THE ENTREPRENEURIAL CODE

- A COMPARATIVE STUDY OF ENTREPRENEURIAL DYNAMICS IN CHINA, EUROPE AND THE U.S.

GEM OPERATIONAL DEFINITIONS:

Total Early-stage entrepreneurial activity (TEA)

Percentage of individuals aged 18-64 who are either a nascent entrepreneur or owner-manager of a new business.

Nascent entrepreneurship rate

Percentage of individuals aged 18-64 who are currently a nascent entrepreneur, i.e., actively involved in setting up a business they will own or co-own; this business has not paid salaries, wages, or any other payments to the owners for more than three months.

New business ownership rate

Percentage of individuals aged 18-64 who are currently an owner-manager of a new business, i.e., owning and managing a running business that has paid salaries, wages, or any other payments to the owners for more than three months, but not more than 42 months.

Characteristics of early-stage entrepreneurial activity

Opportunity-based early-stage entrepreneurial activity

Percentage of individuals involved in early-stage entrepreneurial activity (as defined above) who claim to be purely or partly driven by opportunity as opposed to finding no other option for work. This includes taking advantage of a business opportunity or having a job but seeking better opportunity.

Necessity-based early-stage entrepreneurial activity

Percentage of individuals involved in early-stage entrepreneurial activity (as defined above) who claim to be driven by necessity (having no better choice for work) as opposed to opportunity.

Improvement-driven opportunity early-stage entrepreneurial activity

Percentage of individuals involved in early-stage entrepreneurial activity (as defined above) who (1) claim to be driven by opportunity as opposed to finding no other option for work; and (2) who indicate that the main driver for being involved in this opportunity is being independent or increasing their income, rather than just maintaining their income.

High-growth expectation early-stage entrepreneurial activity: relative prevalence

Percentage of early-stage entrepreneurs (as defined above) who expect to employ at least 20 people five years from now.

New product-market-oriented early-stage entrepreneurial activity: relative prevalence

Percentage of early-stage entrepreneurs (as defined above) who report that their product or service is new to at least some customers and that not many businesses offer the same product or service.

International-oriented early-stage entrepreneurial activity: relative prevalence

Percentage of early-stage entrepreneurs (as defined above) who report that at least 25% of their customers are from foreign countries.

Established business ownership rate

Percentage of individuals aged 18-64 who are currently an owner-manager of an established business, i.e., owning and managing a running business that has paid salaries, wages, or any other payments to the owners for more than 42 months.

Business discontinuation rate

Percentage of individuals aged 18-64 who, in the past 12 months, have discontinued a business, either by selling, shutting down, or otherwise discontinuing an owner/management relationship with the business.
Note: this is NOT a measure of business failure rates.

Individual attributes of a potential entrepreneur

Perceived opportunities

Percentage of individuals aged 18-64 involved in any stage of entrepreneurial activity excluded who see good opportunities to start a business in the area where they live.

Perceived capabilities

Percentage of individuals aged 18-64 involved in any stage of entrepreneurial activity excluded who believe they have the required skills and knowledge to start a business.

Entrepreneurial intentions

Percentage of individuals aged 18-64 involved in any stage of entrepreneurial activity excluded who are latent entrepreneurs and who intend to start a business within three years.

Fear of failure rate

Percentage of individuals aged 18-64 involved in any stage of entrepreneurial activity excluded who report that fear of failure would prevent them from setting up a business.

Source: Global Entrepreneurship Monitor 2014. Global Report

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Sweden's GEM team 2014 consisted of Pontus Braunerhjelm, Professor at KTH Royal Institute of Technology and Research Director at Swedish Entrepreneurship Forum, Carin Holmquist, Professor Stockholm School of Economics, Johan P. Larsson, PhD Jönköping International Business School and Swedish Entrepreneurship Forum, Per Thulin, PhD Royal Institute of Technology and Swedish Entrepreneurship Forum and Lisa Silver, Project Manager Swedish Entrepreneurship Forum.

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GEM

SWEDISH ENTREPRENEURSHIP FORUM

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PREFACE

Swedish Entrepreneurship Forum hereby presents *The Entrepreneurial Code – A comparative study of entrepreneurial dynamics in China, Europe and the U.S.*, based on data from the Global Entrepreneurship Monitor (GEM). GEM is the most comprehensive worldwide investigation on entrepreneurship that annually measures and analyzes entrepreneurial activities, aspirations and attitudes. The project has since the start in 1999 grown from ten participating countries to 73 in the 2014 survey. Altogether 206 000 individuals were interviewed together with 3 936 national experts on entrepreneurship. The survey covers 72 percent of the world's population and 90 percent of global GDP. The launch of the global report was made at a conference in Mexico in February and can be downloaded from the GEM Consortium website, www.gemconsortium.org.

GEM provides an annual and comprehensive snapshot of the level, aspirations and attitudes to entrepreneurship among the population, i.e. not only the entrepreneurs themselves. The analysis also draws attention to economic policy conditions for entrepreneurship, growth and innovation. International comparisons are made possible through extensive coordination of methodology and wording of the questionnaires and analyses.

The Entrepreneurial Code examines the similarities and differences between the dominating economic regions in terms of level of entrepreneurial activity, entrepreneurs' ambition to grow, internationalize and to innovate, as well as the attitudes towards entrepreneurship. We present the development over time as well as the levels for a large number of variables related to activity, ambition and attitude. In addition, we compare entrepreneurial activity to intrapreneurial efforts undertaken by employees in already existing firms.

As usual, the findings, policy recommendations and the analysis presented in the report represent the views of the authors and is not necessarily shared by The Swedish Entrepreneurship Forum.

Stockholm, May 2015

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INTRODUCTION AND SUMMARY

1.1 THE GLOBAL ENTREPRENEURSHIP MONITOR (GEM) – AN INTRODUCTION

The 16th Global Entrepreneurship Monitor Report (GEM) was published in 2015.[1] The report annually examines individual attitudes, activities and ambitions with respect to entrepreneurship around the world. Since the first survey, which covered 10 countries, was conducted in 1999 the study has grown to include 206,000 respondents in 73 countries in 2014, representing over 72 percent of the world's population and 90 percent of world GDP. This makes GEM the largest ongoing study of entrepreneurship and entrepreneurial dynamics in the world.

The current report focuses on entrepreneurial development in innovation-driven economies and China. More precisely, we will discuss how entrepreneurial activities, ambitions and attitudes have evolved over time in the EU-countries, the U.S. and China. Part of the analysis will be narrowed to the larger EU-countries (France, Germany, Italy and the UK), China, Sweden and the U.S., while the results for smaller EU-countries (Belgium, Ireland and Netherlands) and the Nordic countries (Denmark, Finland and Norway) will be presented as weighed averages of their respective groups. We will explore how these different countries and country groups compare with one another and whether there are lessons to be learned from divergent entrepreneurial patterns.

This introductory chapter describes the GEM model and briefly summarizes the global results of the 2014 survey, while chapter 2 presents more detailed results for various European countries, the U.S. and China. Subsequently, chapter 3 presents an analysis of the well-being of entrepreneurs compared with that of employees. Finally, conclusions and policy recommendations are provided in chapter 4.

THE GEM CONCEPTUAL FRAMEWORK

The GEM model is based on the idea that entrepreneurship is key to a country's prosperity and that this applies, albeit through different channels and in various ways, regardless of the degree of a country's economic development.

The objective of the model is to map the entrepreneurial process, beginning with the potential entrepreneur, moving to the start-up of a business, then to an established business, and finally to a potential

1. *The global report can be downloaded from www.gemconsortium.org.*

Figure 1.1: The entrepreneurial process

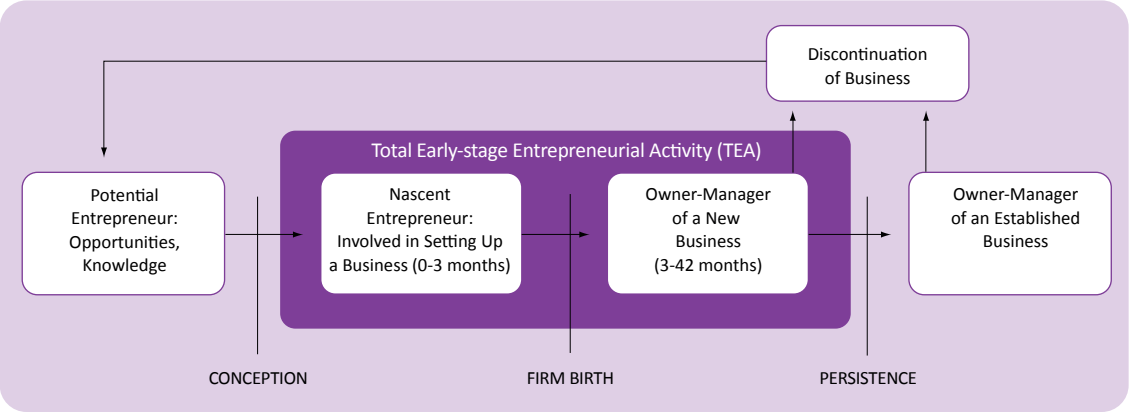
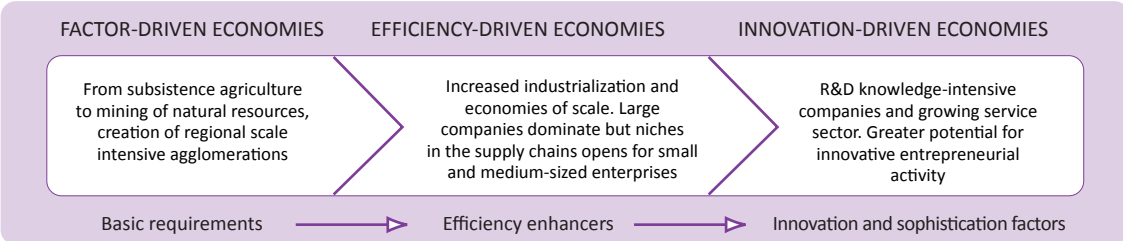


Figure 1.2: Characteristics and key concepts, economic development phases



discontinuation of the business. The GEM differs from similar projects in that it takes the individual's perspective on entrepreneurial activities, ambitions and attitudes.[2]

The GEM methodology focuses on the separate stages that characterize the entrepreneurial process (Figure 1.1). The starting point is the individual's potential, i.e., whether an individual is considering exploiting identified opportunities and believes she or he can start and run a firm. When the potential entrepreneur has converted perceived opportunities and capabilities into activity, the process moves to the next phase – that of the nascent entrepreneur – someone who is involved in starting a business during its first three months. The next stage is ownership and management of a new business, a period that runs from three months to 3.5 years after the start of the business. These two phases form the foundation for the measure of TEA (Total Early-Stage Entrepreneurial Activity) – which is a central part of the GEM survey. The GEM survey also collects data on businesses that are older than 3.5 years. These are defined as established businesses. Finally, information is gathered on the discontinuation of businesses. This is the basic structure of the model that forms the basis for the results presented in this report.

The participating countries in the survey are divided by geographic region and different stages of economic development. The three different stages of development are defined as factor-driven, efficiency-driven and innovation-driven economies. Figure 1.2 illustrates these stages and describe in more detail the characteristics of each category, while Table 1.1 classifies the 73 countries that participated in the GEM study in 2014 by geographic region and stage of economic development.

1.2 SUMMARY OF THE GLOBAL GEM REPORT 2014

ENTREPRENEURIAL ATTITUDES, PERCEIVED OPPORTUNITIES, CAPABILITIES AND INTENTIONS

Promoting entrepreneurial awareness and positive attitudes towards entrepreneurship is a high priority on most countries' policy agendas. The underlying

2. *Definitions and terms are explained on the inside of the cover of the report.*

Table 1.1: Countries by geographic region and economic development

Country	Factor-driven economies	Efficiency-driven economies	Innovation-driven economies
Africa	Angola, Botswana, Burkina Faso, Cameroon, Uganda	South Africa	
Asia & Oceania	Philippines, India, Iran, Vietnam	Indonesia, Kazakhstan, China, Malaysia, Thailand	Australia, Japan, Qatar, Singapore, Taiwan
Latin America & Caribbean	Bolivia	Argentina, Barbados, Belize, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Jamaica, Mexico, Panama, Peru, Surinam, Uruguay	Puerto Rico, Trinidad & Tobago
Europe – EU		Croatia, Lithuania, Poland, Romania, Hungary	Belgium, Denmark, Estonia, Finland, France, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Slovakia, Slovenia, Spain, UK, Sweden, Germany, Austria
Europe – non EU		Bosnia-Hercegovina, Georgia, Kosovo, Russia	Norway, Switzerland
North America			Canada, USA

notion is that an overall positive view of entrepreneurship may result in more people taking the plunge into business start-ups. Consequently, the GEM survey also gathers data on attitudes and entrepreneurial ambitions, in addition to data on entrepreneurial activities. Attitudes towards entrepreneurship include an individual's perceived ability to start a business, perceived business opportunities and fear of failure – all of which can be expected to influence entrepreneurial activity. Obviously, more severe consequences of failure can deter an individual from exploring a perceived business opportunity.

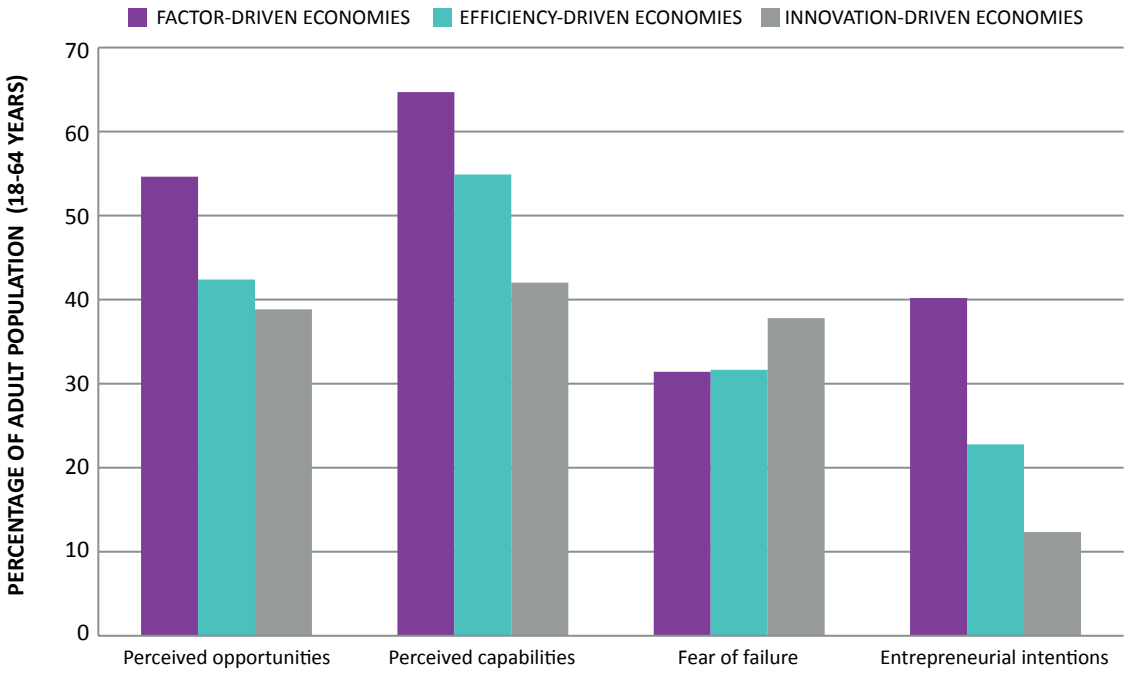
In addition to factors at the individual level, there are contextual conditions, such as the dynamics of the labour market and other institutions (laws and regulations), that may affect individuals' propensities to engage in entrepreneurial activity. Hence, a complex mix of individual, social and contextual factors underlie individuals' decisions to engage in entrepreneurial endeavours. GEM enables us to capture this complexity by providing individually based data.

As shown in Figure 1.3, there are considerable differences between countries in different stages of economic development regarding perceived entrepreneurial opportunities, individuals' abilities to start businesses and entrepreneurial intentions. A generally established pattern is that perceived opportunities and capabilities tend to decline as economic development increases.

The highest average levels of perceived business opportunities (55 percent) and perceived capabilities (65 percent) are found in the factor-driven countries, while the lowest are found in the innovation-driven countries (39 and 44 percent, respectively). Among the innovation-driven countries, Sweden has the highest proportion of the population that considers itself able to identify good business opportunities (70 percent). However, only 37 percent view themselves as having sufficient capabilities to start a business. Denmark and Norway exhibit similar patterns.

Another interesting pattern that emerges in the European Union is that countries that have experienced long-term economic problems do not differ

Figure 1.3: Individual attributes in the GEM economies in 2014, by phase of economic development



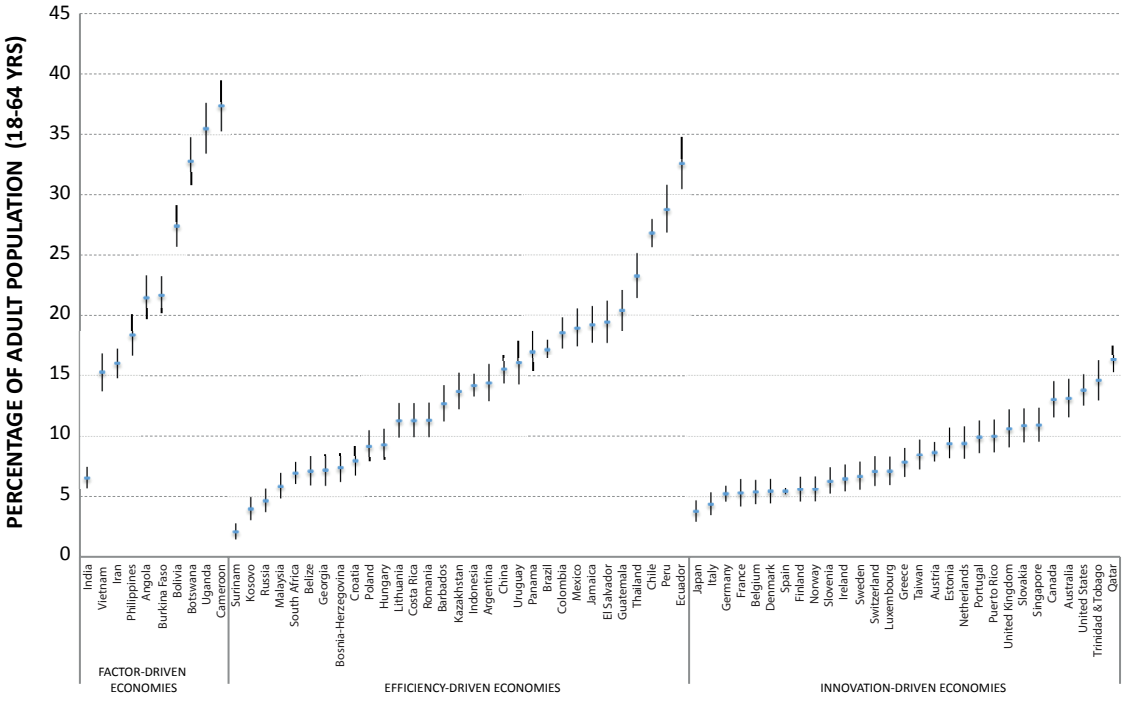
significantly from other countries in terms of perceived capabilities to start and run businesses. However, they do express the lowest levels of perceived entrepreneurial opportunities (17 percent in Slovenia, 18 percent in Croatia, 20 percent in Greece, 23 percent in Spain and 23 percent in Portugal).

The next step in the entrepreneurial process starts when a potential entrepreneur decides he or she intends to start a new business in the next three years; these are so-called potential entrepreneurs. Also, entrepreneurial intent differs between countries in different stages of economic development, with factor-driven economies generally exhibiting significantly higher levels of entrepreneurial intent. This can, at least partly, be explained by the fact that there are fewer choices in the labour markets of these countries. In efficiency-driven and (especially) innovation-driven economies, entrepreneurial intentions are lower.

There is large variation in the data, which can be illustrated by Botswana, where 63 percent of respondents state that they intend to start a business within three years, while the corresponding figure for Japan is three percent. Among innovation-driven countries, Qatar, Trinidad and Tobago and Taiwan have the highest levels of entrepreneurial intentions (50, 34 and 26 percent).

Perceived business opportunities, high confidence in one's own capabilities and entrepreneurial intentions are not sufficient to lead to a high level of entrepreneurial activity. Fear of failure in entrepreneurial ventures may leave a large portion of potential opportunities untapped. This fear is greater in innovation-driven countries than in efficiency- and factor-driven countries. In several countries that have experienced economic crises in recent years, such as Greece, Portugal and Italy, high proportions of respondents express fear of failure, while low proportions of respondents see perceived business opportunities. It is important to note that fear of failure partly relates to the type of business a respondent intends to start, which also tends to correlate with degree of economic development. In factor-driven countries characterised by large economic inequalities, entrepreneurial intentions often focus on local, necessity-based entrepreneurship, with limited growth and development ambitions.

Figure 1.4: Total early-stage entrepreneurship (TEA) in 2014, by economic development



TOTAL ENTREPRENEURIAL ACTIVITY (TEA) – ENTREPRENEURSHIP IN THE EARLY STAGES

As noted above, Total Entrepreneurial Activity (TEA) is a central part of the GEM survey. A country's TEA is defined as the proportion of the population aged 18–64 who are actively involved in starting a business in either the very early phase (nascent entrepreneurship, 0–3 months) or the phase that extends to 3.5 years after a company's inception.

Figure 1.4 shows TEA for all countries, categorized by development. Factor-driven economies are shown to have the highest proportion of entrepreneurial activity, with an average of 23 percent, while the corresponding proportion is nine percent for innovation-driven economies.[3]

Among innovation-driven economies, the highest TEA levels are found in Qatar (16 percent), Trinidad & Tobago (15 percent), the United States (14 percent), Australia (13 percent) and Canada (13 percent), whereas the lowest levels are found in Japan and Italy (four percent).

Motivational reasons

The motivational reasons for starting a business vary widely across countries. At the individual level, this is captured in the GEM model by the distinction between necessity- and opportunity-based entrepreneurship. In the former case, reasons to start a business are related to limited possibilities to earn a livelihood relative to perceived business opportunities. Among those who view entrepreneurship as an opportunity rather than a necessity, the study also discerns improvement-driven opportunity, which pertains to entrepreneurs driven by the opportunity to earn more money and achieve greater independence rather than the need to maintain an income. The share of necessity-based entrepreneurship in TEA is clearly linked to the level of economic development, with necessity-driven entrepreneurship decreasing as economic development increases (Table 1.2).

Necessity-driven entrepreneurship often relates to fundamental economic factors. In developing countries, start-ups are often a consequence of a

Table 1.2: Entrepreneurial activity and motivational reasons by level of economic development

	Factor-driven economies	Efficiency-driven economies	Innovation-driven economies
Total Entrepreneurial Activity (TEA)	23	14	9
Necessity-driven entrepreneurship	28	27	18
Opportunity-driven entrepreneurship	69	70	78
Improvement-driven entrepreneurship	47	45	55

Note: TEA is the percentage of the adult population engaged in early stage entrepreneurial activity. Figures are the proportions of TEA that fall within each motivational category.

lack of jobs and undeveloped social security systems, which force people to try to acquire alternative livelihoods through entrepreneurship. As economies develop, the supply of jobs usually increases, resulting in fewer people being forced into necessity-based entrepreneurship. Factor-driven economies are characterised by the highest levels of entrepreneurial activity in the GEM study but also the highest proportion of necessity-based entrepreneurship. In 2014, the average of necessity-based entrepreneurship was 28 and 27 percent, respectively, for factor-driven and efficiency-driven economies, while the corresponding proportion for innovation-driven economies was 18 percent.

Innovation-driven economies exhibit, on average, the lowest levels of entrepreneurial activity but the highest proportion of opportunity-based entrepreneurship. In these economies, the entrepreneur identifies and pursues an opportunity that can improve not only his/her income but also his/her degree of perceived independence. In 14 of the 30 innovation-driven countries, over 80 percent of entrepreneurship is opportunity-driven, and in an additional 12 of the innovation-driven countries, 60 percent of entrepreneurship is improvement-driven.

Gender aspects of early-stage entrepreneurial activity

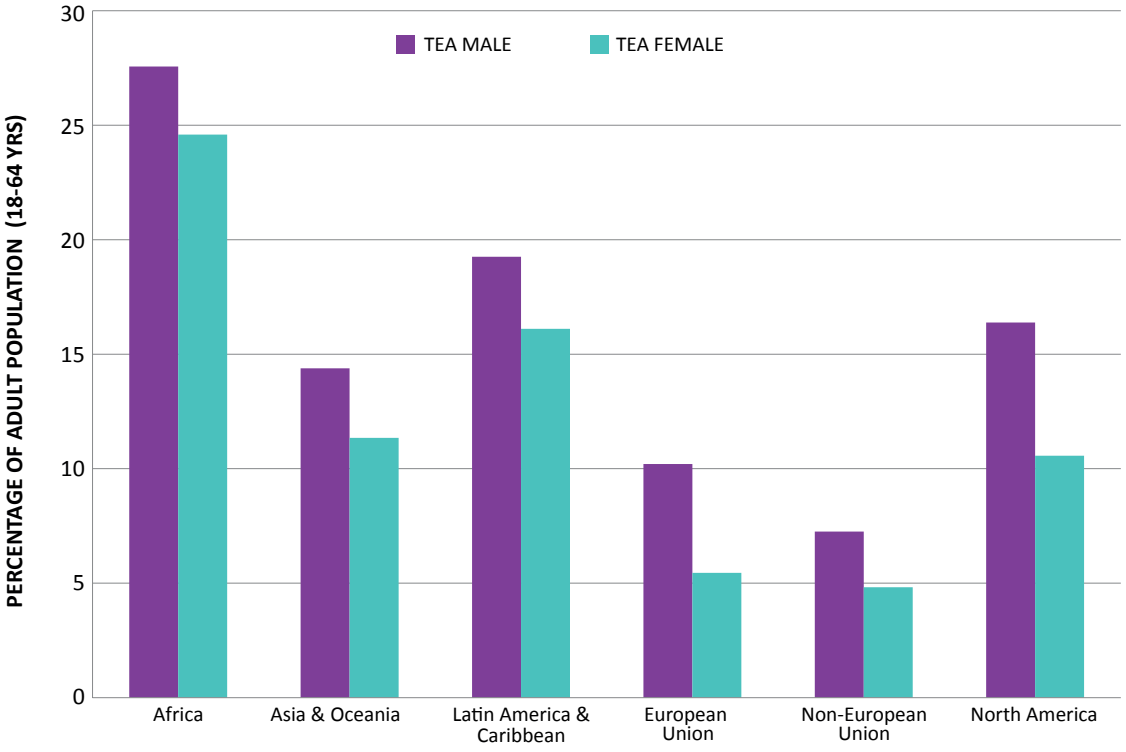
Through the years, GEM has shown that the early stages of entrepreneurial activity among women vary considerably worldwide. These differences between countries reflect differences in culture and tradition regarding women's participation in the economy and more general societal perceptions of women's role in the labour market.

Men generally dominate entrepreneurship in the early stages all over the world (Figure 1.5), but as previous GEM studies have shown, there is no notable difference between women and men in terms of perceived opportunities and capabilities. Only the fear of failure is somewhat higher among women than men.

Another pattern emerges when the motivational reasons for entrepreneurship in the early stages are examined, namely, that in all regions, women's entrepreneurship is more often necessity-driven than men's. One group of countries (United Kingdom, India, Iran and Italy) exhibits the opposite pattern in that relatively more men start their businesses out of necessity. Furthermore, some countries (Australia, Austria, Denmark, Kazakhstan, Luxembourg, the Netherlands, Singapore, South Africa and Thailand) exhibit a fairly balanced proportion of necessity-driven entrepreneurship across genders.

The two countries with the largest differences between men and women in the proportion of necessity-driven entrepreneurship is Chile, with 27 percent for women, compared with 10 percent for men, and Burkina Faso, with 33 percent for women compared with 13 percent for men.

