistic about growing their business. About a quarter of adults running businesses in Uruguay in 2015 said they expected to create six or more jobs over the next five years, while three times as many adults start a business to pursue an opportunity, rather than out of necessity.

In addition 60.4% of Uruguayans believe they are capable of running a business and 24.4% have a fear of failure (placing Uruguay tenth out of 60 countries). Despite this, only 39.2% of adults perceive there to be good opportunities to start a business, lower than other Latin American and Caribbean states.

Part of the challenge is that while the country has good commercial and social infrastructure and fairs well in the transfer of research and development, its small domestic market and poor level of entrepreneurial education at school level hold it back.[1]

In addition, while the percentage of those involved in starting a new entrepreneurial venture in Uruguay has remained stable over the last decade (ranging between 12% and 16% of adults), the percentage of those involved in running established firms declined in 2015 to 2.1% of adults (one of the lowest rates among GEM countries).

BOOSTING INNOVATION

In an effort to encourage innovation, Uruguay's National Agency for Research and Innovations (ANII) offers various subsidy instruments for early-stage businesses, as well as for the establishment of incubators, investment funds and investor networks and the promotion of projects that improve the culture of entrepreneurship.

The agency offers grants of up to 160,000 Uruguayan pesos (US$5,100) for validating business ideas[2] and up to 800,000 Uruguayan pesos ($25,000) for start-ups to cover up to 80% of the cost of innovative services or products[3]. Grants of up to $40,000 are offered to entrepreneurs from overseas who wish to set up businesses in the country (through the Softlandings Uruguay initiative)[4].

The Network to Support Future Entrepreneurs[5] (RAFE), set up in 2013, offers grant funding of up to 220,000 Uruguayan pesos ($7,100) per approved project[6] for organisations that carry out entrepreneurship awareness-raising activities and pre-incubation and business support. The network, promoted by ANII, currently consists of 60 public and private organisations (universities, business chambers, incubators, foundations and investment funds, among others) that promote an entrepreneurial culture in Uruguay.

Between 2013 and 2015, the RAFE network received 136 applications for support, of which 51% were approved, with $388,000 so far being paid out in support. In 2015 the network supported 14 activities which reached a total of 578 participants, 58% of whom were women.[7]

Between 2008 and 2015 the agency channelled $6.7 million in funds to 216 projects, with entrepreneurs and businesses contributing a further $443,000.[8]

Some successful cases which received funding from the agency include Tryolabs (now MonkeyLearn[9]), a high-tech software company that has developed an artificial intelligence software; AdviceMe (now GlamST[10]) a customisable virtual make-up application that helps brands to improve their customer retention; PedidosYa!,[11]an online food ordering company with presence in several Latin American countries ; and Kizanaro (now AZ Sportech),[12] a company that develops products and services for sport through technology.

THE RESULT OF THE INTERVENTION AND ITS IMPACT

A 2013 evaluation[13] of the ANII's entrepreneurship support found that the agency's subsidies contributed to the initial survival of companies supported, even more than for other similar programmes in the region. A cost-benefit calculation showed that for dollar invested by the ANII in companies that have survived at least three years has returned 12 times as much in terms of revenue.

However, the evaluation also found that the median value of sales generated by each beneficiary company in 2012 was a low $18,400, while only six companies supported had more than 10 employees. In addition it found that while the subsidy programme is key to helping entrepreneurs start up, it does not contribute decisively to the growth of projects.

Key, said the evaluation, is to scale up support so that the agency can make a greater impact. The agency recently introduced the possibility of obtaining the subsidy for a second consecutive year, which could go some way to addressing this challenge. Since 2013 the agency has made some progress, with the number of projects approved for funding having increased from 45 to 110 from 2014 to 2015[14].

Today, after more than 10 years of work aimed at the strengthening of the entrepreneurial ecosystem in Uruguay, the country also has five business incubators, three angel investment networks and eight university entrepreneurship centres.

