



# Global Entrepreneurship Monitor

*2007 Latvia Report*

*Olga Rastrigina*

*Sponsored by TeliaSonera*

*The TeliaSonera Institute at the Stockholm School of Economics in Riga*



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# GLOBAL ENTREPRENEURSHIP MONITOR

2007 LATVIA REPORT

Olga Rastrigina

Founding and Cooperating Institutions:

TeliaSonera Institute at SSE Riga  
Baltic International Centre for Economic Policy Studies (BICEPS)  
Latvijas Fakti

## FOREWORD

Global Entrepreneurship Monitor (GEM) is a major international research project aimed at describing and analyzing entrepreneurial processes across a wide range of countries. In 2007 Latvia participated in the GEM for the third time. This volume represents the Latvian Country report based on original data collected in Latvia for GEM. We believe that the Latvian GEM will contribute to the knowledge and understanding of the factors influencing entrepreneurial activity in Latvia.

The Latvian participation in GEM would not have been possible without the generous support of TeliaSonera through the TeliaSonera Institute at the Stockholm School of Economics in Riga.

Anders Paalzow  
Rector, SSE Riga

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## GEM TERMINOLOGY

### Nascent entrepreneur

A nascent entrepreneur is an adult individual (18-64 years old) who is trying to start up a new business that he or she will fully or partially own. This new business has already passed the stage of being a plain idea, because the individual has made some active steps over the last 12 months that would help launch this business, such as looking for equipment or a location, organizing a start-up team, working on a business plan, beginning to save money etc. However, the business is not fully operating yet, since it has not paid wages for more than three months to its employees or owners.

### Baby business or new firm owner

A baby business or a new firm owner is an adult individual who manages and fully or partially owns a new business that has paid wages to its owners for more than 3 months, but less than for 42 months (3.5 years).

### Early-stage entrepreneurs

The term 'early-stage entrepreneurs' refers to nascent entrepreneurs and baby businesses together. This covers entrepreneurs in the beginning of their life cycle: from the first active step taken in order to start up a business till the moment when the enterprise has paid salaries to its owners for 3.5 years.

### Established business owner

An established business owner is an adult individual who manages and at least partially owns a business that has paid wages to its owners for more than 42 months (3.5 years).

### Overall entrepreneurial activity

Overall entrepreneurship combines both early-stage entrepreneurs and established entrepreneurs. Therefore, this group covers all entrepreneurs at all stages of business life-cycle.

## EXECUTIVE SUMMARY

GEM compiles and provides detailed information about entrepreneurial activity in Latvia. The analysis included in this report informs policy makers, business community, and the academic community about the latest trends in entrepreneurship in the country.

According to the GEM survey about 7.6% of adult population were involved in entrepreneurial activity in Latvia in 2007. This is about 110 thousand people. More than half of them (approximately 65 thousand people) were involved in early-stage entrepreneurial activity. The prevalence rate of early-stage entrepreneurial activity, the key indicator in GEM, was quite stable over 2005 and 2006 (6.6% of adult population). However, in 2007 this indicator significantly dropped to 4.4%, thus, leading to a lower relative standing of Latvia among other GEM countries. In 2007 entrepreneurial rates in Latvia were below European average. People also reported a lower perception of good business opportunities and fewer plans to start up a business in the future. Attitudes toward entrepreneurship have changed to a more negative stance.

A sharp decline in the rates of early-stage entrepreneurship was associated with important changes in the characteristics and composition of entrepreneurial activity in Latvia. In 2007 the disparities between early-stage entrepreneurial activity in the Latvian regions diminished, however in the context of an overall reduction in entrepreneurship rates. The prevalence of early-stage entrepreneurs declined in the most entrepreneurial regions, Riga and Vidzeme, and remained approximately at the same levels in the less entrepreneurial Kurzeme and Zemgale.

The construction boom continued to draw entrepreneurial resources to the transformation sector. In 2007 almost 45% of early-stage entrepreneurial activity was in transformation. On the other hand, the share of activity in extraction and consumer-oriented services diminished. The proportion of activity in business services increased to 26%, which GEM considers to be a positive sign of a more sophisticated and developed economy.

Important entrepreneurial characteristics related to competitiveness and future potential of early-stage businesses are innovativeness and international orientation. Over the period from 2005 to 2007 early-stage entrepreneurs in Latvia have been slightly less innovative than in Europe on average. Latvia scores higher than Hungary, Romania, Poland, Greece and Spain with respect to the proportion of early-stage entrepreneurs with novel product-market combinations. According to this and most other measures of innovativeness provided in GEM, entrepreneurs in Latvia in 2007 became less innovative than in the previous years.

Because of its size and geographical position Latvia has a quite high share of early-stage entrepreneurial activity oriented to international markets. More than a quarter of early-stage entrepreneurs in Latvia, by the definition of GEM, have international orientation, i.e. have more than 25% of customers outside the home country. However, half of the entrepreneurs are oriented fully to the domestic market. In 2007 Latvian entrepreneurs became less export-oriented as compared with previous years.

About 16% of early-stage entrepreneurs in Latvia are pushed into entrepreneurship by the necessity motive, i.e. because of insufficient alternative employment options. Over the last three years the share of necessity-driven entrepreneurship in Latvia has remained quite stable, at a slightly higher level than in the more developed EU countries. The majority of opportunity-driven early-stage entrepreneurs in Latvia are involved in entrepreneurial activity in order to increase their personal income, unlike many of the more developed EU countries, where the major driver is "a desire for greater independence".

The GEM surveys suggest that in 2007 early-stage entrepreneurs tended to work longer hours in their new businesses. They were also likely to create more jobs as compared with 2006.

In 2007 important changes were observed in the demographic characteristics of early-stage entrepreneurs in Latvia. The gender gap in entrepreneurship rates continued to widen. In 2007 only slightly more than 15% of early-stage entrepreneurs were women as compared with almost 40% in 2005. It was found that the attitudes toward entrepreneurship and future expectations of men and women were also very different.

A sharp decrease in the early-stage entrepreneurship rate was observed in the age group 18-24. Nevertheless, early-stage entrepreneurs in Latvia still remain relatively young as compared with many European countries. Half of early-stage entrepreneurs are less than 35 years old. Based on the estimates for 2005-2007, the rate of early-stage entrepreneurial activity for young people was close to that in the more developed EU countries, whereas the rate in the older age cohort was one of the lowest in Europe. This discrepancy in entrepreneurial involvement between older and younger generations is one of the highest observed in European countries.

Similarly to the previous year, no significant differences in entrepreneurship rates for ethnic Latvians and non-Latvians were discovered.

In 2007 the rate of early-stage entrepreneurial activity decreased considerably for adults with higher and vocational education, perhaps signaling improvement in employment opportunities for better-educated individuals.

Analysis of the financial requirements of nascent entrepreneurs suggests that in 2007 the average start-up cost was slightly lower than in 2006. 40% of the nascent entrepreneurs require less than 10 thousand EUR to start up a new business. By international standards this is very low, and probably points to fewer ambitious projects taking place in Latvia as compared with other countries.

It is likely that the sources of start-up finance used by nascent entrepreneurs changed considerably in 2007. The prevalence of informal investors in Latvia significantly dropped, suggesting that the use of informal credit by relatives, friends and colleagues became less prevalent in Latvia.

## 1. INTRODUCTION TO GEM AND WHAT IT DOES

The Global Entrepreneurship Monitor (GEM) research programme produces assessment of entrepreneurial activity across the world. Initiated in 1999 with 10 countries, it had expanded to 42 countries by 2007. GEM's contribution to knowledge and understanding of the entrepreneurial process is unique, since, to date, no other data set exists that can provide consistent cross-country information and measurements of entrepreneurial activity in a global context.

The three main objectives of GEM are:

- To measure differences in the level of entrepreneurial activity between countries.
- To uncover factors determining levels of entrepreneurial activity.
- To identify policies that may enhance the level of entrepreneurial activity.

GEM's hallmark is its focus on the role played by individuals in entrepreneurship. The unit of analysis in GEM is the entrepreneur rather than a business venture, and entrepreneurs play the role of informant on their business. After all, people start new firms and manage them, and people determine the entrepreneurial attitude of established firms. Because of the different definitions used in GEM and in the Register of Enterprises it is difficult to compare the results of GEM surveys with national statistics on enterprises. The focus of the GEM approach is not on counting the number of businesses. It is largely about measuring entrepreneurial activity in different phases of business existence, entrepreneurial spirit, and attitudes to entrepreneurship.

GEM recognizes that entrepreneurship is a complex phenomenon and can be found in a variety of settings and situations. For example, an individual who is just starting a venture and trying to make it into a highly competitive market is an entrepreneur. Another individual may be a business owner who has been operating for some years and has managed to establish a firm of medium size. This individual is also an entrepreneur.

The GEM analysis distinguishes entrepreneurs at different stages of their life-cycle. The process of business formation begins with perceiving an opportunity and then taking certain steps towards setting it up, such as securing financing, developing a product or service, and locating customers. Then, the new venture is developed and expanded, turning it into a mature, established business. Of course, there is no guarantee that transition from one stage to another will occur or that the business will succeed. Many dangers await entrepreneurs in their path to creating a successful, mature business.

An important advantage of GEM is its reliance on high-quality data, collected via surveys of the adult population in each participating country. Representative samples of randomly selected adults, ranging in size from 1,500 to almost 43,000 individuals, were collected in the 42 countries participating in GEM in 2007. The GEM adult population survey in Latvia took place in May-June 2007. *Latvijas Fakti*, a professional survey firm, conducted face-to-face interviews with 2,000 adults aged 18-64 years old. In this report we present the findings from this survey, as well as the surveys that took place in all the participating countries.

## 2. SCOPE OF ENTREPRENEURIAL ACTIVITY IN LATVIA

### ENTREPRENEURIAL ACTIVITY

According to the GEM survey about 110 thousand people were involved in entrepreneurial activity in Latvia in 2007. This is about 7.6% of adult population of the country. The measure of overall entrepreneurial activity includes entrepreneurs at different stages of business existence: from start-ups to mature business owners.

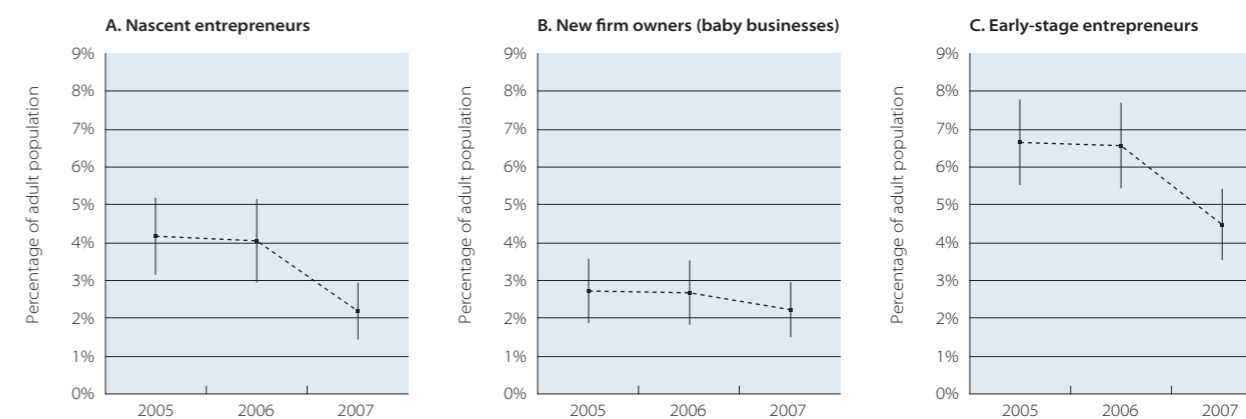
First, there are people actively starting up a business (*nascent entrepreneurs*) and people who own a firm which is no older than 3.5 years (*baby businesses*). Together these entrepreneurs are called *early-stage entrepreneurs*. In 2007 there were about 65 thousand early-stage entrepreneurs in Latvia. This is approximately 4.4% of adult population – an indicator known as the prevalence of early-stage entrepreneurial activity. The prevalence rate of early-stage entrepreneurs is a measure of the dynamism and future potential of the economy.

Second, there are owners and managers of firms that are at least 3.5 years old, i.e. established business owners. In 2007 there were around 50 thousands established business owners in Latvia, which is approximately 3.4% of adult population<sup>1</sup>. Established entrepreneurship describes business owners whose businesses already proved to be sustainable, i.e. those who form the basis of entrepreneurial activity in Latvia.

Early-stage entrepreneurship is the hallmark of GEM analysis. This is probably the most crucial period in the life of a new venture, decisive as to whether a business will thrive or perish. Yet official data often do not completely cover this important group of entrepreneurs, since nascent entrepreneurs may not yet have registered their businesses in the Register of Enterprises. Therefore, in order to take advantage of the GEM survey as a unique source of information on nascent entrepreneurs, this report will mainly focus on the analysis of early-stage entrepreneurship in Latvia<sup>2</sup>.

According to the Latvian GEM surveys the rate of early-stage entrepreneurial activity was quite stable over 2005 and 2006. However, in 2007 there was a significant drop in early-stage entrepreneurship. Figure 1 demonstrates the dynamics in entrepreneurial activity rates in Latvia over the last three years. The sharpest decrease of almost 50% occurred in the prevalence rate of nascent entrepreneurs. Total early-stage entrepreneurial activity diminished by one third (from 6.6% to 4.5%). The prevalence rate of new firm owners decreased only slightly, by 0.5 percentage points. Several European countries - France, Greece and Norway - experienced a similar decrease (although smaller) in the prevalence of early-stage entrepreneurs. Out of all GEM nations the largest decrease in early-stage entrepreneurship rate occurred in Latvia's neighbour country – Russia.

Figure 1: Prevalence rates of entrepreneurial activity in Latvia, 2005-2007



Note: The vertical bars in the chart display 95% confidence intervals.

<sup>1</sup> Some individuals are simultaneously involved in several businesses which are at different stages of development. Therefore number of early-stage entrepreneurs and number of established business owners does not sum up to total entrepreneurial activity.

<sup>2</sup> Characteristics of established businesses can in some respects be described more accurately using data from the Register of Enterprises because it covers the whole population of the businesses registered in Latvia, unlike GEM that provides information on a random sample of business owners.

Table 1: Prevalence rates of entrepreneurial activity across all GEM countries, 2007

	country	nascent entrepreneurship	owners of young businesses	early-stage entrepreneurs	established businesses	overall business activity
EU countries	Greece	4.6%	1.1%	5.7%	13.3%	18.7%
	Ireland	4.2%	4.2%	8.2%	9.0%	16.8%
	Portugal	4.8%	4.1%	8.8%	7.1%	15.4%
	Finland	4.4%	2.7%	6.9%	7.6%	14.0%
	Spain	3.5%	4.3%	7.6%	6.4%	13.4%
	<b>Hungary</b>	<b>3.8%</b>	<b>3.1%</b>	<b>6.9%</b>	<b>4.8%</b>	<b>11.7%</b>
	Netherlands	2.7%	2.6%	5.2%	6.4%	11.3%
	Denmark	2.3%	3.1%	5.4%	6.0%	11.1%
	UK	2.9%	2.7%	5.5%	5.1%	10.5%
	Italy	3.6%	1.5%	5.0%	5.6%	10.4%
	<b>Slovenia</b>	<b>3.0%</b>	<b>1.8%</b>	<b>4.8%</b>	<b>4.6%</b>	<b>9.3%</b>
	Sweden	1.9%	2.4%	4.2%	4.7%	8.8%
	Austria	1.5%	1.0%	2.4%	6.0%	8.4%
	<b>Latvia</b>	<b>2.2%</b>	<b>2.3%</b>	<b>4.5%</b>	<b>3.4%</b>	<b>7.7%</b>
	<b>Romania</b>	<b>2.9%</b>	<b>1.3%</b>	<b>4.0%</b>	<b>2.5%</b>	<b>6.5%</b>
	France	2.3%	0.9%	3.2%	1.7%	4.8%
	Belgium	2.7%	0.4%	3.2%	1.4%	4.6%
<b>Average (EU-15)</b>	<b>3.2%</b>	<b>2.4%</b>	<b>5.5%</b>	<b>6.2%</b>	<b>11.4%</b>	
<b>Average (NMS)</b>	<b>3.0%</b>	<b>2.1%</b>	<b>5.0%</b>	<b>3.8%</b>	<b>8.8%</b>	
Other European non-EU countries	Iceland	8.5%	4.5%	12.5%	8.8%	19.8%
	Serbia	4.8%	4.0%	8.6%	5.3%	13.7%
	Switzerland	3.5%	2.9%	6.3%	6.6%	12.7%
	Croatia	5.3%	2.0%	7.3%	4.2%	11.1%
	Turkey	1.9%	3.7%	5.6%	5.5%	10.8%
	Norway	3.8%	2.6%	6.5%	4.8%	10.6%
	Russia	1.3%	1.3%	2.7%	1.7%	4.3%
	<b>Average</b>	<b>4.1%</b>	<b>3.0%</b>	<b>7.0%</b>	<b>5.3%</b>	<b>11.9%</b>
Non-European high-income countries	Hong Kong	5.7%	4.3%	10.0%	5.6%	15.0%
	US	6.5%	3.4%	9.6%	5.0%	14.1%
	Japan	2.2%	2.2%	4.3%	8.7%	12.6%
	UAE	4.6%	4.1%	8.4%	3.4%	11.8%
	Israel	3.6%	2.0%	5.4%	2.4%	7.4%
	Puerto Rico	1.6%	1.7%	3.1%	2.4%	5.2%
<b>Average</b>	<b>4.0%</b>	<b>2.9%</b>	<b>6.8%</b>	<b>4.6%</b>	<b>11.0%</b>	
Non-European middle- and low-income countries	Thailand	9.4%	18.6%	26.9%	21.4%	47.4%
	Peru	15.1%	12.2%	25.9%	15.3%	39.0%
	Colombia	8.0%	15.5%	22.7%	11.6%	33.6%
	Venezuela	14.5%	7.1%	20.2%	5.4%	24.9%
	China	6.9%	10.0%	16.4%	8.4%	24.6%
	Argentina	7.8%	7.1%	14.4%	10.0%	24.1%
	Dominican Republic	9.8%	7.2%	16.8%	7.6%	23.2%
	Brazil	4.3%	8.7%	12.7%	9.9%	22.4%
	Chile	7.3%	6.5%	13.4%	8.7%	21.4%
	Uruguay	7.4%	5.0%	12.2%	6.6%	18.5%
	Kazakhstan	4.3%	5.3%	9.4%	5.8%	14.8%
	India	6.0%	2.6%	8.5%	5.5%	13.9%
	<b>Average</b>	<b>8.4%</b>	<b>8.8%</b>	<b>16.6%</b>	<b>9.7%</b>	<b>25.7%</b>
	<b>ALL GEM</b>	<b>All GEM average</b>	<b>4.9%</b>	<b>4.4%</b>	<b>9.1%</b>	<b>6.6%</b>

Note: Within each group the order is sorted by overall business activity.  
Source: GEM 2007 master data in own calculations.