Figure 1.5: Male and female early-stage entrepreneurial activity (TEA) in 2014, by geographic region



ENTREPRENEURIAL EMPLOYEE ACTIVITY (EEA)

Since 2011, GEM has measured employees' entrepreneurial activity (EEA) to illustrate how entrepreneurship may be channelled between different occupational choices, implying that employees may also engage in entrepreneurial activities. These different types of entrepreneurship combined, it may be argued, constitute an economy's entrepreneurial capacity. GEM operationalizes employees' entrepreneurial activity as a situation in which an employee, during the last three years, has actively participated or had a leading role in developing an idea for a new activity or preparing and implementing a new activity. The levels of EEA increase along with countries' levels of economic development; thus, it is highest in innovation-driven economies and lowest in factor-driven economies.

EEA is far less common in the world than TEA, with the largest differences between TEA and EEA found in the African, Latin American and the Caribbean economies. North America and EU economies have the highest incidence of EEA (Figure 1.6).

ENTREPRENEURIAL AMBITIONS FOR GROWTH, INNOVATION AND INTERNATIONALIZATION

GEM also measures ambitions associated with entrepreneurship. More precisely, ambitions are defined as entrepreneurs' expected job creation together with their innovation and internationalization efforts. These types of entrepreneurial ambitions have been positively linked to economic development.[4]

Growth ambitions

Growth ambitions of entrepreneurs in the early stages are directly connected to political priorities around the world, i.e., the creation of jobs. Young and small businesses are of particular interest in this respect, and their importance in contributing to job creation is established in the literature.[5] GEM measures expected job growth associated with companies by asking early stage entrepreneurs how many employees they expect to hire in the coming five years.

4. *Amorós et al., (2013).*
5. *Birch, D, (1979); Haltiwanger et al. (2010); Braunerhjelm et al. (2014).*

Figure 1.6: Comparison of presence of TEA and EEA in 2014, by geographic regions

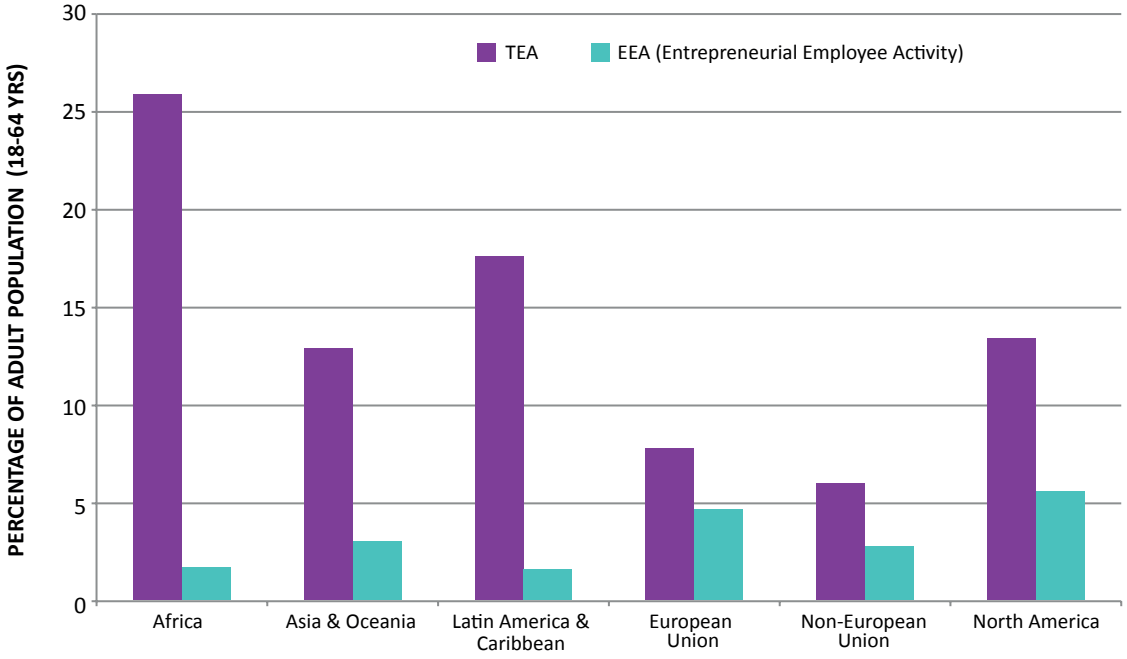
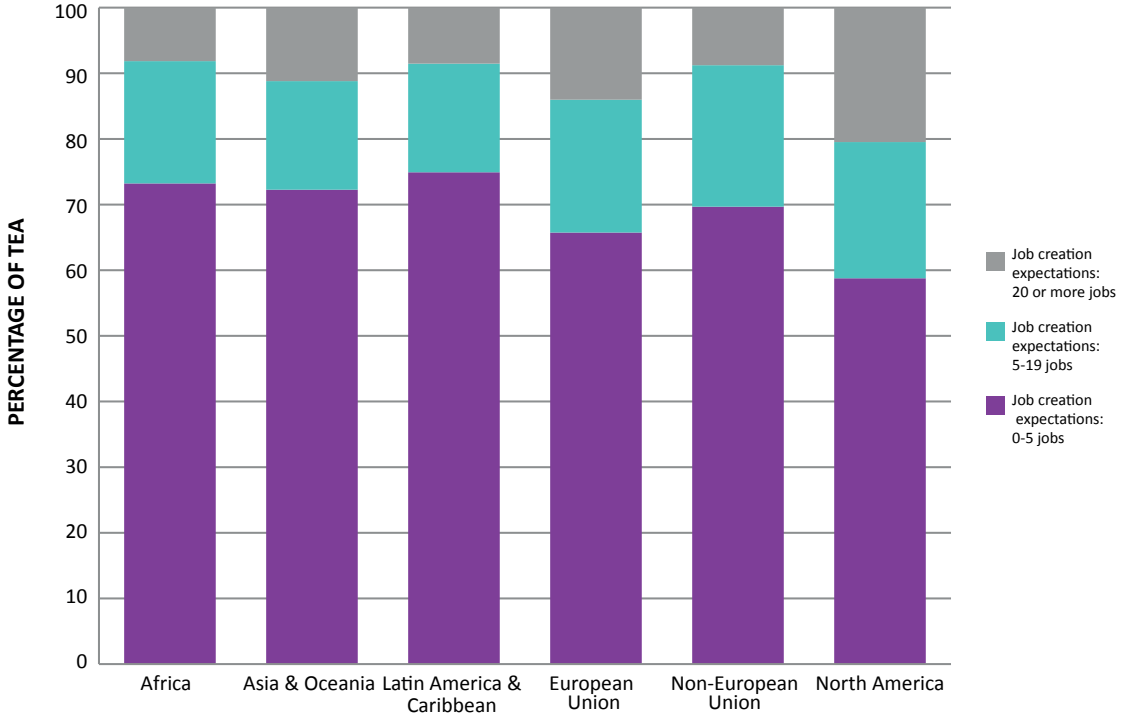


Figure 1.7: Expected job growth by geographic region



The figure shows that growth ambitions are particularly strong in North America, where over 20 percent of entrepreneurs believe they will employ more than 20 people within five years. The corresponding figure for entrepreneurs in the EU is approximately 15 percent. The lowest growth ambitions are found in Africa, Latin America and the Caribbean.

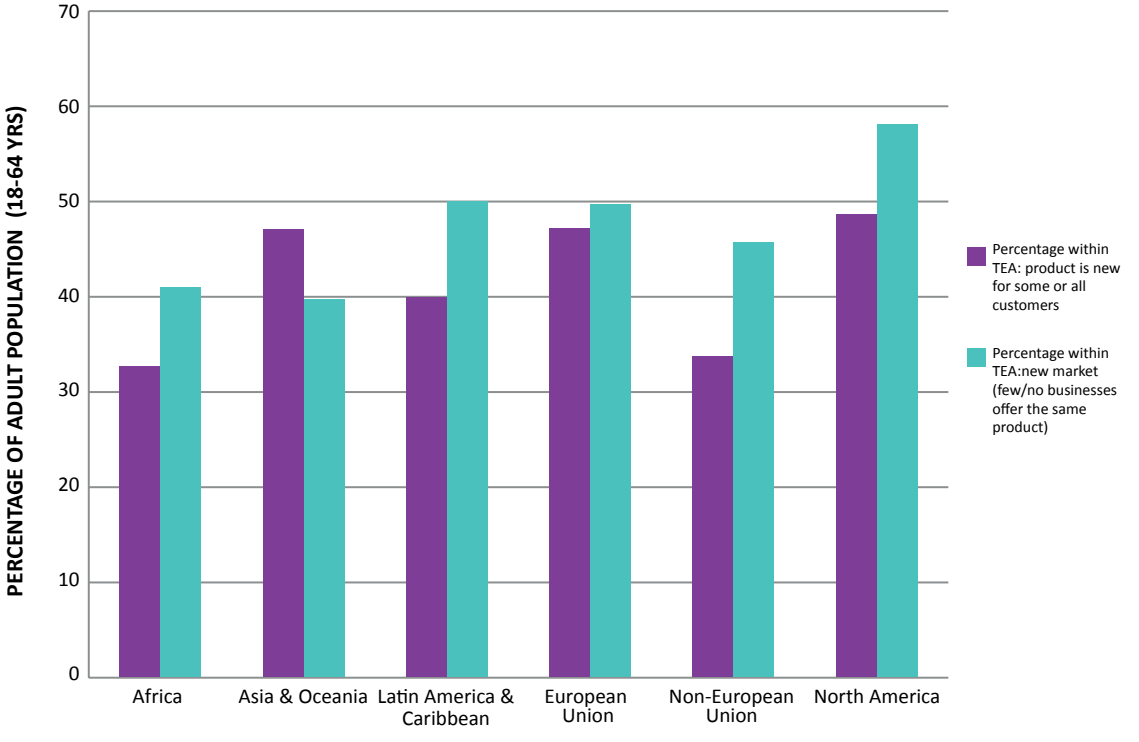
Innovative orientation

While expectations of job growth and how they are realized constitute a visible effect of entrepreneurship in the short term, innovation is indicative of the long-term prospects of entrepreneurs. Innovation here refers to the Schumpeterian view that new products, services, processes and markets drive the further development of a country.[6]

GEM measures the innovative orientation of a business from two perspectives (product and market). The study examines the extent to which entrepreneurial products or services are new to some or all customers in the market and whether few or no competitors offer the same product or service. It is important to note that this measure is rather context-dependent, as some products/services, despite globalization, may be new to internal markets in many economies though already available in other markets. Nevertheless, a high degree of innovation tends to positively impact the economic development of the country in question.

The North American economies are more innovation-oriented than the rest of the world in both respects. Asia and Oceania shows a different pattern of high product innovation but less introduction of products to new markets. The African economies, with the exception of South Africa, exhibit low innovative orientation in both respects. The EU countries are on average more innovation-oriented in both dimensions measured by GEM than most other regions (Figure 1.8).

Figure 1.8: Innovative orientation of early-stage entrepreneur (TEA) in 2014, by geographic regions (% of TEA)



6. *Schumpeter (1942).*

Internationalization

As globalization proceeds, it becomes increasingly important for new and young firms to penetrate foreign markets. While innovation may pave the way for small and new companies, such firms must also acquire skills to expand into markets for their products, particularly for ventures originating in countries with small domestic markets.

The EU countries, with their tradition of international trade and geographical proximity to various markets, have the highest percentage of young companies that indicate that at least 25 percent of their customers are located outside their countries. Several small EU countries exhibit the highest degree of internationalization: In Luxembourg, 42 percent of young companies have more than 25 percent of their customers abroad, followed by Croatia (38 percent), Belgium (33 percent) and Estonia (24 percent). The same is evident in countries outside the EU, where Kosovo leads with 33 percent, followed by Switzerland with 31 percent. Other small countries, such as Suriname, Singapore and Barbados, also exhibit high internationalization.

The African economies report the least intense internationalization of young businesses (almost 70 percent of entrepreneurs in the early stages entirely lack customers outside their respective countries). The exception is South Africa, where 26 percent of start-up companies have more than 25 percent of their customers abroad.

1.3 SUMMARY OF THE FINDINGS OF THE GLOBAL GEM REPORT 2014

The results of the Global GEM report 2014 confirm many of the findings of previous reports. The least economically developed parts of the world generally exhibit the highest levels of entrepreneurial activity but also the highest levels of entrepreneurship driven by necessity rather than perceived opportunities.

Perceived business opportunities and capabilities to start and run a business are also greatest in these factor- and efficiency-driven countries. The innovative orientation of businesses increases as economic development increases. GEM 2014 shows, once again, that there is a considerable gender gap in most countries and that women's entrepreneurship is more often necessity-driven than men's.

In the global GEM report, the authors stress the importance that decision-makers understand that different types of entrepreneurship coexist (early-stage entrepreneurship, established businesses, employees' entrepreneurial activities, etc.). Identification and support of these different types of entrepreneurship and recognition, for example, of entrepreneurial activity manifested in established businesses contributes to an improved understanding of a country's entrepreneurial capacity and potential.

Table 1.3: Entrepreneurial activity in GEM 2014 distributed on level of development

Entrepreneurial activities and attitudes in GEM-countries 2014 distributed on level of development		Nascent entrepreneurship rate	New business ownership	Early-stage entrepreneurial activity (TEA)	Established business ownership rate	Discontinuation of businesses (%	Necessity-driven (% of TEA)	Improvement-driven opportunity (% of TEA)
Level 1: Factor-driven economies (including countries in transition towards level 2)	Angola	9.5	12.4	21.5	6.5	15.1	24.5	43.4
	Bolivia	21.5	7.1	27.4	7.6	6.9	22.8	51.7
	Botswana	23.1	11.1	32.8	5.0	15.1	30.3	54.7
	Burkina Faso	12.7	9.7	21.7	17.7	10.8	22.3	52.8
	Cameroon	26.4	13.7	37.4	11.5	17.7	33.5	40.5
	India	4.1	2.5	6.6	3.7	1.2	31.7	36.5
	Iran	7.5	8.7	16.0	10.9	5.7	38.7	49.6
	Philippines	8.2	10.5	18.4	6.2	12.6	29.4	33.5
	Uganda	8.9	28.1	35.5	35.9	21.2	18.9	54.3
	Vietnam	2.0	13.3	15.3	22.2	3.6	29.7	53.3
	Average (unweighted)	12.4	11.7	23.3	12.7	11.0	28.2	47.0
Level 2: Efficiency-driven economies (including countries in transition towards level 3)	Argentina	9.5	5.2	14.4	9.1	4.9	28.0	43.5
	Barbados	8.5	4.2	12.7	7.1	3.7	14.6	53.1
	Belize	4.3	3.0	7.1	3.7	4.7	13.1	47.6
	Bosnia and Herzegovina	4.5	2.9	7.4	6.7	4.5	50.8	25.2
	Brazil	3.7	13.8	17.2	17.5	4.1	29.0	57.8
	Chile	16.6	11.0	26.8	8.8	8.3	17.6	62.2
	China	5.4	10.2	15.5	11.6	1.4	33.2	45.4
	Colombia	12.4	6.7	18.5	4.9	5.6	33.3	51.6
	Costa Rica	7.6	3.7	11.3	2.5	4.9	19.3	63.5
	Croatia	6.0	2.0	8.0	3.6	3.8	46.6	28.7
	Ecuador	24.5	9.9	32.6	17.7	8.1	29.4	35.0
	El Salvador	11.4	8.7	19.5	12.7	10.8	32.0	54.5
	Georgia	4.1	3.2	7.2	7.3	2.5	48.6	31.0
	Guatemala	12.0	9.2	20.4	7.4	4.4	40.6	38.9
	Hungary	5.6	3.9	9.3	7.9	3.1	33.2	36.3
	Indonesia	4.4	10.1	14.2	11.9	4.2	20.5	38.0
	Jamaica	7.9	11.9	19.3	14.4	6.3	32.1	33.5
	Kazakhstan	8.1	6.2	13.7	7.4	2.9	26.4	33.7
	Kosovo	2.5	1.8	4.0	2.1	6.6	22.0	29.1
	Lithuania	6.1	5.3	11.3	7.8	2.9	19.6	43.8
	Malaysia	1.4	4.6	5.9	8.5	2.0	17.5	64.0
	Mexico	12.7	6.4	19.0	4.5	5.6	22.5	50.0
	Panama	13.1	4.1	17.1	3.4	4.5	26.3	60.2
	Peru	23.1	7.3	28.8	9.2	8.0	16.4	58.9
	Poland	5.8	3.6	9.2	7.3	4.2	36.8	47.1
	Rumania	5.3	6.2	11.3	7.6	3.2	28.9	49.8
	Russia	2.4	2.4	4.7	3.9	1.2	39.0	41.6
	South Africa	3.9	3.2	7.0	2.7	3.9	28.2	35.5
	Surinam	1.9	0.2	2.1	5.2	0.2	5.4	39.8
	Thailand	7.6	16.7	23.3	33.1	4.2	17.8	71.2
	Uruguay	10.5	5.7	16.1	6.7	4.4	16.0	27.3
	Average (unweighted)	8.2	6.2	14.0	8.5	4.5	27.2	45.1
Level 3: Innovation-driven economies	Australia	7.6	5.7	13.1	9.8	3.9	17.6	63.8
	Austria	5.8	3.1	8.7	9.9	2.7	11.0	37.4
	Belgium	2.9	2.5	5.4	3.5	2.3	30.7	43.1
	Canada	7.9	5.6	13.0	9.4	4.2	15.7	63.3
	Denmark	3.1	2.5	5.5	5.1	2.2	5.4	60.2
	Estonia	6.3	3.5	9.4	5.7	2.0	15.1	41.2
	Finland	3.4	2.3	5.6	6.6	2.3	15.6	63.1
	France	3.7	1.7	5.3	2.9	1.7	16.1	69.2
	Germany	3.1	2.3	5.3	5.2	1.7	23.2	53.7
	Greece	4.6	3.4	7.9	12.8	2.8	34.8	30.5
	Ireland	4.4	2.5	6.5	9.9	1.9	29.7	48.6
	Italy	3.2	1.3	4.4	4.3	2.1	13.6	38.6
	Japan	2.7	1.3	3.8	7.2	1.1	18.8	68.2
	Luxembourg	4.9	2.3	7.1	3.7	2.6	11.8	59.8
	Netherlands	5.2	4.5	9.5	9.6	1.8	15.7	62.8
	Norway	2.8	3.0	5.7	5.4	1.9	3.5	69.0
	Portugal	5.8	4.4	10.0	7.6	3.0	27.4	49.3
	Puerto Rico	8.8	1.3	10.0	1.3	3.6	20.5	51.1
	Qatar	11.3	5.4	16.4	3.5	4.8	21.5	54.4
	Singapore	6.4	4.8	11.0	2.9	2.4	11.4	70.8
	Slovak Rep.	6.7	4.4	10.9	7.8	5.2	32.6	51.8
	Slovenia	3.8	2.7	6.3	4.8	1.5	25.5	44.8
	Spain	3.3	2.2	5.5	7.0	1.9	29.8	33.5
	Sweden	4.9	1.9	6.7	6.5	2.1	7.9	56.2
	Switzerland	3.4	3.8	7.1	9.1	1.5	14.4	58.1
	Taiwan	4.4	4.1	8.5	12.2	5.1	13.3	66.0
	Trinidad & Tobago	7.5	7.4	14.6	8.5	2.8	12.0	64.3
	UK	6.3	4.5	10.7	6.5	1.9	12.9	52.7
	USA	9.7	4.3	13.8	6.9	4.0	13.5	66.9
	Average (unweighted)	5.3	3.4	8.5	6.7	2.7	18.0	54.9

2

A CROSS-COUNTRY ANALYSIS OF ENTREPRENEURIAL ACTIVITY, AMBITION AND ATTITUDES[7]

Chapter 2 contains three sections based on the GEM's classification of entrepreneurship on entrepreneurial activities, entrepreneurial ambitions and societal attitudes towards entrepreneurship. Our comparison involves seven countries (China, France, Germany, Italy, UK, USA and Sweden) and two country groups – small EU-countries (Belgium, Ireland and the Netherlands) and the Nordic countries (Denmark, Finland and Norway but not Sweden).

These countries form the basis for international comparisons when we examine entrepreneurial activity in section 2.1 (level, types, gender, age and industry composition, etc.) and entrepreneurial attitudes in section 2.3 (intention, perceived opportunities and capabilities, fear of failure, career choice, etc.). When examining entrepreneurial ambitions (employment growth, market position, innovation and internationalization), all innovation-driven economies are included in the analysis.

Time series running from 2002 to 2014 will be presented for most of the variables presented below. In addition to comparing rates of individual participation across countries, we will present details of the various phases of entrepreneurship: potential entrepreneurs, individuals who intend to found businesses, early-stage entrepreneurs who are starting and running new businesses and owners of established businesses.

2.1 ENTREPRENEURIAL ACTIVITY

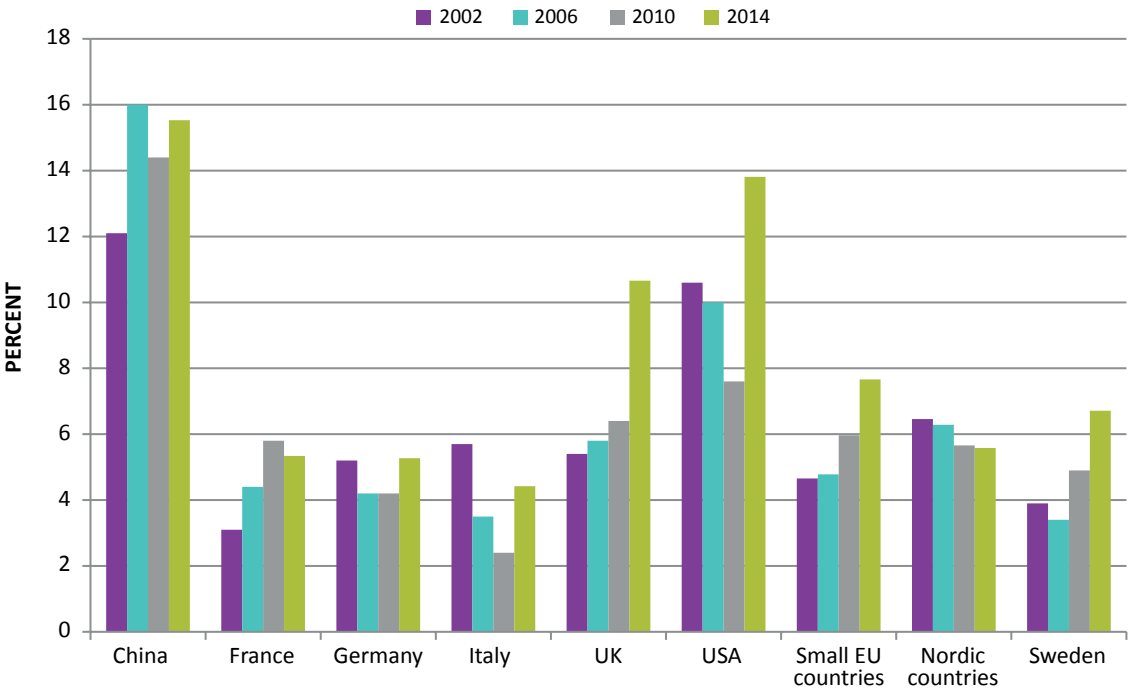
ENTREPRENEURIAL LEVEL

We distinguish between individuals in the process of starting a business (i.e., nascent entrepreneurship, 0–3 months old), those operating a new business that is older than three months but younger than 3.5 years (new business ownership), and those operating an established business (older than 3.5 years). The nascent entrepreneurship rate and the new business ownership rate together account for total early-stage entrepreneurial activity (TEA) within an economy.

Figure 2.1 compares TEA for seven countries and two groups of countries that participated in the GEM between 2002 and 2014. It is clear that TEA rates vary between three categories of economies with higher average levels of entrepreneurial activity observed for the Anglo-Saxon countries together with China, followed by smaller

7. *For a summary and brief explanation of the National Expert Survey (NES), see Appendix 1.*

Figure 2.1: Total early-stage entrepreneurial activity (TEA)
Percentage of 18–64 year olds in population who are either nascent entrepreneurs or owner-managers of new businesses



Note: Small EU-countries comprise Belgium, Ireland and the Netherlands; Nordic countries comprise Denmark, Finland and Norway.

EU-countries, the Nordic countries and Sweden. The larger EU-economies report somewhat lower levels of entrepreneurial activity. Note that several countries appear to have embarked on an entrepreneurial path over this time period: in particular, entrepreneurship is increasing in the UK but also in France, Sweden and other small EU-countries.[8] We will return to possible explanations of this development below. Another conspicuous feature is that the U.S. entrepreneurial level (almost 14 percent) is about twice that of the EU-countries. Moreover, China is basically on par with the U.S.

Turning to the earliest stage of entrepreneurship – nascent entrepreneurship – the U.S. dominates with almost 10 percent of the adult population in 2014 involved in setting up a business (Figure 2.2). The UK ranks second, while Sweden, a traditional welfare state, is in fourth place, just after China. We observe a notable increase in nascent entrepreneurship in the U.S., the UK, Sweden and, to some extent, other small EU-countries.

Nascent entrepreneurship is important, as it captures the extent to which countries are engaged in market experiments that may generate new and growing firms. Nevertheless, the underlying reasons may differ between countries, as may the societal impact, depending on whether entrepreneurial endeavours are undertaken because institutions are conducive to start-ups or because various support structures subsidize entrepreneurial activities. These two need not conflict with each other, but it is important to identify the drivers of entrepreneurial activity to understand the underlying dynamics.

The next stage of entrepreneurial activity concerns new business ownership rates (young firms between 3–42 months old). According to Figure 2.3, the picture is much more compressed when we consider new businesses. Disregarding China, the U.S. reports the highest shares of the adult population running new firms.[9] However, the share in the U.S. has decreased somewhat over the years and also appears to have shrunk considerably during the economic crisis that started in 2008.

8. *Sweden did however experience an unprecedented decline between 2013 and 2014 (1,5 percentage points), including nascent entrepreneurship and new business ownership. Female entrepreneurship declined with more than two percentage points.*
9. *Data for entrepreneurial activity in China is overall surprisingly high but may reflect the opening up of a formally closed economy and (overoptimistic) attempts to exploit conceived business opportunities.*

Figure 2.2: Nascent entrepreneurship rate
Percentage of the 18–64 year old population who are currently nascent entrepreneurs, i.e., actively involved in setting up businesses they will own or co-own; such a business has not paid salaries or wages or made any other payments to the owners for more than three months.