Shopkeepers in Mercado del Puerto in Montevideo, Uruguay

The following graph illustrates the role of Uruguayan institutions throughout the entrepreneurial evolution process:

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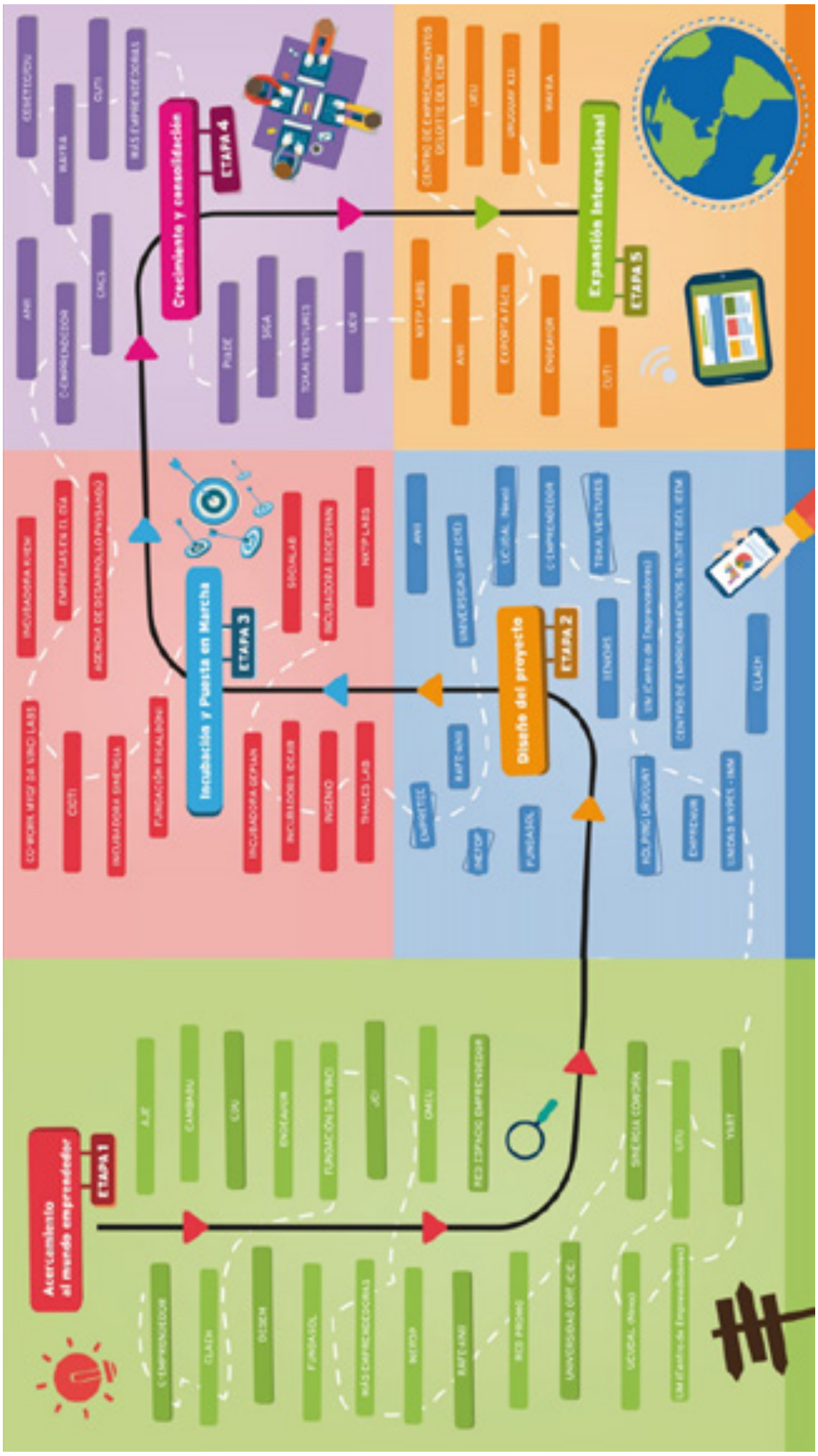
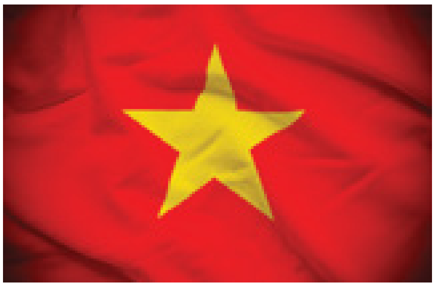