In order to present Latvia in an international context Table 1 illustrates prevalence rates of entrepreneurial activity at different stages of development for all countries that participated in GEM 2007. The countries are divided into four groups.

The first group includes all EU countries that participated in GEM in 2007. With the exception of Luxembourg and Germany all EU-15 participated in the 2007 survey. The participation rate is much smaller among the 12 new member states: only Hungary, Slovenia, Romania and Latvia are in GEM 2007. On average, entrepreneurship rates in the EU-15 are slightly higher than in the new member states. The difference is most pronounced in the established business ownership rate.

The second group consists of other European countries that are not members of the EU. This group comprises very different countries: EU candidate countries (Croatia and Turkey); highly developed European countries staying outside the EU (Norway, Iceland, Switzerland); and two transition countries – Russia and Serbia. Apart from Russia, all the countries in this group have quite high entrepreneurship rates.

The third group refers to non-European high-income countries<sup>3</sup>. Countries in this group have entrepreneurship rates similar to those in the previous two groups.

Other non-European low- and middle-income countries are included in the last group. Patterns of entrepreneurial activity

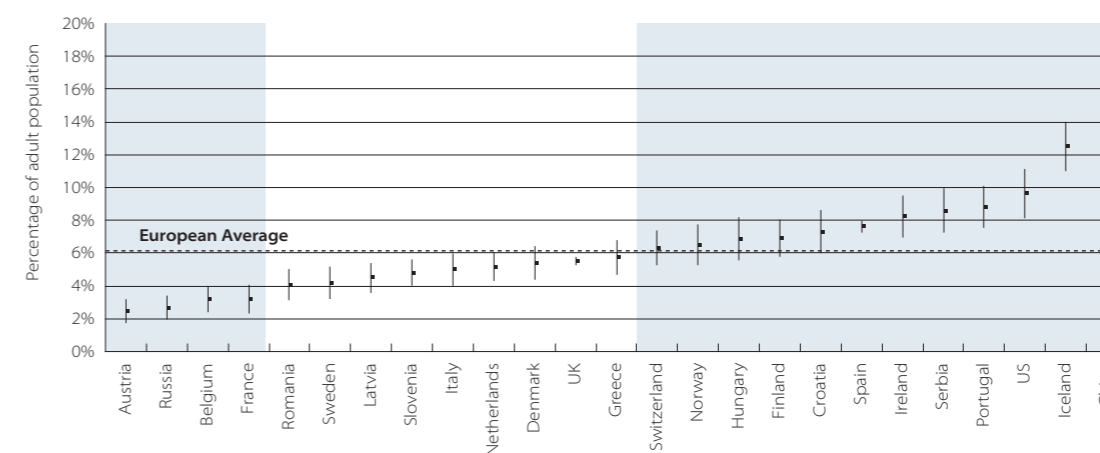
in these countries are considerably different from the patterns observed in the countries from the first three groups. Namely, entrepreneurial activity in these countries is very high. Overall business activity ranges from 14% to 47% with the average being more than 25%.

Most of the analysis in this report will be restricted to European countries from the first and the second groups, since these countries represent better comparators for Latvia. Sometimes we shall also report figures for US and China as selected representatives of highly entrepreneurial non-European countries.

How do entrepreneurship rates in Latvia compare with other countries? As seen from Figure 2, the level of early-stage entrepreneurial activity in Latvia in 2007 was below the European average. This is because of the significant drop in early-stage entrepreneurship rate in 2007 as compared with 2006 and 2005. Latvia is now ranked much lower than many GEM nations. In 2006 only Croatia, Norway, and Iceland among all European countries had significantly higher early-stage entrepreneurship rates than Latvia. However, in 2007 Switzerland, Norway, Hungary, Finland, Croatia, Spain, Ireland, Serbia, Portugal, and Iceland all had statistically higher rates of early-stage entrepreneurial activity.

Latvia is ranked below European average also according to prevalence of established business owners. In 2007 in the EU, only France and Belgium have significantly lower prevalence of established business owners than Latvia.

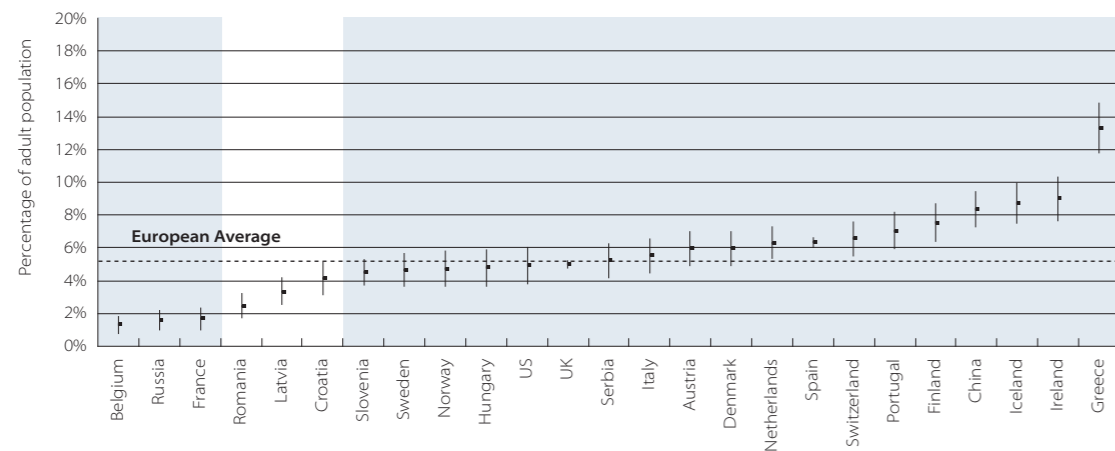
Figure 2: Early-stage entrepreneurial activity by country, 2007



Note: The vertical bars in the chart display 95% confidence intervals.  
Countries in the shaded area on the left (right) have early-stage entrepreneurship rates significantly lower (higher) than in Latvia at 5% significance level.  
Source: GEM 2007 master data in own calculations.

<sup>3</sup> The division into high-income countries and middle- and low-income countries is based on differences in formal institutional characteristics, demography, entrepreneurial culture and the degree of economic welfare. This classification is introduced in GEM 2007 Executive Report that provides assessment of entrepreneurial activity in all countries participating in GEM project.

Figure 3: Established business ownership by country, 2007

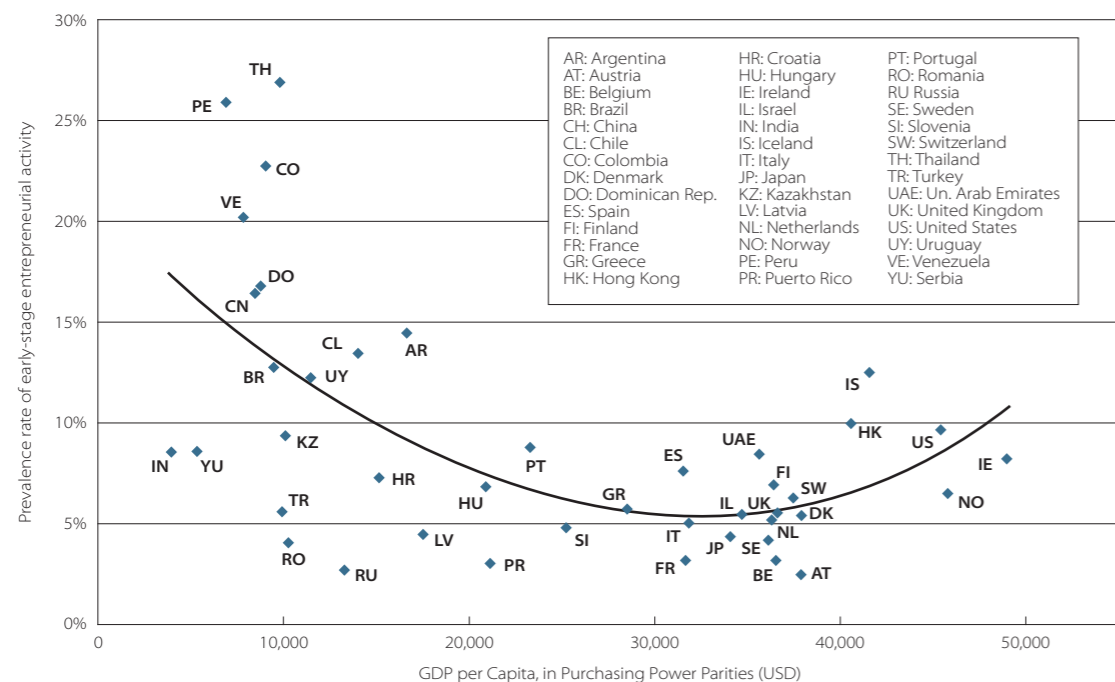


Note: The vertical bars in the chart display 95% confidence intervals. Countries in the shaded area on the left (right) have established business ownership rates significantly lower (higher) than in Latvia at 5% significance level. Source: GEM 2007 master data in own calculations.

GEM data suggest a nonlinear relationship between entrepreneurial activity and economic development. Plotting early-stage entrepreneurial activity against GDP per capita reveals a U-shaped relationship (Figure 4). Generally, low levels of GDP per capita are associated with a large number of small enterprises operating in the economy, and therefore high entrepreneurship rates. As GDP per capita grows, more large established firms come into the market, due to industrialization and economies

of scale. Simultaneously, employment in large firms increases. However, if income grows further, the role of the entrepreneurial sector becomes important again. Thus, it is not surprising that some of the developing countries exhibit entrepreneurial rates higher than in the developed EU countries or in the US. The graph below demonstrates this U-shaped relationship between GDP per capita and the early-stage entrepreneurship index in GEM countries.

Figure 4: Early-stage entrepreneurial activity and GDP per capita, 2007



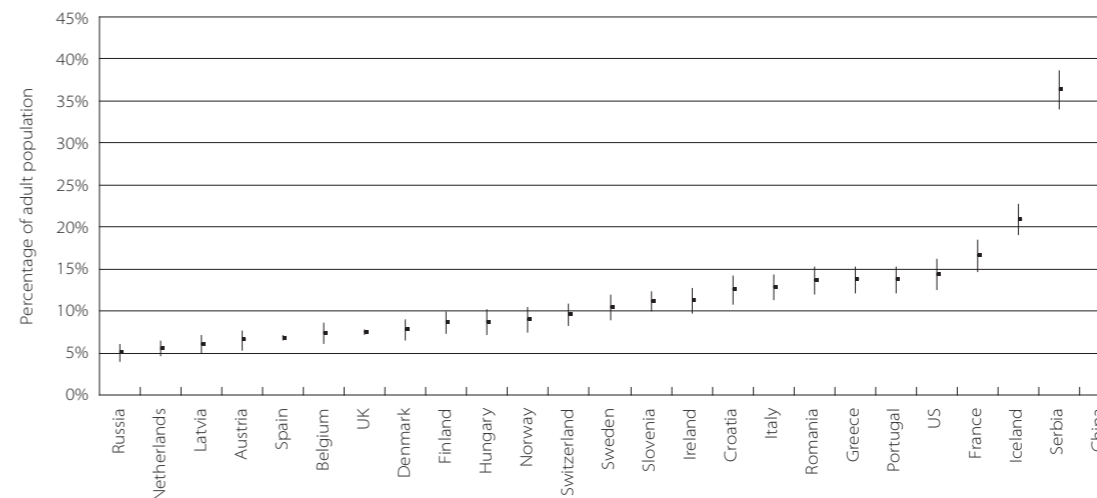
Source: GEM 2007 Executive Report.

### ENTREPRENEURIAL INTENTIONS

The GEM survey also screens people with respect to their medium term entrepreneurial intentions. Respondents were asked whether they plan to start-up a business over the next three years. These people are potential entrepreneurs who may think that they have the necessary entrepreneurial skills (or they intend to acquire these skills), perceive business opportunities in future, and expect to have the resources to start-up a business. The prevalence rate of potential entrepreneurs points to future tendencies in the development of entrepreneurial activity in a country.

In Latvia in 2007 about 90 thousand people planned to start-up a business within the next three years. This is about 6% of the adult population of Latvia. Figure 5 shows that the prevalence rate of potential entrepreneurs in Latvia is one of the lowest in Europe. It is also one third of what it was in 2006, thus suggesting that entering entrepreneurship appears to have become less attractive or feasible than it was a year before.

Figure 5: Prevalence rate of potential entrepreneurs by country, 2007



Note: The vertical bars in the chart display 95% confidence intervals. This measure includes all those individuals who expect to start a new business in the next three years. Source: GEM 2007 master data in own calculations.

### ENTREPRENEURIAL ENVIRONMENT

The GEM study explores people's attitudes towards entrepreneurship in order to describe the entrepreneurial environment in the country. The following aspects of entrepreneurial environment are captured:

- Skills and experience in starting-up a business
- Fear of business failure
- Business opportunities in the nearest future
- Popularity of entrepreneurship as a career
- Social status of successful businessmen
- Support of entrepreneurship in the mass media

By 2007 attitudes towards entrepreneurial activity appear to have changed to a more negative stance. The changed attitudes possibly reflect expectations of a slowdown in economic growth. A smaller share of respondents than in the previous year (40%) considered entrepreneurship to be a decent career choice. Only about one fourth believed that they possess the necessary skills for a starting up a business, and only slightly more than 20% perceived good conditions for business in their region in coming half year.

Table 2 summarizes the indicators of attitudes to entrepreneurship for 2006 and 2007. The entrepreneurial environment in Latvia seem to vary with the rates of entrepreneurial activity and economic performance of the country. With a booming economy in 2006, people expressed very positive views about entrepreneurial activity. More than one half of respondents shared the belief that entrepreneurship is a good career path. Moreover, approximately 40% of respondents also believed that they possessed the necessary skills and experience to start up a business, and about one third also stated that they perceived good opportunities for business start-ups in their region in the nearest future.

More than a third of population in both years stated that fear of failure may prevent them from starting up a business. Surprisingly, there was no considerable change in this indicator. While sharing less positive views on business opportunities, individuals' attitudes towards risk of business failure seem to remain unaffected.

Support of entrepreneurship in the mass media and high social status seem to have decreased slightly in 2007 as compared with 2006.



**Table 2: Attitudes towards entrepreneurship in Latvia, 2006 and 2007**

Respondents stated that:	2006	2007
...they have necessary knowledge, skills, and experience to start up a business	39%	26%
...a fear of failure would prevent them from starting up business	38%	36%
...there will be good opportunities for starting a business in the next 6 months in the area where they live	32%	22%
...people in Latvia believe that entrepreneurship is a desirable career	57%	40%
...people who successfully started their business are respected in Latvia	66%	56%
...there are many stories about successful new businesses in Latvian mass media	62%	52%

Note: figures display the share of respondents who replied affirmatively to each question. Differences between 2006 and 2007 are statistically significant at the 1% significance level, with the exception of "fear of failure", where the difference is significant only at the 10%.