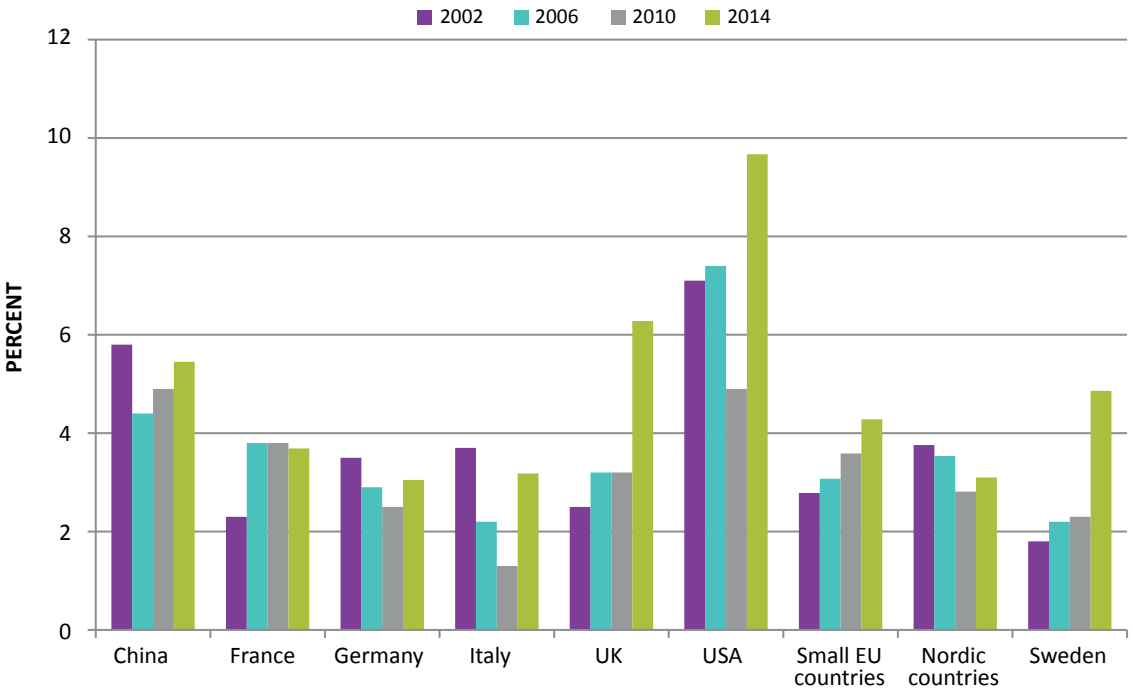
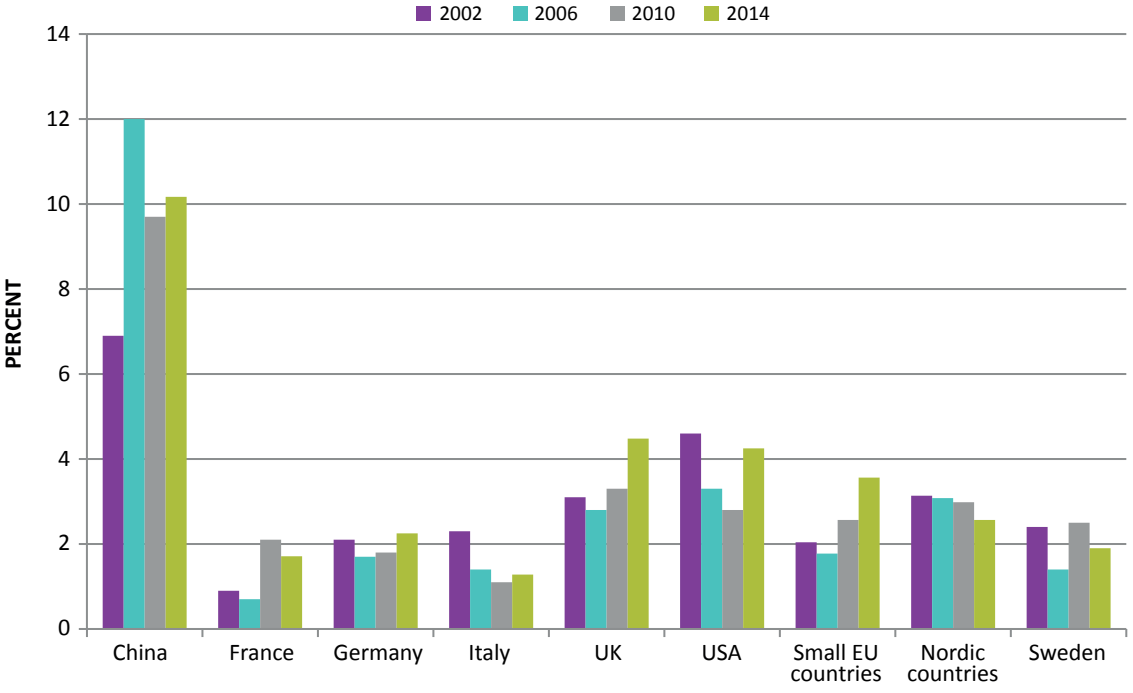
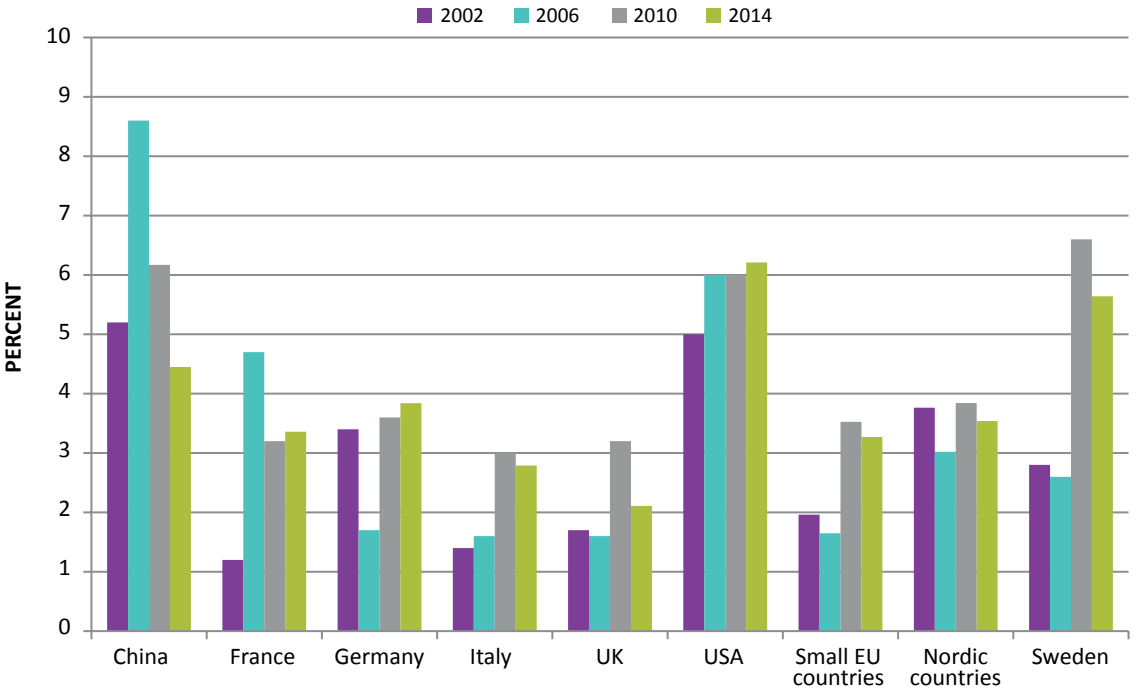


Figure 2.3: New business ownership rate
Percentage of 18–64 year old population who are currently owner-managers of new businesses, i.e., run businesses that have paid salaries or wages or made any other payments to owners for more than three months but not more than 42 months



Note Figure 2.2 and 2.3: Small EU-countries comprise Belgium, Ireland and the Netherlands; Nordic countries comprise Denmark, Finland and Norway.

Figure 2.4: Informal investors rate
Percentage of 18–64 year old population that has personally provided funds for a new business started by someone else in the past three years



Note: Small EU-countries comprise Belgium, Ireland and the Netherlands; Nordic countries comprise Denmark, Finland and Norway.

The pattern varies across countries. The UK and small EU-countries display the most pronounced increase over the studied time period. The low levels in larger EU-countries are noteworthy, particularly, the decline in traditional small business economies, such as Italy.

FUNDING

A critically important precondition for starting a new firm is access to capital. The GEM provides data on the share of the adult population involved in funding new businesses – often referred to as fools, friends and family. Figure 2.4 reveals some interesting findings. First, Sweden turns out to be among the countries with the largest share of informal investors. Indeed, in 2010, Sweden had a higher share than any other country. Together with the U.S. and to some extent China, Sweden stands out as best endowed with early-stage funding individuals. This may explain Sweden's high and increasing share of nascent entrepreneurs. Second, the crisis that started in 2008 does not appear to have deprived countries of their informal investors. Rather, informal investors increased in a number of countries between 2006 (before the crisis) and 2010 (in the midst of the crisis), and for some, it has continued to increase through 2014.

ENTREPRENEURIAL MOTIVE – NECESSITY OR OPPORTUNITY

A key difference in the character of entrepreneurship can be observed by comparing the primary motivations of entrepreneurs. On the one hand, entrepreneurs may be pushed into starting a business out of necessity because they have no other work options and require a source of income – necessity-driven entrepreneurship. On the other hand, they may be pulled into starting businesses because they recognize lucrative business opportunities and choose to pursue them – opportunity-driven entrepreneurship. Entrepreneurs in innovation-driven economies tend to be primarily driven by opportunity-motivated entrepreneurship.

Figures 2.5a and 2.5b clearly illustrate this distinction. Most countries are predominantly characterized by opportunity-driven entrepreneurship, the exception being China. As economies become richer and more developed, the share of necessity-driven

Figure 2.5a: Necessity-driven entrepreneurial activity: relative prevalence
Percentage of those involved in TEA because they have no other work options

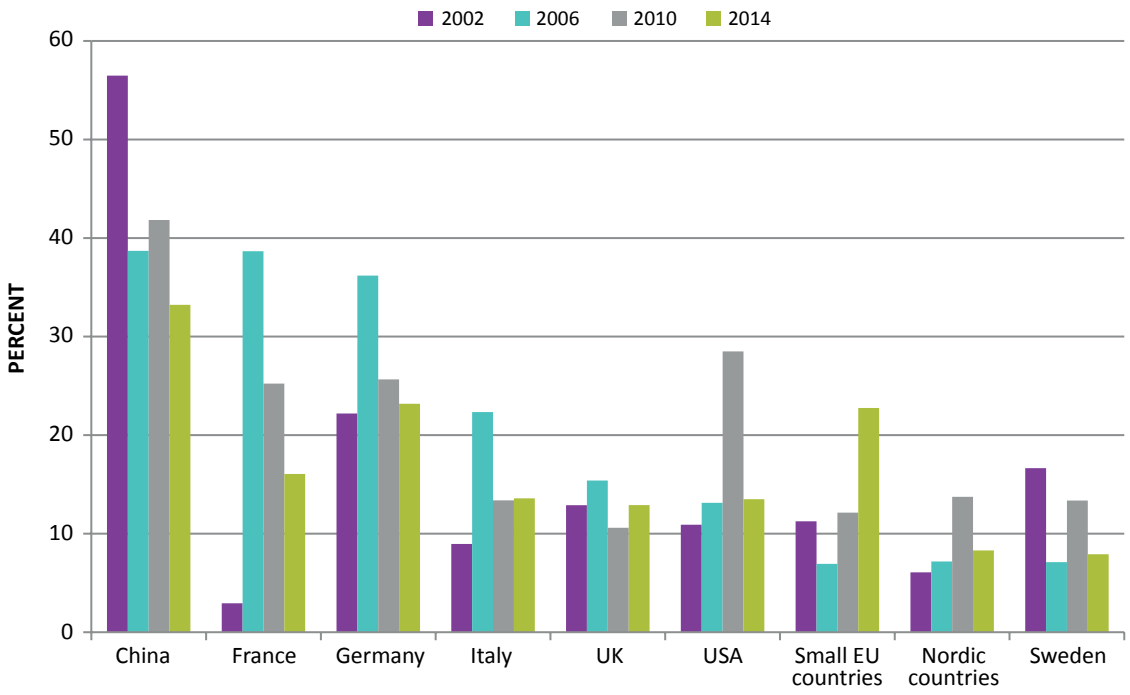
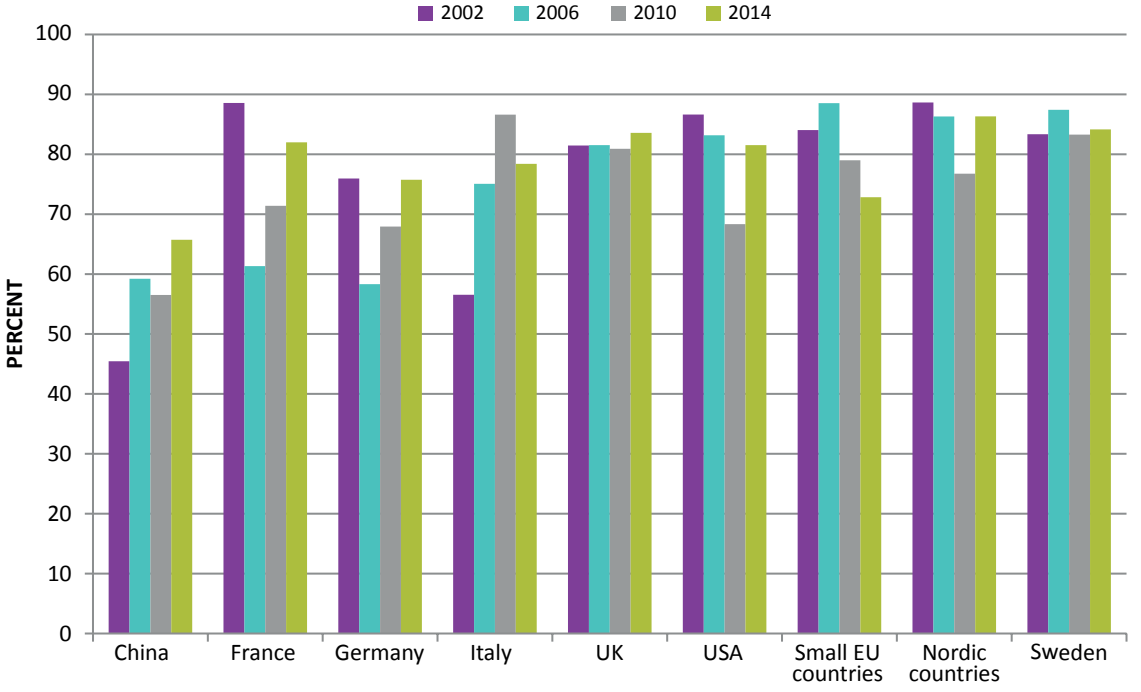
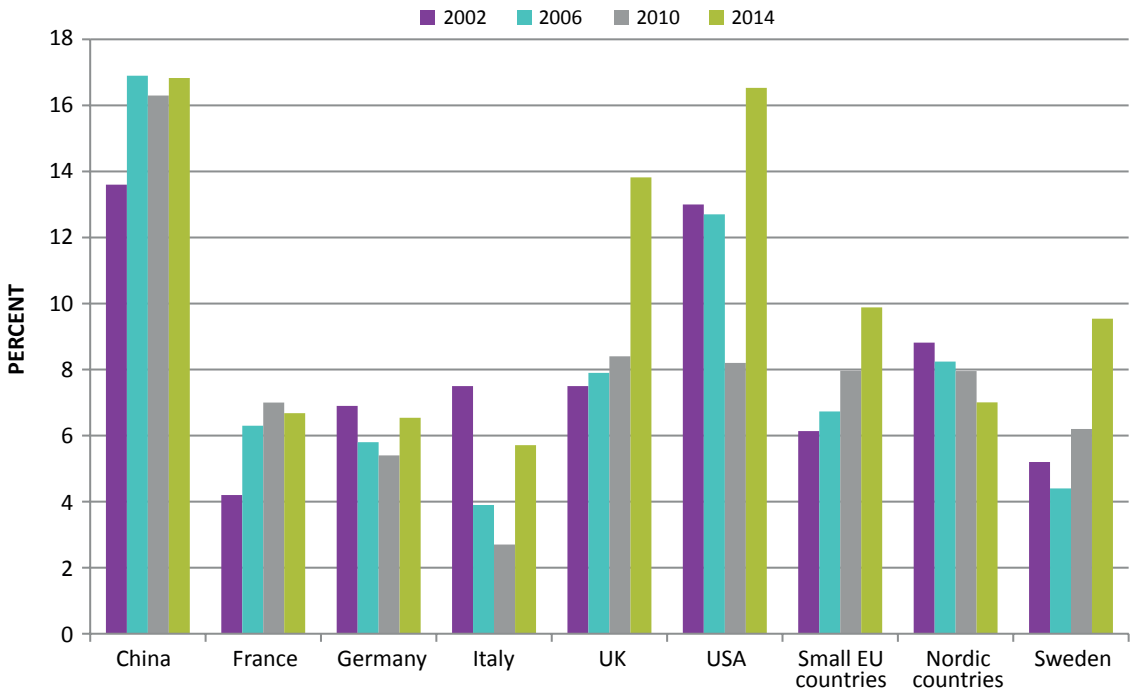


Figure 2.5b: Opportunity-driven entrepreneurial activity: relative prevalence
Percentage of those involved in TEA because they identified business opportunities



Note Figure 2.5 a and b: Small EU-countries comprise Belgium, Ireland and the Netherlands; Nordic countries comprise Denmark, Finland and Norway.

Figure 2.6a: Total early-stage entrepreneurial activity for male working age population
Percentage of male 18–64 year old population who are either nascent entrepreneurs or owner-managers of new businesses



Note: Small EU-countries comprise Belgium, Ireland and the Netherlands; Nordic countries comprise Denmark, Finland and Norway.

entrepreneurship normally falls. In 2014, between 70–80 percent of entrepreneurship is related to business opportunities in the eight innovation-driven economies, whereas it has risen from approximately 45 percent in 2002 to 65 percent in 2014 in China, i.e., not far behind the more developed economies. There has, however, been a trend-wise fall in smaller EU-economies since 2006 (but from high levels).

Moreover, the crisis appears to have increased the share of necessity-based entrepreneurship, judging from the increase in 2010, particularly in the U.S. The smallest share is reported for the Nordic countries and Sweden, both having shares of approximately 8–9 percent that can be attributed necessity-driven entrepreneurship. In France and Germany, this kind of new firm formation has decreased by approximately 50 percent since 2006, albeit the shares are still considerably higher than in the other six innovation economies.

Each of these two types of entrepreneurship is important for economic development, but we expect opportunity-based entrepreneurship to be more strongly associated with productivity and growth effects (Fritsch and Schroeder 2011; Lamballais, Tessensohn and Thurik, 2012).

THE GENDER GAP

Figures 2.6a and 2.6b present the TEA rate for the male and female adult population. The rankings in Figure 2.6a basically mimic the overall TEA rate shown in Figure 2.1, but the shares are higher if we restrict the analysis to men. In the corresponding graph for women, it is clear that countries characterized by strong entrepreneurial performance in general also exhibit strong entrepreneurial performance among women (Figure 2.6b). Among developed economies, the U.S. and UK are far ahead of the remaining countries but still trail China.

The female TEA prevalence rate further reveals that most countries exhibit a substantial gender gap in entrepreneurship (Figure 2.7), with the share of women entrepreneurs approximately 50 percent that of males in most countries. Sweden is shown to have

Figure 2.6b: Total early-stage entrepreneurial activity for female working age population
Percentage of female 18–64 year old population who are either nascent entrepreneurs or owner-managers of new businesses

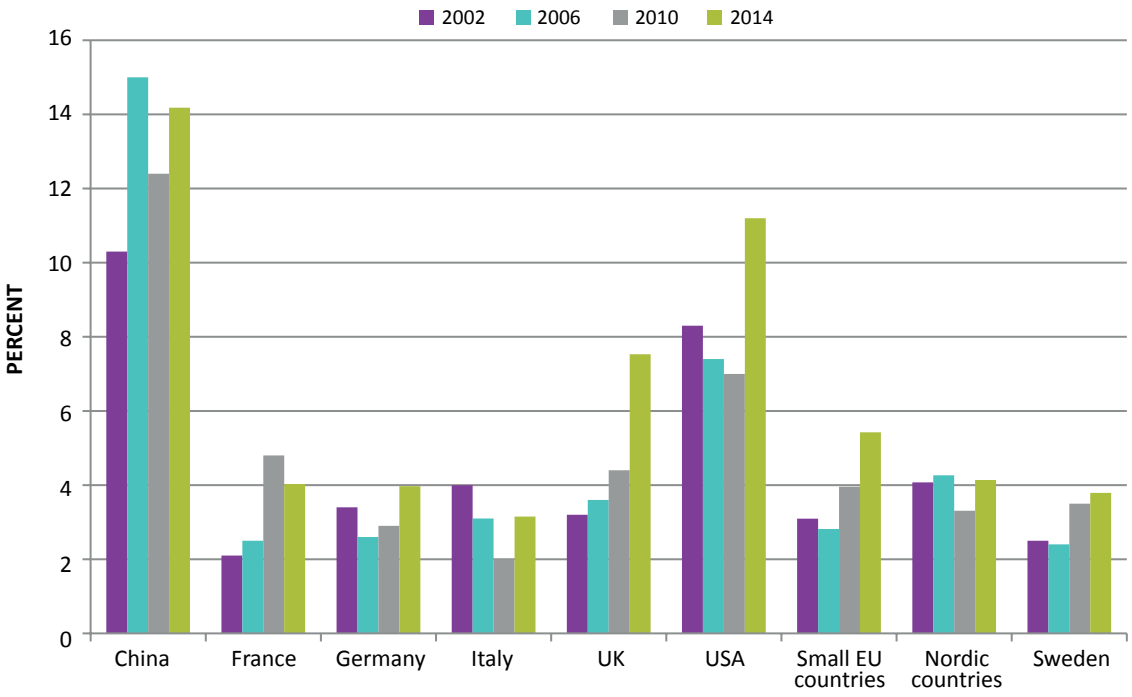
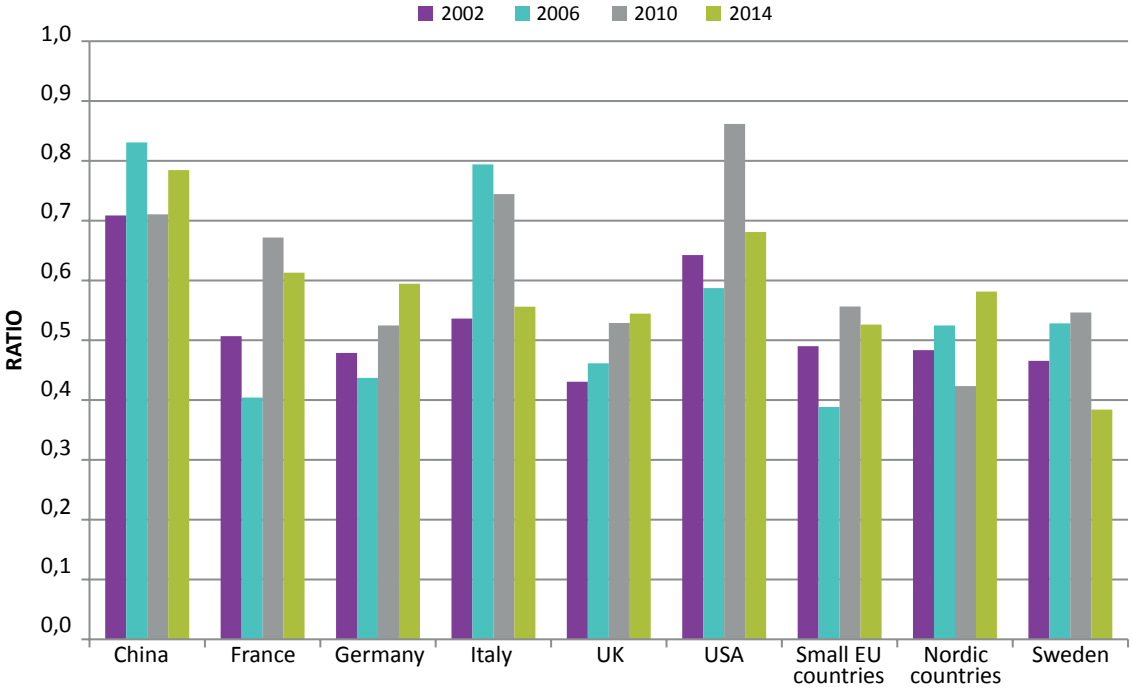
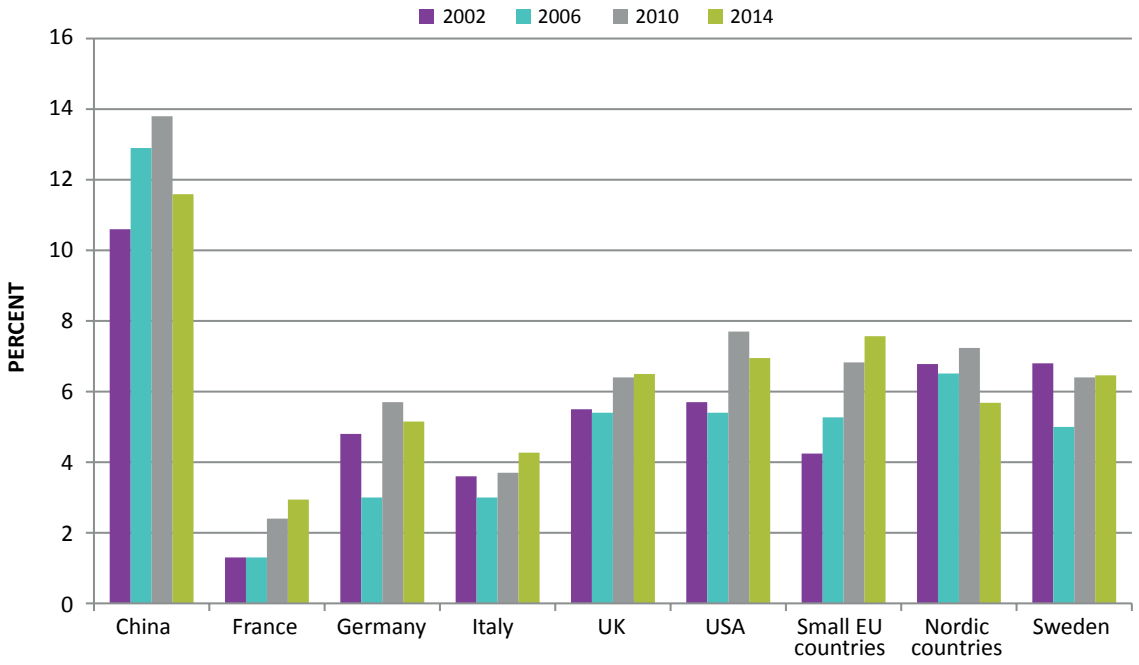


Figure 2.7: Total early-stage entrepreneurial activity, number of females per male



Note Figure 2.6b and 2.7: Small EU-countries comprise Belgium, Ireland and the Netherlands; Nordic countries comprise Denmark, Finland and Norway.

Figure 2.8: Established business ownership rate
Percentage of 18–64 year old population who are currently owner-managers of established businesses, i.e., run businesses that have paid salaries or wages or made any other payments to owners for more than 42 months



Note: Small EU-countries comprise Belgium, Ireland and the Netherlands; Nordic countries comprise Denmark, Finland and Norway.

experienced a large drop in women's entrepreneurship in 2014.

ESTABLISHED BUSINESSES

With respect to established business ownership, we can observe in Figure 2.8 that in a surprisingly large number of countries, the share of the adult population running a firm older than 3.5 years is in the range of 6.0–7.5 percent. China is again an outlier, having a rate of approximately 12 percent, which corroborates previous findings regarding the relationship between stage of economic development and number of firms.

INDUSTRY AND AGE COMPOSITION OF ENTREPRENEURSHIP

The distribution of early-stage entrepreneurs (TEA) by industry is shown in Figure 2.9. Among innovation-driven economies, Germany, the U.S. and Sweden have the largest shares of TEA in the service sector. While Sweden has a considerably smaller share of start-ups in the consumer-oriented part of the service sector, this share is largest in Germany and Italy. Sectoral differences are relatively small between countries. Again, China deviates from the general pattern, with a considerable share of entrepreneurial ventures taking place in the consumption-oriented service sector while having a tiny but growing business service sector.

The final figure in the entrepreneurial activity section focuses on the age distribution of entrepreneurs. As shown in Figure 2.10, approximately 35–40 percent of early-stage entrepreneurship occurs among the age cohorts 18–24 and 24–35. For all countries, entrepreneurship, however, is most common among individuals of mid-career ages, i.e., the age cohort 35–54. There are signs of entrepreneurship becoming more prevalent among the more elderly (55–64), particularly in France, the UK, the U.S. and Sweden. However, this share is quite low, somewhere between 13–18 percent in 2014.