MAP OF THE ENTREPRENEURIAL ECOSYSTEM IN URUGUAY
Source: Endeavor, 2015, http://www.mapaemprendedor.uy/

VIETNAM

EASING BUSINESS REGULATIONS



POPULATION
91.7 million (2015)*

GDP
$191.5 billion (2015)*

GDP PER CAPITA
$2,088.30 (2015)*

GEM TEA RATE
13.7% (2015)

SME CONTRIBUTION TO GDP
40% (2013)**

*Figures from the Global Competitive Index Report 2016/7
** Figure taken from Ministry of Planning and Investment's 2013 "White Paper on Vietnam SME 2014" : http://en.business.gov.vn/tabid/179/catid/572/item/13807/white-paper-on-vietnam-sme-2014.aspx

ENTREPRENEURSHIP ECOSYSTEM

Vietnam's entrepreneurship ecosystem has seen steady improvements in recent years. During this time the percentage of adults who believe they have entrepreneurial capabilities has risen from 34% in 2013 to 57% in 2015, bringing it closer to the average of other factor-driven economies' average (66%).

In addition, Vietnam's established business ownership rate is high – at 19.6% (placing it third out of 60 ranked countries on this measure). Entrepreneurs in Vietnam are highly regarded in society, as three in every four adults dream of running their own business.[1]

Added to this the number of new business registrations grew 26.6% between 2014 and 2015, while the total registered charter capital in 2015 was up 39.1% over the previous year. Despite this, the number of businesses that temporarily ceased operating was 22.4% higher in 2015 than the previous year.[2]

Although there is much room for improvement in Vietnam's physical infrastructure, the country still ranks better on this measure than do many other developing countries (ranked 17th out of 60 countries). Communications technology has also developed well in recent years, while the country's internal market dynamics (ranked 11th out of 60 countries) create many opportunities for businesses. However, too few young people get basic business skills, while many entrepreneurs battle to access to capital.

While only about one in five businesses survive past their first three years, it is hoped that the growth of business development services in recent years might help improve the lot of local enterprises.[3]

BUSINESS REFORMS

In 2014 Vietnam's government made efforts to improve the business environment, by amending its 2005 Law of Enterprise to simplify procedures for establishing businesses and updating another law to ease regulations on the number of business activities deemed prohibited. Amendments to both were effective from 1 July 2015.

With changes to the Law of Enterprise entrepreneurs are now able to freely decide on the form, contents and number of their corporate seal. The amended law also reduced the percentage of shareholders that are required to attend shareholder meeting from 65% to 51%, in line with international practice. The changes also allow enterprises of any type to merge or be acquired by other firms (previously, mergers and acquisitions were confined to enterprises of the same type).

In addition, while in the 2005 Law of Enterprise a legal representative of an enterprise had to be specified in the firm's enterprise charter or appointed by an authorised governmental agency, enterprises are now able to assign more than one legal representative to their enterprise.[4]

A number of amendments to the 2005 Investment Law investors have also made it easier to do business in Vietnam. Most notably, investors can now invest in sectors previously listed in the law as prohibited. In addition, domestic investors no longer need an investment registration certificate – a business registration will suffice. Only deals where foreign investment constitutes 51% or more of the total investment need apply for an investment registration certificate. The amendment also specifies 267 (down from 386) types of business activities for which entrepreneurs must meet certain conditions before operating. This will save investors the time of having to dig for specialised texts.[5]

River merchants in Soc Trang, Vietnam

SUPPORTING INITIATIVES

In addition to the amendments to the two laws, the government passed Resolution 19/NQ-CP in 2014 to improve the business environment and competitiveness of enterprises. It sets various targets to cut red tape (including to reduce the time taken to register a business to six days by the end of 2015) by among other things the adoption of e-government tools.[6]

Under a directive in 2014 (No. 11/CT-TT[7]) the then prime minister Nguyen Tan Dung requested the Ministry of Finance to develop tax incentives and financial solutions. In 2014 the corporate tax rate was lowered from 25% to 22%, while a special rate of 20% was introduced in 2013 for enterprises with a revenue of up to 20 billion Vietnamese dong ($896 000). The ministry has since proposed other tax incentives.[8]

Most recently, with Resolution 35/NQ-CP[9] of May 16, 2016 the government aims to have at least 1 million operating enterprises by 2020, including large-scale enterprises. The resolution includes various measures – to among other things ease administrative measures, lower the cost of doing business and create better business support and access to finance for start-ups.