### SLOWDOWN IN EARLY-STAGE ENTREPRENEURIAL ACTIVITY

The results of GEM 2007 suggest that an entrepreneurial career in 2007 became less attractive or feasible for adults in Latvia as compared with 2006 or 2005. This change affected not only current rates of involvement in early-stage entrepreneurial activity, but also expectations with respect to business opportunities in the future and intentions to start up a business. The entrepreneurial environment (as measured by views on entrepreneurship) has also become less favourable than it was a year before.

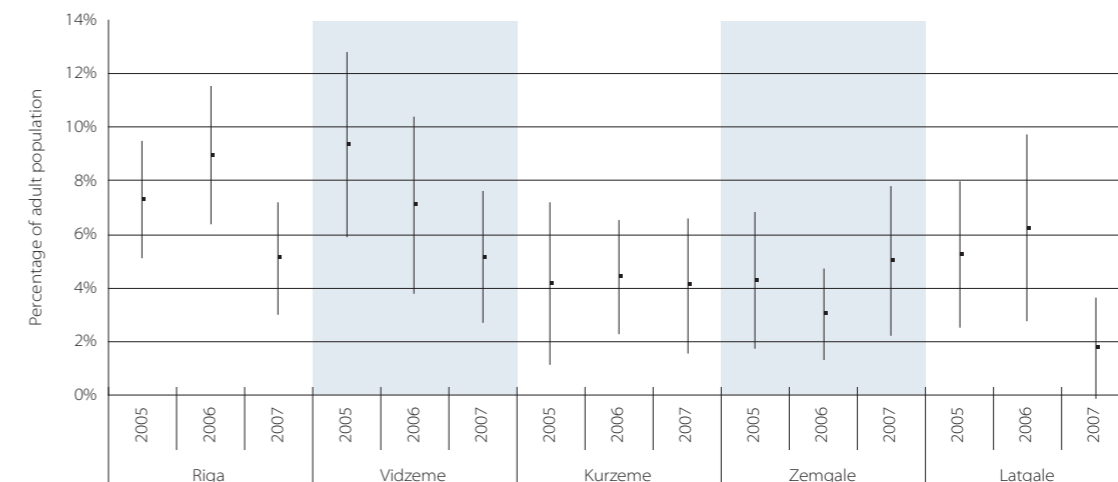
This report also aims to analyze what other changes in the qualitative characteristics of early-stage entrepreneurial activity and individual characteristics of early-stage entrepreneurs were observed over the last three years, thus, seeking possible explanation for the causes of the slowdown in early-stage entrepreneurial activity.

## 3. CHARACTERISTICS OF ENTREPRENEURIAL ACTIVITY IN LATVIA

### REGIONAL DISTRIBUTION

Substantial regional disparities in entrepreneurial activity were found in previous Latvian GEM surveys. It was found that Riga and Vidzeme were the most entrepreneurial regions, whereas Kurzeme and Zemgale were the least entrepreneurial<sup>4</sup>. The GEM 2007 data suggest that differences in early-stage entrepreneurship across regions have diminished, as compared with earlier years.

In 2007 the prevalence of early-stage entrepreneurs has significantly dropped in Riga. In Vidzeme the level of early-stage entrepreneurial activity has declined in each of the last two years, while in Kurzeme and Zemgale, where rates were initially quite low, there has been little change. As a result discrepancies between the regions have diminished, however, in the context of an overall reduction in early-stage entrepreneurial activity.

**Figure 6: Early-stage entrepreneurial activity in Latvia by region, 2005-2007**

Note: The vertical bars in the chart display 95% confidence intervals.

### SECTORAL DISTRIBUTION

To analyze the sectors in which people attempt to start businesses, GEM codes activity according to the International Standard Industry Classification (ISIC). This classification uses more than five hundred different types of activity, which GEM consolidates under four main headings. These sectoral groups are:

- **Extraction:** agriculture, forestry, fishing, and mining (i.e., extraction of products from the natural environment).
- **Transformation:** construction, manufacturing, transportation, and wholesale distribution (physical transformation or relocation of goods and people).
- **Business Services:** where the primary customer is another business.
- **Consumer Oriented Services:** where the primary customer is a physical person (e.g. retail, restaurants and bars, lodging, health, education, social services, recreation).

Using these categories we have observed a significant change in the sectoral composition of early-stage entrepreneurial activity in Latvia over the period from 2005 to 2007. The share of activity in extraction and consumer-oriented services has diminished, whereas proportion of businesses in the transformation and business services sectors has increased (Figure 7). In 2005 more than 40% of early-stage businesses in Latvia were in consumer-oriented services and a quarter of businesses in transformation. In 2007, only about a quarter of businesses were operating (or planned to start activity) in consumer-services and almost half of start-ups and baby businesses were in transformation.

<sup>4</sup> Latgale is a special case in this respect. While early-stage entrepreneurial activity used to be quite high in Latgale, a very large proportion of it was by nascent entrepreneurs, i.e. those people who are only planning to start up a business.

Figure 7: Sectoral composition of early-stage entrepreneurial activity in Latvia, 2005-2007

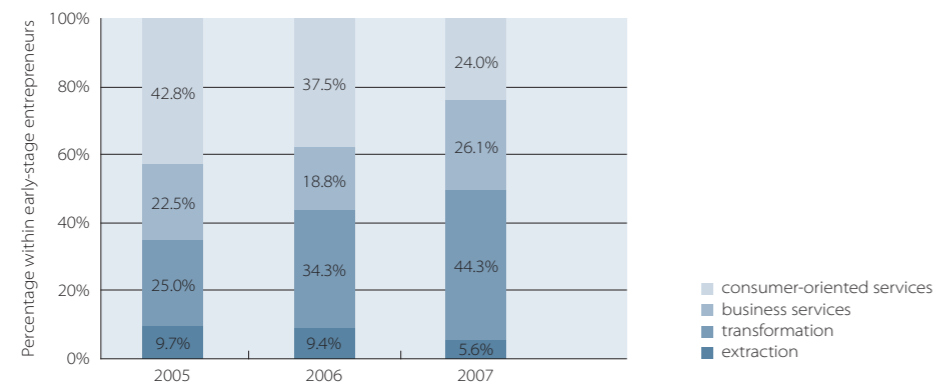
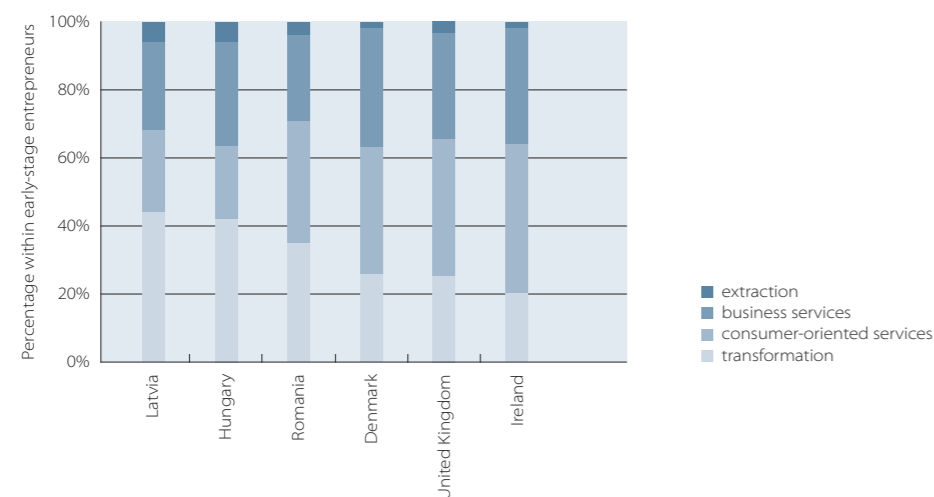


Figure 8 shows sectoral composition of early-stage entrepreneurial activity in selected EU countries: three developed countries from EU-15 (Denmark, United Kingdom, Ireland) and three countries from the new member states (Latvia, Hungary and Romania). Latvia (among all European countries) has the largest share of early-stage activity taking place in the transformation sector. Only Hungary has a comparably large proportion (over 42%) of early-stage activity in transformation. This tendency may be explained by the boom in the construction sector, which took place in the new member states after accession to the EU. The construction boom has attracted resources, including entrepreneurial talent, from other sectors of the economy.

Figure 8: Sectoral composition of early-stage entrepreneurial activity in selected EU countries, 2007



Source: GEM 2007 master data in own calculations.

GEM research explains the differences in the sectoral distribution of entrepreneurial activity by a country's level of economic development. Entrepreneurship in predominantly extractive sectors of the economy is common in less developed countries (e.g. 18.1% in Serbia, 10.4% in Croatia, 12.3% in Russia). By contrast, as the economy develops and becomes more sophisticated, its business sector grows and attracts young entrepreneurs. Therefore, early-stage entrepreneurial activity in the extraction sector gradually declines, whereas activity in business services increases.

## INNOVATIVENESS

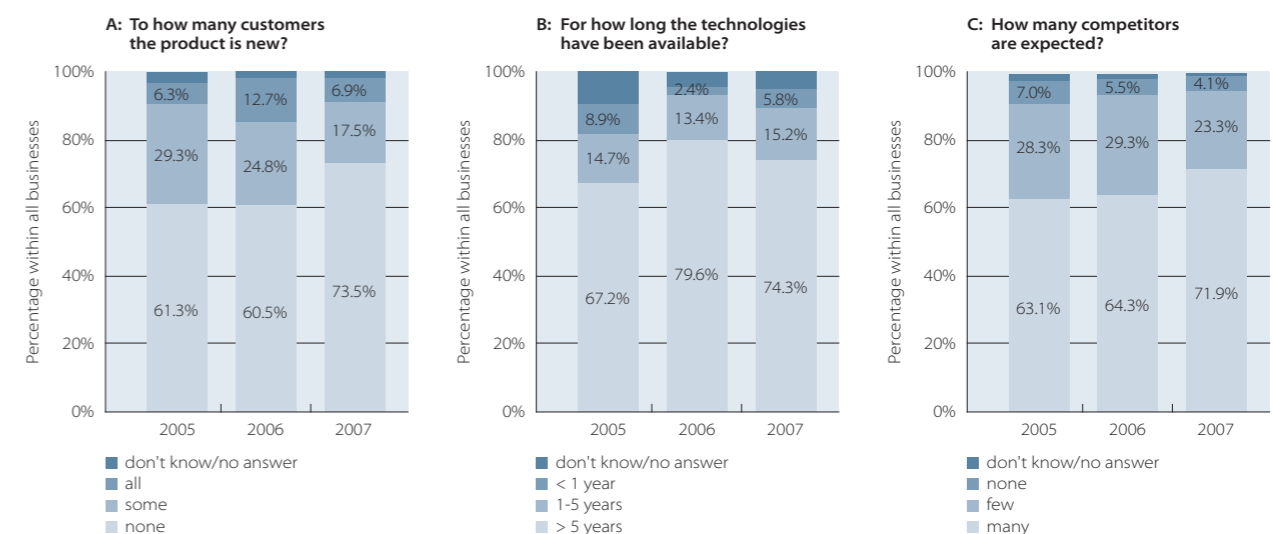
The GEM survey offers three measures of the innovativeness of entrepreneurial activity. The first is related to the novelty of produced goods, the second is about newness of the technology used in production, and the third is based on the degree of competition in the market.

The first measure refers to product innovation. In the GEM survey entrepreneurs were asked whether they think that the product (or service) they offer is seen as new and unfamiliar by all customers, some, or none of them. About three fourths of all businesses in Latvia in 2007 consider their product to be ordinary (not new to any customer). Figure 9 (Panel A) demonstrates that in 2007 the share of businesses that produce innovative products became smaller<sup>5</sup>.

The second measure (Panel B) estimates the proportion of businesses that introduced process innovation, i.e. used technologies available in the market for less than 5 years. As compared with 2006, the 2007 share of businesses using relatively new technologies is slightly higher.

The third panel (Panel C) captures the innovativeness of businesses in terms of entering new markets which were not previously served by competitors. Owners of businesses were asked whether they expect many, some, or no potential competitors in the market. In 2007 the share of businesses that expect many competitors slightly increased as compared with previous years.

Figure 9: Three measures of the innovativeness of businesses in Latvia, 2005-2007



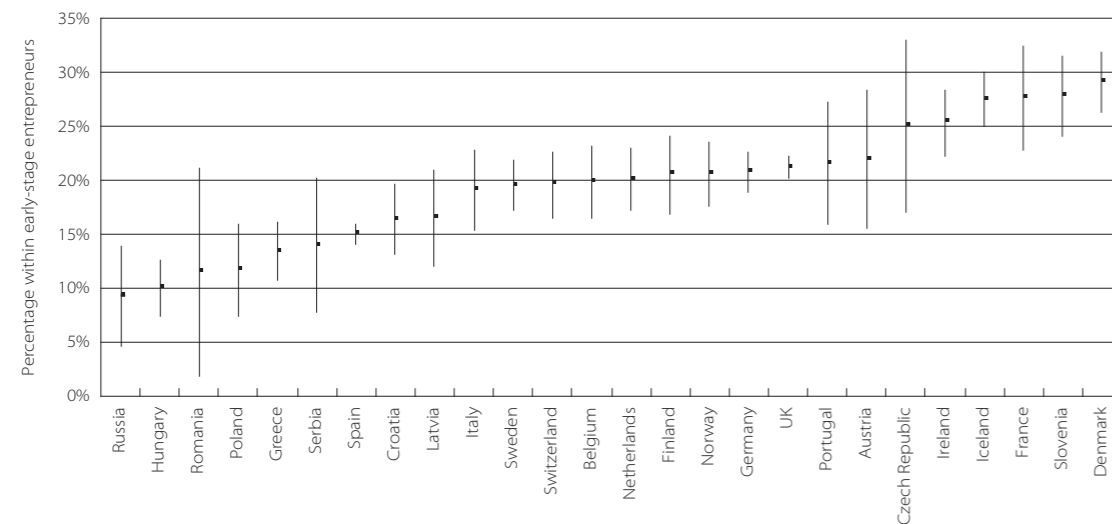
Note: Since the share of innovative businesses in the sample is quite small, this figure is based on all businesses in the sample (i.e. overall entrepreneurial activity).

The GEM 2007 Executive Report provides assessment of entrepreneurial activity in all countries participating in GEM project. It compares the innovativeness of early-stage entrepreneurial activity across countries using an index based on two of these measures: novelty of product and degree of competition, thus measuring the percentage of early-stage entrepreneurs with novel product-market combinations. In order to provide more reliable results Figure 10 offers estimates

based on combined GEM data for period 2002-2007 (and for Latvia the period is 2005-2007). According to this measure, Latvia stands a little bit below European average. Latvia scores higher than such new EU member states as Hungary, Romania, Poland, and also outperforms some of the old EU member states – Greece and Spain. However, the confidence intervals for this measurement are quite broad which should be kept in mind while making cross-country comparisons.

<sup>5</sup> The difference between 2006 and 2007 is significant at the 10% significance level.

**Figure 10: Proportion of early-stage entrepreneurs with new product-market combination by country, 2002-2007**



Notes: Percentages are calculated using combined GEM data for 2002-2007. For Latvia the measurement is based on data for 2005-2007. Vertical bars indicate 95% confidence intervals. Source: GEM 2007 Executive Report.

In the European Innovation Scoreboard Latvian innovative performance has for five years been one of the lowest in Europe (European Commission 2008). Only Turkey and Romania have a lower Summary Innovation Index (SII) than Latvia. According to this measure innovative performance in Latvia has improved over time, but has remained quite low even compared with neighbouring Estonia and Lithuania. A measure of innovation at the firm level (one of the dimensions of SII “innovation and entrepreneurship”) draws a picture that is similar to the results based on GEM (as shown in Figure 10). By this particular SII dimension, Latvia outperforms Slovakia, Romania, Hungary, Italy, Poland, Spain, Bulgaria and even Norway and the Netherlands.

Following the definition introduced in the GEM 2006 Latvia Report, a business is regarded as innovative if it either offers a new product (service), or employs a new technology that allows for a more efficient production of traditional products, (i.e. introduces either a product or a process innovation)<sup>6</sup>. Two measures of innovativeness are then constructed. First, there are businesses that either offer a product that is new to all customers, or use a technology available for less than one year. We refer to this group as core innovators. Second, there are businesses that offer a product that is “new to some buyers” or that use relatively new technologies available for less than 5 years but more than a year. We refer to this group as moderate innovators.<sup>7</sup> The remaining businesses are classified as ‘regular’; these form the ‘bricks-and-mortar’ of the economy. The measures of innovativeness are summarized in Figure 11.