Figure 2.9: TEA distributed on sectors 2012–2014

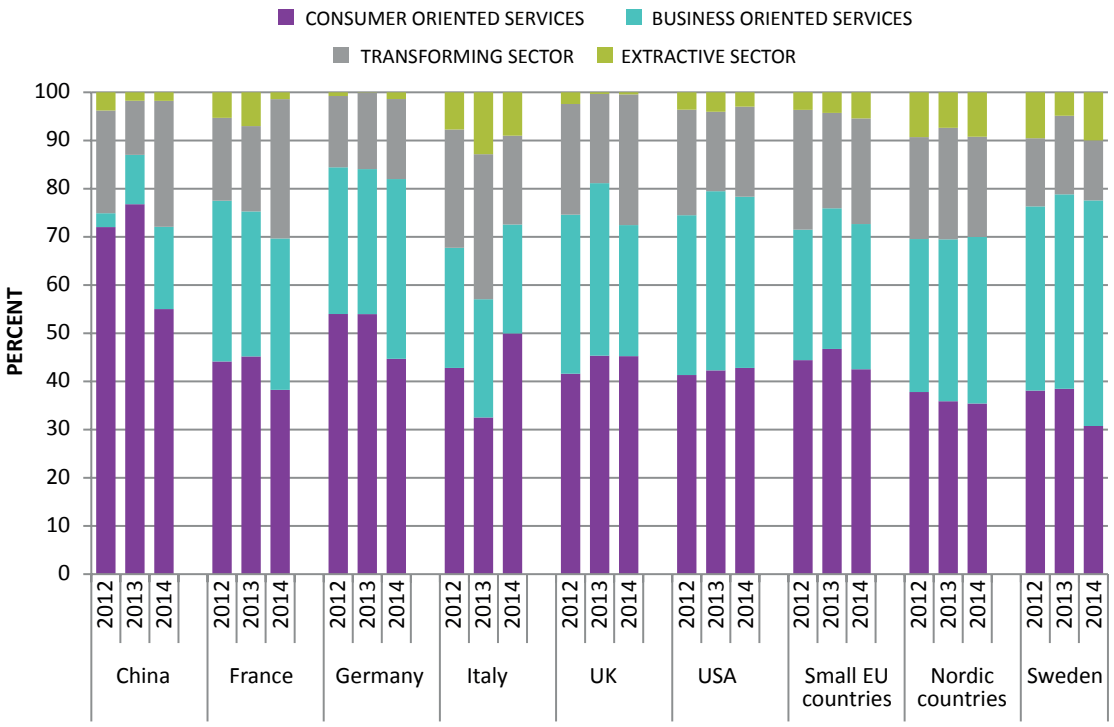
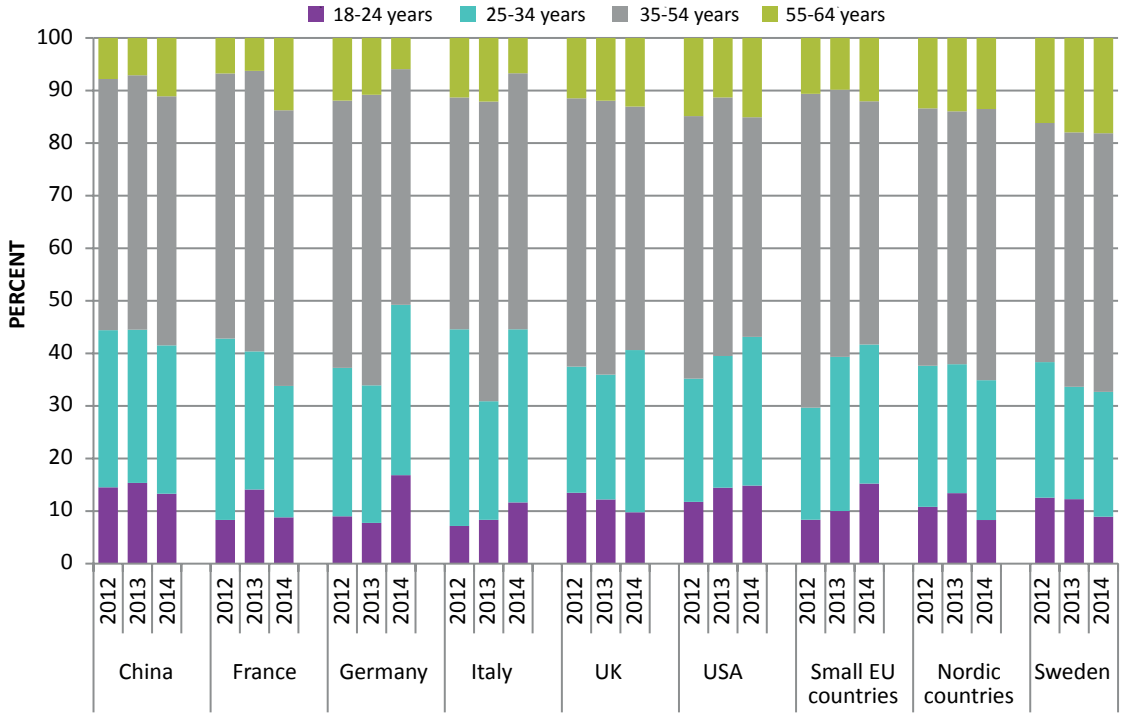
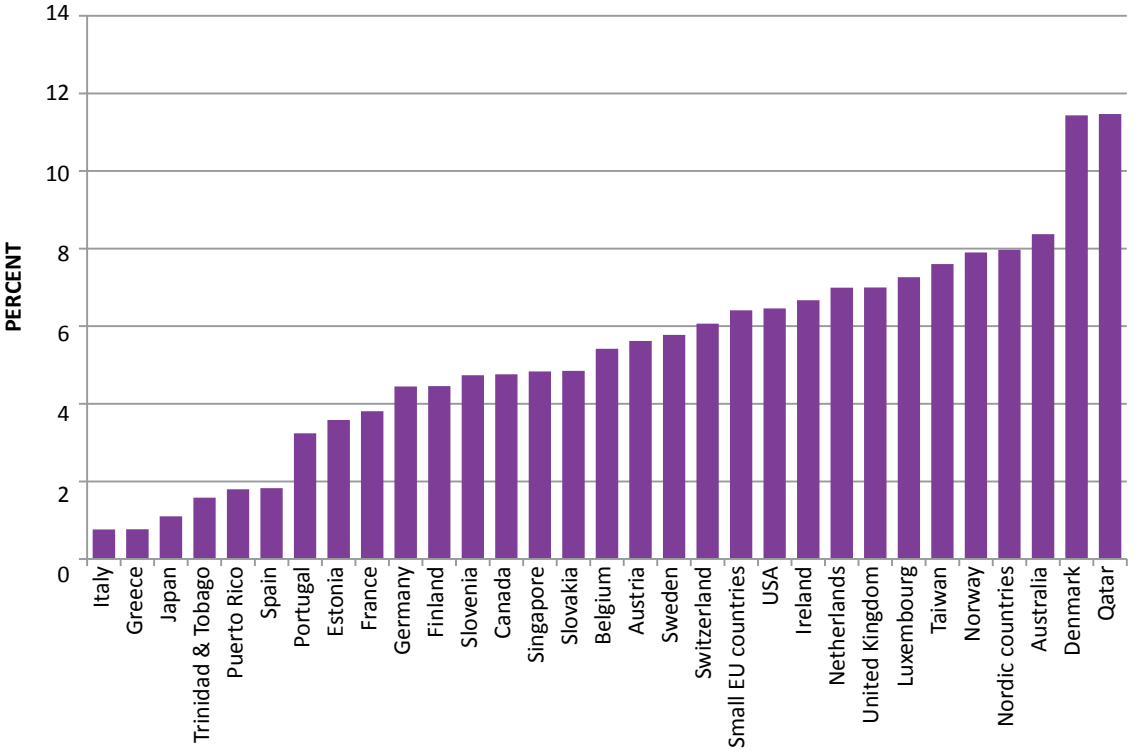


Figure 2.10: TEA distributed on age groups 2012–2014



Note Figure 2.9 and 2.10: Small EU-countries comprise Belgium, Ireland and the Netherlands; Nordic countries comprise Denmark, Finland and Norway.

Figure 2.11: Entrepreneurial employee activity (EEA)
Percentage of population 18–64 years old that, in the last three years, actively managed and developed new activities for his or her employer



Note: Small EU-countries comprise Belgium, Ireland and the Netherlands; Nordic countries comprise Denmark, Finland and Norway.

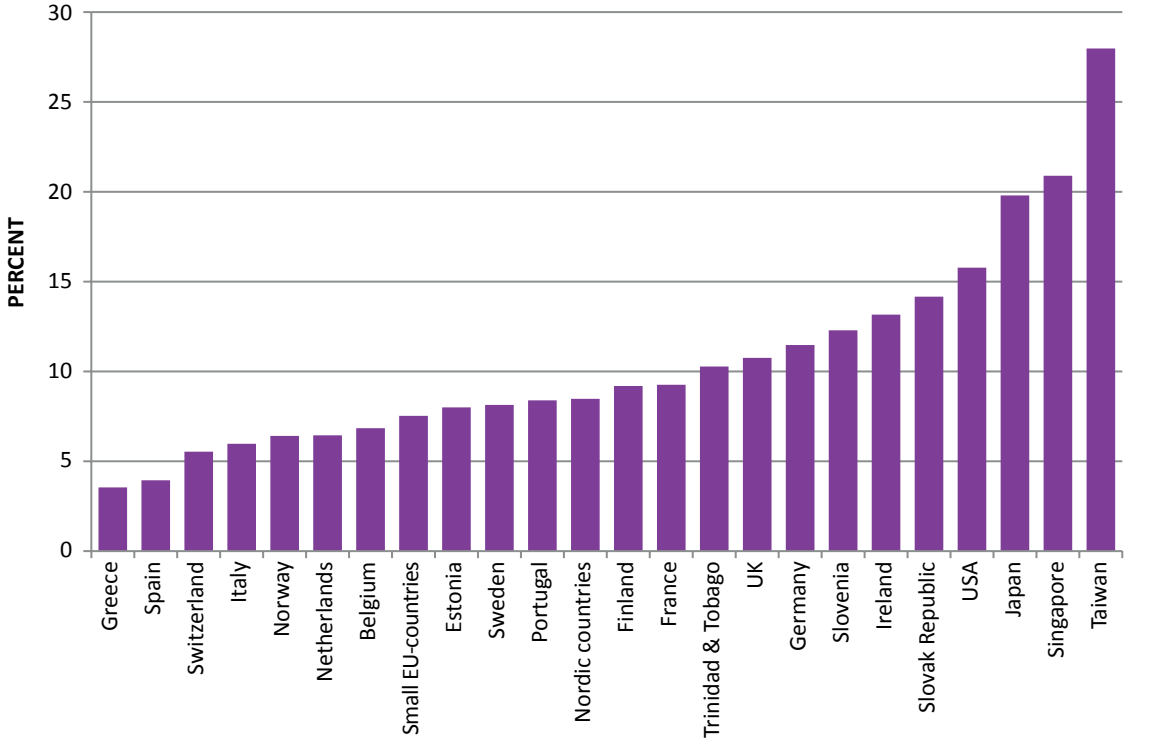
INTRAPRENEURSHIP – ENTREPRENEURIAL EMPLOYEES

Entrepreneurship materializes not only in the form of new and young firms but is also an ongoing continuous process in incumbent firms. For example, many of Sweden's multinational and successful firms today were founded about a century ago, and their ability to reinvent themselves and maintain international competitiveness largely rests on the contributions of their employees to innovativeness and efficiency. This is often referred to as corporate entrepreneurship or intrapreneurship.

Figure 2.11 depicts the shares of employees in incumbents that define themselves as entrepreneurial employees, i.e., as involved in entrepreneurial and innovative tasks. They can be defined as intrapreneurs. Note that the Nordic countries are ranked high – Denmark reports the second largest share of intrapreneurs, while Norway holds the fourth position. Finland is ranked considerably lower, while Sweden belongs to the middle group of countries with respect to intrapreneurship. Several Anglo-Saxon countries can also be found in the top segment in terms of intrapreneurship.

On average, approximately eight percent of the adult population in Nordic countries reports being involved in intrapreneurship, which can be compared to the share claiming to be involved in entrepreneurship, which is considerably lower (approximately 5.5 percent; see Figure 2.1). The corresponding shares for Sweden are six percent (intrapreneurship) and just above six percent (TEA), respectively. Within small EU-countries, the share of intrapreneurship is slightly above six percent, which is about one percentage point smaller than the share of the population that is in the process of starting or running a young company. Large EU-countries rank on average below smaller EU-countries with regard to both intrapreneurship (four percent) and entrepreneurship, having a TEA

Figure 2.12: Job growth expectations for early-stage entrepreneurs, 2012–2014
Share of TEA where entrepreneurs expect to hire 20 or more employees within five years



Note: Small EU-countries comprise Belgium, Ireland and the Netherlands; Nordic countries comprise Denmark, Finland and Norway.

of six percent. It is noteworthy that the U.S. deviates markedly from European countries, where the share of the population involved in entrepreneurship (14 percent) is more than twice the share that defines themselves as intrapreneurs (around six percent).

Consequently, it appears that the way that entrepreneurship materializes depends on the institutional framework – laws, regulations and traditions – where traditional welfare states, such as the Nordic countries and Sweden, with stricter labour market regulations for permanent employees and tighter social security safety nets, result in relatively larger shares of intrapreneurship.

2.2 ENTREPRENEURIAL AMBITIONS – GROWTH, INNOVATION AND INTERNATIONALIZATION

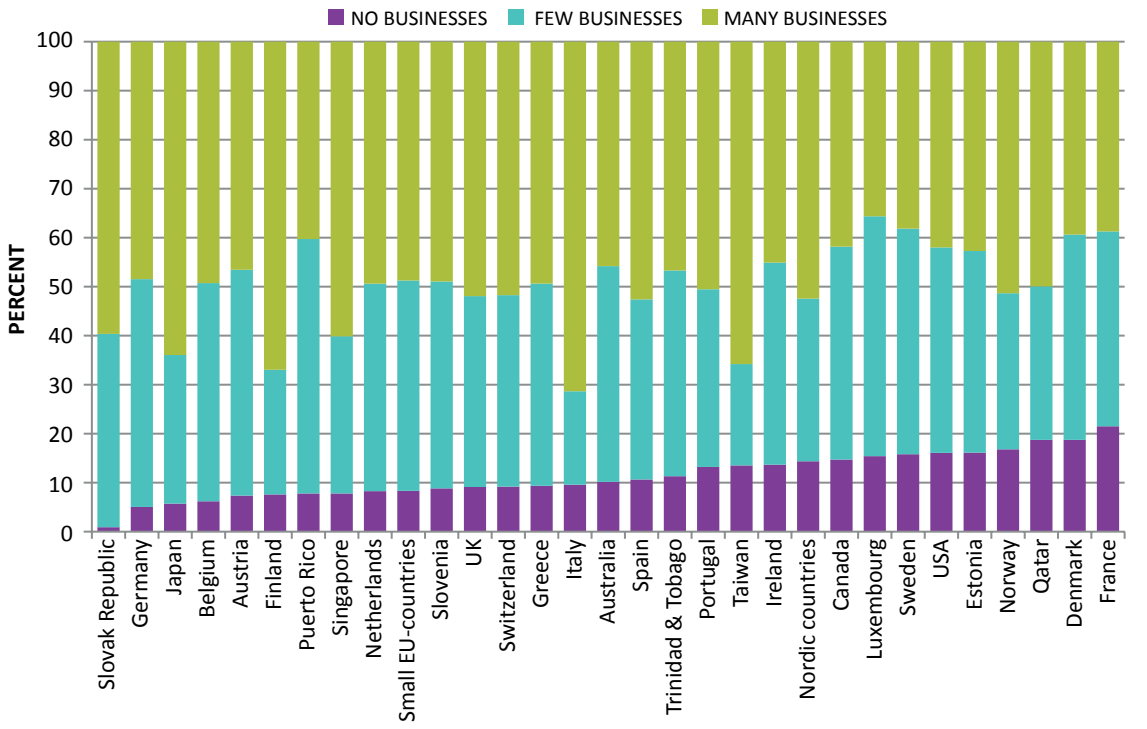
How new firms and businesses impact the national economy depends on the institutional framework that surrounds the activities of incumbents and entrepreneurs. This section profiles the potential impact of entrepreneurship by examining the perceived i) job-creation potential of businesses, ii) market position, iii) innovativeness and iv) internationalization, measured by the share of customers abroad..

In this section, we will present data for all countries defined as innovation-driven, based on data for the last available year (2014) and averages for the last three years.

JOB GROWTH EXPECTATIONS

Growth expectations measure how many employees entrepreneurs expect to employ in the coming five years. Previous research has shown that growth expectations are a workable indicator of later growth performance by firms (Davidsson et al., 2012). In Figure 2.12, average growth expectations are presented for new and young firms expecting to hire more than 20 employees in the coming five-year period (high growth expectations). High-growth firms, or gazelles, have been shown to account for a disproportionate share

Figure 2.13a: Competition 2014
How many businesses offer the same product? Share of TEA



Note: Small EU-countries comprise Belgium, Ireland and the Netherlands; Nordic countries comprise Denmark, Finland and Norway.

of new employees and are consequently important for future growth (Henrekson and Johansson, 2010).

The most growth oriented nations report shares of TEA that exceed 15 percent, whereas the share of those at the other end of the spectrum is approximately 3–5 percent. Countries with low growth expectations have either been severely hurt by the economic crisis (e.g., Greece, Spain and Italy) or can be found among smaller countries and often belong to the group of welfare countries (Norway, the Netherlands and Sweden).[10] Asian countries, some Anglo-Saxon countries and several Eastern European countries dominate the top performers.

MARKET CONDITIONS AND INNOVATIVENESS

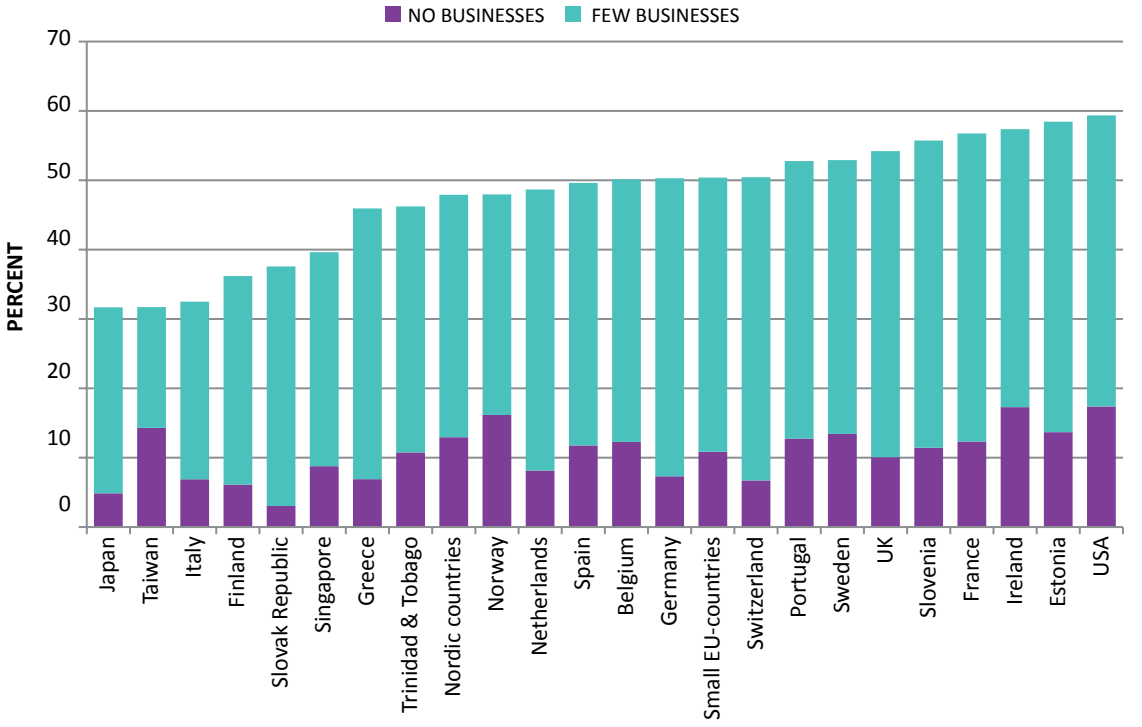
When asked about market conditions facing entrepreneurs, all countries (except France) report that more than 80 percent of the entrepreneurs have at least a few competitors and about 50 percent are competing with many other firms in 2014 (Figure 2.13a). This suggests that most entrepreneurship has an imitative character. Countries that report relatively large shares of entrepreneurs who face no competition are not necessarily characterized by high levels of innovativeness, as competition is highly contingent upon institutions and the extent to which competition is supported.

The data vary somewhat over the years. When the results are based on averages over the last three years, the shares remains more or less intact, but the position of the respective country may change (Figure 2.13b). For instance, France was shown to have a pole position in 2014, but when we implement averages for the last three years, France's position falls considerably (eight out of 22 countries).

Market position is thus not necessarily associated with innovativeness. Introducing new products or services into the market, thereby fostering product variety for customers and contributing to national competitiveness, is vital to growth and often

10. See Braunerhjelm and Henrekson (2013) on the effect of regulations on entrepreneurship.

Figure 2.13b: Competition 2012–2014
How many businesses offer the same product? Share of TEA



Note: Small EU-countries comprise Belgium, Ireland and the Netherlands; Nordic countries comprise Denmark, Finland and Norway.

attributed entrepreneurs, being the agents of change that introduce radical and disruptive innovations.

Complementing the above information about competitors, to capture novelty, GEM asks entrepreneurs whether their product or service is new to some or all their customers. Figure 2.14a reveals that a somewhat larger number of countries claim that their entrepreneurs have developed innovative products that are new to all customers in 2014. Accordingly, in Taiwan, 50 percent of entrepreneurs launch products that are new to all customers, followed by six other countries reporting a share above 20 percent. Note that only 14 percent of Taiwanese firms said that no other businesses offered the same product (Figure 2.13a), indicating that they operate in different markets or that they overstate their innovative capabilities. Smaller EU-countries and the Nordic countries rank fairly high when asked to estimate their innovativeness.

Taking three-year averages, the ranking does not change considerably, suggesting that innovation performance does not change substantially over the years. Note, however, that the ranking in Figure 2.14b is based on countries where the product is new to at least some customers, whereas a stricter version (new to all customers) is applied in Figure 2.14a.

INTERNATIONALIZATION

Internationalization measures the extent to which early-stage entrepreneurs sell to customers outside their domestic markets. In general, serving international markets signals both high ambition and international competitiveness of a country's early stage entrepreneurs. As shown in Figure 2.15a, in 11 of the 29 countries, approximately 50 percent of new and young firms have no sales at all outside their domestic markets. And only in five countries does the share of entrepreneurs with more than 25 percent of their customers abroad exceed 30 percent. Hence, the degree of internationalization, overall, is quite low in the group of new and young firms (TEA).

Figure 2.14a: Innovative products for early-stage entrepreneurs 2014
Share of TEA whose products are new to …

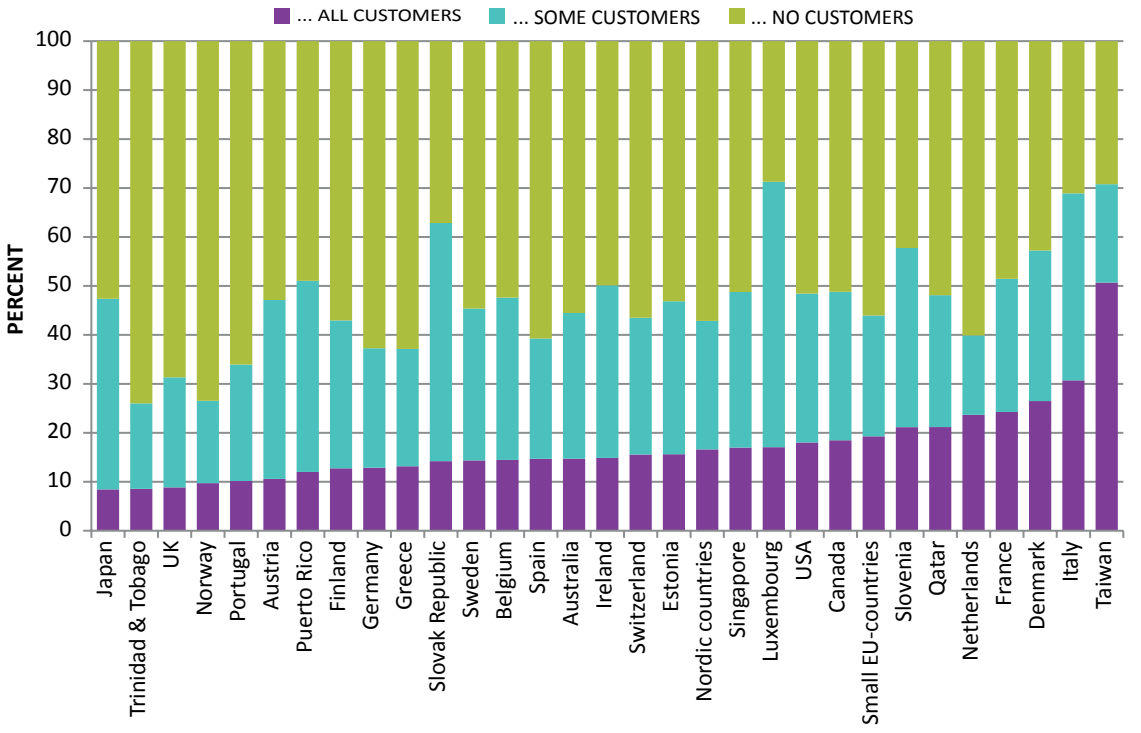
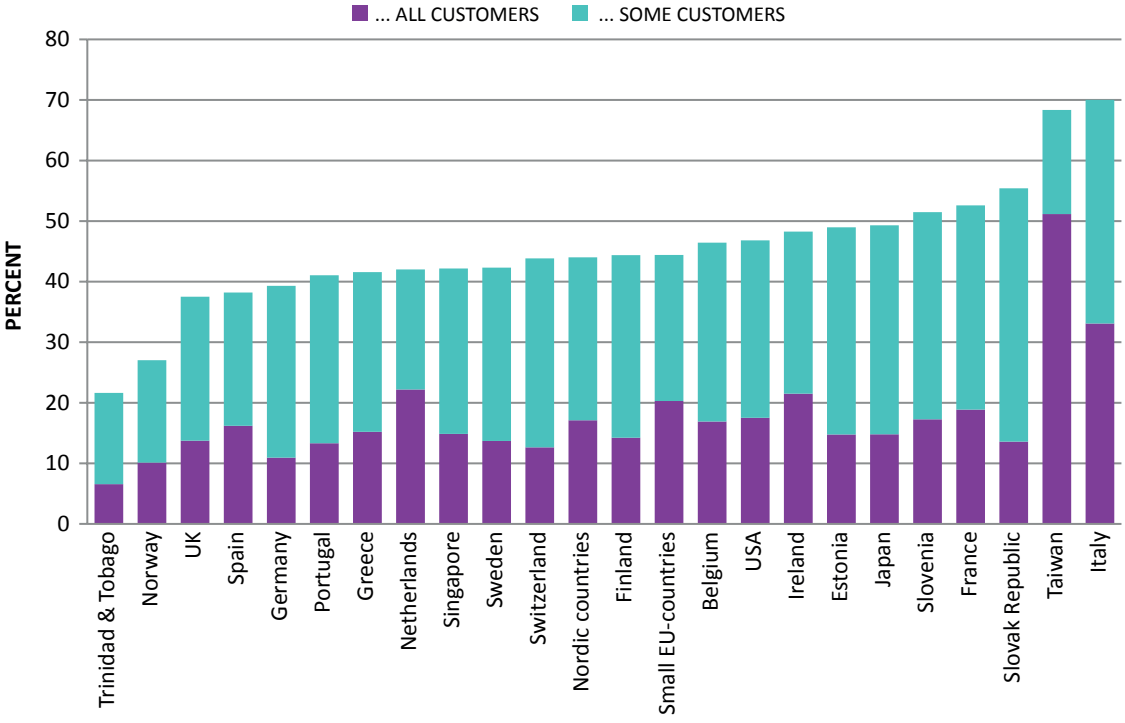


Figure 2.14b: Innovative products for early-stage entrepreneurs 2012–2014
Share of TEA whose products are new to …



Note Figure 14a and b: Small EU-countries comprise Belgium, Ireland and the Netherlands; Nordic countries comprise Denmark, Finland and Norway.