IMPACT

After the first year of implementation of Resolution 19/NQ-CP the number of days it takes to register a business in Vietnam, according to the World Bank, fell from 34 to 17 days[10] (this slipped to 20 days in 2016[11]). The rate of enterprises using a government electronic portal to declare tax owing has increased from 65% to 95% of all businesses, which helped reduce the time businesses spend on paying tax by 290 hours a year, to 247 hours at present. The time it takes to register an electricity connection was also reduced, from 115 days to 70 days.[12]

However, despite a number of reforms Vietnam was ranked at 90th out of 189 economies in 2016 (but up from 93 in 2015) by the World Bank for the ease of doing business (including 168th for paying taxes)[13] and businesses are still faced with significant red tape when operating in Vietnam[14]. In January 2016 Vietnam's planning minister Bui Qang Vinh warned that the country risked falling behind if it did not make fresh reforms soon[15].

The recent signing of free trade agreements such as the Trans-Pacific Partnership Agreement and EU-Vietnam Free Trade Agreement have spurred many Vietnamese enterprises to transform. But this requires not only support from the government but also effort from Vietnamese enterprises themselves, to make various improvements. Entrepreneurship training at schools, to equip more youth with basic business skills, would also help.

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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 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
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
Australia	14.7	8.7	11.6	13.4	10.5	11.9				7.8	10.5			13.1	12.8	14.6
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		
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
Bulgaria															3.5	4.8
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
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
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
Colombia						22.4	22.7	24.5	22.6	20.6	21.4	20.1	23.7	18.5	22.7	27.4
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
Cyprus																12.0
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
Egypt								13.1		7.0		7.8			7.4	14.3
El Salvador												15.3		19.5		14.3
Estonia												14.3	13.1	9.4	13.1	16.2
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
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
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
Guatemala									19.2	16.3	19.3		12.3	20.4	17.7	20.1
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

GEM National Teams - Early Stage Entrepreneurial Activity (TEA) by Year

Table 1: Continued

Country	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
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
Indonesia						19.3							25.5	14.2	17.7	14.1
Iran								9.2	12.1	12.3	14.5	10.8	12.3	16.0	12.9	12.8
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
Israel	5.3	7.0		6.6			5.4	6.4	6.1	5.0		6.5	10.0		11.8	11.3
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
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		
Jordan				18.2					10.2							8.2
Kazakhstan							9.4							13.7	11.0	10.2
Korea	14.3	14.5						10.0	7.0	6.6	7.8	6.6	6.9		9.3	6.7
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
Lebanon									15.0						30.2	21.2
Libya													11.2			
Lithuania											11.3	6.7	12.4	11.3		
Luxembourg													8.7	7.1	10.2	9.2
Macedonia								14.5		7.9		7.0	6.6		6.1	6.5
Malawi												35.6	28.1			
Malaysia						11.1			4.4	5.0	4.9	7.0	6.6	5.9	2.9	4.7
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
Montenegro										14.9						
Morocco									15.7						4.4	5.6
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
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
Peru				40.3		40.1	25.9	25.6	20.9	27.2	22.9	20.2	23.4	28.8	22.2	
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
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
Qatar														16.4		7.9
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

GEM National Teams - Early Stage Entrepreneurial Activity (TEA) by Year

Table 1: Continued

Country	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Saudi Arabia									4.7	9.4						11.4
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
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
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
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
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
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
Syria									8.5							
Taiwan		4.3								8.4	7.9	7.5	8.2	8.5	7.3	8.2
Thailand		18.9			20.7	15.2	26.9				19.5	18.9	17.7	23.3	13.7	17.2
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
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
Ukraine																
Uruguay						12.5	12.2	11.9	12.2	11.7	16.7	14.6	14.1	16.1	14.3	14.1
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
Vanuatu										52.1						
Venezuela			26.8		24.9		20.2		18.7		15.4					
Vietnam													15.4	15.3	13.7	
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 running a mature business that has been in operation for more than 42 months.