**Figure 11: Definitions of innovative entrepreneurs**

	Technology available for ...		
	... less than 1 year	... less than 5 years	... more than 5 years
Customers that view the product as new			
All	Core innovators		
Some	Moderate innovators		
None			Regular businesses

<sup>6</sup> See Oslo Manual (2005) for detailed discussion of the definitions of product and process innovations used by Eurostat and OECD.

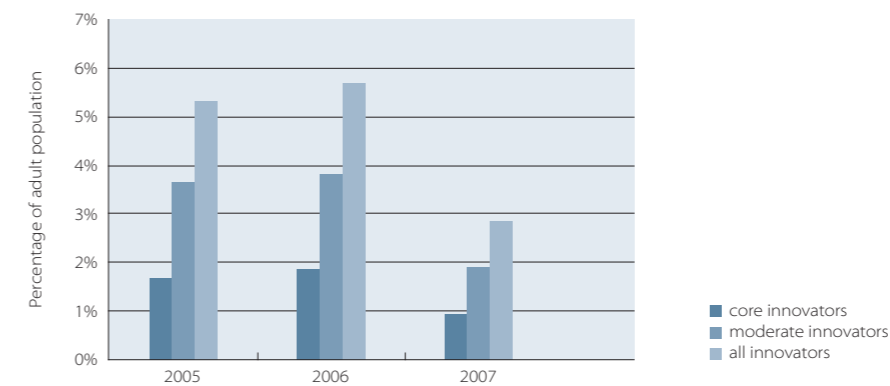
<sup>7</sup> This definition of innovativeness is consistent with the definitions used in most other studies. However, considerable caution should be exercised in making direct comparisons with other studies. For example, Eurostat’s Community Innovation Survey focuses on product or process innovations that are new to the firm, rather than new to the market. Our definition covers innovations that are new to the market.

According to the discussed described above, in 2007 1% of adult population in Latvia were core innovators, and a further 2% were moderate innovators (i.e. altogether approximately 43,600 adults). The prevalence rate of innovative businesses was relatively stable over 2005-2006. However, there was a significant drop in 2007. As shown in Figure 12, the prevalence of both core and moderate innovators in the adult population decreased by almost a half. The composition of entrepreneurial activity with respect to the innovative nature of businesses also changed.

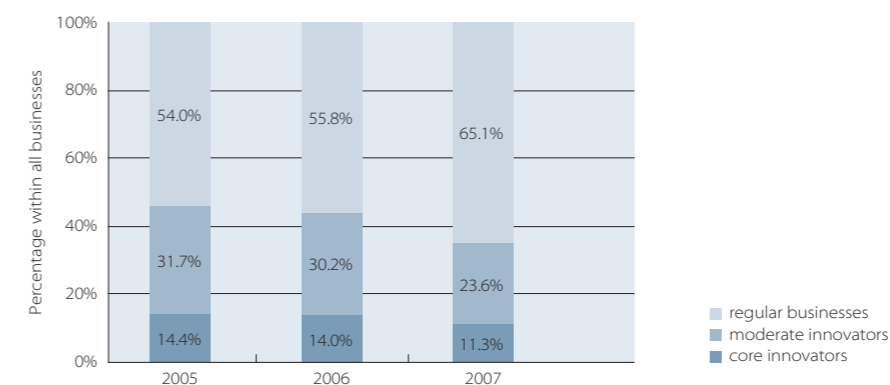
There were relatively more regular businesses and fewer innovators<sup>8</sup> (Figure 13).

By most measures of innovativeness presented in this section businesses in Latvia became less innovative<sup>9</sup> in 2007 as compared with 2006 and 2005. Clearly, this tendency is a bad sign for the Latvian economy, because innovative entrepreneurship is regarded as being of central importance for sustainable economic growth.

**Figure 12: Prevalence rate of core and moderate innovators in Latvia, 2005-2007**



**Figure 13: Proportion of innovators in overall entrepreneurial activity in Latvia, 2005-2007**



<sup>8</sup> The difference between 2006 and 2007 is significant at the 10% significance level.

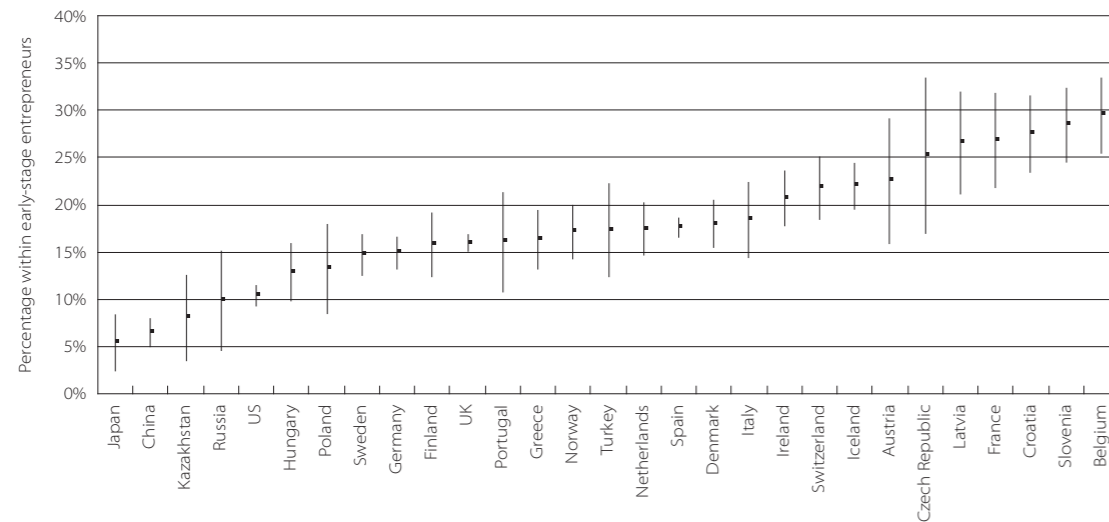
<sup>9</sup> The only exception is a slight increase in the share of businesses that introduced process innovation. However, this change was small and not statistically significant.

## INTERNATIONAL ORIENTATION

The contribution of small and medium enterprises to international trade has been growing over the last decades. The issue of access to external markets is therefore of increasing importance to established as well as early-stage entrepreneurs. In the GEM

survey all entrepreneurs were asked to estimate the proportion of actual (or potential) customers living outside the home country. Figure 14 shows the proportion of early-stage entrepreneurs who report having more than 25% of their customers abroad.

**Figure 14: Proportion of early-stage entrepreneurs with international orientation by country, 2002-2007**

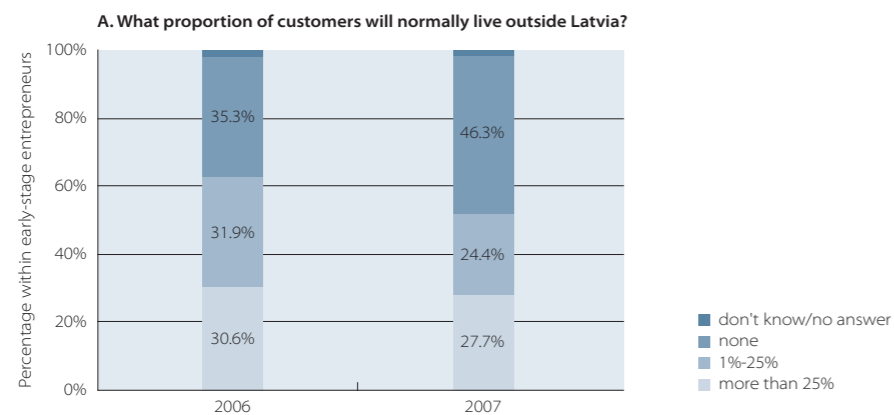


Notes: Percentages are calculated using combined GEM data for 2002-2007. For Latvia the measurement is based on data for 2005-2007. This measure includes all early-stage entrepreneurs who have (or expect to have) more than 25% of customers outside the country. Vertical bars indicate 95% confidence intervals. Source: GEM 2007 Executive Report.

Latvia is a small open economy located near large European markets. Therefore the role of external markets for early-stage entrepreneurial activity in Latvia is considerable. Entrepreneurs in small rapidly growing countries (e.g. Latvia, Slovenia, and Croatia) tend to have more customers abroad as compared with entrepreneurs in large economies which focus more on their home markets (like US, China, Russia, Germany).

In 2007 the share of internationally-oriented early-stage entrepreneurs in Latvia (i.e. entrepreneurs who have more than 25% of customers abroad) slightly decreased (see Figure 15). At the same time, the share of entrepreneurs operating solely on the domestic market increased. In 2006 about one third of all early-stage entrepreneurs stated that they have no customers outside Latvia. A year later almost one half of early-stage businesses were solely oriented towards the domestic market.

**Figure 15: Proportion of early-stage entrepreneurs with international orientation in Latvia, 2006-2007**



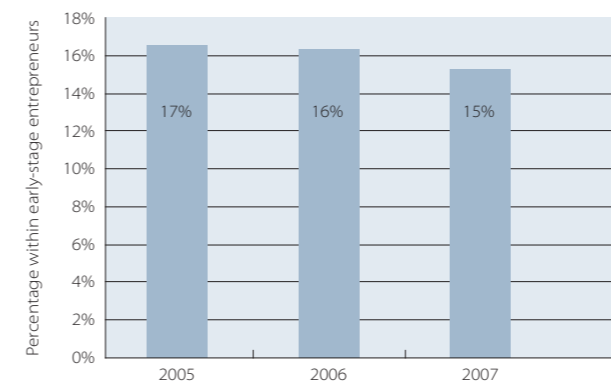
## ENTREPRENEURIAL MOTIVATION

Not all individuals are pulled into entrepreneurial activity because of opportunity recognition. There is a proportion of entrepreneurs who perceive no other ways of making their living. These are called necessity-driven entrepreneurs and are sometimes considered to contribute much less to economic growth. For example, in theory these entrepreneurs are less likely to reinvest income, grow in terms of turnover or employment, export their products abroad, introduce innovative products or use modern technologies. A high rate of necessity-based entrepreneurship may be a sign of deficient labour markets and troubled economies.

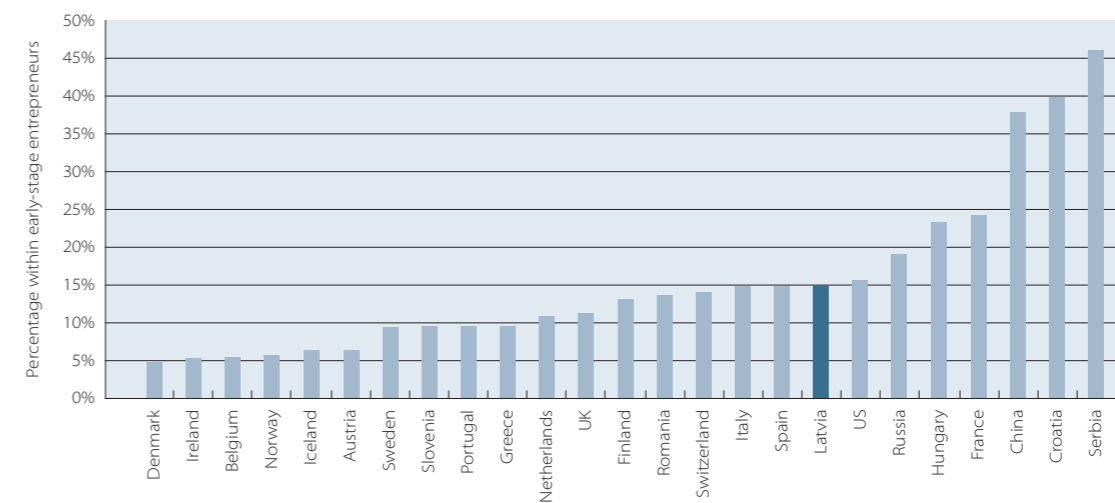
In Latvia about 16% of early-stage entrepreneurs are driven by necessity motives. Figure 16 shows a small decline in share of necessity-driven early-stage entrepreneurs. However, the decrease in the proportion is small and not statistically significant.

There is a substantial variation in entrepreneurial motivation across countries. Figure 17 presents Latvia in an international context. On average, countries in the EU-15 have lower shares of necessity-driven entrepreneurship than Latvia. Particularly high shares of entrepreneurs induced by the necessity motive are in Croatia and Serbia. Slovenia has the lowest proportion of necessity-driven early-stage entrepreneurship in the new member states (below 10%).

**Figure 16: Proportion of early-stage entrepreneurs driven by necessity motive in Latvia, 2005-2007**



**Figure 17: Proportion of early-stage entrepreneurs driven by necessity motive by country, 2007**



Source: GEM 2007 master data in own calculations.

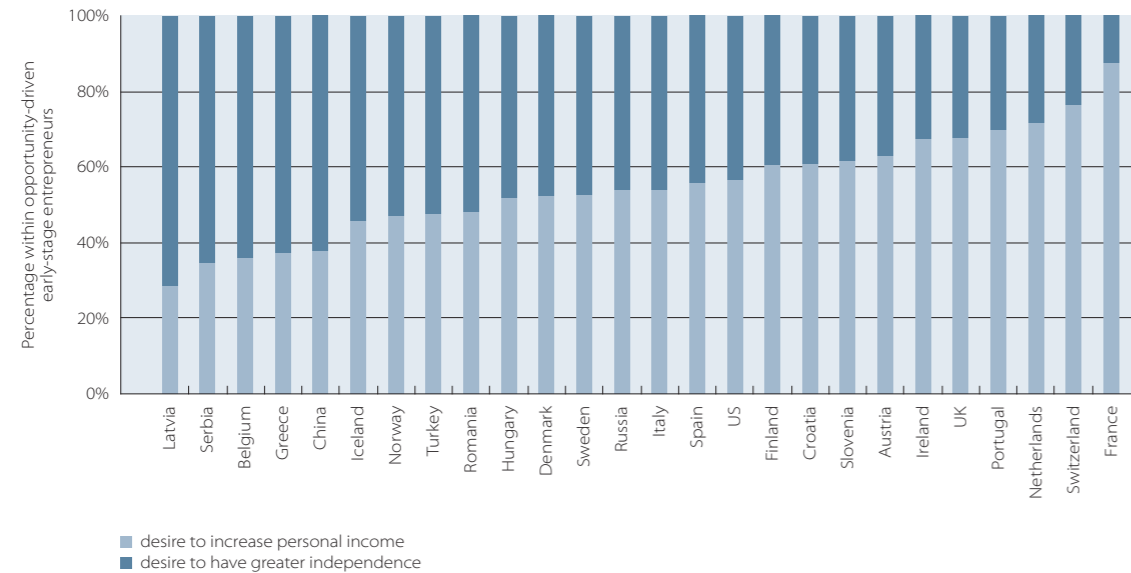
For those who are involved in entrepreneurship in order to take advantage of business opportunities, two major drivers exist: the desire for greater independence and the desire to increase personal income. The weight of these two motives differs a lot across GEM nations. In most high-income countries the 'independence' motive is dominant. The GEM study explains it in terms of the availability of alternative ways of generating income in these countries. However, other factors, like differences in the taxation of employers, self-employed, and employees, attitudes toward wealth creation and accumulation, may also have an effect.

In Latvia the share of those induced by a desire of greater independence within opportunity-driven early-stage entrepreneurs is very low: 29%. It is one of the lowest indicators among all GEM countries, and the lowest in Europe (Figure 18). This

characterizes Latvian early-stage entrepreneurs as mainly motivated by profit or wealth motives.