Figure 2.15a: International orientation for early-stage entrepreneurs 2014
TEA distributed on share of customers abroad

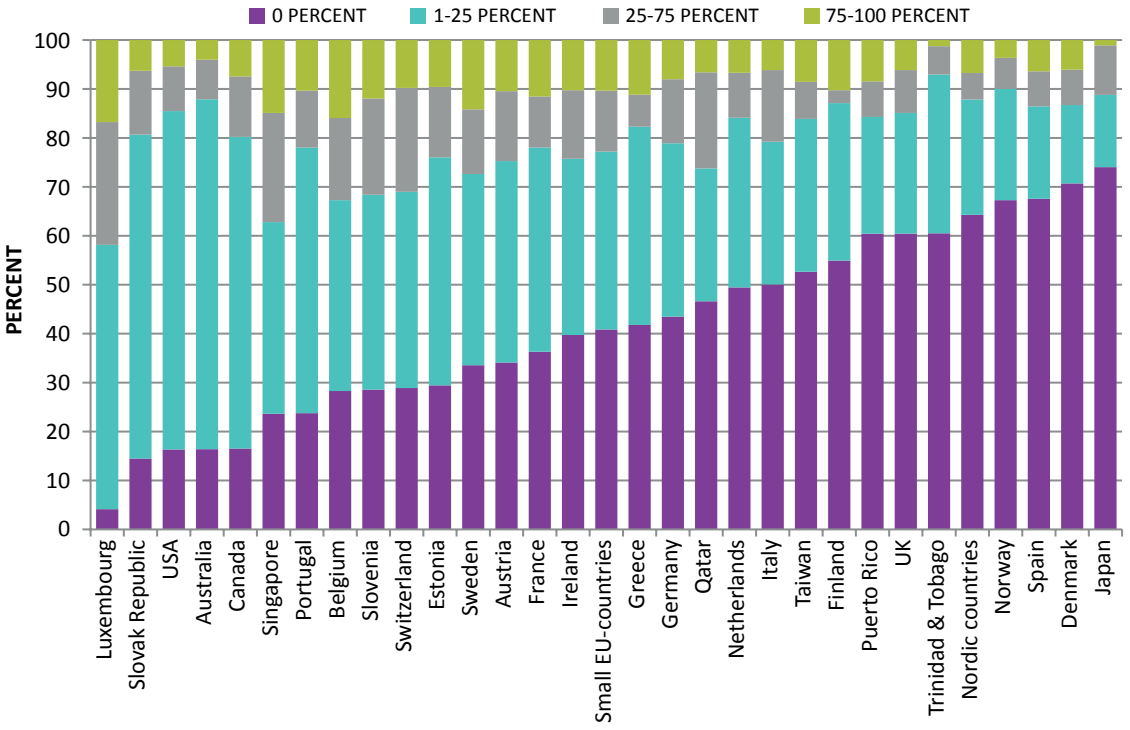
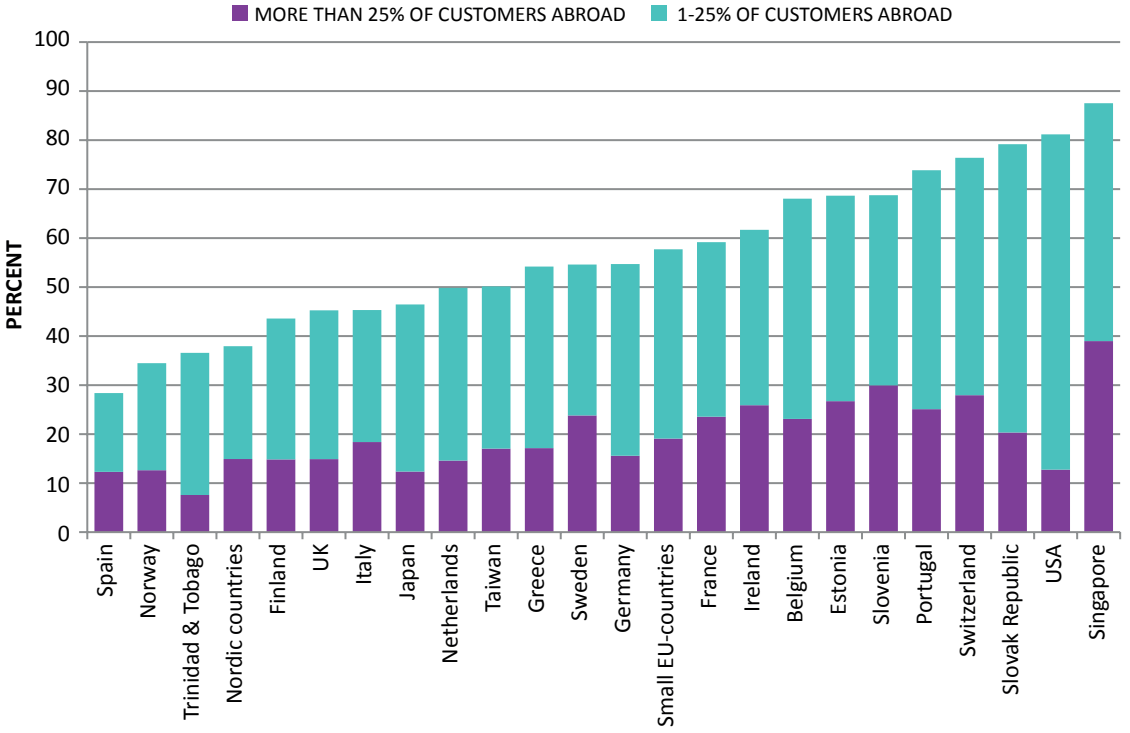


Figure 2.15b: International orientation for early-stage entrepreneurs 2012–2014
TEA distributed on share of customers abroad



Note Figure 2.15a and b: Small EU-countries comprise Belgium, Ireland and the Netherlands; Nordic countries comprise Denmark, Finland and Norway.

One would expect smaller countries to have larger shares of their customers abroad, given the limited sizes of their domestic markets. However, the picture is quite mixed, although a fairly large number of small countries are among those most internationalized, as seen in Figure 2.15b. Differences in internationalization among smaller countries are likely to mirror differences in industrial structure, firm size distribution and tradition among such countries. Nevertheless, in a process of increased globalization where domestic market shares can be expected to shrink due to intensified competition, it is of vital importance for new and young firms to have the skills to penetrate foreign markets.

2.3 ENTREPRENEURIAL ATTITUDES

Every individual has the potential to become an entrepreneur. Some will venture into entrepreneurship, while others – for various reasons – will not. Thus, it is important to understand how individuals perceive their abilities and whether societal attitudes toward entrepreneurship are likely to influence the occupational choice between becoming an entrepreneur or a wage earner.

INTENTIONS, OPPORTUNITIES AND CAPABILITIES

Entrepreneurial intentions are an important measure of potential entrepreneurship in a society, and in the GEM study, these are represented by the percentage of individuals who expect to start businesses within the next three years. In innovation-driven economies, there appears to have been an increase in entrepreneurial intentions between 2002 and 2014 for most countries, Sweden being the exception (Figure 2.16). The levels and magnitudes of change differ, with France, Italy, Sweden and the U.S. reporting the highest levels, while the change appears to be most pronounced in smaller EU-countries, Italy and the U.S., at least when we examine more recent observations. China exhibits a distinct negative trend, likely reflective of the fact that much of previous entrepreneurship was necessity-based, which has been declining since 2002 (see Figure 2.5a).

A possible source of positive views of individuals on entrepreneurship is previous contacts with entrepreneurs or acquaintance with someone who has recently started a firm. We know that norms and cultures surrounding economic activities are formed by the extent to which people are engaged in similar behaviour (Lindbeck and Snower, 2002).

Figure 2.17 illustrates the percentage share of individuals in different countries who know someone who has started a business in the past two years. In all countries, a sizeable share of the adult population does know someone who has been involved in setting up a company. The range of 30–50 percent appears to be most prevalent among the innovation-driven countries. A trend-wise decline can be observed in Germany, Italy, the Nordic countries and Sweden, a decline that by and large matches the stagnant or decreasing entrepreneurial intentions in these countries, shown in the previous figure (Germany deviates from that pattern, with intention perhaps more strongly affected by a booming economy in recent years).

Turning to perceived opportunities that individuals claim they can identify in their neighbourhoods, several interesting features emerge from Figure 2.18. First, traditional welfare countries, such as the Nordic countries together with Sweden, rank highest and have seen an increase over the time period examined, particularly Sweden. Next in line are the UK and U.S., i.e., two countries that represent a quite different way of organizing society. Hence, both “cuddly capitalism” (a term coined by Acemoglu et al., 2012), as represented by the welfare states, and “cut-throat capitalism” (the UK and U.S.) are shown to be conducive to defining entrepreneurial opportunities. This suggests that there is no one-size-fits-all avenue for making individuals aware of entrepreneurial opportunities. Second, levels of perceived opportunities differ across countries (basically, it is twice as high in the welfare countries than in the larger EU-economies), but in all countries, perceived opportunities have risen between 2002 and 2014, notwithstanding several temporary setbacks in particular years in several countries. Hence, economies appear to be entering a more entrepreneurial regime.

The increase in individuals’ subjective perceptions of their abilities to identify entrepreneurial opportunities is, however, not paralleled by perceived capabilities to start and run a business (Figure 2.19). There

Figure 2.16: Entrepreneurial intention
Percentage of 18–64 year old population (individuals involved in any stage of entrepreneurial activity excluded) that intends to start a business within three years

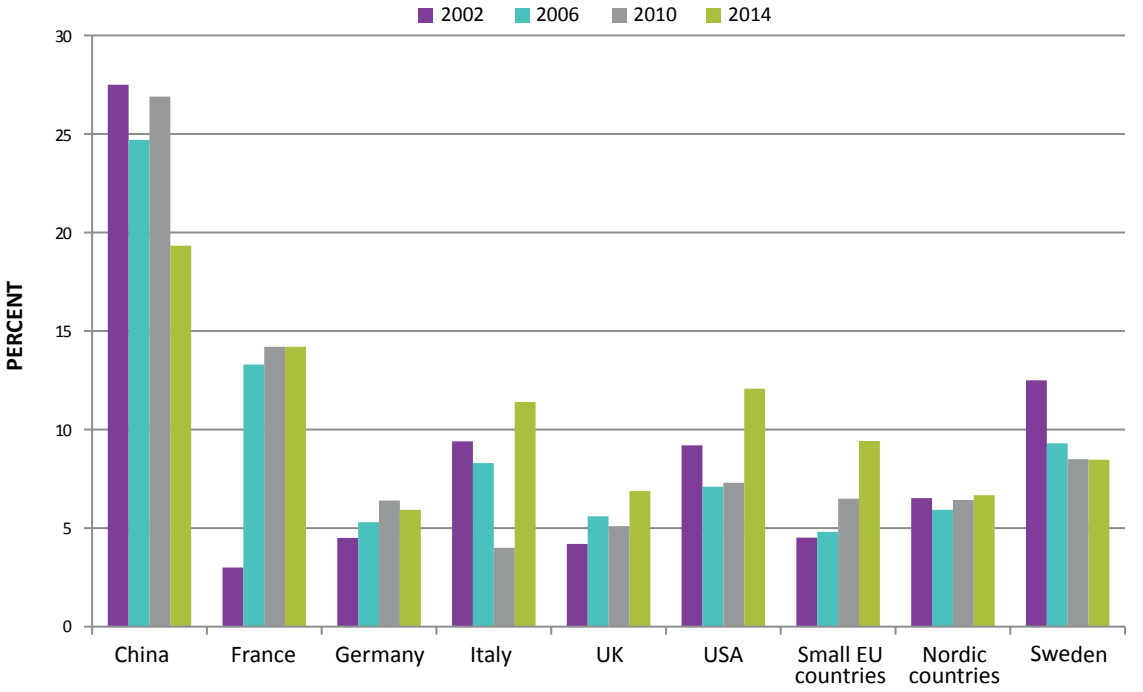
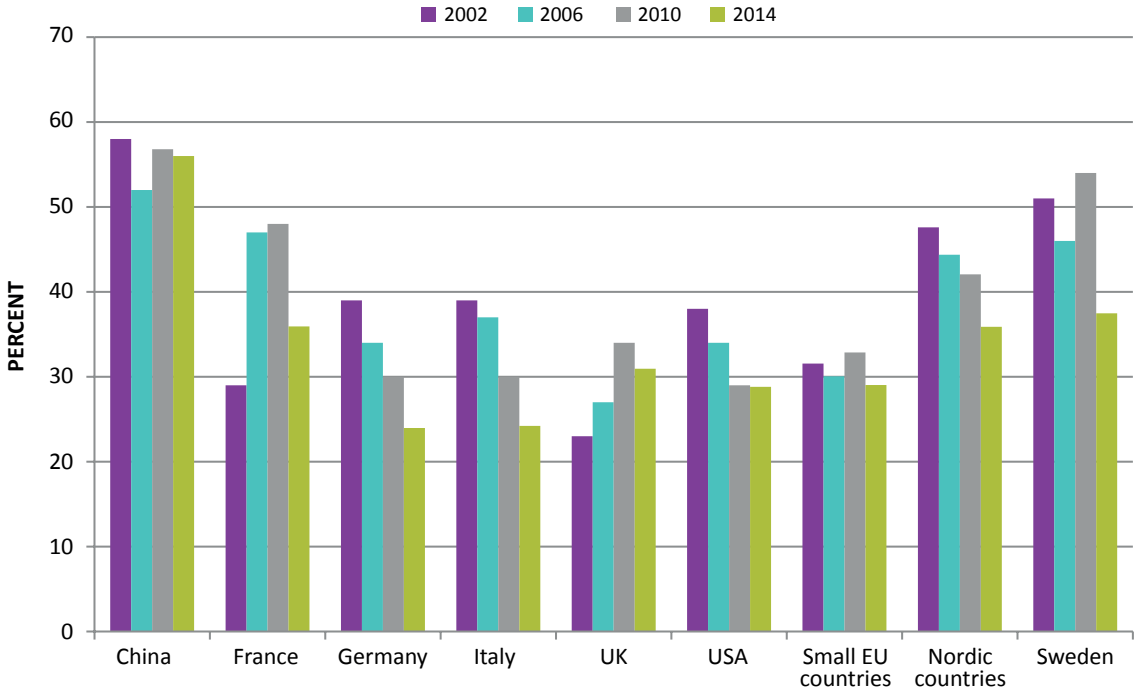
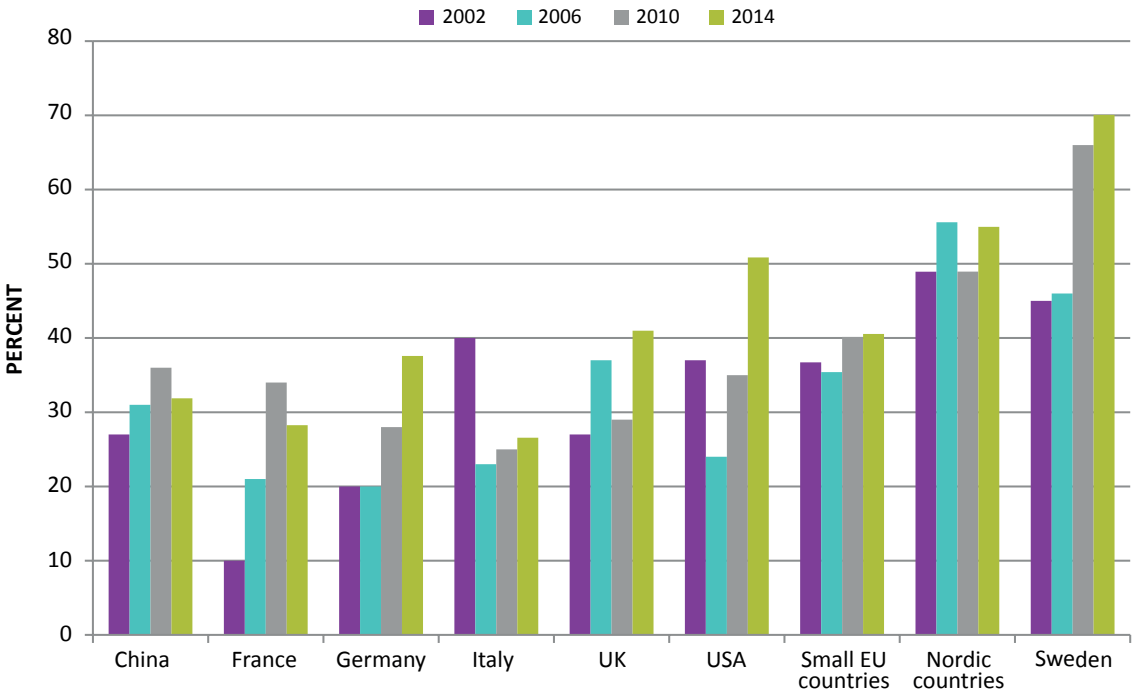


Figure 2.17: Acquaintance with start-up entrepreneur rate
Percentage of 18–64 year old population that personally knows someone who started a business in the past two years



Note Figure 2.16 and 2.17: Small EU-countries comprise Belgium, Ireland and the Netherlands; Nordic countries comprise Denmark, Finland and Norway.

Figure 2.18: Perceived opportunities
Percentage of 18–64 year old population that perceives good opportunities to start a firm in the area where they live



Note: Small EU-countries comprise Belgium, Ireland and the Netherlands; Nordic countries comprise Denmark, Finland and Norway.

is no clear trend over time, and the levels are generally much lower. Approximately 35–40 percent of the adult population believe they have the ability to set up and manage a firm. Interestingly, two countries do not adhere to this general pattern: the UK and, in particular, the U.S. Hence, whereas the welfare states (Nordic countries and Sweden) claim a high capability to spot entrepreneurial opportunities, their self-confidence with regard to starting and running a firm is considerably lower. For the UK and U.S., the opposite pattern prevails. This suggests that the difference between these two sets of countries concerns other factors, such as the institutional set-up for starting and exiting entrepreneurship. Exiting an entrepreneurial venture or fear of failure and its long-term individual consequences can be expected to strongly influence entrepreneurship. If failure stigmatizes the individual socially, in addition to burdening him/her with long-term debt, the gap between wage earners and entrepreneurs will widen.

It has been claimed that the U.S. is more lenient than other countries in providing "a second chance" to those who have tried but failed as entrepreneurs. Indeed, some argue that failure could be positively related to individuals' human capital, due to learning effects. The GEM data do not allow us to dig deeper into these issues. However, as illustrated in Figure 2.20, there is a distinct difference between the U.S. and other countries with respect to fear of failure. The economic crisis that started in 2008 appears to have augmented Americans' fear of failure, even though the level of fear of failure remains five to 20 percent lower in the U.S. than in other countries. UK respondents also appear to be less worried about failure than respondents in most countries, although the UK is on par with the Nordic countries and Sweden in this respect. To summarize, it is likely that lower fear of failure in the U.S. is partly driven by institutional differences with other countries, differences that appear to trigger greater entrepreneurial activity in the U.S.

SOCIETAL ATTITUDES

We will conclude Chapter 2 with three graphs on societal attitudes about entrepreneurial activity: whether the adult population in these countries views

Figure 2.19: Perceived capabilities
Percentage of 18–64 year old population that believes it has the required skills and knowledge to start a business

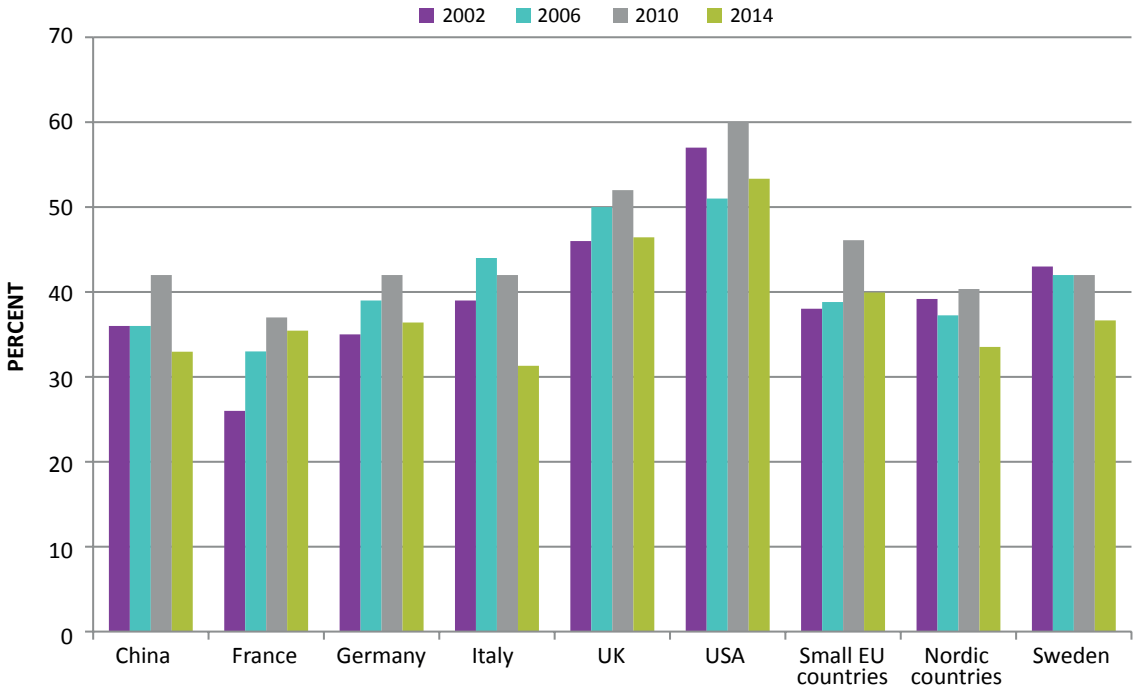
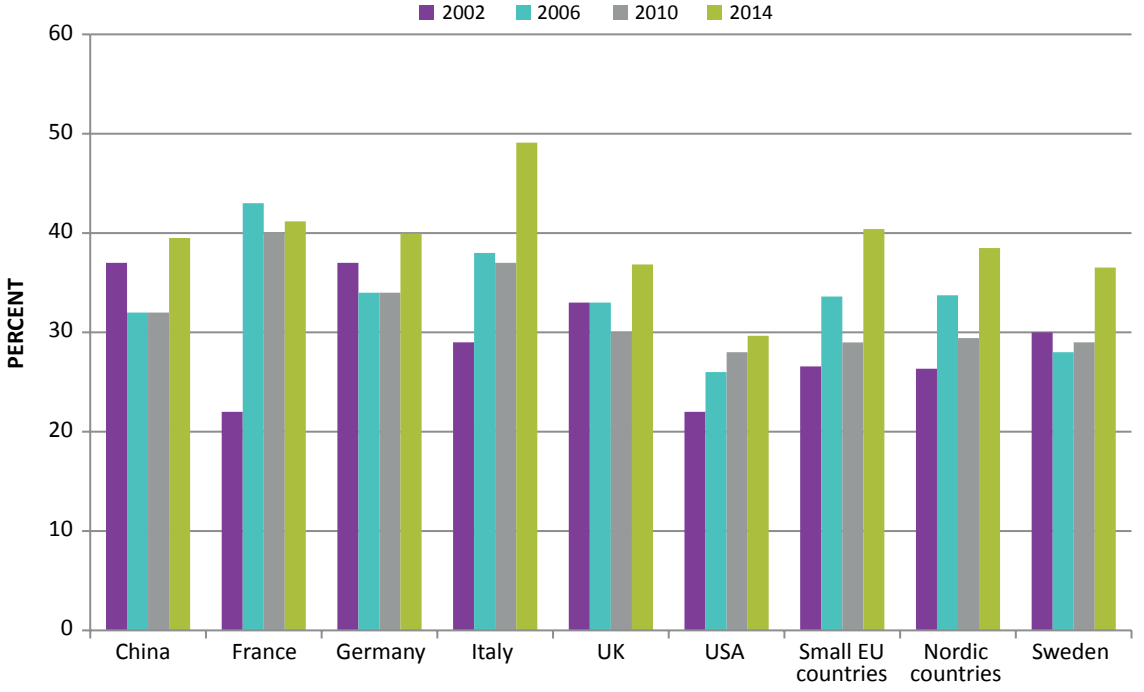


Figure 2.20: Fear of failure rate
Percentage of 18–64 year old population with positive perceived opportunities and indicate that fear of failure would prevent them from setting up a business



Note Figure 2.19 and 2.20: Small EU-countries comprise Belgium, Ireland and the Netherlands; Nordic countries comprise Denmark, Finland and Norway.

entrepreneurship as a good career choice (Figure 2.21), whether successful entrepreneurship is perceived to receive considerable media attention (Figure 2.22), and the extent to which successful entrepreneurs have a high societal status (Figure 2.23).

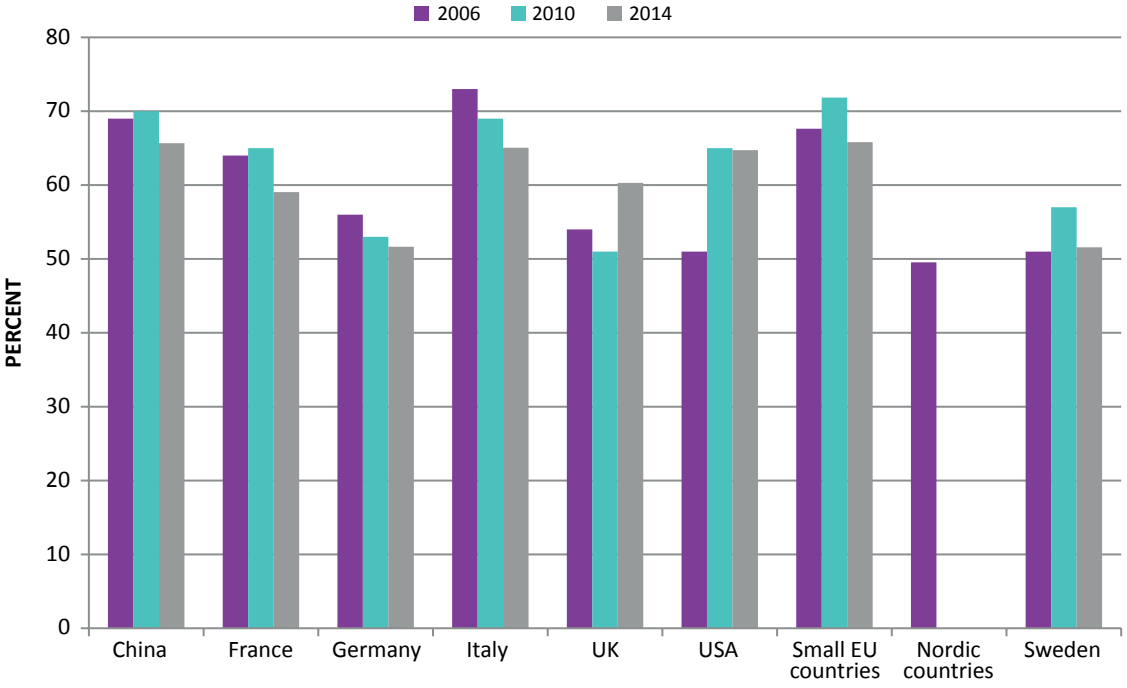
More than 50 percent of respondents in all countries view entrepreneurship as a desirable career choice (the exception is the Nordic group, where we only have data for 2006). The lowest levels are found in Germany, the Nordic countries and Sweden. There is no clear trend across countries, but in four countries, a diminishing share views an entrepreneurial career as a desirable occupational choice (China, France, Germany and Italy).

Media attention to entrepreneurship is shown to have gradually increased in the majority of countries (Figure 2.22). The level varies between approximately 40 and 75 percent of the adult population claiming that stories of successful businesses are reported in media. The two largest economies – China and the U.S. – have a considerably larger share than the other economies.

Finally, and likely fostered by media attention, successful entrepreneurs enjoy a high social status in all countries, although the span is quite large (Figure 2.23). The lowest rate is reported in the Nordic countries (50 percent), while Germany, the UK and the U.S. are found at the opposite end (approximately 80 percent).

Although country level differences exist, the overall picture is that social attitudes in the countries considered are favourable or very favourable to entrepreneurial endeavours. Such attitudes foster the formation of informal institutions that are favourable to entrepreneurship and that – together with an appropriate formal institutional framework – provide a necessary condition for the encouragement, stimulation and sustenance of entrepreneurial activities and ambitions.

Figure 2.21: Entrepreneurship as desirable career choice
Percentage of 18–64 year old population that agrees with the statement that in their country, most people consider starting a business a desirable career choice



Note: Small EU-countries comprise Belgium, Ireland and the Netherlands; Nordic countries comprise Denmark, Finland and Norway.