Country	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
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
Australia	28.0	7.7	9.1	9.6	10.4	9.1				8.5	9.1			9.8	8.7	11.3
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		
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
Bulgaria															5.4	6.2
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
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
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
Colombia						10.4	11.6	14.1	12.9	12.2	7.5	6.7	5.9	4.9	5.2	8.9
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
Cyprus																8.2
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
Egypt								8.0		4.5		4.1			2.9	6.1
El Salvador												9.4		12.7		11.5
Estonia												7.2	5.0	5.7	7.7	7.8
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
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
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
Guatemala									4.2	6.7	2.5		5.1	7.4	8.1	9.1
Hong Kong		2.6	3.5	2.7			5.6		2.9							6.1

GEM National Teams - Established Business Ownership Rate by Year

Table 2: Continued

Country	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
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
Indonesia						17.6							21.2	11.9	17.1	15.3
Iran								6.8	6.5	12.2	11.2	9.5	10.6	10.9	14.0	11.6
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
Israel	0.0	5.7		3.9			2.4	4.1	4.3	3.3		3.8	5.9		3.9	4.0
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
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		
Jordan				21.9					5.3							2.7
Kazakhstan							5.8							7.4	2.4	2.4
Korea		10.2						12.84	11.8	11.2	10.9	9.6	9.01			6.6
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
Lebanon									16.0						18.0	20.1
Libya													3.4			
Lithuania											6.3	8.2	8.3	7.8		
Luxembourg													2.4	3.7	3.3	3.2
Macedonia								11.0		7.6		6.7	7.3		5.9	7.2
Malawi												10.8	12.0			
Malaysia						7.3			4.3	7.9	5.2	7.0	6.0	8.5	4.8	4.7
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
Montenegro										7.8						
Morocco									15.3						5.2	7.5
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
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
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
Philippines						19.7							6.6	6.2	7.3	
Poland	4.7	2.0		8.2							5.0	5.8	6.5	7.3	5.9	7.1
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
Qatar														3.5		3.0
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

GEM National Teams - Established Business Ownership Rate by Year

Table 2: Continued

Country	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Saudi Arabia									4.1	3.9						2.3
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
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
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
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
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
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
Taiwan		8.3								7.2	6.3	10.4	8.3	12.2	9.6	7.7
Thailand		13.3			14.1	17.4	21.4				30.1	29.7	28.0	33.1	24.6	27.5
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
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
Ukraine																
Uruguay						6.9	6.6	7.9	6.0	7.2	5.9	5.0	4.9	6.7	2.1	7.4
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
Vanuatu										23.2						
Venezuela			9.6		8.6		5.4		6.5		1.6					
Vietnam													16.4	22.2	19.6	
West Bank & Gaza Strip									6.9	2.0						
Yemen									2.9							
Zambia										9.6		3.8	16.6			

GEM National Teams - Employee Entrepreneurial Activity (EEA) by Year

Table 3: 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	2011	2012	2013	2014	2015	2016
Algeria	0.8	0.6	0.6			
Angola				2.9		
Argentina	3.2			2.4	2.4	3.1
Australia	6.2			8.4	8.5	9.0
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		
Botswana		2.1	0.9	2.7	1.6	
Brazil	1.0			1.0	1.0	1.5
Bulgaria					0.4	0.9
Burkina Faso				0.3	0.6	0.6
Canada				4.8	7.1	5.9
Cameroon				1.9	0.7	1.2
Chile	3.5	4.8	3.6	5.1	5.2	5.4
China	2.1	0.6	0.6	0.5	1.4	1.2
Colombia	1.7			3.7	2.3	1.2
Costa Rica		1.9		0.5		
Croatia	4.4	4.4		3.6	4.9	5.3
Cyprus						5.6
Czech Republic	3.8					
Denmark	15.1	12.6		11.4		
Dominican Republic						
Ecuador		0.9	1.9	0.3	0.9	0.7
Egypt		1.0			1.3	2.0
El Salvador				0.3		1.0
Estonia		7.3		3.6	6.3	6.3
Ethiopia		0.6				
Finland	9.4		5.7	4.5	5.8	5.6
France	4.7			3.8		3.6
Georgia				0.4		0.5
Germany	4.8			4.5	4.5	5.1
Greece	1.6	1.6		0.8	1.0	1.4
Guatemala				0.5	1.2	1.7
Hong Kong						4.1
Hungary	3.9	2.1	3.6	2.8	2.1	3.0