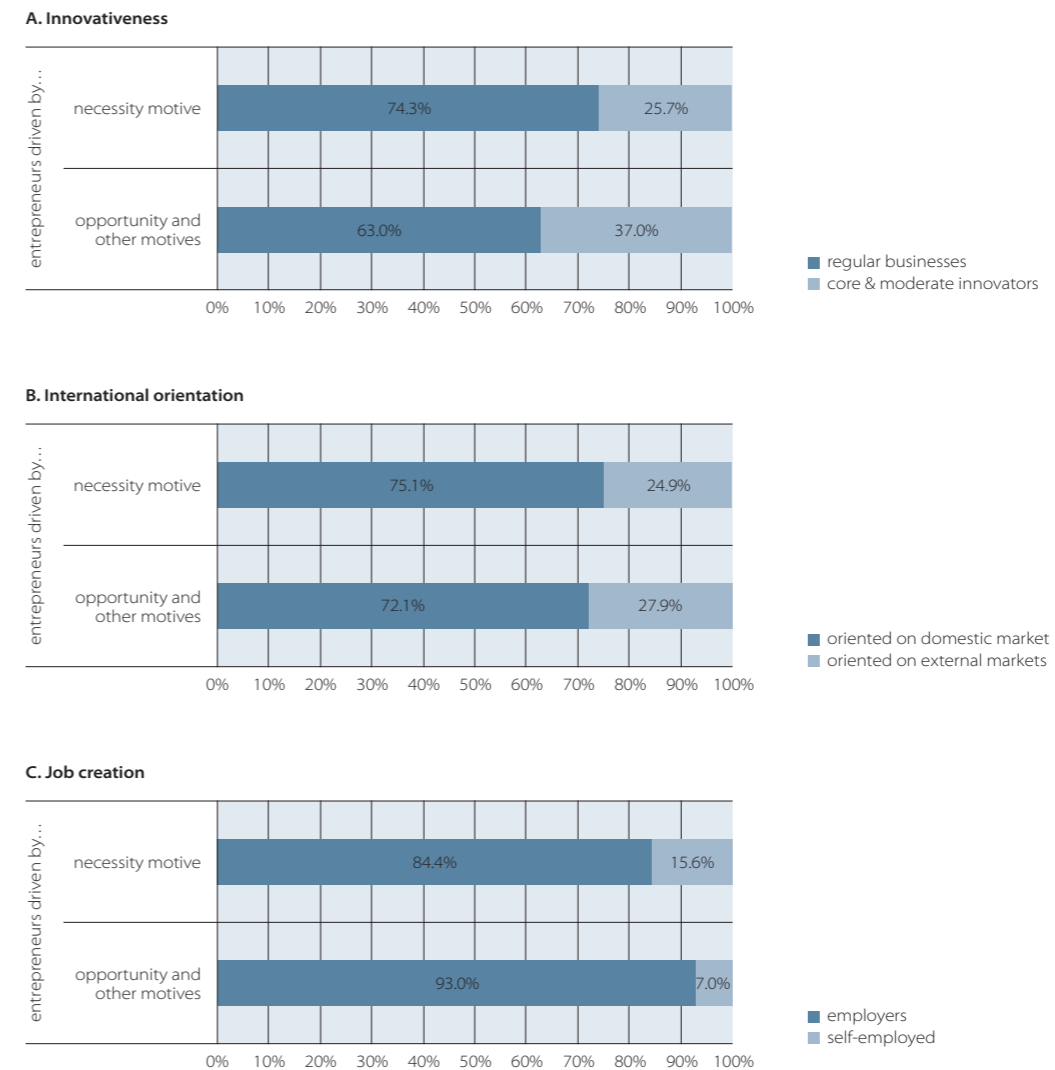
As mentioned earlier, necessity-driven entrepreneurs are likely to differ from opportunity-driven entrepreneurs in terms of the characteristics of their business activity. This hypothesis can be tested using GEM data. As shown in Figure 19, opportunity-driven entrepreneurs are more likely to be innovative. There are slightly fewer export-oriented entrepreneurs among necessity-driven businesses. Among entrepreneurs driven by the necessity motive there are relatively more self-employed individuals; therefore necessity-driven businesses are likely to contribute less to job creation. The same patterns are observed over the period from 2005 to 2007. However, the differences between opportunity and necessity entrepreneurs are not significant at the 10% of significance level.

Figure 18: Two drivers of opportunity recognition of early-stage entrepreneurs by country, 2007



Source: GEM 2007 Executive Report.

Figure 19: Characteristics of opportunity- and necessity-driven entrepreneurs in Latvia, 2007



## EMPLOYMENT

### Job creation

Job creation is an important characteristic of early-stage as well as established businesses. Studies show that relatively few early-stage firms contribute a disproportionate share of all new jobs created by new firms (Autio 2007).

GEM 2007 data shows that on average an early-stage entrepreneurial firm employed about 7 workers<sup>10</sup> which is approximately the same as for 2006. In 2007 8.6% of entrepreneurs in Latvia were self-employed. They do not employ anybody else; therefore, they do not contribute (at least directly) to job creation. Self-employed individuals account for a smaller share of overall business activity in 2007 than in 2006. Analysis also shows that the share of micro enterprises decreased in 2007, whereas the share of small, medium and big enterprises increased<sup>11</sup>.

### Size of start-up team

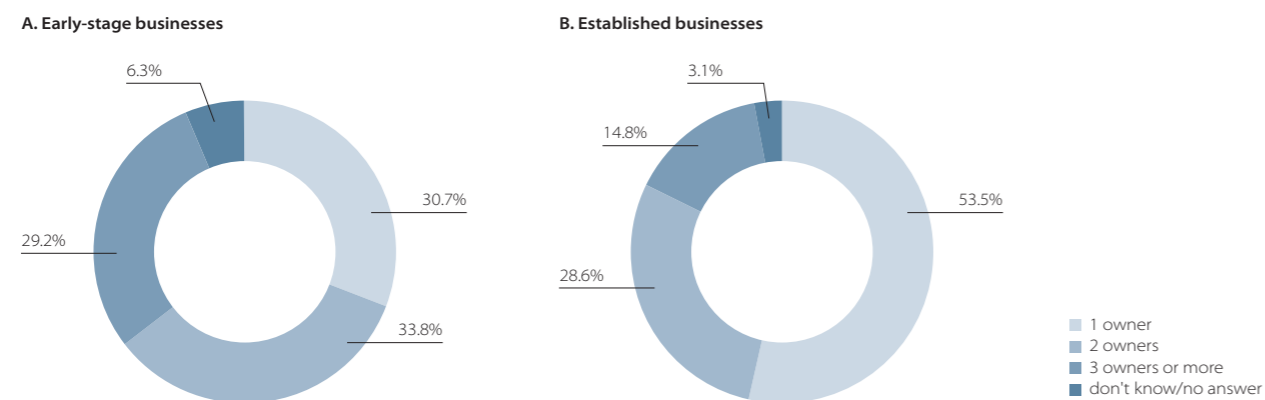
Some people start, own and manage a business alone, others do this in cooperation with partners. The GEM survey in Latvia suggests that on average there are about 2 owners in a start-up team. Team size of an early-stage firm in Latvia has not changed much

It might be possible that smaller enterprises were more likely to withdraw from the market over the last year. Smaller firms are more flexible. They are easier and faster to close down. For example, self-employed persons may easily switch between self-employment and employment if the relative attractiveness changes.

As to expectations of employment in five years time, in 2007 only about 3.3% of businesses expected a contraction in their employment. Another 32% did not expect employment to change. A slightly lower share of entrepreneurs planned to expand<sup>12</sup>.

over recent years. Slightly less than one third of early-stage entrepreneurs are sole owners, another third are partnerships. The rest (slightly less than 30%) have 3 owners or more. More than half of established entrepreneurs are the sole owners of their businesses.

Figure 20: Businesses in Latvia by number of owners, 2007

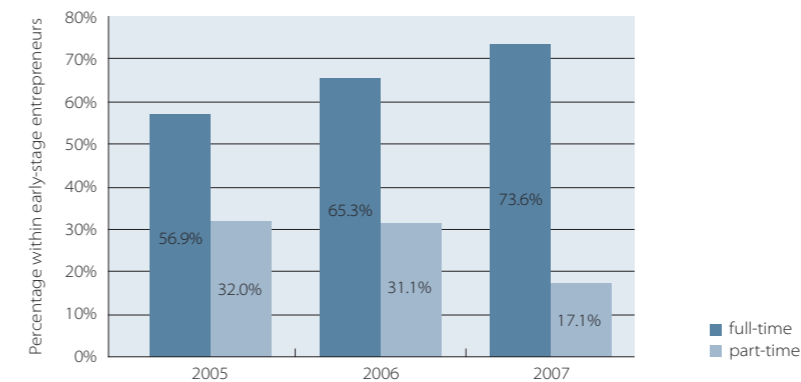


### Full-time and part-time entrepreneurial activity

Some individuals devote only part of their time to involvement in early-stage entrepreneurial activity. When starting up a business some nascent entrepreneurs prefer not to exit their previous job. Also female entrepreneurs may prefer part-time entrepreneurial activity in order to reserve time for household activities. Some people choose a part-time schedule in order to diversify risk, i.e. they are involved in several activities simultaneously. Thus, if any of these activities proves unsuccessful, they would withdraw from it without being seriously hurt financially.

The GEM data for Latvia demonstrates that approximately three fourths of early-stage entrepreneurs in 2007 were full-time entrepreneurs, whereas only 17% were part-timers. As compared with previous years the share of full-time entrepreneurs has significantly increased, and the opposite is true for part-time businesspersons.

Figure 21: Full-time and part-time early-stage entrepreneurs in Latvia, 2005-2007



## CHANGE IN THE QUALITY OF ENTREPRENEURIAL ACTIVITY

In 2007 we observed a sharp decline in early-stage entrepreneurship rates in Latvia. An obvious concern is whether such an abrupt change also implies a change in the qualitative characteristics and composition of entrepreneurial activity.

On the one hand, the geographical distribution of entrepreneurial resources in the country became more even, and entrepreneurship rates across sectors became more balanced. Early-stage entrepreneurial activity increased in business services and decreased in extraction, which is a sign of a more developed economy. On the other hand, the qualitative characteristics of early-stage entrepreneurs seemed to deteriorate. In 2007 there were relatively less innovative entrepreneurs and businesses with international orientation. There was a tendency for necessity-driven entrepreneurship rates to diminish; however, this result was barely significant.

The decrease in entrepreneurship rates was to some extent mitigated by involvement in entrepreneurial activity for longer hours and higher job creation. In 2007 there were more full-time entrepreneurs and the proportion of enterprises with more than 10 employees increased.

The results suggest that the decline in entrepreneurial activity in Latvia was not fully random. It looks like there is a group of entrepreneurs that was less represented in 2007 as compared with 2006. These are part-time entrepreneurs who own micro-firms or are self-employed, operating in extraction or consumer-oriented services, residing in the most developed regions of Latvia: Riga and Vidzeme. These individuals are likely to be more flexible in switching between different activities. If the labour market offers better employment opportunities these individuals are likely to be the first to disengage from entrepreneurial activity.

<sup>10</sup> Average is calculated excluding the few big firms (>250 employees) from the sample.

<sup>11</sup> The data on employment should be interpreted with caution because of a high rate of invalid responses to this question.

<sup>12</sup> About one third of respondents were not sure how employment will change or refused to answer this question.

## 4. PORTRAIT OF LATVIAN ENTREPRENEURS

### GENDER

Entrepreneurship in many countries has a strong gender dimension and Latvia is no exception. A gender gap in entrepreneurship rates can be observed over the whole time period from 2005 to 2006. The discrepancy between early-stage entrepreneurship rates for men and women in Latvia has grown fast. In 2007 only slightly more than 15% of early-stage entrepreneurs were women as compared with almost 40% in 2005.

Figure 23 shows the prevalence rates of early-stage entrepreneurial activity for men and women in five different age groups. While all the rates decreased in 2007, the drop was especially pronounced for young women.

Men and women also differ in their attitudes towards entrepreneurial activity and future expectations. Only 22% of women, as opposed to 30% of men, stated that they possess the skills and experience necessary to start a business. Women were less likely than men to perceive good opportunities to start a business in the next 6 months in the area where they live. A significantly smaller share of women (3.3% vs. 8.5%) expected to start a new business in the next three years. However, fear of business failure was not a characteristic specific to any particular gender: approximately the same proportions of men and women stated that fear of failure may prevent them from starting up a business. Women more often than men have been driven into entrepreneurship by the necessity motive.

Figure 22: Gender gap in early-stage entrepreneurial activity in Latvia, 2005-2007

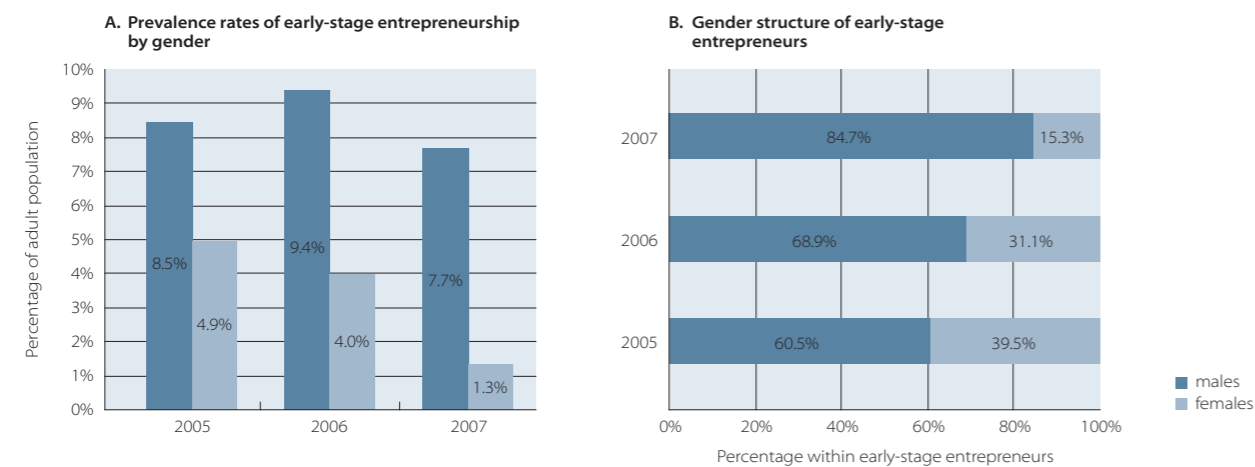
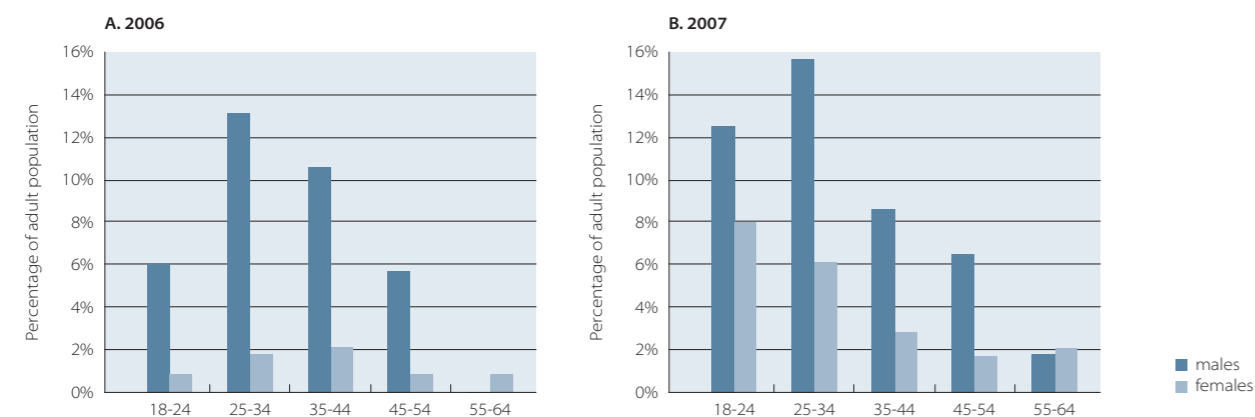


Figure 23: Early-stage entrepreneurial activity in Latvia by age cohorts and gender, 2006-2007



### AGE

Early-stage entrepreneurs in Latvia are quite young. Half of them are less than 35 years old. The mean age of early-stage entrepreneurs in 2007 was 34, whereas employees on average were 40 years old. Established business owners tend to be older than both employees and early-stage entrepreneurs.

Early-stage entrepreneurs in Latvia are also younger than in other European countries. The age profiles of early-stage entrepreneurs in different countries are presented in Figure 25. Only in the Netherlands and Italy was the share of early-stage entrepreneurs younger than 25 years old higher than in Latvia.