Figure 2.22: Media attention for entrepreneurship
Percentage of 18–64 year old population that agree with the statement that in their country, there are often stories in the public media about successful new businesses

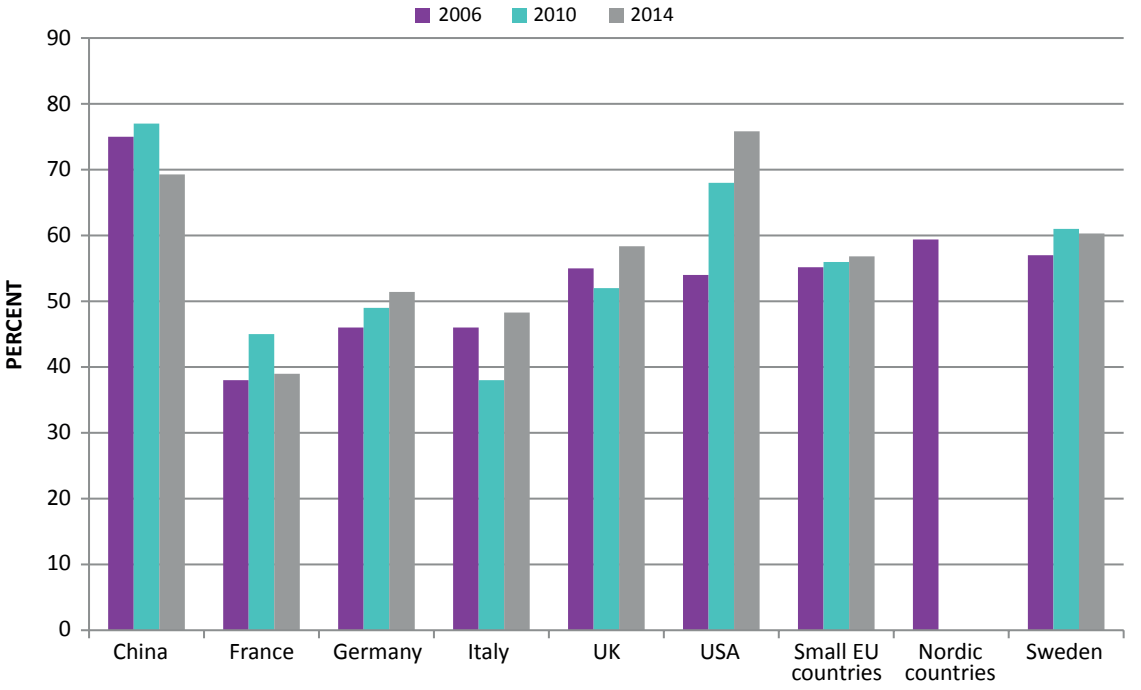
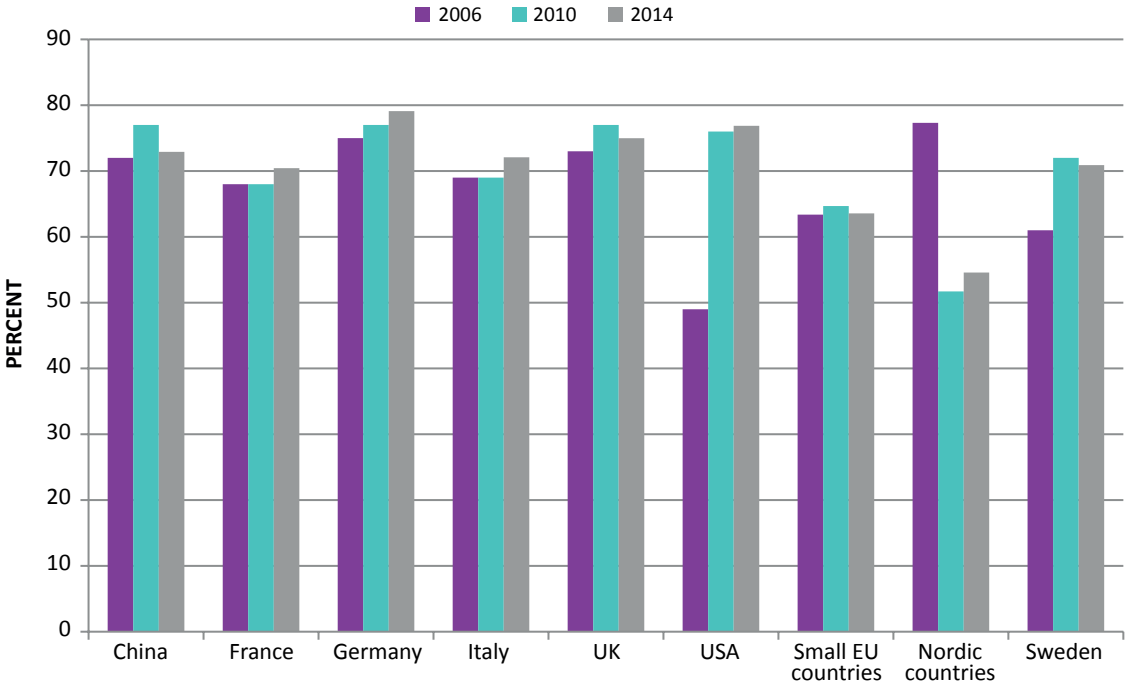


Figure 2.23: High status successful entrepreneurship
Percentage of 18–64 year old population that agree with the statement that in their country, successful entrepreneurs enjoy high status



Note Figure 2.22 and 2.23: Small EU-countries comprise Belgium, Ireland and the Netherlands; Nordic countries comprise Denmark, Finland and Norway.

3

ENTREPRENEURSHIP AND WELL-BEING[11]

3.1 INTRODUCTION AND MOTIVATION

This chapter discusses the growing field connecting entrepreneurship and subjective (self-reported) well-being (SWB). We further describe some of the methods underlying this study and the results of the 2013 GEM study on this issue.

Discussion of the connection – and sometimes alleged lack thereof – between economic dynamism and well-being is conceptually quite old. In a seminal contribution, Easterlin (1974) analyzed the relationship between GNP per capita and self-reported personal happiness at the country level. He positioned the analysis as an inquiry into the connection between growth of output (and hence, of income), on the one hand, and growth of welfare – in the broad sense of the term – on the other. The prevailing view in the economics profession at the time was that income was an acceptable, if credulous, indicator of welfare (Nordhaus and Tobin, 1972). Easterlin challenged this view by demonstrating that the relationship was in fact non-existent, with the United States and Cuba as peculiar positive outliers on the happiness scale. This so-called "Easterlin paradox"[12] has now arguably been refuted by evidence that a linear-logarithmic relationship between income and SWB is robustly positive across countries and over time, with no evidence of "satiation", i.e., an upper bound of SWB at higher levels of income (Hagerty and Veenhoven, 2003; Stevenson and Wolfers, 2013).

The notion of a relationship between entrepreneurship and SWB is more recent (and the relationship at the individual level remains relatively unchartered territory). Nevertheless, a few contributions emphasize some aspects of this issue, foremost among them, that the self-employed derive higher work-satisfaction than employed workers, presumably because self-employment is associated with e.g., greater autonomy and flexibility (Benz and Frey, 2008; Hundley, 2001). Such studies have tended to be based on self-employment rather than more refined measures of entrepreneurship and on measures of job satisfaction rather than general well-being.

Connecting these points causally is indeed an intricate task. For instance, one of the most robust indicators of negative SWB – consistently and across studies – is unemployment (e.g., Benz and Frey, 2008; Dolan et al 2008). Together with unemployment, the robust influences of SWB identified in a comprehensive literature review include separation, health and issues related to lack of social contacts (Dolan et al, 2008). All of these characteristics may be considered endogenous in this empirical context, e.g.,

11. This Chapter has benefited from work by Maria Adenfell and Nadav Shir (see Braunerhjelm et al., 2014, Ch. 4), and Shir (2015).

12. The Easterlin paradox initially referred to Easterlin's observation that the within-country association between growth of production and SWB did not appear to be reflected in cross-country statistics (interpreted as a case for relative, rather than absolute, utility). Over time, the term has more generally come to refer to a disassociation between growth of SWB and growth of production.

with regard to the decision to become an entrepreneur. Poor health is hardly an ideal characteristic of a budding entrepreneur. Neither is lack of social contacts (the connection between social interaction and entrepreneurship is another growing field; see, e.g., Andersson and Larsson, 2015; Giannetti and Simonov, 2009). Unemployment, on the other hand, is a key determinant of self-employment but arguably not of entrepreneurial intentions. Being married (unseparated) and having children who reside at home are also quite powerful statistical determinants of transcending employment for self-employment (Andersson and Larsson, 2015).

While there are serious and obvious shortcomings, both conceptually and in terms of measurement, in this line of enquiry, the need to elucidate these issues should motivate further data collection. Are entrepreneurs 'happier' because happier people are more motivated to start businesses? Would entrepreneurs be shown to be more content with their lives if necessity entrepreneurs were eliminated from the analysis? Does the reportedly higher job satisfaction of self-employed people translate into higher satisfaction with life more generally?

3.2 DATA AND METHOD

The main objectives of the GEM study of entrepreneurship and well-being are to analyze correlations between entrepreneurship and SWB across 54 countries in different stages of development and to bridge some of the gaps in previous literature. Key questions analyzed in the survey include (Braunerhjelm et al, 2014):

- Do entrepreneurs experience higher SWB than the employed?
- Do opportunity entrepreneurs experience higher SWB than necessity entrepreneurs?
- How do entrepreneurs experience their leisure time balance relative to those employed?

The main areas investigated are i) life satisfaction as a measure of SWB, ii) balance between work and leisure, and iii) work satisfaction and stress. The approach to SWB applied is the satisfaction with life scale (SWLS, see Diener et al, 1985), where an individual's self-assessment of life satisfaction is rated on a 1–5 scale. Satisfaction with the leisure-work balance is analyzed using measures suggested by Valcour (2007).
The main results of the survey can be summarized as follows:

- Entrepreneurs exhibit higher levels of SWB than employees.
- Entrepreneurs in mature firms and opportunity-driven entrepreneurs exhibit high levels of SWB.
- Female entrepreneurs exhibit higher levels of SWB than male entrepreneurs.
- Necessity entrepreneurs exhibit substantially lower levels of SWB than opportunity entrepreneurs and the population average.

3.3 ENTREPRENEURSHIP AND WELL-BEING ACROSS COUNTRIES

An overview of the results is displayed in Figures 3.1 and 3.2. The figures display SWB categorized by entrepreneurship stage and a country's level of economic development.

Several observations stand out in these summarizing figures. First, (almost) invariably, entrepreneurs in innovation-driven countries exhibit higher SWB than entrepreneurs in efficiency-driven countries, which always rank above factor-driven countries. Second, the pattern is similar for non-entrepreneurs, consistent with refutation of the Easterlin paradox referenced above. Third, established entrepreneurs exhibit higher levels of SWB. Fourth, women exhibit higher SWB than men. Fifth, there is a large gap between SWB of necessity entrepreneurs and SWB of opportunity entrepreneurs.

The picture that emerges supports the notion that entrepreneurs, on average, score higher on SWB than non-entrepreneurs. Table 3.1 depicts the situation within the group classified as innovation-driven countries. This picture is more conflicted than the between-group comparison in Figures 3.1 and 3.2.

Of 26 innovation-driven countries, 14 have a higher SWB score for entrepreneurs than for the population average. With few exceptions, the well-being of entrepreneurs and non-entrepreneurs are heavily clustered at the nation level, suggesting that country fixed effects – such as institutional and cultural factors – are more important for absolute SWB than is entrepreneurship. This phenomenon is illustrated by France, which has the highest discrepancy between

Figure 3.1: Subjective well-being, by phase of entrepreneurship and stages of economic development

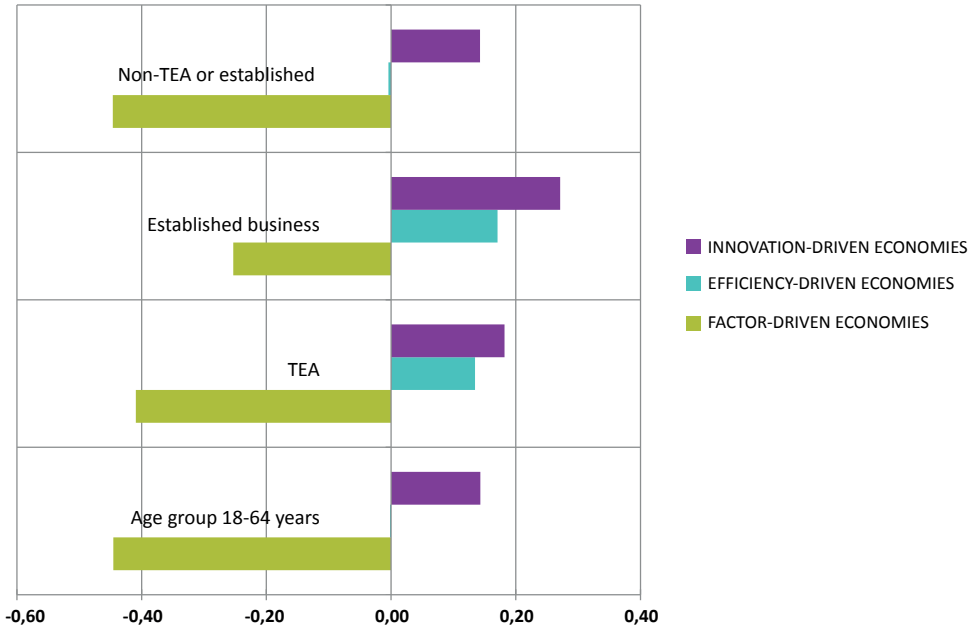


Figure 3.2: Subjective well-being and entrepreneurship motivations and gender, stages of economic development

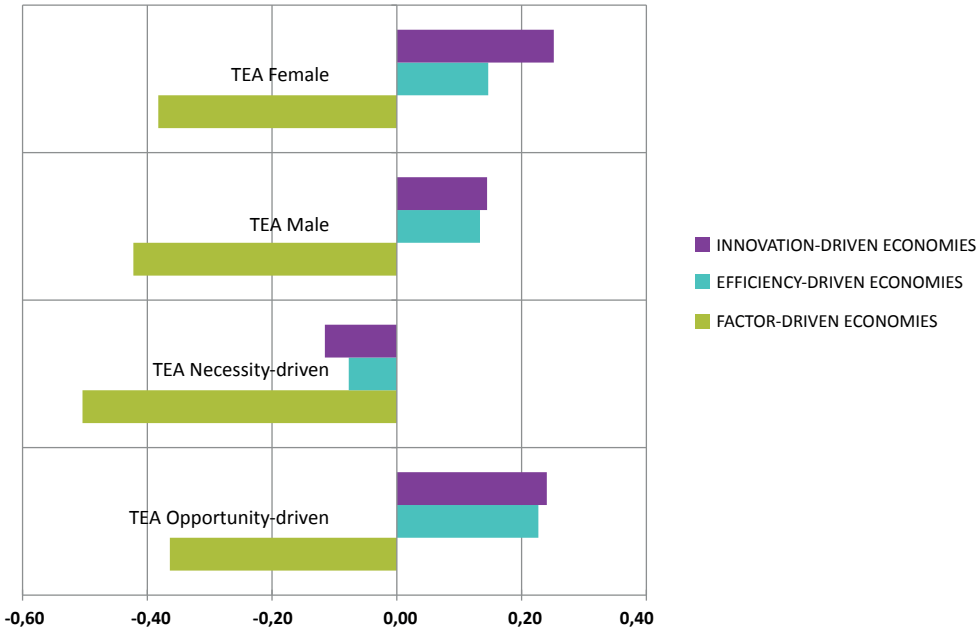


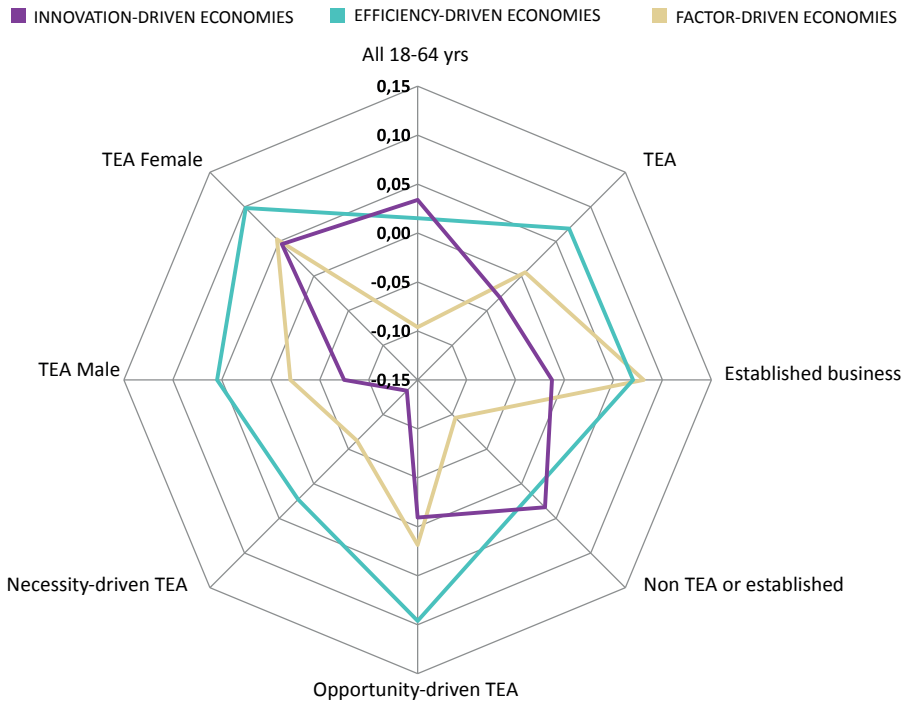
Table3.1: Subjective well-being in innovation-driven countries, general results

Country	All 18–64 yrs	TEA	Non-TEA or Established	Established business	Opportunity-driven TEA	Necessity-driven TEA	TEA Male	TEA Female
Belgium	0.16	0.16	0.16	0.27	0.18	0.17	0.12	0.25
Canada	0.33	0.32	0.33	0.51	0.41	–0.22	0.22	0.46
Czech Republic	–0.03	0.00	–0.03	0.10	0.05	–0.15	–0.02	0.05
Finland	0.40	0.39	0.40	0.58	0.42	0.21	0.36	0.44
France	–0.03	0.09	–0.03	0.08	0.17	–0.62	–0.01	0.30
Germany	0.12	0.06	0.12	0.27	0.18	–0.40	–0.04	0.22
Greece	–0.50	–0.30	–0.50	–0.48	–0.25	–0.46	–0.23	–0.50
Ireland	0.24	0.31	0.24	0.43	0.31	0.36	0.30	0.34
Israel	0.07	0.16	0.08	0.24	0.23	–0.08	0.04	0.41
Italy	0.02	–0.01	0.02	0.19	0.13	–0.64	0.01	–0.06
Japan	–0.23	–0.31	–0.23	–0.08	–0.26	–0.43	–0.55	0.14
Korea	–0.42	–0.42	–0.42	–0.47	–0.27	–0.69	–0.49	–0.24
Luxembourg	0.36	0.23	0.36	0.08	0.21	–0.51	0.16	0.37
Netherlands	0.29	0.47	0.28	0.42	0.50	0.26	0.55	0.35
Norway	0.61	0.53	0.61	0.70	0.51	0.44	0.49	0.63
Portugal	–0.14	0.11	–0.14	0.07	0.20	–0.13	0.10	0.13
Puerto Rico	0.49	0.79	0.49	0.91	0.78	0.75	0.90	0.60
Singapore	0.18	0.25	0.18	0.23	0.25	0.26	0.17	0.39
Slovenia	0.08	0.16	0.08	0.19	0.23	–0.09	0.16	0.16
Spain	0.08	0.15	0.08	0.15	0.23	0.01	0.13	0.19
Sweden	0.24	0.31	0.24	0.30	0.40	–0.34	0.15	0.59
Switzerland	0.62	0.74	0.62	0.85	0.78	0.06	0.63	0.85
Taiwan	–0.12	–0.08	–0.12	–0.05	0.01	–0.31	–0.11	–0.03
Trinidad & Tobago	0.38	0.37	0.38	0.70	0.37	0.38	0.36	0.39
United Kingdom	0.30	0.11	0.29	0.32	0.22	–0.45	0.22	–0.03
USA	0.22	0.14	0.22	0.54	0.26	–0.38	0.14	0.14
Average	**0.16**	**0.18**	**0.15**	**0.29**	**0.25**	**–0.15**	**0.14**	**0.26**

opportunity-driven and necessity-driven entrepreneurs. Despite the large relative difference, French opportunity-driven entrepreneurs report only slightly higher SWB scores (0.17) than the average for the total population in innovation-driven countries (0.16) and slightly lower scores than the TEA average (0.18).

Interestingly, much of this peculiarity is explained by the discrepancy between necessity-driven entrepreneurs and opportunity-driven entrepreneurs. In 19 of 26 cases, the SWB of necessity-driven entrepreneurs is in fact below the country average, suggesting that the literature on the effect of self-employment

Figure 3.3: Satisfaction with balance between personal and professional life and entrepreneurship indicators, by stages of economic development



on well-being may be inherently problematic if the objective is to study the effect of entrepreneurship on well-being – the answer to the question may be entirely explained by the country's ratio of opportunity to necessity entrepreneurs, as the former group pulls the average up, while the latter drags it down.

While the purpose of this section is only to present a descriptive snapshot of the results, it does offer at least three interesting points to consider: first, any study aiming to shed causal light on these issues must carefully consider country fixed effects. Second, the differences between opportunity entrepreneurs and necessity entrepreneurs is much more pronounced than the differences between entrepreneurs and the general population, suggesting that self-employment figures should be used with caution. Third, there is the issue of endogeneity and interdependence. If, e.g., unemployment causes both necessity entrepreneurship and lower SWB, then a statistical analysis might actually conclude that entrepreneurship leads to lower SWB, even though the positive relationship between opportunity entrepreneurship and SWB appears rather unidirectional.

LEISURE-WORK BALANCE, STRESS AND WORK SATISFACTION

Figure 3.3 displays the perceived balance between work and leisure for the three stages of economic development and categorized by different stages of entrepreneurship, by the necessity-opportunity distinction, and by gender.

Efficiency-driven countries stand out in most of these dimensions. The perceived well-balanced leisure-work domain of the efficiency-driven countries is clearest in the TEA categories, where the differences are consistently quite large. Although the differences are quite small at times, efficiency-driven countries exhibit the highest averages for all displayed components but three: i) the population (non-entrepreneur) average, ii) entrepreneurs running established

Table 3.2: Balance between work and leisure – results in innovation-driven countries

Country	All 18–64 yrs	TEA	Non-TEA or Established	Established business ownership	Opportunity-driven TEA	Necessity-driven TEA	TEA Male	TEA Female
Belgium	–0.05	–0.47	–0.02	–0.14	–0.39	–0.45	–0.53	–0.35
Canada	–0.02	0.00	–0.02	–0.01	0.06	–0.23	–0.13	0.17
Finland	0.21	0.07	0.23	0.08	0.02	0.06	0.04	0.13
France	–0.11	–0.17	–0.11	–0.17	–0.20	–0.23	–0.20	–0.11
Greece	–0.38	–0.32	–0.32	–0.55	–0.31	–0.33	–0.30	–0.39
Israel	–0.17	–0.16	–0.17	–0.09	–0.07	–0.43	–0.31	0.13
Italy	0.37	0.27	0.39	0.10	0.43	–0.63	0.17	0.54
Japan	–0.35	–0.45	–0.35	–0.22	–0.50	–0.50	–0.48	–0.40
Korea	–0.42	–0.50	–0.43	–0.34	–0.38	–0.74	–0.54	–0.34
Luxembourg	0.10	0.00	0.12	–0.11	–0.06	–0.51	0.05	–0.11
Netherlands	0.16	0.13	0.16	0.15	0.14	–0.02	0.19	0.03
Portugal	–0.02	–0.02	–0.02	0.00	–0.07	0.18	–0.12	0.17
Puerto Rico	0.58	0.59	0.57	0.69	0.51	0.93	0.64	0.49
Slovenia	–0.01	–0.12	0.01	–0.11	–0.04	–0.33	–0.10	–0.17
Spain	0.02	–0.13	0.10	–0.23	0.01	–0.53	–0.23	–0.03
Sweden	–0.03	0.05	–0.02	–0.22	0.08	0.11	–0.02	0.15
Trinidad & Tobago	0.46	0.47	0.41	0.58	0.43	0.75	0.32	0.73
United Kingdom	0.05	–0.03	0.05	0.12	–0.06	0.24	–0.02	–0.05
Average	**–0.01**	**0.01**	**–0.04**	**0.04**	**0.04**	**–0.05**	**–0.01**	**0.06**

businesses, and iii) entrepreneurs in non-TEA, non-established firms. In all three of these categories, efficiency-driven countries rank a close second. Categories (i) and (iii) are the only ones where innovation-driven countries rank highest.

Some connections deserve mention in relation to the previous section on SWB. While entrepreneurs in innovation-driven countries exhibit higher SWB than entrepreneurs in other countries, the phenomenon does not appear to be driven by entrepreneurs in such countries having a healthier balance between work and leisure. Note, e.g., the (north) dimension displaying work satisfaction for opportunity-driven TEA entrepreneurs. The innovation-driven countries rank lowest on this component, yet we already know, from Figure 3.2, that these entrepreneurs are rather content with their lives. In fact, opportunity-driven TEA entrepreneurs in factor-driven countries perceive their leisure-work balance as slightly better than that of their counterparts in innovation-driven countries. However, these differences in SWB are sizeable in the other direction and are in fact among the largest average differences recorded in Figures 3.1 and 3.2. Hence, these results lend support to the results of previous literature, which finds that entrepreneurs do appear to be motivated by autonomy and independence in their working lives (e.g., Benz and Frey, 2008) rather than by perceived balance between work and leisure activities.

Table 3.2 summarizes the leisure-work balance statistics, categorized by entrepreneurs and non-entrepreneurs, stages of entrepreneurship, and gender, for innovation-driven countries. The list of countries is slightly shorter, as some[13] country studies did not incorporate this question.

On average, in 10 of 18 countries, TEA entrepreneurs perceive a lower degree of leisure-work balance than the population average. In most other countries, the differentials are relatively close, with the notable exception of Sweden, which is the only country with a substantially higher perceived balance for TEA

13. *These countries are: the US, Norway, Germany, Singapore, Switzerland, Ireland, the Czech Republic, and Taiwan. These countries also did not respond to questions about work satisfaction.*

Table 3.3: Satisfaction with work and stress exposure for innovation-driven countries, categorized by entrepreneurs and non-entrepreneurs, opportunity TEA and necessity TEA, and gender

Country	Stress (all)	Satisfaction (all)	Stress (TEA)	Satisfaction (TEA)	Stress (Opp. TEA)	Satisfaction (TEA Opp.)	Stress (TEA Neces.)	Satisfaction (TEA Neces.)	Stress (TEA Male)	Satisfaction (TEA Male)	Stress (TEA Female)	Satisfaction (TEA Female)
Belgium	–0.13	0.15	–0.29	0.07	–0.17	0.07	–0.33	–0.14	–0.41	0.00	0.05	–0.13
Canada	–0.16	0.02	–0.13	0.04	–0.10	0.03	–0.26	0.11	–0.19	–0.05	0.16	–0.16
Czech Republic	–0.10	–0.03	–0.17	0.06	–0.11	0.08	–0.39	–0.01	–0.25	0.09	0.05	–0.10
Finland	0.23	0.22	0.24	0.25	0.24	0.18	0.42	0.50	0.27	0.20	0.19	0.23
France	–0.13	–0.07	–0.01	–0.10	–0.05	–0.09	0.01	–0.35	0.05	–0.12	–0.04	–0.13
Germany	–0.28	0.09	–0.37	–0.02	–0.35	0.09	–0.49	–0.36	–0.37	–0.37	0.22	–0.28
Greece	–0.53	–0.22	–0.32	–0.22	–0.28	–0.15	–0.49	–0.42	–0.28	–0.41	–0.29	–0.53
Ireland	0.02	0.28	0.02	0.39	0.00	0.37	0.22	0.50	0.13	–0.18	0.43	0.02
Israel	–0.02	0.03	0.08	0.06	0.07	0.08	0.06	–0.02	–0.03	0.28	0.18	–0.02
Italy	0.20	0.08	0.29	0.05	0.40	0.08	–0.38	–0.22	0.29	0.31	0.06	0.20
Japan	–0.03	–0.29	0.28	–0.15	0.32	–0.12	0.09	–0.19	0.24	0.35	–0.04	–0.03
Korea	–0.17	–0.37	–0.15	–0.26	–0.14	–0.10	–0.19	–0.59	–0.17	–0.09	–0.24	–0.17
Luxembourg	–0.21	0.10	–0.07	0.04	–0.12	–0.02	–0.31	–0.63	–0.11	0.02	–0.01	–0.21
Netherlands	0.08	0.21	0.18	0.30	0.17	0.31	0.19	0.10	0.21	0.12	0.24	0.08
Portugal	–0.33	0.06	–0.29	0.27	–0.43	0.34	0.07	–0.02	–0.27	–0.33	0.30	–0.33
Puerto Rico	0.03	0.36	0.18	0.31	0.06	0.24	0.71	0.59	0.25	0.03	0.21	0.03
Slovenia	–0.24	0.07	–0.27	0.11	–0.30	0.19	–0.32	–0.17	–0.23	–0.40	0.04	–0.24
Spain	–0.19	0.14	–0.20	0.29	–0.20	0.35	–0.18	0.15	–0.24	–0.13	0.33	–0.19
Sweden	–0.02	0.13	–0.03	0.14	0.01	0.22	0.05	–0.38	–0.13	0.14	0.43	–0.02
Trinidad & Tobago	0.31	0.33	0.38	0.35	0.34	0.35	0.75	0.33	0.39	0.38	0.40	0.31
UK	0.00	0.26	–0.05	0.27	0.04	0.35	–0.38	–0.31	–0.01	–0.12	0.13	0.00
Average	**–0.08**	**0.07**	**–0.03**	**0.11**	**–0.03**	**0.14**	**–0.06**	**–0.07**	**–0.04**	**–0.01**	**0.13**	**–0.08**

Note: The questions asked are: "at my work, I am not exposed to excessive stress", and "I am satisfied with my current work".

entrepreneurs relative to the general population. In line with previous observations (Figure 3.3), female entrepreneurs perceive a higher degree of balance between work and leisure.