Country	2011	2012	2013	2014	2015	2016
India				0.1	0.3	2.5
Indonesia				0.5	0.2	0.7
Iran	0.4	0.7	2.5	1.4	1.0	1.2
Ireland	5.9			6.7	6.6	6.2
Israel		4.2			6.6	7.3
Italy				0.8	1.4	2.1
Jamaica	0.2			0.4		0.7
Japan	3.4			1.1		
Kazakhstan				1.1	1.0	
Kenya						
Korea	2.6	2.1	4.0		2.4	
Kosovo				0.2		
Latvia	3.0				3.3	4.5
Lebanon					3.3	2.6
Lithuania	4.9	5.8	6.8	5.1		
Luxembourg				7.3	6.4	7.3
Macedonia					2.3	1.4
Malaysia	0.4	0.9	0.5		0.3	0.4
Mexico	0.9	1.2		0.7	1.2	4.8
Montenegro						
Morocco					0.4	0.5
Namibia		2.1	1.6			
Netherlands	7.8			7.0	6.3	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
Peru	1.4	1.7	0.9	1.7	0.7	0.8
Philippines			0.4	0.6	2.4	
Poland	2.8		4.3	3.4	4.0	5.2
Portugal	4.0			3.2	4.0	2.4
Puerto Rico			2.5	1.8	0.6	1.8
Qatar				11.5		6.4
Romania	3.9	3.5	5.1	4.9	4.6	
Russia	0.6			0.5		0.7
Saudi Arabia						4.7

GEM National Teams - Employee Entrepreneurial Activity (EEA) by Year

Table 3: Continued

Country	2011	2012	2013	2014	2015	2016
Senegal					2.3	
Singapore	3.3			4.8		
Slovakia	3.4	4.6	4.4	4.9	3.6	2.2
Slovenia	5.1	5.9	6.1	4.7	5.6	4.7
South Africa	0.4	0.4	0.8	0.3	0.3	0.7
Spain	2.7			1.8	1.1	2.7
Suriname				0.4		
Sweden	16.2			5.8	6.4	6.1
Switzerland	4.6			6.1	6.5	6.1
Taiwan	2.0			7.6	4.1	5.7
Thailand	1.4	1.1	1.7	2.1	0.7	1.0
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
Uganda				2.3		
United Kingdom	5.3	10.1	8.5	7.0	4.1	7.0
Uruguay	5.2	5.0	6.7	3.8	4.2	2.6
United States	6.6			6.5	7.0	7.0
Vanuatu						
Venezuela	0.6					
Vietnam			2.7	0.3	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 who are expecting to start a new business within the next three year.

Country	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
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
Australia	7.8	11.8	15.5	12.0	10.6				8.7	12.3			10.0	14.4	9.5
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		
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
Bulgaria														5.3	7.1
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
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
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
Colombia					62.6	60.1	60.5	57.2	41.3	55.8	56.7	54.5	47.0	48.2	48.2
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
Cyprus															16.2
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
Egypt							34.5		24.3		42.3			36.8	64.8
El Salvador											39.8		23.1		27.9
Estonia											16.4	19.4	9.8	16.7	13.9
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
Georgia													15.6		9.9
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
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

GEM National Teams - Entrepreneurial Intentions by year

Table 4: Continued

Country	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Guatemala								10.3	30.7	26.4		39.0	35.8	36.9	36.9
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
Indonesia					30.2							35.1	27.4	27.5	20.7
Iran							35.8	22.3	31.4	29.9	22.8	30.6	25.5	35.0	45.1
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
Israel	14.4		16.6			12.6	14.2	13.6	13.5		12.8	24.0		21.6	20.6
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
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		
Jordan			33.2					24.9							13.6
Kazakhstan						13.2							15.4	17.5	17.4
Korea	19.7						17.2	11.4	10.1	15.7	13.0	12.1		6.6	27.5
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
Lebanon								22.4						44.0	39.6
Libya												62.1			
Lithuania										16.8	18.0	22.4	19.7		
Luxembourg												14.1	11.9	13.5	10.9
Macedonia							39.0		26.7		27.7	29.1		23.3	20.9
Malawi											70.3	66.7			
Malaysia					9.1			5.1	5.1	8.7	13.3	11.8	11.6	5.6	4.9
Mexico	23.2			17.2	15.7		25.6		22.3	24.2	18.4	16.9	17.4	13.7	10.0
Montenegro									31.9						
Morocco								28.9						30.2	36.4
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
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
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