Figure 24: Age structure of entrepreneurs and non-entrepreneurs in Latvia, 2007

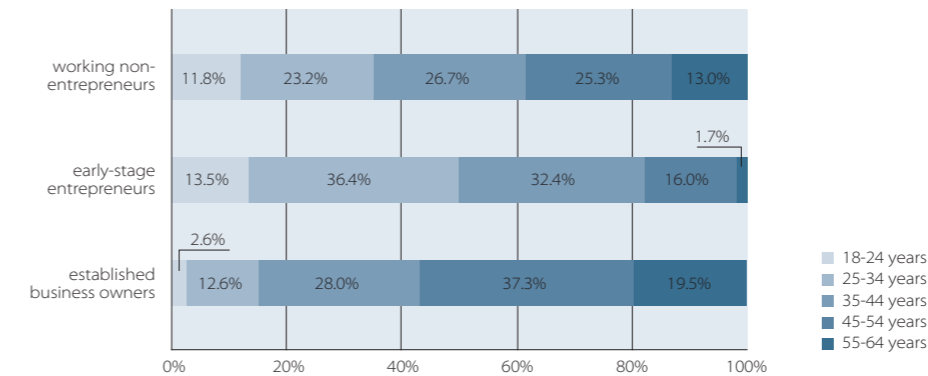
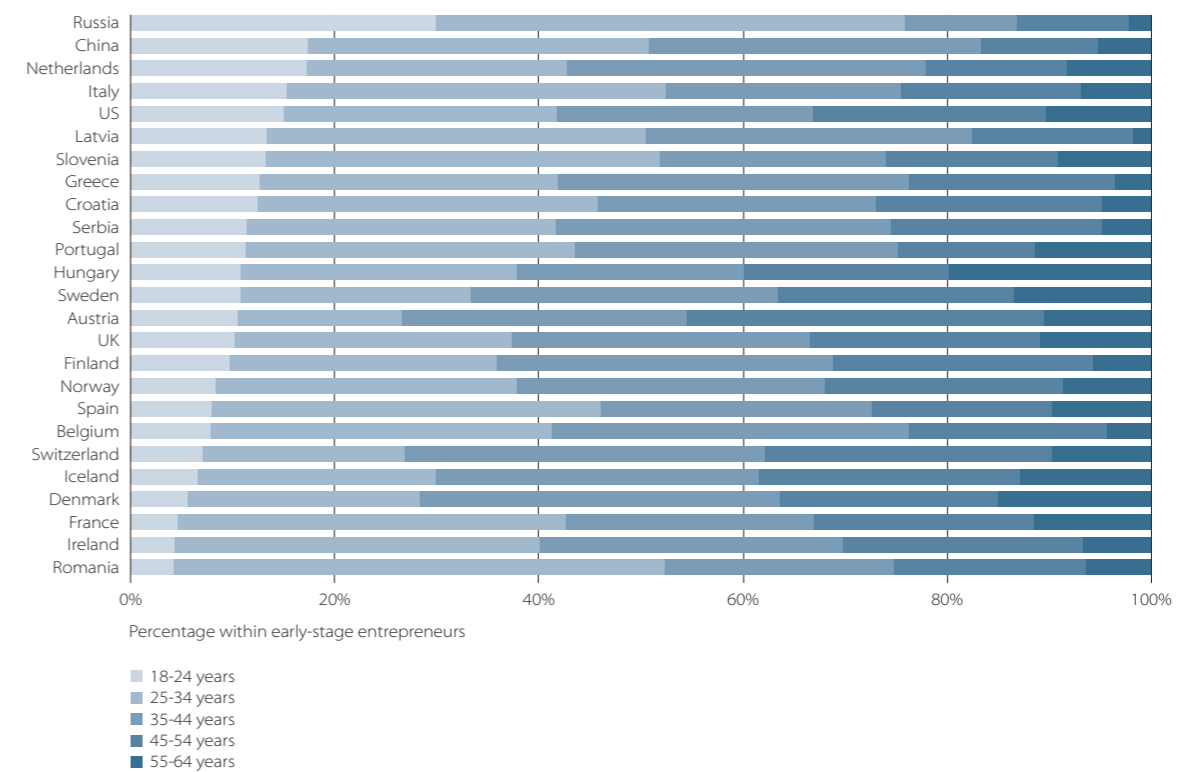


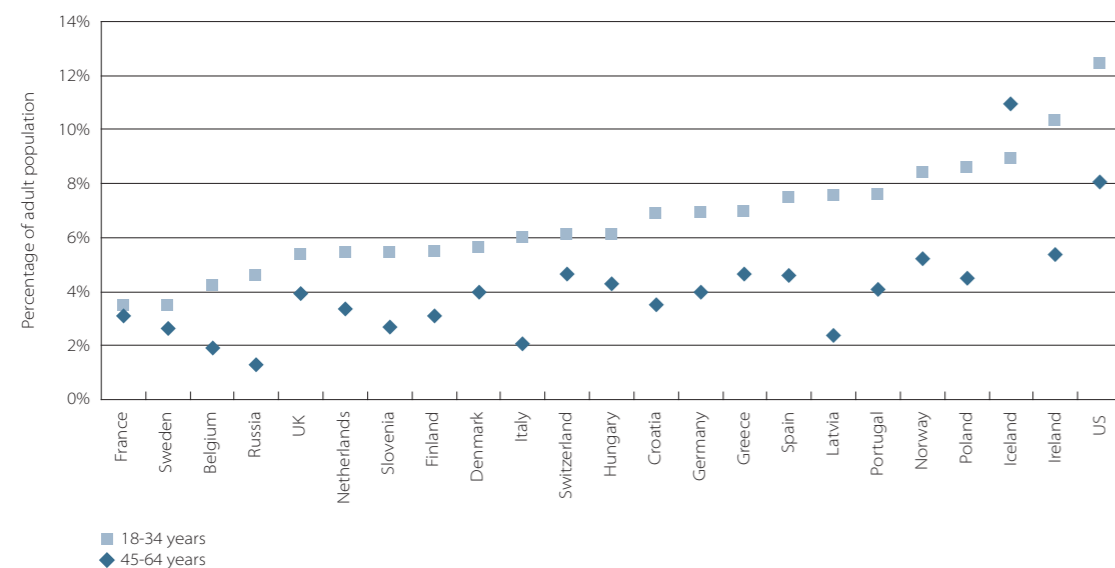
Figure 25: Age structure of early-stage entrepreneurs by country, 2007



Source: GEM 2007 master data in own calculations.

Figure 26 demonstrates early-stage entrepreneurship rates in younger and older age groups for a selection of GEM countries. There is a big difference in the rates for younger and older generations in all European countries, except for France and Sweden. Iceland is the only European country where the older generation appears to be more entrepreneurial than the younger. In all other European countries younger people tend to have higher early-stage entrepreneurship rates than older people. This pattern is especially pronounced in transition countries (e.g. Russia, Croatia) and new member states (e.g. Latvia, Slovenia, Poland)<sup>13</sup>.

Figure 26: Early-stage entrepreneurial activity by age cohorts across countries, 2001-2007



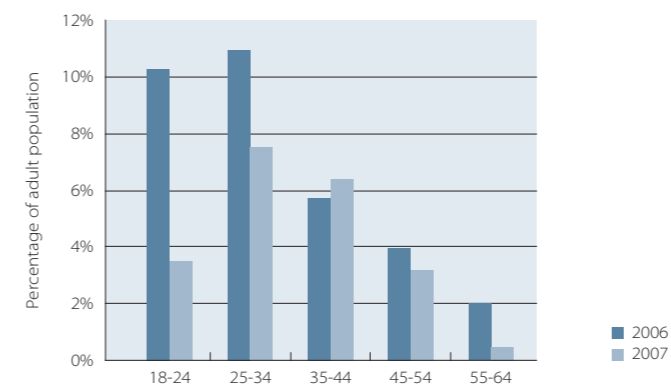
Notes: Percentages are calculated using combined GEM data for 2001-2007. For Latvia the measurement is based on data for 2005-2007. Source: GEM 2007 Executive Report.

The international comparison above is based on the combined GEM data for 2001-2007 (and for Latvia the period is 2005-2007). However, in Latvia the situation is very dynamic. What we observe this year is a drop in entrepreneurship rates, especially in the youngest age group of 18-24. The peak of early-stage en-

trepreneurial activity (i.e. the highest prevalence rate) remains in the age cohort between 25 and 34. However, the distribution of early-stage entrepreneurial activity across age groups becomes more similar to that observed in the developed EU countries, i.e. an inverse U-shape distribution.

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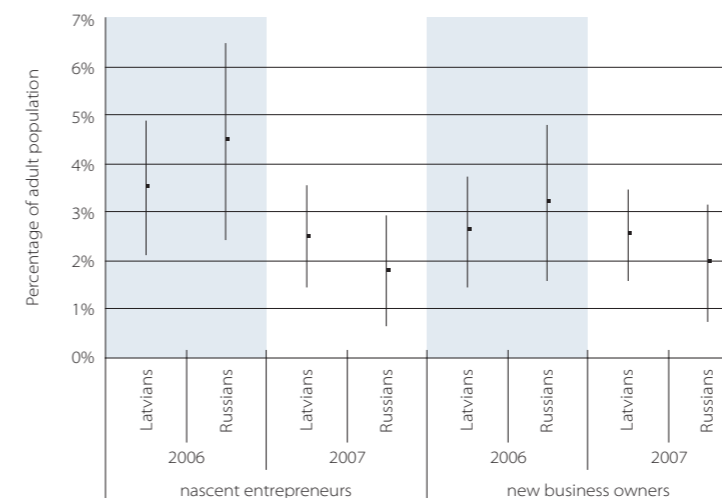
Figure 27: Early-stage entrepreneurial activity in Latvia by age cohorts, 2006-2007



## ETHNICITY

In both 2006 and 2007 the Latvian GEM survey discovered no significant differences in entrepreneurship rates between ethnic groups. Russians and Latvians are equally likely to be nascent entrepreneurs as well as new business owners.

Figure 28: Prevalence rate of nascent entrepreneurs and new business owners in Latvia by ethnicity, 2006-2007



Note: The vertical bars in the chart display 95% confidence intervals.

<sup>13</sup> The absolute difference in early-stage entrepreneurship rates for young and old is also very big in highly entrepreneurial countries like US and Ireland; however, in relative terms the discrepancy is not so high.

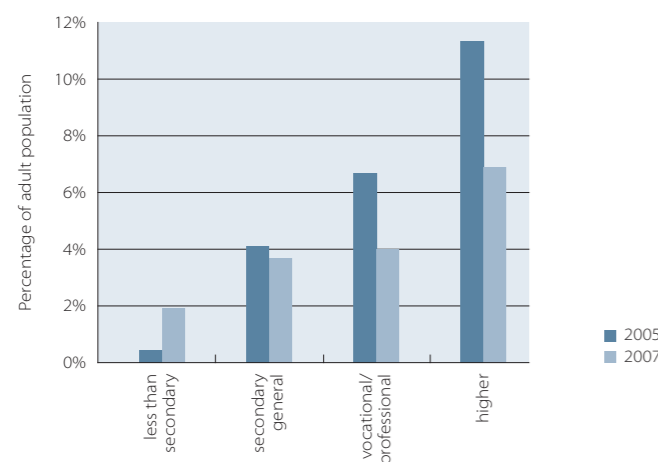


## EDUCATION

Theoretically, the effect of educational attainment on entrepreneurship is ambiguous. On the one hand, better-educated individuals are well rewarded in the labour market and, therefore, may have limited incentive to enter entrepreneurship. On the other hand, education may impart skills that would increase the chances of being a successful entrepreneur.

Figure 29 demonstrates that in 2007 the rate of early-stage entrepreneurial activity in Latvia decreased considerably among adults with higher education<sup>14</sup>. A decrease in entrepreneurship rates among the better-educated may signal that the labour market in 2007 offered better employment opportunities to individuals with high educational attainments. With particularly fast economic growth competition for qualified workers may have tilted the balance between employment and independent entrepreneurship as the rewards offered by large employers increased. It appears that many educated entrepreneurs may have been attracted to employment by high wages or other employment benefits.

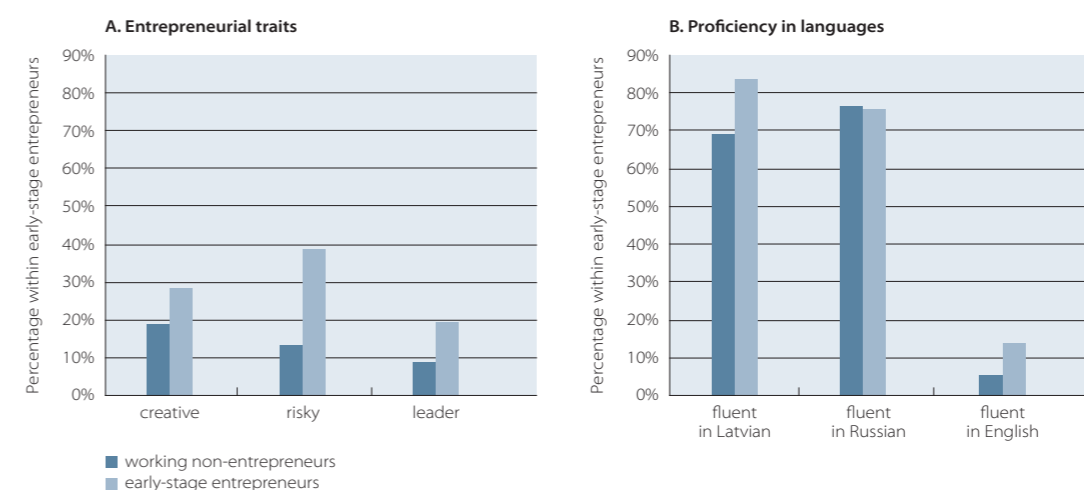
Figure 29: Early-stage entrepreneurial activity in Latvia by level of education, 2005-2007



Only 16% of early-stage entrepreneurs and 18% of established businessmen had their highest level of education in business administration or management. However, among working non-entrepreneurs this figure was even less at 9%. Early-stage entrepreneurs had better language skills as compared with employees: they were more likely to speak fluent Latvian and English. However, knowledge of Russian is not a particular characteristic of entrepreneurs in Latvia. Early-stage entrepreneurs and established business owners were more likely to consider themselves as being creative, risk-taking and to possess leadership qualities as compared with ordinary employees.

For some people who start a business this activity is absolutely new while others might have tried to start a business in the past. Irrespective of whether the previous business failed or succeeded, it seems that such people gain valuable experience of being entrepreneurs. The fraction of early-stage and established entrepreneurs in Latvia that have previous entrepreneurial experience is striking. Almost half of entrepreneurs stated that in the past they have already tried to start up a business that they intended to own and manage. A negligible percentage of non-entrepreneurs had similar experience.

Figure 30: Entrepreneurial traits and proficiency in languages of early-stage entrepreneurs in Latvia, 2007



Note: Both entrepreneurial traits and proficiency in languages are subjectively assessed by respondents themselves using 5-point scale.

Table 3: Entrepreneurial experience of entrepreneurs and non-entrepreneurs in Latvia, 2007

Type of activity	Percentage of those who have started a business in the past
early-stage entrepreneurs	42%
established entrepreneurs	48%
working non-entrepreneurs	5%

Note: For entrepreneurs the question refers to any business before the current start-up or current business.

## CHANGE IN THE DEMOGRAPHIC CHARACTERISTICS OF ENTREPRENEURS

A pronounced decline in the early-stage entrepreneurship rate in Latvia in 2007 was associated with a change in the demographic characteristics of nascent entrepreneurs and new business owners. The drop in early-stage entrepreneurial activity was highly significant for young people, especially for young women, and people with higher or vocational education.

Young qualified adults represent the most mobile part of population. It might be possible that many young educated people who considered entrepreneurial activity as potential career choice in 2007 decided to switch temporarily or permanently to employment because of more attractive employment opportunities in the labour market. It is not clear why entrepreneurial activity among women dropped more than among men. It might be that women put more value to security and social benefits which is generally an important part of the compensation package for employees.

<sup>14</sup> There was a significant drop over the period from 2005 to 2007 in early-stage entrepreneurial activity as well as established business ownership rates for those adults who hold their highest degree in higher education and vocational education.

## 5. FINANCING OF NEW BUSINESSES

### START-UP COST

The average cost of starting up a business in Latvia in 2007 was slightly lower than it was in 2006. In 2006 half of nascent entrepreneurs required at least 21,300 EUR to start up a business, whereas in 2007 half of such businesses stated that less than 15,000 EUR was enough.

Table 4 summarizes the expected start-up needs of nascent entrepreneurs in Latvia. The sample of nascent entrepreneurs has been divided into 3 groups according to their financial requirements using standard clustering techniques. Approximately 40% of nascent entrepreneurs on average needed 4,670 EUR to start a business, which represents a very low start-up capital. On the other hand, for a quarter of entrepreneurs the costs appear to be very high.

Start-ups with very high financial requirements tend to be operating in telecommunications, manufacturing of metal products, manufacturing of building materials, real estate, and wholesale

trade. None of these fields is mentioned in the first cluster of businesses with low start-up cost. Projects with low start-up costs were mainly in the fields of services, retail trade, agriculture and rural tourism.

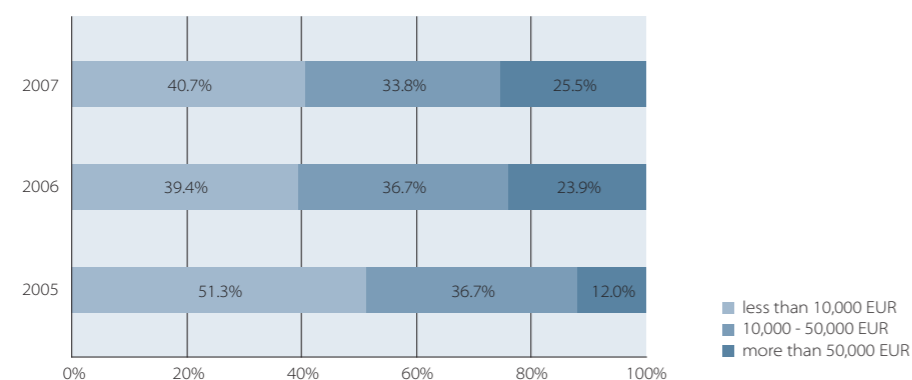
Comparing the structure of start-up financing over the last 3 years it looks like there was a slightly bigger proportion of relatively cheap projects in 2005 as compared with 2006 or 2007. However, the structure has not changed very significantly. Approximately same proportion of entrepreneurs face medium financial requirements to start a business.