Finally, Table 3.3 summarizes similar figures for the questions about work satisfaction and stress at work. The distributions are fairly compressed, but the systematic differences between stress and work satisfaction are apparent for entrepreneurs and for the general population. The most stressed group are necessity entrepreneurs, and this figure seems to be largely driven by men.

In conclusion, although the explorative nature of the data should be borne in mind, and the caveats about interdependence still apply, several interesting observations emerge from this exercise. First, there is the previously noted importance of country fixed effects in empirical analyses. Second, stress and satisfaction appear to be fairly disconnected for entrepreneurs. Third, the figures are consistent with earlier hypotheses about autonomy and independence as key to entrepreneurial SWB, e.g., higher observed SWBs for entrepreneurs appear to be entirely driven by opportunity entrepreneurship.

4

CONCLUDING REMARKS

4.1 SUMMARY

The GEM survey of 2014 covers 73 countries and 206,000 individuals in the age group of 18–64 years. Participating countries account for approximately 90 percent of world GDP and more than 72 percent of the world population. It is undoubtedly the largest study of entrepreneurs' activity and ambitions and of societal attitudes towards entrepreneurship that is conducted. In addition, data on entrepreneurial employees, typically termed intrapreneurship, will be presented.

Hence, the main objective of the report is to present comparative data on entrepreneurial development and the prerequisites for innovation-driven countries. For most of the variables, we report the results for the large EU-countries, France, Germany, Italy and the UK, whereas the smaller EU-countries, Belgium, Ireland and the Netherlands, have been grouped together. Also, the Nordic countries, with the exception of Sweden, are merged into one group. Finally, results for the U.S. and China are also presented, although China is not an innovation-driven country. In parts of the analysis, we have included all innovation-driven economies.

Entrepreneurial activity remained unchanged or slightly improved in most countries between 2013 and 2014. There are, however, some exceptions. For instance, a marked increase in nascent entrepreneurship can be seen in the U.S., outperforming most other countries. Another example is the dramatic and unprecedented fall in Swedish entrepreneurship between 2013 and 2014 referred to in Chapter 2, a decline of almost two percentage points. No other countries come close to such sharp movements, either downward or upward. This implies a break in the upward trend, observed since 2006, during which Sweden more than doubled its entrepreneurial activity, a trend that explains why Sweden, despite the decline in 2014, remains at a relatively high level of entrepreneurial endeavour. Indeed, only on one earlier occasion has such a large proportion of the Swedish population reported being about to start a business or operating a young company.

Last year's drastic deterioration in Swedish entrepreneurship likely reflects several factors. In absolute terms, the major part of the decline is accounted for by opportunity-based entrepreneurship. One explanation for the sharp decline may relate to continuous improvement in the labour market. Another competing reason may be uncertainty about whether tax reductions associated with household services will remain in effect after the election of autumn 2014. Both factors have probably played roles, but other

factors not accounted for in this study may also have influenced the diminishing rate of Swedish entrepreneurship.

Sweden, together with the U.S., also stands out in another respect: the share of the adult population claiming to have invested in new and young firms. Basically, the two countries are on par in this respect, with China closely keeping track. The remaining countries, by contrast, are lagging. In most countries, the number of investors has increased, particularly since 2006, which obviously should be considered a positive indicator of economic activity in general.

The evolution of the relative shares of opportunity- and necessity-based entrepreneurship is mixed across countries. This is likely to reflect the fact that different countries are at different stages of the business cycle. In some countries, one sees a sharp decline in necessity-based entrepreneurship, whereas others have experienced an increase (e.g., both France and Germany) or a levelling-out. China has a considerably higher share of necessity-based entrepreneurship, a pattern linked to its stage of development. As countries become richer, the share of necessity-based entrepreneurship falls, which we also observe in China, if we go back a decade.

The growth ambitions of entrepreneurs – employment growth, market position, innovation and internationalization – fall within a relatively narrow span for several of the countries considered. Nevertheless, the most growth-oriented nations report that approximately 15 percent of their entrepreneurs plan to expand employment by more than 20 employees over the coming five years, whereas the share at the other end of the spectrum is approximately 3–5 percent. Countries with low growth expectations have either been severely hurt by the economic crisis (e.g., Greece, Spain and Italy) or can be found among smaller countries and often belong to the group of welfare countries.[14] Asian and some Anglo-Saxon countries, together with several Eastern European countries, dominate the top performers.

With regard to market position and innovativeness, the changes are small. This contrasts with internationalization, where there is a clear trend among new firms towards increasing their shares of customers abroad. There are also fewer entrepreneurs who have no customers abroad, compared with last year.

Employment growth, market position, innovation and internationalization are all closely interrelated: innovation enables a company to deliver a unique product or service that is also an important precondition for exports. Increased market share abroad can be expected to lead to increased labour demand at home and thus positively affect the domestic economy.

Overall perceptions of the importance and social prestige of entrepreneurs vary across countries. Nevertheless, the overall picture is that social attitudes in the countries considered are favourable or very favourable to entrepreneurial endeavours, a pattern that also holds for China. These favourable attitudes are often strongest in the U.S., although the differences should not be exaggerated. Positive attitudes toward entrepreneurship foster the development of informal institutions that benefit entrepreneurship and are – together with an appropriate formal institutional framework – a necessary condition for the encouragement, stimulation and sustenance of entrepreneurial activities and ambitions.

One conspicuous result of our survey again refers to Sweden. Just as last year Sweden was an outlier with respect to the share of the population claiming to have identified a business opportunity worth building a company around, the distance to other countries and country groups increased in 2014. Together with the U.S., Sweden is far ahead of other innovation-driven economies on this survey item. Interestingly, however, this finding does not correspond with a perceived ability of Swedes to start and run businesses. .

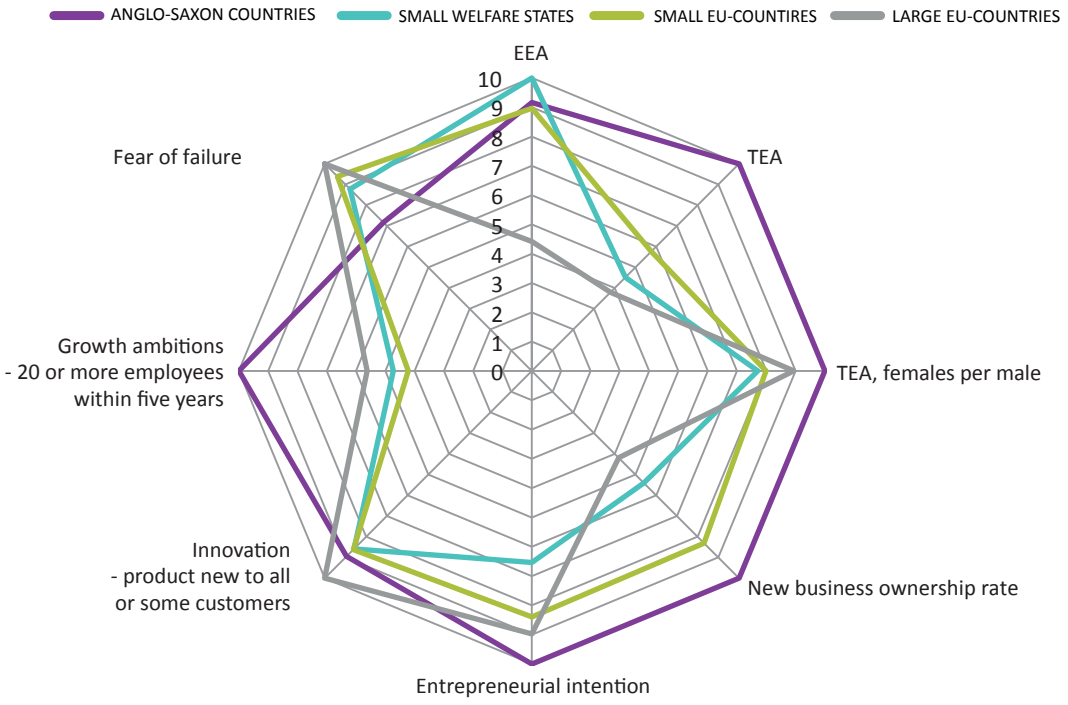
Hence, while both the more welfare-oriented system of Sweden and the explicit market-driven economy of the U.S. appear to provide identifiable entrepreneurial opportunities, these are not realized to the same extent in Sweden. This paradox is probably related to a greater difference in Sweden between expected net returns of entrepreneurship as compared to remaining an employee.

4.2 AN INTERNATIONAL COMPARISON

A common way of categorizing countries refers to the size of the public sector, the degree of centralization of political power and whether countries can be defined as welfare states (Acemoglu et al. 2012). Using this relatively crude typology to classify the countries

14. See Braunerhjelm and Henrekson (2013) on the effect of regulations on entrepreneurship.

Figure 4.1: Entrepreneurship for four different types of countries, 2014



Note: The value 10 is given to the group of countries which has the highest measure for a particular variable and all other groups of countries are expressed as relative to the country with the highest level.

involved in the current analysis, the Nordic countries and Sweden constitute the group of countries defined as welfare states. The social security systems in these countries are extensive, and there is minimal risk that individuals will end up without any form of livelihood. At the opposite end from the welfare states, we tend to place the United States and, more generally, the Anglo-Saxon nations. These countries are characterized to a greater degree by clear economic incentives to start and run businesses. We add the UK to form the group of Anglo-Saxon countries. Finally, there is the Continental model, often described as having more centrally organized and politically administered systems, albeit with significant elements of the traditional welfare state. Below, we will, as in Chapter 2, distinguish between large and small EU-countries in discussing the continental model.

As shown in Figure 4.1, there are some interesting differences between the welfare states and the EU countries, although in most cases, they are of a quite marginal nature. The entrepreneurial vein, however, appears to be less pronounced in the larger EU-countries, a pattern captured by considerably lower TEA but also by a lower level of intrapreneurship (EEA). Additionally, early-stage entrepreneurship in the larger EU-countries differs negatively from that of the other groups of countries. On the other hand, and more surprisingly, relatively large percentages of the populations in the large EU-country group report planning to start a business within three years (entrepreneurial intent), and the gender-gap in entrepreneurship in these countries is much smaller than in the other European groups of countries.

In terms of new (3–42 months) business formation, the small EU-countries perform comparatively well, but otherwise, the differences relative to the welfare states or the larger EU-countries are negligible. Nor do the welfare states show any dramatic differences compared with other groups of countries, albeit they are slightly stronger than the rest in intrapreneurship while being somewhat weaker in entrepreneurial intent.

Instead, the more dramatic differences are found between the Anglo-Saxon group and the other

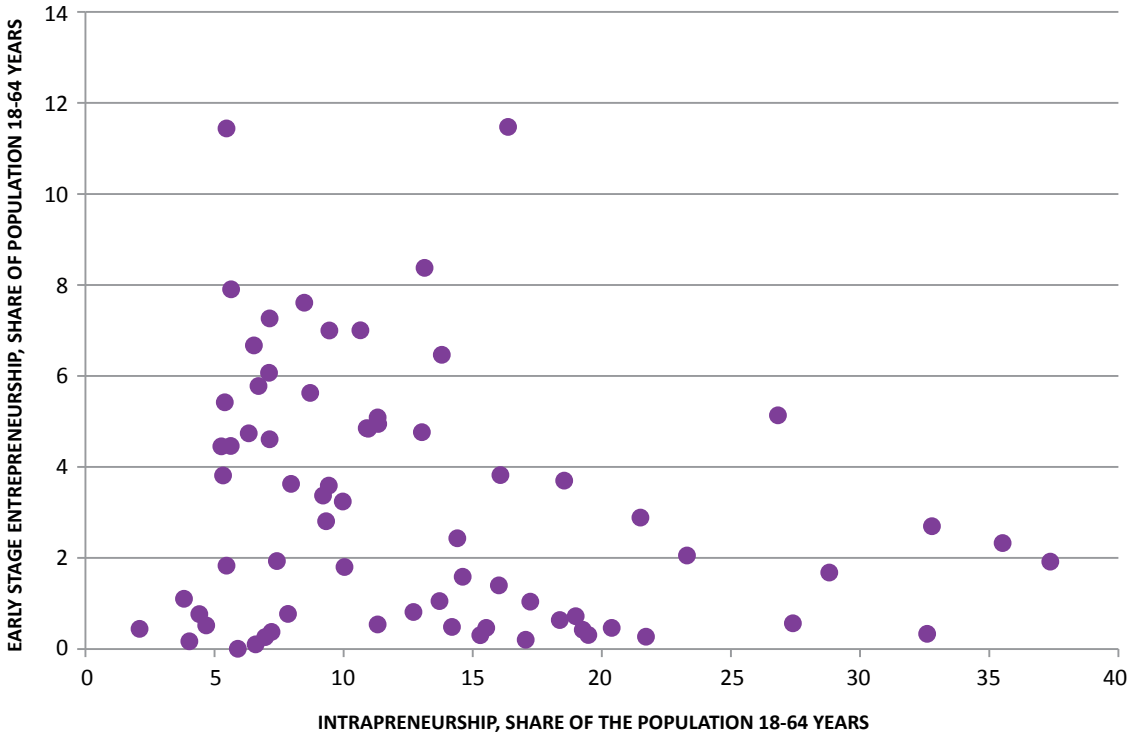
groups of countries. In all dimensions that measure entrepreneurial activity, the Anglo-Saxon group outperforms the others – TEA, new business ownership, women's entrepreneurship and future potential entrepreneurs (intention to start a business). The fear of failure is also noticeably lower among Anglo-Saxon entrepreneurs. It is only when intrapreneurship is considered that small EU-states and welfare states are comparable with the Anglo-Saxon group. Moreover, growth ambitions are far greater in the latter group, while the level of innovation appears to be roughly the same in all.

Interesting differences emerge between the Anglo-Saxon group and all other groups of countries, on the one hand, and between the small (EU and welfare states) and large countries, on the other hand. Institutions – laws and regulations – as well as traditions and norms govern these differences. The Anglo-Saxon countries are usually viewed as more incentive-driven – the rewards for a successful business can be significant both economically and in terms of social prestige. Income distribution is more uneven in the Anglo-Saxon countries, as is access to high-quality education.

These differences can be expected to affect choices between employment and entrepreneurs as well as the type of entrepreneurship that prevails (necessity- versus opportunity-driven entrepreneurship). Nations with better-developed social safety nets and a comprehensive public administration apparatus must be financed through higher tax revenues. As a side effect, tax wedges, market imperfections and regulatory burdens, all of which tend to inhibit entrepreneurship, innovation and market experiments, are also created.[15] Larger companies, which have the scale needed to manage complex regulations and tax regimes, are favoured, and public authorities are required to administer these institutions.[16] Entrepreneurship may then instead be channelled to larger incumbents in the form entrepreneurial employees, i.e., intrapreneurs.

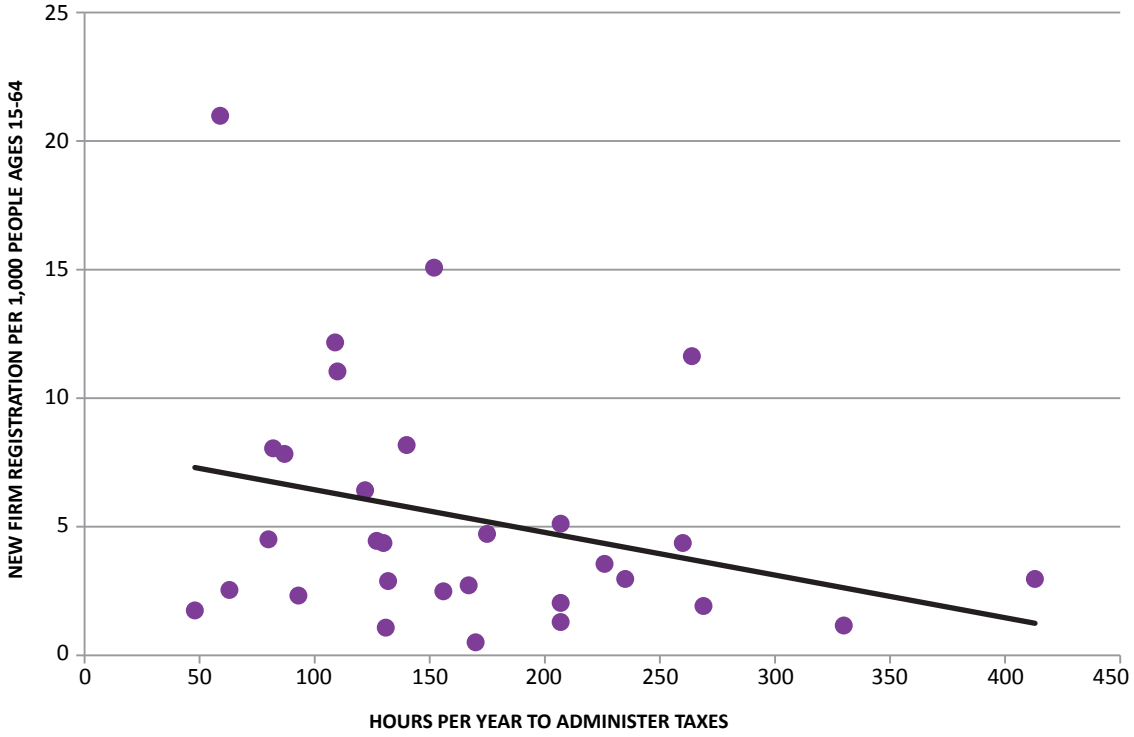
It appears reasonable that countries with high levels of entrepreneurship would also be good at intrapreneurship; that is, entrepreneurship should

Figure 4.2: Correlation between countries intra- and entrepreneurship, 2014



15. *Bosma and Levie (2010) find a negative relationship between the level of expenditures for social insurance systems and entrepreneurship. They also find that a negative view of entrepreneurship correlates with a high percentage of employees who are entrepreneurial.*
16. *See Braunerhjelm and Eklund (2014), who show that the complexity – not only the level – of taxes has a statistically negative impact on the level of entrepreneurship.*

Figure 4.3: Regulatory burden and entrepreneurship, 2014



Source: The World Bank.

be high, irrespective of whether one is employed or running a business. However, as shown in Figure 4.2, there appears to be no such connection between countries' levels of entrepreneurship and intrapreneurship (or possibly a weak negative relationship). Rather, the interpretation is that institutions – laws and regulations – are critically important not only to the level of entrepreneurship but also to how entrepreneurship is allocated between different activities (Baumol, 1990).

4.3 SOME POLICY IMPLICATIONS

The analysis in this report has primarily been descriptive, with the objective of comparing nations along various dimensions related to entrepreneurship. Nevertheless, we would like to conclude with some policy considerations in addition to those referred to above (pertaining to the level and structure of taxes briefly). We would like to emphasize three policy areas that are of particular importance for early-stage entrepreneurship and the types of entrepreneurs that will emerge.

First, several studies have highlighted the negative effects of regulations on entrepreneurship. For instance, van Stel et al. (2007), using GEM data on new and young entrepreneurs (TEA), conclude that there is a significant and negative relationship between regulatory burdens and start-ups – with effects that can be expected to vary between firms, industries and policy areas. Figure 4.3 illustrates this negative relationship by plotting tax complexity, defined as the average time required by a company to process its taxes, against newly registered companies.[17]

Obviously, causality is not clear from a simple two-variable analysis, but a clear negative correlation strongly indicates that an increased regulatory burden more generally leads to a reduced level of entrepreneurship. A strategically important issue for economic policy in creating an environment conducive to entrepreneurial endeavours is thus how to minimize regulations that are particularly harmful or administratively burdensome and costly for entrepreneurs. Moreover, it should be noted that a heavy regulatory burden may not only have direct effects

17. Braunerhjelm and Eklund (2014) confirm a statistically negative relationship that runs from tax complexity to new firm formation.

Figure 4.4a: Countries' educational expenditures and opportunity-based entrepreneurship, 2014

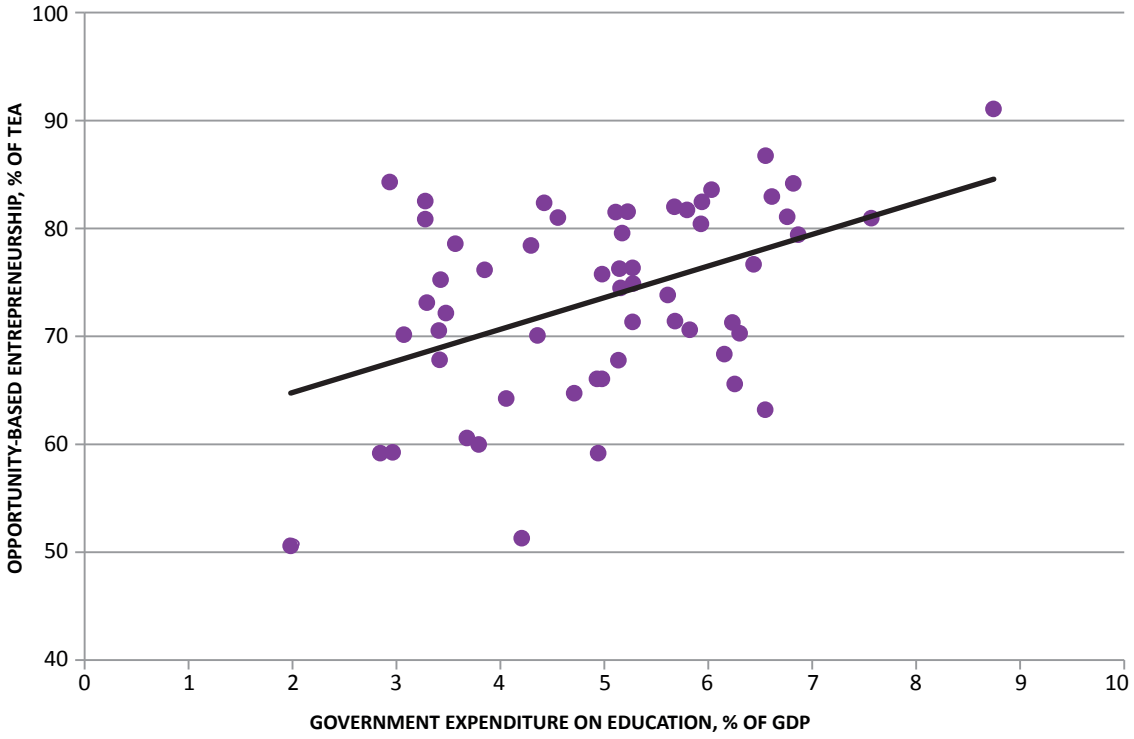
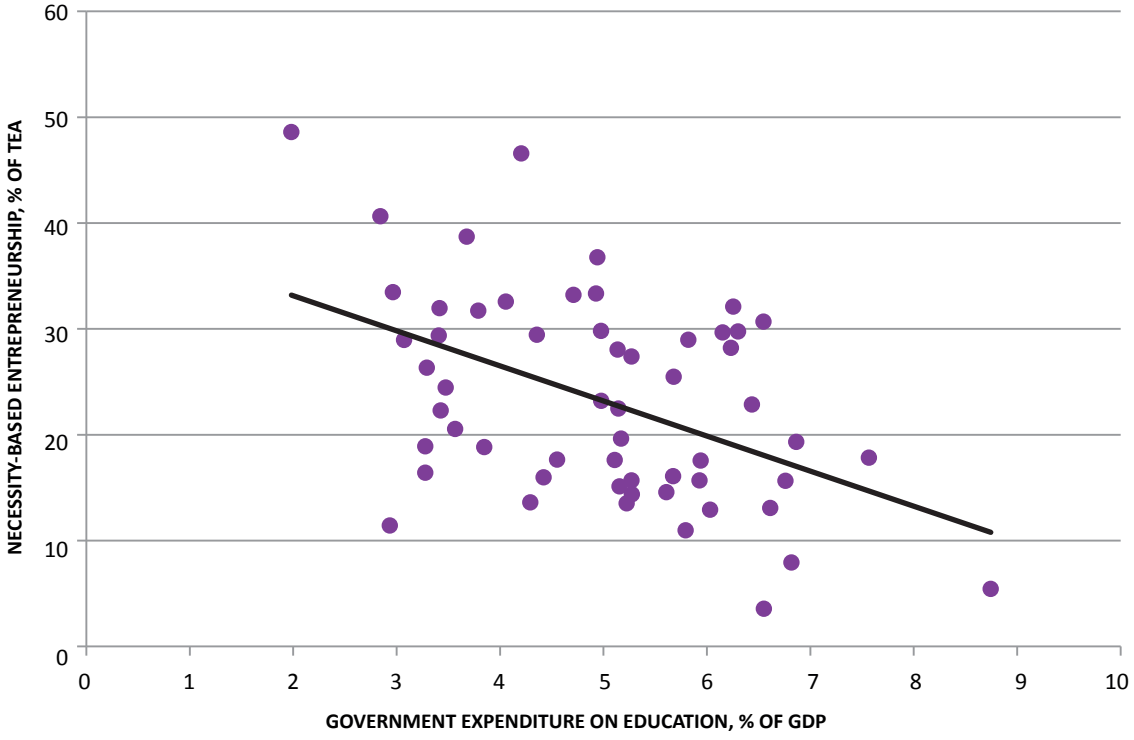


Figure 4.4b: Countries' educational expenditures and necessity-based entrepreneurship, 2014



Source Figure 4.4a and b: World Development Indicators (The World Bank) and GEM.