GEM National Teams - Entrepreneurial Intentions by year

Table 4: Continued

Country	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
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
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
Qatar													50.4		37.3
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
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
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
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
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
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
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
Syria								54.0							
Taiwan	16.2								25.1	28.2	25.5	27.8	25.6	26.1	25.7
Thailand	16.5			34.8	26.4	21.3				26.5	19.0	18.5	21.8	16.7	20.8
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
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
Ukraine															
Uruguay					14.5	15.4	16.8	20.7	31.9	38.2	19.9	25.3	24.8	25.4	20.7
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
Vanuatu									50.5						
Venezuela		37.3		40.0		20.7		28.7		20.2					
Vietnam												24.1	18.2	22.3	
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 5A: 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
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
Australia	0.48	0.48	0.70	0.70	0.54	0.69				0.99	0.67			0.65	0.65	0.65
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		
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
Bulgaria															0.72	0.80
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
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
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
Colombia						0.62	0.70	0.63	0.79	0.80	0.61	0.77	0.57	0.64	0.68	0.82
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
Cyprus																0.43
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
Egypt								0.29		0.46		0.18			0.33	0.36
El Salvador												0.87		1.02		0.91
Estonia												0.51	0.55	0.69	0.58	0.56
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
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
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
Guatemala									0.87	0.81	0.99		0.73	0.69	0.63	0.68

GEM National Teams - Female/Male Early-Stage Entrepreneurial Activity by Year

Table 5A: Continued

Country	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
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
Indonesia						0.94							0.96	1.15	1.01	1.24
Iran								0.33	0.40	0.25	0.24	0.38	0.36	0.49	0.48	0.54
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
Israel	0.28	0.28		0.54			0.53	0.46	0.52	0.50		0.72	0.48		0.65	0.71
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
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		
Jordan				0.59					0.29							0.26
Kazakhstan							0.68							0.92	0.84	0.87
Korea	0.42	0.42						0.34	0.33	0.19	0.32	0.21	0.40		0.72	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
Lebanon									0.51						0.69	0.61
Libya													0.49			
Lithuania											0.46	0.44	0.45	0.42		
Luxembourg													0.49	0.60	0.75	0.56
Macedonia								0.42		0.34		0.49	0.41		0.41	0.39
Malawi												0.82	0.95			
Malaysia						1.01			0.72	0.94	0.69	0.80	0.72	1.33	1.05	0.91
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
Montenegro										0.54						
Morocco									0.59						0.47	0.67
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
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
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
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
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
Qatar														0.53		0.84
Romania							0.62	0.36	0.46	0.62	0.59	0.40	0.64	0.41	0.53	

GEM National Teams - Female/Male Early-Stage Entrepreneurial Activity by Year

Table 5A: Continued

Country	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
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
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
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
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
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
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
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
Syria									0.23							
Taiwan		0.64								0.60	0.55	0.67	0.48	0.67	0.50	0.45
Thailand		0.95			0.87	0.87	0.93				1.16	1.19	0.96	0.90	1.16	0.83
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
United Arab Emirates						0.05	0.61		0.40		0.63					0.56
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
Uruguay						0.51	0.42	0.56	0.45	0.58	0.60	0.50	0.46	0.69	0.45	0.53
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
Vanuatu										0.78						
Venezuela			0.88		0.91		0.72		0.91		0.88					
Vietnam													0.83	1.02	1.34	
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 5B: Female TEA and Male TEA as two independent rates.