GEM data suggests that the start-up costs peaked in 2006. As shown in Figure 32, mean and median start-up financing in all three clusters decreased in 2007 as compared with 2006. The reasons for this cannot be pinned down from the GEM survey, but perhaps by 2007 optimism in the Latvian economy was already declining, thus leading to fewer ambitious start-ups.

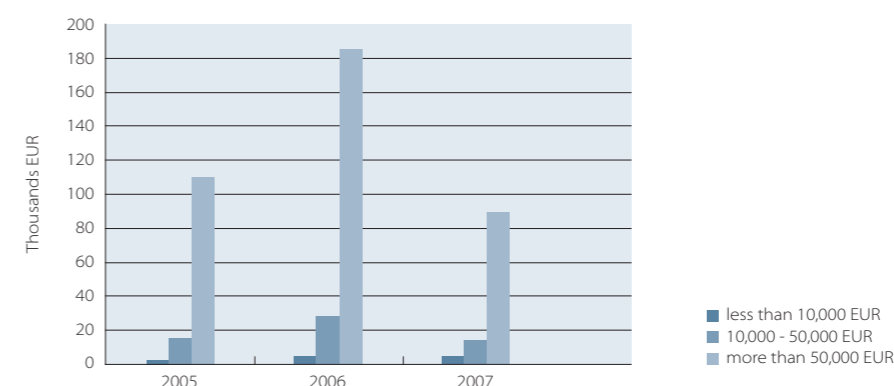
**Table 4: Average start-up cost in Latvia by cluster, 2007**

Range of start-up financing required	Average amount needed (EUR)	Percentage of nascent entrepreneurs to whom this range applies
less than 10,000 EUR	4,670	41%
10,000 - 50,000 EUR	19,170	34%
more than 50,000 EUR	147,650	25%

**Figure 31: Structure of start-up finances of nascent entrepreneurs in Latvia, 2005-2007**



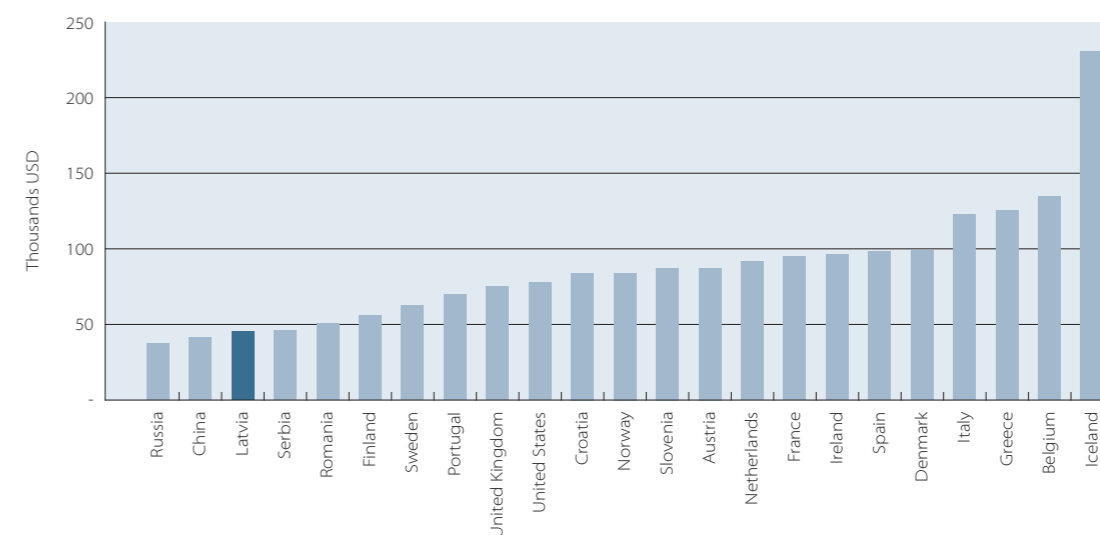
**Figure 32: Median start-up cost in Latvia by cluster, 2005-2007**



International comparison of financial requirements for starting up a business shows that start-up costs in Latvia remain very low. The amount needed to establish a new business in Latvia is similar to that in Russia, Serbia, and Romania. In more developed Slovenia the average start-up cost is approximately the same as in US, Norway, Austria and Netherlands. These figures not only reflect the level of prices in different countries, but also point to the sizes and qualitative characteristics of projects undertaken by nascent entrepreneurs in different countries. More ambitious start-ups aimed at innovation, growth and exporting to international markets are likely to require more financial resources than smaller traditional domestic-oriented firms.

The latter hypothesis can be tested using GEM 2007 survey data in Latvia (see Figure 34). Thus, the results suggest that necessity-driven businesses had lower start-up costs than opportunity-driven. Furthermore, innovative businesses required five times more money than regular businesses; the start-up cost for export-oriented firms were significantly larger than for businesses supplying local markets. In addition, the analysis shows that male nascent entrepreneurs plan to establish firms with higher financial requirements as compared to females<sup>15</sup>.

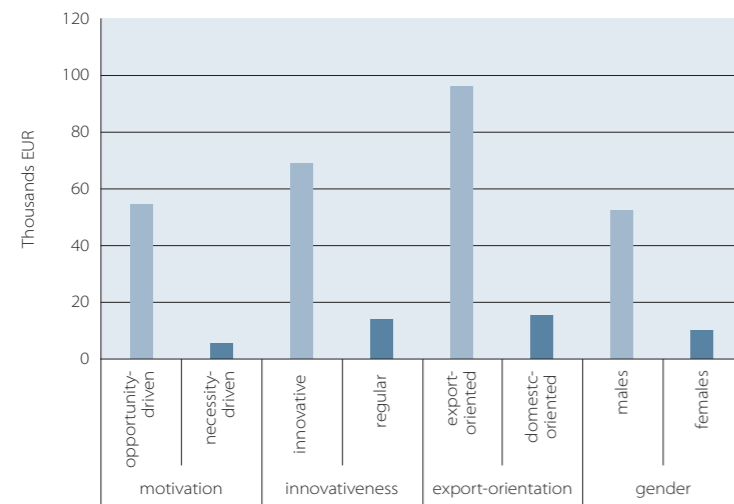
**Figure 33: Average start-up cost by country, 2007**



Source: GEM 2007 Financial dataset.

<sup>15</sup> The difference in mean start-up costs for necessity-driven and opportunity-driven entrepreneurs is significant at the 5% significance level. All other differences are significant at the 10% level. No significant difference in start-up cost is found in ethnic groups of nascent entrepreneurs.

Figure 34: Average start-up cost in Latvia by characteristics of nascent entrepreneurs, 2007



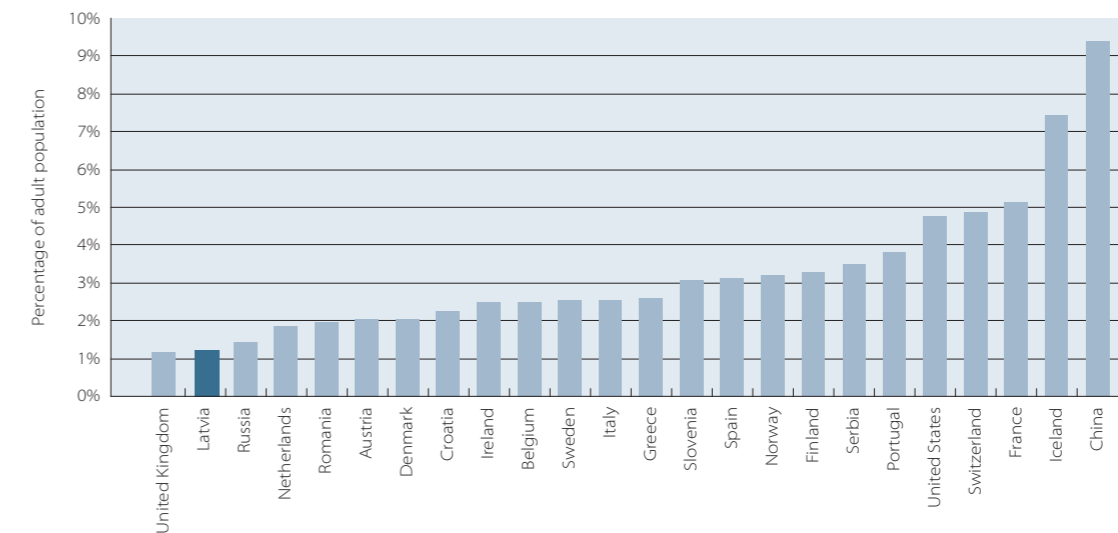
## INFORMAL INVESTMENT

An important source of start-up financing, as shown by GEM 2005 and 2006, has been informal investors (i.e. family members, friends, colleagues etc.). In 2006 approximately 70% of those nascent entrepreneurs who relied on external financial resources mentioned at least one informal investor as a potential source of money for a new start-up.

The GEM study investigates the incidence of informal investors across countries. Respondents were asked whether they have personally provided funds for a new business started up by somebody else. In 2007 only 1.6% of adult population in Latvia responded positively (approximately 24 thousand people). The prevalence rate of informal investors was significantly higher in 2006 (5.3%). A cross-country comparison also shows that in 2007 Latvia was very low with respect to the prevalence of informal investors.

A drop in the prevalence of informal investors is consistent with the decrease in the number of nascent entrepreneurs. It is not clear, however, what the casual relationship between these two phenomena is. On the one hand, it might be that the demand for informal investment decreased because fewer people were planning to start-up a business in 2007. On the other hand, it may have happened that the amount of financial resources available to individuals for investment purposes has decreased (or the option to invest these resources into business development appeared no longer profitable). The number of potential informal investors decreased leaving potential nascent entrepreneurs without their main source of start-up finances. If the latter explanation is correct then the lack of informal investors could be one of the important factors in the slowdown of entrepreneurial activity.

Figure 35: Prevalence rate of informal investors by country, 2007



Source: GEM 2007 Financial dataset.

## CHANGE IN START-UP FINANCING

Nascent entrepreneurs in 2007 had lower financial requirements than nascent entrepreneurs in 2006. This might be explained with fewer ambitious projects taking place. As previous chapters show, indeed, in 2007 there were fewer innovative and export-oriented early-stage entrepreneurs, as compared with earlier years. Moreover, the share of individuals with higher education among early-stage entrepreneurs decreased. It might be possible that better-educated are more likely to initiate more ambitious projects and it is easier for them to attract financial resources, using for example bank credit.

GEM 2007 does not provide information on sources of start-up finance of nascent entrepreneurs. However, we observe that the prevalence of informal investors in Latvia has decreased. It is not clear how to interpret this change. The structure of start-up financing is a result of complex interplay between the capital requirements of nascent entrepreneurs and availability of different sources of financing. For example, if entrepreneurs get easier access to bank credit they might prefer that to micro credit from informal sources. On the other hand, if many nascent entrepreneurs have quite low capital requirements and no formal financing or own money is available to start-up a business, then a decrease in the prevalence of informal investors might emerge as an obstacle for development of entrepreneurial activity.

## FOCUS INSERT 1: PROFILE OF NASCENT ENTREPRENEURS IN LATVIA

(BASED ON PANEL STUDY OF ENTREPRENEURIAL DYNAMICS IN LATVIA<sup>16</sup>)

The panel study of entrepreneurial dynamics (PSED) in Latvia represents a random and nationally representative sample of 400 nascent entrepreneurs. Based on this data we may draw a more sophisticated portrait of nascent entrepreneurs in Latvia<sup>17</sup>. PSED data refers to approximately the same time period as GEM 2007. It was gathered over the period from November 2006 to May 2007. Therefore, the results of the two surveys are comparable.

The definition of nascent entrepreneurs in PSED is similar to that in GEM, that is to say a nascent entrepreneur is an adult individual trying (actively) to set up a new business by him/herself or with others which he or she will fully or partially own<sup>18</sup>. At least one of the criteria listed below should be met (for more than 6 months out of the preceding 12 months) in order for a business to be classified as nascent:

- The business has not generated any income;
- Monthly expenses have been greater than monthly revenue;
- Salaries have not been paid to owners of the business.

PSED data demonstrates that nascent entrepreneurs in Latvia have already quite developed businesses at the very beginning of the business life cycle. Practically two thirds of entrepreneurs have their product or service completely developed and ready for sale. Only 2% admit that the product or service is only at the stage of an idea. Slightly more than a quarter of nascent entrepreneurs claim that the product is in the process of development.

A typical nascent entrepreneur in Latvia is a 36 year-old Latvian male with a Bachelors degree in Engineering or Business. His entrepreneurial activity is most likely to be in the construction sector. He has about 6-7 years of experience in the field where he is starting a business. Before starting up this business he has tried 2 or 3 different professional activities.

PSED data reveals a more optimistic picture of the gender structure of entrepreneurial activity in Latvia as compared with GEM 2007 data. 60% of nascent entrepreneurs in the sample are males, 40% are females. This result is consistent with GEM 2005 and 2006, but does not show the huge gender gap observed in the latest GEM data.

There are roughly twice as many ethnic Latvians as ethnic Russians among nascent entrepreneurs: 63% vs. 30% respectively. Approximately the same proportions apply for those who speak Latvian as a native language and Russian as a native language (63% and 34%). Most nascent entrepreneurs who have ethnicity other than Latvian or Russian speak Russian as their mother-tongue.

Most nascent entrepreneurs have completed either professional education (43%) or higher education (38%). The most popular fields of education for nascent entrepreneurs are engineering (18%) and business (15%). Males are more likely to study engineering (23%), followed by business (13%), construction (10%), and transport (8%); while for females it is business (18%), law (11%), engineering (10%), and social and behavioral sciences (9%).

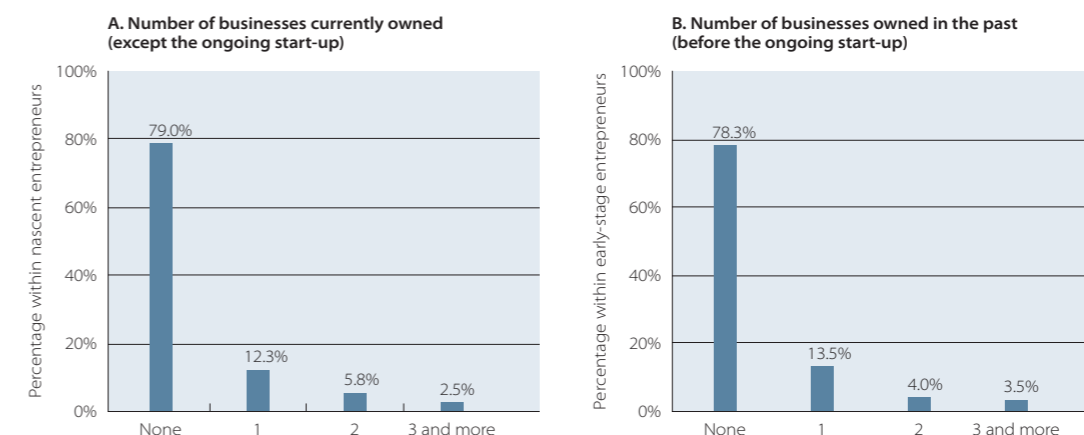
Only 5% of nascent entrepreneurs are trying to start a business as their first professional activity. The other 95% already have some experience in the labour market. Half of them have tried one or two different professional activities before engaging in the current start-up. A small group of nascent entrepreneurs (13%) may be regarded as “jacks-of-all-trades”. These people have tried five different professional activities or more. They are likely to be multi-skilled and have experience in many different fields. According to Lazear (2004) such people are more likely to be successful in entrepreneurship. ‘Jacks-of-all-trades’ in our sample are predominantly males. However, they are not significantly different from the rest of the sample in terms of other characteristics.

Around 30% of nascent entrepreneurs are not new to entrepreneurial activity. They have already owned a business before or are currently owners of another business. Strikingly, a quarter of nascent entrepreneurs are starting a business in an area where they have no experience at all. However, another 50% have 5 years of experience or more.

Generally, the areas where nascent entrepreneurs launch their business are construction (19%), private services (14%), retailing (13%), and transportation (10%). Males prefer construction (25%) and transportation (13%) sectors; whereas females prefer private services (21%) and retail (19%) sectors.

Around 10% of nascent entrepreneurs state that the technologies they use (or are going to use) in the production process were not available one year ago. Approximately the same proportion of entrepreneurs consider the product or service they are offering as new and unfamiliar to all customers. Using the definition developed in Section 3 of this report, 18% of nascent entrepreneurs are core innovators. Almost 15% of nascent entrepreneurs in Latvia state that they have developed original proprietary technologies, processes, or procedures. However, only 4% of the entrepreneurs have submitted an application for a patent, copyright, or trademark.