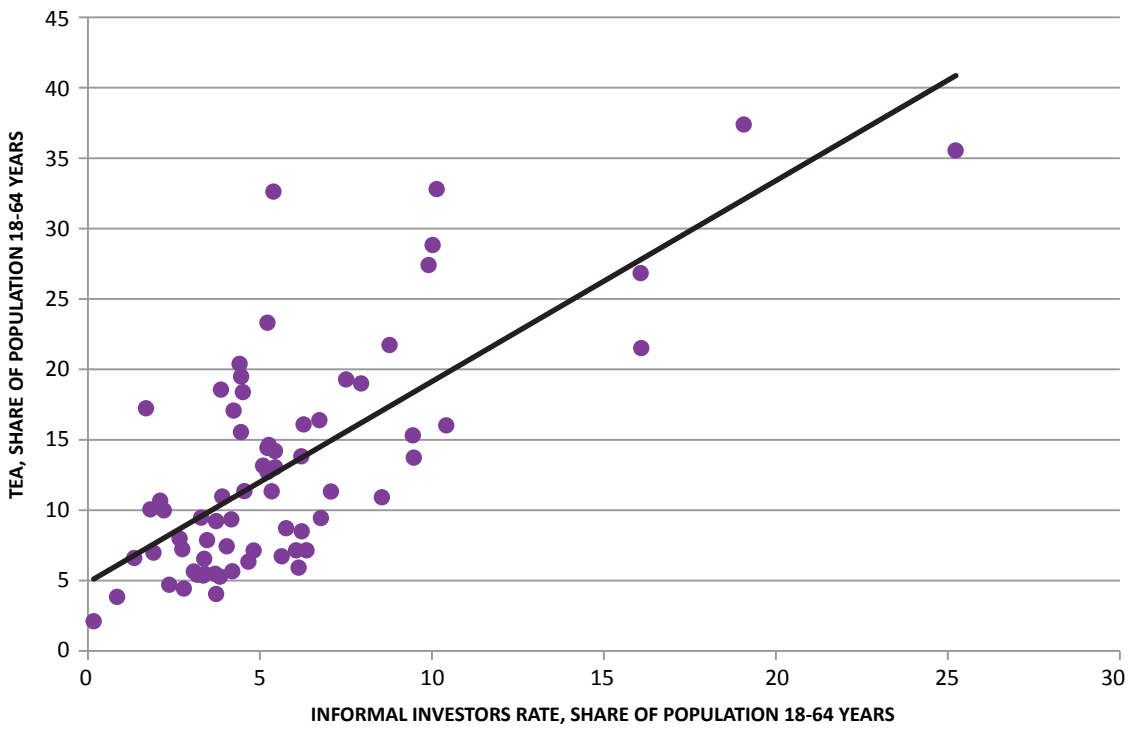
in terms of added costs of compliance but also indirectly harm entrepreneurship by affecting incentives, motivations and norms.[18]

The supply of skills is another key condition for entrepreneurs to grow and maintain their innovative capacities (World Bank 2015). In addition to impacting the levels of entrepreneurship, the supply of skills influences the types of entrepreneurs present in an economy. Figures 4.4a and 4.4b show how opportunity-based entrepreneurship is positively associated with a country's educational expenditures, while a correspondingly strong negative correlation can be observed between necessity-based entrepreneurship and aggregate educational spending.

A third important component in promoting entrepreneurship-driven dynamics and economic growth concerns access to capital. Figure 4.5a depicts the links between access to informal investors – business angels (i.e., fools, friends and family) – and the proportion of entrepreneurs in the population (TEA), while Figure 4.5b is limited to very early entrepreneurship (0–3 months). In both cases, business angels and entrepreneurship are clearly positively associated.

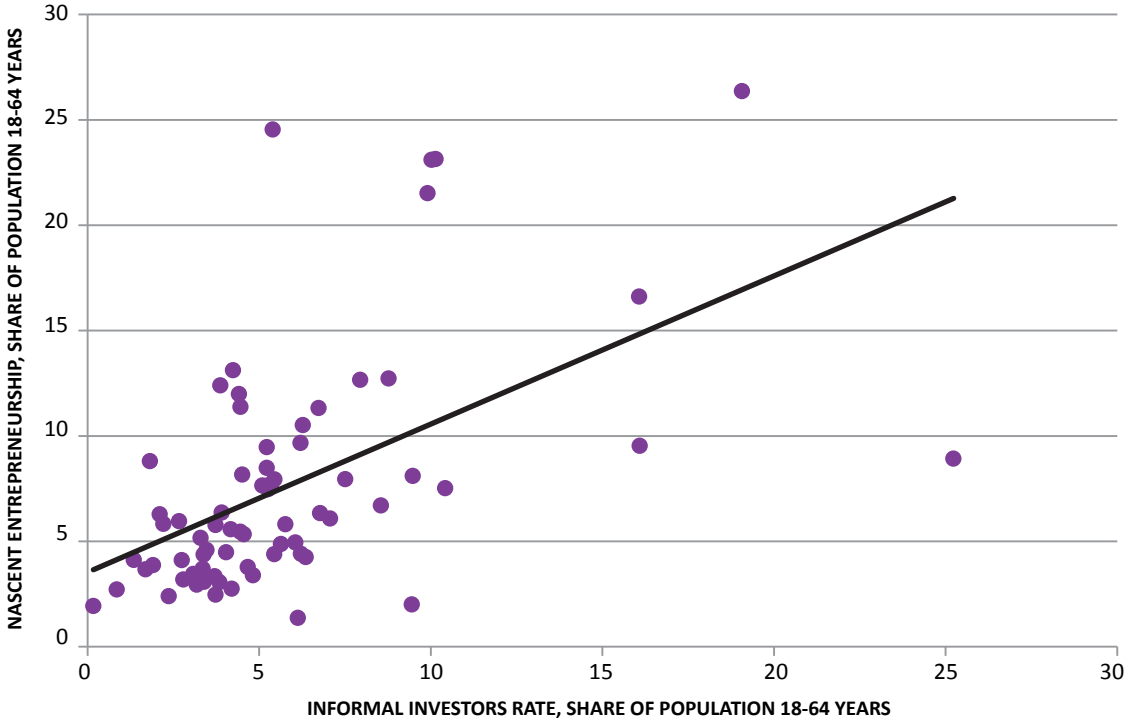
Business angels who have experience of actually starting and running businesses are considered to be particularly important in piloting and fostering the development of new businesses. The Anglo-Saxon model, described above and found to be by far the best at generating entrepreneurial activity, is largely based on the social and economic acceptability of economically successful entrepreneurs. If these entrepreneurs reinvest their assets in new ventures and combine these investments with the provision of competence, a virtuous circle may be set into motion in which previously successful entrepreneurs' capital and expertise are invested in new entrepreneurs, whereof at least some will succeed and re-invest their profits in new enterprises, etc. Countries that lack an entrepreneurial tradition are likely to also lack the skills critical to start and build businesses. Instead, they have entrenched skills suited to organizing and streamlining existing larger companies.

Figure 4.5a: Informal equity (business angels) and entrepreneurship (TEA), 2014



18. *See Braunerhjelm (2011) for a survey.*

Figure 4.5b: Informal equity (business angels) and nascent entrepreneurship, 2014



To conclude, countries differ in their institutions and their traditions relating to entrepreneurship, differences that show up in statistics. If the political aim is to enter a path on which entrepreneurship, innovation and continuous market experimentation pave the way for a sustainable future growth, a first condition is to understand the level of entrepreneurship, its ambitions and the attitudes surrounding entrepreneurial endeavours. The GEM project makes such an analysis possible. In addition, the differences reported across countries imply that there is room for learning about and adopting measures implemented in other economies.

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APPENDIX 1:
NATIONAL EXPERT SURVEY - EXPERTS' VIEWS ON CONDITIONS FOR ENTREPRENEURSHIP

The results of the APS questionnaire, reported in Chapter 2, are complemented by a smaller survey of national experts (the NES survey), who are interviewed for their views on entrepreneurial conditions. The questions have remained unchanged to facilitate comparison over time.[17]

In each country, at least 36 experts are interviewed by phone or through the web. The experts are from different areas, such as finance, education/research, policy-making and business advising or are entrepreneurs themselves. In 2014, 73 countries participated in the NES study. The questionnaire consists of two sets of questions. First, the experts are asked to evaluate various claims on a five-point Likert scale, where the alternatives range from completely false (1) to completely true (5). These questions are designed to address entrepreneurial conditions, as seen in Table A1.1 below.

Second, the experts are also asked more generally to evaluate and provide their opinions regarding key strengths and weaknesses of existing entrepreneurial conditions. Moreover, they are asked to state three topics/areas that are constraining entrepreneurial activity in the country and three that are fostering it.

Whereas the global GEM report for 2014[18] discusses the results for all countries, here we focus on the innovation-driven economies. Briefly, the results for the entire group of countries, categorized by factor-, efficiency- and innovation-driven economies, are summarized in Figure A1.1 and Figure A1.2. As can be seen, there are considerable differences among the

Table A1.1: GEM's key entrepreneurial framework conditions

1. Entrepreneurial Finance. The availability of financial resources—equity and debt—for small and medium enterprises (SMEs) (including grants and subsidies).
2. Government Policy. The extent to which public policies support entrepreneurship. This EFC has two components: 2a. Entrepreneurship as a relevant economic issue and 2b. Taxes or regulations are either size-neutral or encourage new and SMEs
3. Government Entrepreneurship Programs. The presence and quality of programs directly assisting SMEs at all levels of government (national, regional, and municipal).
4. Entrepreneurship Education. The extent to which training in creating or managing SMEs is incorporated within the education and training system at all levels. This EFC has two components: 4a. Entrepreneurship Education at basic school (primary and secondary) and 4b. Entrepreneurship Education at post-secondary levels (higher education such as vocational, college, business schools, etc.).
5. R&D Transfer. The extent to which national research and development will lead to new commercial opportunities and is available to SMEs.
6. Commercial and Legal Infrastructure. The presence of property rights, commercial, accounting and other legal and assessment services and institutions that support or promote SMEs.
7. Entry Regulation. This EFC contains two components: 7a. Market Dynamics: the level of change in markets from year to year, and 7b. Market Openness: the extent to which new firms are free to enter existing markets.
8. Physical Infrastructure. Ease of access to physical resources—communication, utilities, transportation, land or space—at a price that does not discriminate against SMEs.
9. Cultural and Social Norms. The extent to which social and cultural norms encourage or allow actions leading to new business methods or activities that can potentially increase personal wealth and income

17. For a more detailed description of the NES methodology see the Global GEM report 2014 which can be downloaded from www.gemconsortium.org.
18. Singer et al. (2015), Global Entrepreneurship Monitor 2014. Global Report.

Figure A1.1: Composite indicators of entrepreneurship institutions, by stage of development (1/2)

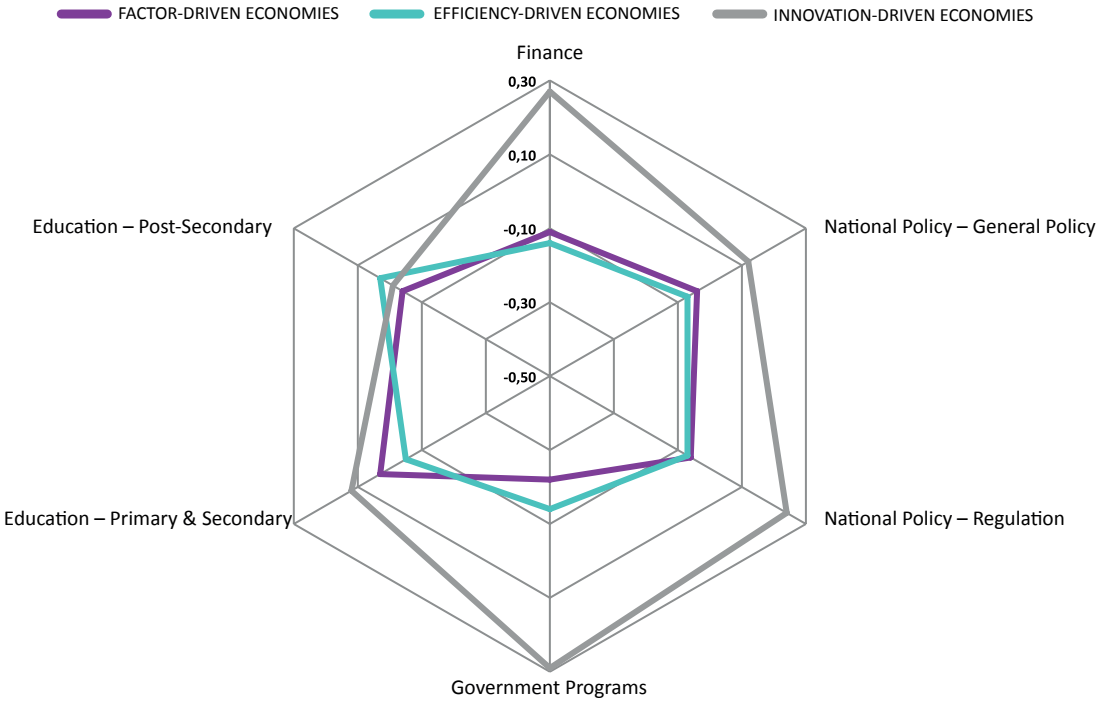


Figure A1.2: Composite indicators on entrepreneurship institutions, by stage of development (2/2)

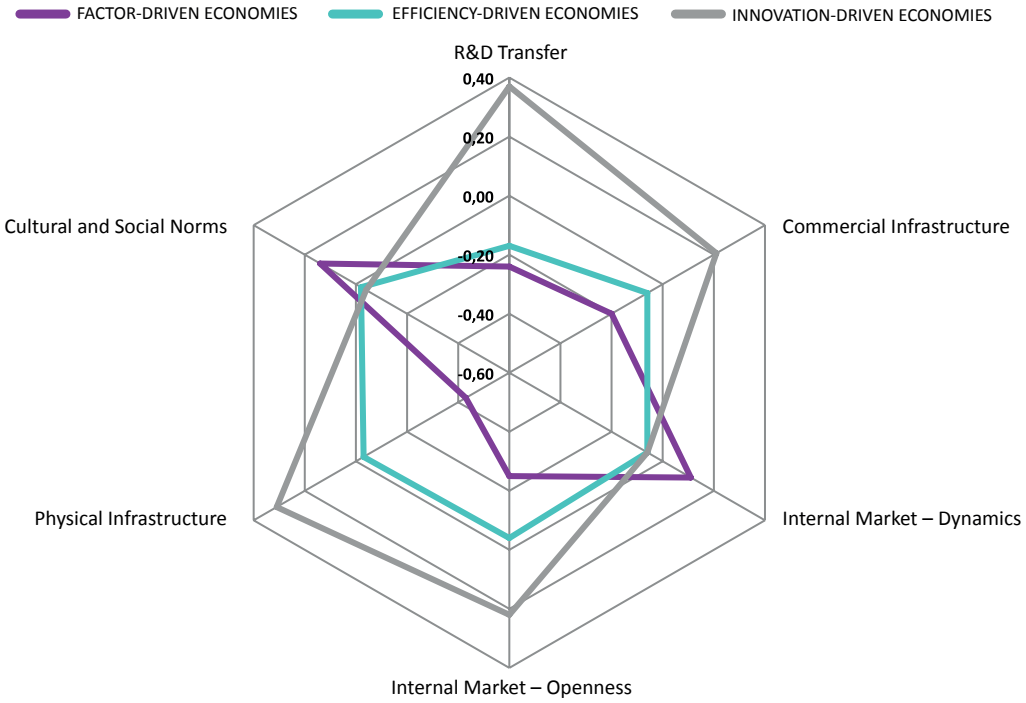


Table A1.2: Entrepreneurial framework conditions, main indicators, lowest and highest rankings for EU, Norway and North America (source: Singer et al. 2015:58)

1. Finance
2. National policy – General policy
3. National policy – Regulation
4. Government Programs
5. Education – Primary and Secondary
6. Education – Post-Secondary
7. R&D Transfer
8. Commercial Infrastructure
9. Internal Market – Dynamics
10. Internal Market – Openness
11. Physical Infrastructure
12. Cultural and Social Norms

	1	2	3	4	5	6	7	8	9	10	11	12
Austria												
Belgium												
Canada												
Croatia												
Denmark												
Estonia												
Finland												
France												
Germany												
Greece												
Hungary												
Ireland												
Italy												
Latvia												
Lithuania												
Luxembourg												
Netherlands												
Norway												
Poland												
Portugal												
Romania												
Slovakia												
Slovenia												
Spain												
Sweden												
United Kingdom												
United States												
Average EU												
Average North America												

experts of different groups of countries in how they evaluate entrepreneurial conditions. The closer to the centre of the figure a topic area is, the worse conditions are assessed to be.

As seen in the figures, education at lower levels is given a low evaluation in all three types of economies; other low-rated conditions are national policies regarding regulations and R&D transfer. At the other end of the valuation scale, we find physical infrastructure – a condition that is highly valued except in factor-driven economies. We also find that experts in more developed countries, i.e., the EU and North America, tend to be somewhat more positive generally.

Without going into details, we would like to stress that it is important to consider the specific conditions of each country and not draw farfetched conclusions based these intergroup comparisons. Ratings are undertaken in a country-specific context that consists of physical and economic conditions as well as cultural and social norms that tend to be unique to each country. Nevertheless, we may conclude that the most obvious differences between factor-, efficiency- and innovation-driven economies are found in the areas of finance, government programs, national policy regulation, R&D transfer and physical infrastructure.

Looking more closely at the innovation-driven economies (Table A1.2), we find large similarities. The table reveals the lowest (cyan) and highest (purple) condition for each country. Comparing the means of the valuations of entrepreneurial conditions, we observe that the values are highly centred on the five-point scale. Nevertheless, some distinct differences are evident. It should also be noted that variations are quite small – the lowest ranked condition varies between 1.5 and 2.6 on the scale, the highest between 3.1 and 4.8.

Experts in most of the countries value physical infrastructure most highly, together with market dynamics in a few cases. There is somewhat more variation between countries regarding conditions that experts evaluate lowest. In the majority of countries, basic education receives the lowest evaluation. Additionally, however, national policy, R&D transfer and market dynamics are ranked at the bottom by several countries.

An interesting finding is that experts in most countries, despite differences in economic conditions and cultural norms, appear to be quite similar in their evaluations of conditions. Indeed, there appear to be more similarities between experts globally than between individuals who take part in the APS study. Experts are persons who, on a daily basis, work in an entrepreneurial context. Therefore, it is perhaps not surprising that experts from quite varied national contexts encounter the same types of concerns – for instance, issues regarding financing or regulations.

The experts represent a field of research on entrepreneurship that has been emerging for several decades. This profession is international and to a large extent confronts similar problems throughout the world. We also see indications of this emerging global profession in projects and reports of the OECD, the EU and other international organizations. And, of course, the GEM itself is a sign of the global nature of entrepreneurship expertise and increasing transfers of knowledge in terms of best practices.

APPENDIX 2:

GEM METHOD

The entrepreneurial process and the GEM conceptual framework can be summarized as in Figure A2.1 and Figure A2.2. For a more detailed description of the GEM model and conceptual framework see the Global GEM report 2014 which can be downloaded from www.gemconsortium.org.

Figure A2.1: The entrepreneurial process

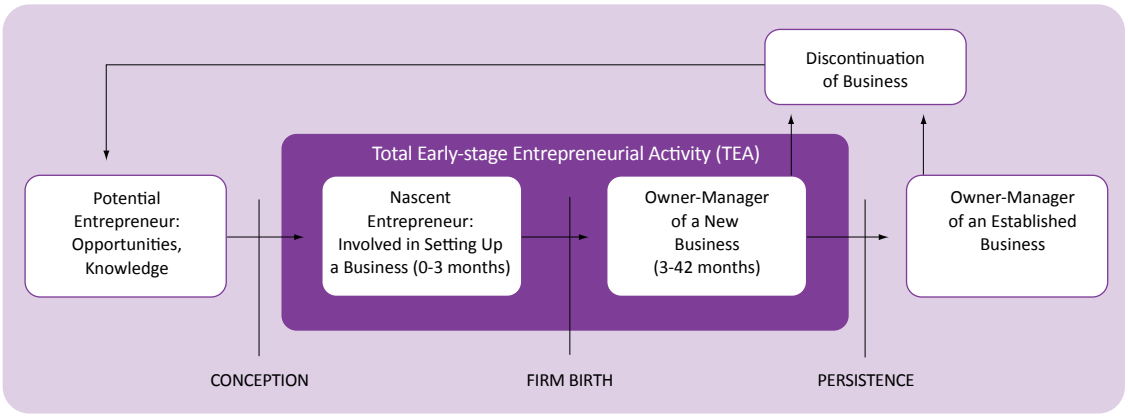
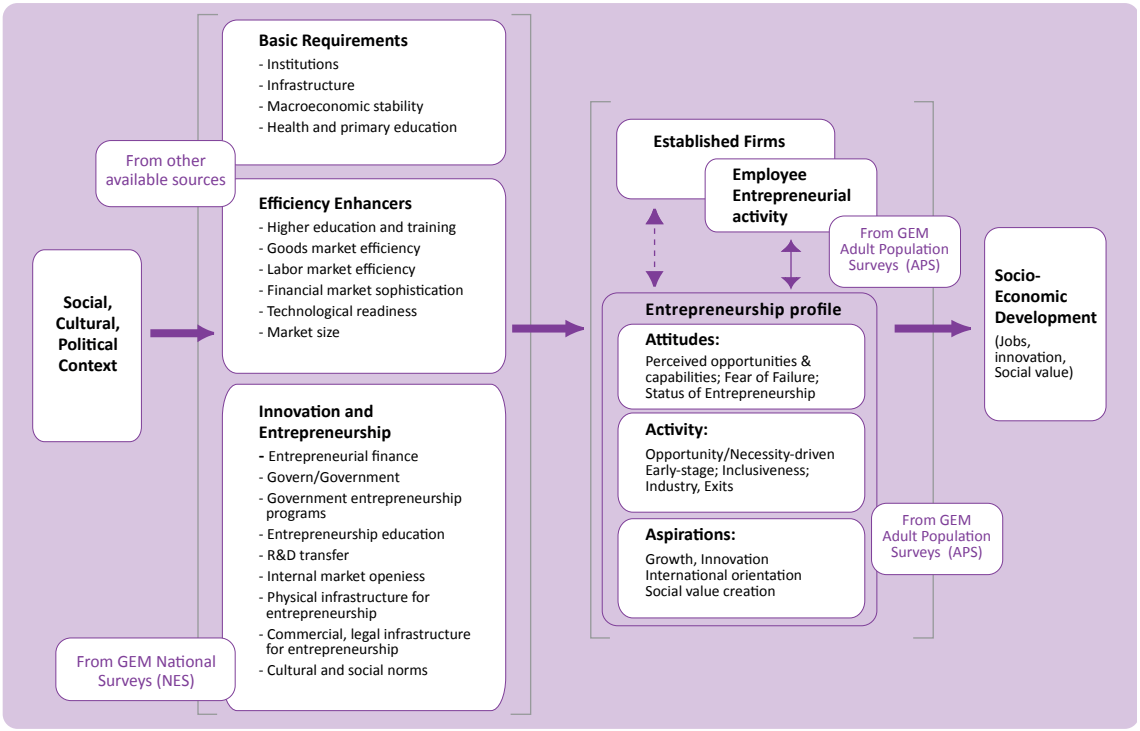


Figure A 2.2: The GEM-Model



APPENDIX 3:

QUESTIONS TO EXPERTS

TOPIC A: FINANCE

- *In my country there is sufficient equity funding available for new and growing firms*
- *In my country there is sufficient debt funding available for new and growing firms.*
- *In my country there is sufficient government subsidies available for new and growing firms.*
- *In my country there is sufficient funding available from informal investors (family, friends and colleagues) who are private individuals (other than founders) for new and growing firms.*
- *In my country there is sufficient professional Business Angels funding available for new and growing firms*
- *In my country there is sufficient venture capitalist funding available for new and growing firms.*
- *In my country there is sufficient funding available through initial public offerings (IPOs) for new and growing firms.*
- *In my country there is sufficient private lenders' funding (crowdfunding) available for new and growing firms*

TOPIC B: GOVERNMENT POLICIES

- *In my country government policies (e.g., public procurement) consistently favor new firms.*
- *In my country the support for new and growing firms is a high priority for policy at the national government level.*
- *In my country the support for new and growing firms is a high priority for policy at the local government level.*
- *In my country new firms can get most of the required permits and licenses in about a week.*
- *In my country the amount of taxes is NOT a burden for new and growing firms.*
- *In my country taxes and other government regulations are applied to new and growing firms in a predictable and consistent way.*
- *In my country coping with government bureaucracy, regulations, and licensing requirements is not unduly difficult for new and growing firms.*

TOPIC C: GOVERNMENTAL PROGRAMS

- *In my country a wide range of government assistance for new and growing firms can be obtained through contact with a single agency.*
- *In my country science parks and business incubators provide effective support for new and growing firms.*
- *In my country there are an adequate number of government programs for new and growing businesses.*
- *In my country the people working for government agencies are competent and effective in supporting new and growing firms.*
- *In my country almost anyone who needs help from a government program for a new or growing business can find what they need.*
- *In my country government programs aimed at supporting new and growing firms are effective.*

TOPIC D: EDUCATION AND TRAINING

- *In my country teaching in primary and secondary education encourages creativity, self-sufficiency, and personal initiative.*
- *In my country teaching in primary and secondary education provides adequate instruction in market economic principles.*
- *In my country teaching in primary and secondary education provides adequate attention to entrepreneurship and new firm creation.*
- *In my country colleges and universities provide good and adequate preparation for starting up and growing new firms.*
- *In my country the level of business and management education provide good and ade¬quate preparation for starting up and growing new firms.*
- *In my country the vocational, professional, and continuing education systems provide good and adequate preparation for starting up and growing new firms.*

TOPIC E: R&D TRANSFER

- *In my country new technology, science, and other knowledge are efficiently transferred from universities and public research centers to new and growing firms.*
- *In my country new and growing firms have just as much access to new research and technology as large, established firms.*
- *In my country new and growing firms can afford the latest technology.*
- *In my country there are adequate government subsidies for new and growing firms to acquire new technology.*
- *In my country the science and technology base efficiently supports the creation of world-class new technology-based ventures in at least one area.*
- *In my country there is good support available for engineers and scientists to have their ideas commercialized through new and growing firms.*

TOPIC F: COMMERCIAL AND SERVICES INFRASTRUCTURE

- *In my country there are enough subcontractors, suppliers, and consultants to support new and growing firms.*
- *In my country new and growing firms can afford the cost of using subcontractors, suppliers, and consultants.*
- *In my country it is easy for new and growing firms to get good subcontractors, suppliers, and consultants.*
- *In my country it is easy for new and growing firms to get good, professional legal and accounting services.*
- *In my country it is easy for new and growing firms to get good banking services (checking accounts, foreign exchange transactions, letters of credit, and the like).*

TOPIC G: MARKET OPENNESS

- *In my country the markets for consumer goods and services change dramatically from year to year.*
- *In my country the markets for business-to-business goods and services change dramatically from year to year.*
- *In my country new and growing firms can easily enter new markets.*
- *In my country new and growing firms can afford the cost of market entry.*
- *In my country new and growing firms can enter markets without being unfairly blocked by established firms.*
- *In my country the anti-trust legislation is effective and well enforced.*

TOPIC H: PHYSICAL INFRASTRUCTURE

- *In my country the physical infrastructure (roads, utilities, communications, water disposal) provides good support for new and growing firms.*
- *In my country it is not too expensive for a new or growing firm to get good access to communications (phone, Internet, etc.).*
- *In my country a new or growing firm can get good access to communications (telephone, internet, etc.) in about a week.*
- *In my country new and growing firms can afford the cost of basic utilities (gas, water, electricity, and sewer).*
- *In my country new or growing firms can get good access to utilities (gas, water, electricity, and sewer) in about a month.*

TOPIC I: CULTURAL AND SOCIAL NORMS

- *In my country the national culture is highly supportive of individual success achieved through own personal efforts.*
- *In my country the national culture emphasizes self-sufficiency, autonomy, and personal initiative.*
- *In my country the national culture encourages entrepreneurial risk-taking.*
- *In my country the national culture encourages creativity and innovativeness.*
- *In my country the national culture emphasizes the responsibility that the individual (rather than the collective) has in managing his or her own life.*

TOPIC S: SOCIAL ENTREPRENEURSHIP

- *In my country people who live in poverty cannot rely on the government or civil society organizations*
- *In my country you will find many business that provide people with basic needs that are covered by governments and civil society organizations in other countries*
- *In my country social, environmental and community problems are generally solved more effectively by businesses than by the government and civil society organizations.*
- *In my country entrepreneurs' associations/groups challenge existing regulations that negatively impact particular groups in society or the environment*
- *In my country the government is able to bring together potential entrepreneurs, businesses and civil society organizations around specific social, environmental or community projects.*
- *In my country consumers are putting pressure on businesses to address social and environmental needs*
- *In my country there are sufficient private and public funds available for new and growing firms that aim at solving social and environmental problems*
- *In my country there is a lot of media attention for new and growing firms that combine profits with positive social and environmental impact.*

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The report is available for download on www.entreprenorskapsforum.se