	2001		2002		2003		2004		2005		2006		2007		2008	
Country	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
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

GEM National Teams - Female/Male Early-Stage entrepreneurial Activity by Year

Table 5B: Continues

2009		2010		2011		2012		2013		2014		2015		2016	
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
13.4	19.9			5.6	10.8	5.4	12.1	3.3	6.4						
		31.0	32.9			30.6	34.4	20.4	24.3	20.4	22.8				
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
		7.8	7.8	8.4	12.6					10.3	16.0	10.1	15.5	11.5	17.7
						8.1	11.0			7.1	10.4			8.1	11.2
		1.0	6.0												
				5.5	10.7	16.1	18.2	19.6	23.9	11.2	14.3	19.8	22.4		
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		
										6.4	7.8			27.3	30.5
		36.5	40.9							25.0	29.9				
3.0	5.9	4.2	11.2	5.2	11.0	5.1	10.4	7.1	13.4	4.3	10.6				
						25.4	30.0	19.9	21.9	30.9	34.8	30.1	36.6		
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
												2.9	4.0	4.3	5.4
										18.7	25.4	26.7	33.6	30.2	37.6
										34.1	40.9	23.6	27.2	26.5	28.7
								9.9	14.5	9.9	16.2	13.5	16.0	13.3	20.3
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
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
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
		13.6	13.2			10.7	19.7			11.0	11.7				
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
														7.3	17.0
				4.2	11.0			4.1	10.5						
2.5	4.8	2.3	5.2	2.9	6.3	3.1	7.6			3.8	7.1				
14.9	20.1														
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
		4.4	9.5			2.4	13.1					3.7	11.1	7.5	20.9
						14.3	16.4			19.7	19.3			13.6	15.0
						9.7	19.1	9.4	17.0	7.7	11.2	9.7	16.7	11.7	20.8
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
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
										6.5	8.0			6.5	10.9
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
		37.1	30.8			38.0	35.0	27.9	23.5						
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
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
2.2	5.2													6.5	13.1
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
8.0	14.8	7.1	13.9												
								6.4	13.2	4.6	8.5	7.9	13.7	7.6	13.5
								25.0	26.0	15.2	13.2	17.8	17.6	15.6	12.6
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
		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

GEM National Teams - Female/Male Early-Stage entrepreneurial Activity by Year

Table 5B: Continued

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
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
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																
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																

GEM National Teams - Female/Male Early-Stage entrepreneurial Activity by Year

Table 5B: Continues

2009		2010		2011		2012		2013		2014		2015		2016	
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
4.2	8.0	3.4	6.7			5.5	7.6	6.5	13.7			9.3	14.4	9.4	13.3
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
19.4	26.2	9.2	11.8	12.6	14.9			12.3	15.3	17.3	21.3			8.8	10.9
1.5	5.0	1.5	5.1	3.2	7.2	2.1	5.9	2.7	4.8	1.5	6.1				
														3.3	12.8
										13.2	14.3	10.1	12.0	9.5	10.9
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
										3.3	4.8				
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
10.2	20.2											24.6	35.7	16.1	26.2
								7.2	14.8						
				7.2	15.6	4.2	9.4	7.8	17.5	6.8	16.2				
								5.6	11.6	5.3	8.9	8.7	11.6	6.5	11.7
		4.0	11.7			4.5	9.4	3.8	9.4			3.5	8.7	3.7	9.3
						32.1	39.3	27.3	28.9						
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
		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
		10.5	19.6												
11.8	19.9											2.9	6.1	4.5	6.7
						17.5	18.8	34.4	32.1						
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
				28.1	41.4	35.6	34.5	40.7	39.0						
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		
		3.4	14.4	1.7	15.9	1.2	21.3								
						3.4	16.0								
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
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
								18.0	19.1	20.8	15.9	19.5	14.9		
				5.0	13.1	6.2	12.6	6.2	12.4	6.0	12.5	6.0	12.5	8.1	13.3
		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
								6.1	10.7	9.1	11.1	7.1	10.0	7.7	13.2
										10.3	19.3			6.8	8.1
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		
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
0.7	7.9	5.9	12.1											9.7	12.9
												36.8	40.5		
2.8	7.0														
				7.2	6.0	10.0	13.2	8.2	13.2	7.2	14.8				
				8.1	20.3	6.7	13.7	7.3	11.7	7.4	14.4	6.5	13.0	7.6	11.3
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
4.7	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
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
								3.5	6.8	1.5	2.7				

GEM National Teams - Female/Male Early-Stage entrepreneurial Activity by Year

Table 5B: Continued

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
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
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																

GEM National Teams - Female/Male Early-Stage entrepreneurial Activity by Year

Table 5B: Continued

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
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
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																