Figure 36: Entrepreneurial experience of nascent entrepreneurs in Latvia, 2006/2007



<sup>16</sup> For more information on the project see Appendix B.

<sup>17</sup> GEM data is not sufficient for such a purpose because the sample of nascent entrepreneurs in GEM survey is quite small – about 50 individuals.

<sup>18</sup> Those who currently own and manage an already existing business are also considered to be nascent entrepreneurs if other criteria in the definition are met.

## FOCUS INSERT 2: START-UP FINANCES OF NASCENT ENTREPRENEURS IN LATVIA

(BASED ON PANEL STUDY OF ENTREPRENEURIAL DYNAMICS IN LATVIA)

The panel study of entrepreneurial dynamics (PSED) in Latvia contains a section devoted to the financial side of a start-up process. Unlike previous years, in 2007 GEM has no information on sources of start-up finances; nevertheless, PSED can provide good insights into this issue.

The PSED sample of 400 nascent entrepreneurs can be divided into three major groups according to the needs for external financing: a third of nascent entrepreneurs have already applied to some financial institution for external financing; another third have not yet applied, but plan to do so in the future; the rest regarded external financing as not relevant for their businesses. Approximately half of entrepreneurs interested in external financing (47%) had already received the first outside funding at the moment of the interview.

The PSED study examines the sources of financing attracted by owners before registering the start-up with the Register of Enterprises. Respondents were asked to specify the amount<sup>19</sup> of start-up finances received from the following sources:

- Personal savings
- Personal loans from family members and relatives
- Personal loans from friends, employers or colleagues
- Asset-backed loans (e.g. backed by a car or a house)
- Other sources

**Table 5: Sources of start-up financing, 2006/2007**

Sources of financing	Frequency	Percent
Personal savings	343	95.8%
Loans from family members, relatives	38	10.6%
Loans from friends, employers, colleagues	12	3.4%
Asset-backed loan	38	10.6%
Other sources	34	9.5%

Note: Percentages are calculated out of all respondents who gave valid answers to the set of questions on sources of financing (358 observations).

Respondents were asked to report the resources they used themselves as well as on the resources used by other owners of the business. The breakdown by types of financing used by all owners is presented in Table 5.

PSED data suggests that nascent entrepreneurs rely heavily on own financing. 96% of start-ups used money from the personal savings of owners. Moreover, nearly three fourths used personal savings as the only source of start-up financing. The extent of using other sources is much lower: only 11% reported use of personal loans from family members, the same proportion used asset-backed loans. Loans from friends, employers, and colleagues appeared to be less popular sources of financing. Overall, 34 respondents (9.5%) reported use of other sources not mentioned in the list. For the majority of them the other source was a bank. Other mentioned sources were, for example, EU structural funds, the help of sponsors, and assistance from a city council. As shown in Table 6, the number of owners of a new business seems not to affect significantly the structure of start-up finance.

**Table 6: Structure of financing by number of owners, 2006/2007**

Number of different sources of financing	Single owner (N=210)		Several owners (N=148)	
	Frequency	Percent	Frequency	Percent
Only one source is used	155	73.8%	116	78.4%
Only personal savings are used	149	71.0%	108	73.0%
More than one source is used	55	26.2%	32	21.6%

These results point to a remarkable change in the sources of start-up finances used by nascent entrepreneurs in Latvia. According to the GEM 2006 Report only half of nascent entrepreneurs relied solely on self-financing, and a very large proportion (approximately 35%) named informal investors (i.e. family members, friends, and colleagues) as an important source of finance. PSED data suggest that at the end of 2006 the situation changed: more nascent entrepreneurs turned to self-financing, considerably less were able to attract informal investors. In line with this result, we observe in GEM 2007 a sharp decrease in the prevalence of informal investors in Latvia.

The average start-up financing from personal sources according to PSED is not high – about 2700 LVL (3840 EUR)<sup>20</sup>. This is not surprising taking into account that the minimum amount required to register a new enterprise in Latvia is 2000 LVL (2850 EUR). More than one third of respondents stated exactly this amount (2000 LVL) as the total amount of money provided by all owners from personal savings.

<sup>19</sup> If respondents refused to specify amounts, they were asked to give a relative proportion of start-up finances received from each source. About 10% of all respondents refused to answer any question concerning start-up financing.

<sup>20</sup> This estimate is based on 202 respondents who reported the amount of money invested in a start-up from the personal savings of owners. The remaining 141 respondent refused to specify an amount. Therefore, the estimate might be biased.

## CONCLUSIONS

Despite high levels of economic growth throughout 2005-2007, early-stage entrepreneurial activity in Latvia seems to slow down already in mid 2007. An entrepreneurial career became less attractive or feasible for adults in Latvia as compared with 2006 or 2005. This change affected current rates of involvement in early-stage entrepreneurial activity as well as expectations with respect to business opportunities in the future and intentions to start up a business. The entrepreneurial environment has also become less favourable than it was a year before. The decrease in entrepreneurship rates was to some extent mitigated by involvement in entrepreneurial activity for longer hours and higher job creation. However, this does not compensate for the decrease in the number of early-stage entrepreneurs.

The slowdown in early-stage entrepreneurial activity was associated with some important changes in the characteristics and composition of entrepreneurial activity in Latvia. On the one hand, the geographical distribution of entrepreneurial resources in the country became more even, and entrepreneurship rates across sectors became more balanced. Early-stage entrepreneurial activity increased in business services and decreased in extraction, which is a sign of a more developed economy.

On the other hand, the qualitative characteristics of early-stage entrepreneurs seemed to deteriorate. In 2007 there were relatively less innovative entrepreneurs and businesses with international orientation. Lower financial requirements of nascent entrepreneurs in 2007 as compared with 2006 also pointed to fewer ambitious projects taking place. This is a bad news for economy, because it signals that Latvian entrepreneurship is likely to have lower growth potential in the future and may become less competitive.

In spite of a more even distribution of entrepreneurial activity across regions and sectors, the gender gap in 2007 continued to increase. Policy makers should pay attention to this persistent gender imbalance. More research is needed in order to understand the factors behind this tendency.

The results of GEM 2007 imply that the drop in early-stage entrepreneurial activity was more pronounced for the part of Latvian population that can be considered the most mobile, i.e. for young qualified adults, part-timers who own micro-firms or are self-employed, operating in the sectors where no big capital investment is needed, residing in the most developed regions

of Latvia. It is likely that in 2007 these individuals instead of choosing an entrepreneurial career were attracted into employment. The situation in the labour market in 2007 was very favourable in terms of employment opportunities. Because of rapid economic growth and scarcity of labour there were many vacancies that attracted all human resources, including people with entrepreneurial talent.

Another impediment to development of early-stage entrepreneurship might be connected to the financing of start-ups. Nascent entrepreneurs in Latvia face rather narrow financing options. Previous GEM reports found that nascent entrepreneurs rely heavily on own finance and micro credits from informal sources, such as relatives, friends, and colleagues. Only a small part of nascent entrepreneurs have access to bank credit. In GEM 2007 we observe a sharp decrease in the prevalence of informal investors in Latvia. This indirectly suggests that informal financing became less prevalent in Latvia. The reasons behind this change are not clear. However, it might be possible that a decrease in the prevalence of informal investors emerged as an obstacle for development of entrepreneurial activity, especially small start-ups with low capital requirements.

What are the expectations concerning the level and characteristics of early-stage entrepreneurial activity in the future? On the one hand, the overall slowdown in economic activity observed in 2008 will also negatively affect the development of entrepreneurship. On the other hand, it is likely that deterioration in employment opportunities in the labour market will again give rise to new start-up attempts. However, in this case necessity-driven entrepreneurship is likely to increase rather than entrepreneurial activity driven by business opportunities. As EU Structural Funds for 2007-2013 come fully outstream, we hope to see again an increase in the share of innovative and internationally-oriented entrepreneurship because several programmes are directly focused on promotion of innovation and exports in Latvian businesses.

GEM is mostly an "entrepreneurship-meter" and offers a snapshot of entrepreneurial activity in a country. Other research initiatives at the TeliaSonera institute, e.g. the Panel Study of Entrepreneurial Dynamics (PSED) or the Survey of Innovative Businesses in Latvia (SIBiL), complement GEM by providing more elaborate analysis of the entrepreneurial dynamics.

## APPENDIX A: GEM APPROACH AND DATA COLLECTION

### THE GEM PROJECT EXPLAINED

The Global Entrepreneurship Monitor (GEM) is a research programme started as a partnership between the London Business School (UK) and Babson College (USA). Research also involves a consortium of national teams from each of the countries involved in the study. The aim of GEM is to create an annual assessment of levels of entrepreneurial activity across countries. The research also explores a variety of factors both within and across countries that might give rise to systematic differences in entrepreneurship rates. Through a greater understanding of these factors, policies

to enhance the level of entrepreneurial activity can be based on solid research, while the role of entrepreneurship in contributing to a positive economic environment can be better understood. GEM was initiated in 1999 with 10 countries. 42 countries participated in the 2007 research cycle and more than 120 scholars from the various national teams collaborated with the coordination team in collecting data and developing the project. Latvia has been a member of the GEM project since 2005, and continues its participation in the 2008 research cycle.

### ADULT POPULATION SURVEY

GEM is the largest survey-based study of entrepreneurship in the world. Every year each national team is responsible for conducting a survey within its adult population. Representative samples of randomly selected adults, ranging in size from 1,500 to almost 43,000 individuals, were surveyed in 42 countries participating in GEM in 2007. Similar to previous rounds of GEM, the interview schedule consisted of a set of questions used to derive entrepreneurial activity rates and additional questions concerning the attributes and characteristics of the respondents as well as their attitudes towards entrepreneurship. An extensive description of the GEM methodology may be found in Reynolds et al. (2005).

In Latvia, the GEM adult population survey was conducted by a professional survey firm "Latvijas Fakti". Via face-to-face interviews a total of 2000 adults aged 18-64 were surveyed during May-June 2007. A multi-stage stratified random sampling procedure was used to gather the sample data. Stratification by region (Riga, Vidzeme, Kurzeme, Zemgale, Latgale), district (26 administrative districts) and type of settlement (Riga, big cities, cities, towns, rural areas) ensured representativeness of all social-demographic groups in the sample. 268 sampling points were randomly chosen at the first stage. The choice of the respondent in each household was made using the 'last birthday method'. The response rate depending on the location was 76-81%. Observations were weighted by age, gender, ethnicity, geographical region, and settlement type. Thus, GEM findings can be reliably generalized to the whole of Latvia's population.

## APPENDIX B: PANEL STUDY OF ENTREPRENEURIAL DYNAMICS IN LATVIA

GEM is a part of a broader research programme at the TeliaSonera Institute, which aims to inform the public about the causes and consequences of entrepreneurship in Latvia. Another important initiative of this programme is Panel Study of Entrepreneurial Dynamics (PSED) in Latvia. PSED is a research project aimed at providing information on nascent entrepreneurs, i.e. those individuals who are trying to start-up a new business venture. PSED is the first nationally-representative dataset in Latvia that offers systematic and reliable data on the process of business formation in Latvia.

The methodology of the PSED study was developed by a group of entrepreneurship scholars in the United States, led by Professor Paul Reynolds. PSED started in the US in 1998 and continues to this day. Similar surveys have taken place also in Australia, Belgium, Denmark, Germany, Hong Kong, Iceland, Ireland, Netherlands, Singapore, Slovenia, Sweden, and Wales. These efforts also resulted in creation of the Global Assessment of Longitudinal Entrepreneurial Studies (GALES) initiative in 2006, with the aim of standardizing the research design of PSED studies across the world, facilitating quality of data collection, and developing empirically-based policy recommendations to promote new firm creation. The TeliaSonera Institute is also part of the GALES initiative, which seeks to facilitate and coordinate panel studies of entrepreneurship around the world.

PSED data collection involves screening a large proportion of the adult population of the country in order to identify a nationally representative sample of nascent entrepreneurs<sup>21</sup>. Each start-up is tracked across time through a set of recurring interviews over a period of three years. Generally only a fraction of initially identified start-ups succeed in establishing viable businesses. Therefore, the study is focused on understanding the factors leading to successful business creation. Most surveys of businesses in Latvia to date have focused mainly on barriers to operating already *established* firms. However, this practice resulted in *selection bias*, as information was gathered only on startup efforts that actually resulted in up-and-running businesses. Little, if anything, is known about very young and small start-up efforts.

Latvia's PSED study was set up in 2006 by researchers at the TeliaSonera Institute. The first round of data collection for the Latvian PSED began in November 2006 and finished in May 2007. The survey was conducted by the professional survey firm "Latvijas Fakti". A random and nationally representative sample of about 400 nascent entrepreneurs was collected in screening phase and interviewed face-to-face. In August 2008 the second round of interviews took place. The first results of the PSED study are about to be published in the PSED Latvia Report (Baltrušaitytė-Axelson, Sauka and Welter, 2008).

## APPENDIX C: SURVEY PROCEDURE IN GEM COUNTRIES

	Interview Procedure	Sampling Method	No. of completed interviews	Reported Response Rate <sup>1,2</sup>	Maximum number of call backs <sup>3</sup>
Argentina	Fixed-line Phone	Random Dial from List using quotas	2,018	32%	3
Austria	Fixed-line Phone	Random Dial from List	2,158	86%	5
Belgium	Fixed-line Phone and Mobile Phone	Random Dial from List and Random Digital Dialling	2,028	19%	2
Brazil	Face-to-Face	Cluster sampling using Census	2,000	70%	3
Chile	Fixed-line Phone	Random Dial from List	4,008	45%	5
China	Fixed-line Phone and Face-to-face	Random Digital Dialling and Cluster Sampling from lists	2,666	72%	5
Columbia	Fixed-line Phone and Face-to-Face	Random Dial from List and Cluster Sampling from Census	2,102	28%	5 (phone)
Croatia	Fixed-line Phone	Random Dial from List	2,000	11%	6
Denmark	Fixed-line Phone and Mobile Phone	Random Dial from List	2,001	42%	5 up to 7
Dominican Republic	Face-to-Face	Cluster sampling using Census	2,081	97%	3
Finland	Fixed-line Phone and Mobile Phone	Random Dial from List and Random Digital Dialling using quotas	2,005	19%	6
France	Fixed-line Phone	Random Dial from List with quotas	2,005	50%	-
Greece	Fixed-line Phone	Random Dial from List and Random Digital Dialling	2,000	57%	5
Hong Kong	Fixed-line Phone	Random Dial from List	2,058	58%	3
Hungary	Mobile Phone	Random Digital Dialling	1,500	58%	5
Iceland	Fixed-line Phone	Random Dial from List	2,002	52%	25 to 30
India	Face-to-Face	Cluster sampling using voters lists	1,662	100%	5
Ireland	Fixed-line Phone	Random Digital Dialling	2,007	39%	7
Israel	Fixed-line Phone	Random Digital Dialling	2,019	33%	5
Italy	Fixed-line Phone	Random Dial from List	2,000	25%	5
Japan	Fixed-line Phone	Random Dial from List and Random digital dialling	1,860	10%	0
Kazakhstan	Face-to-Face	Cluster sampling using maps	2,000	74%	5
Latvia	Face-to-Face	Cluster sampling from Census	2,000	79%	3
Netherlands	Fixed-line Phone	Random Dial from List	3,539	32%	6
Norway	Fixed-line Phone and Mobile Phone	Random Dial from List	2,037	15%	5
Peru	Face-to-Face	Cluster sampling using maps based on socio-economic levels	2,000	67%	3
Portugal	Mobile Phone	Random Digital Dialling using quotas	2,023	41%	3
Puerto Rico	Fixed-line Phone	Random Dial from List	1,998	-	1
Romania	Face-to-Face	Cluster sampling using voters lists	2,046	67%	5
Russia	Face-to-Face	Cluster sampling using government data and voters lists	1,939	52%	3
Serbia	Fixed-line Phone	Random Dial from List	2,200	62%	5
Slovenia	Fixed-line Phone	Random Dial from List	3,020	86%	8
Spain	Fixed-line Phone	Random Dial from List	27,880	46%	7
Sweden	Fixed-line Phone	Random Dial from List	2,001	75%	12
Switzerland	Fixed-line Phone	Random Dial from Lists	2,148	35%	2
Thailand	Fixed-line Phone and Face-to-Face	Random Dial from list and cluster sampling using maps and quotas	2,000	43%	2 (phone) 3 (F-F)
Turkey	Fixed-line Phone	Random Digital Dialling	2,400	-	5
United Arab Emirates	Fixed-line Phone and Mobile Phone	Random Dial from List	2,180	-	5
United Kingdom	Fixed-line Phone	Random Digital Dialling	42,713	29%	7
United States	Fixed-line Phone	Random Digital Dialling	2,166	17%	9
Uruguay	Fixed-line Phone	Random Dial from List and Random Digital Dialling using quotas	2,000	51%	3
Venezuela	Face-to-Face	Cluster sampling using maps based on socio-economic levels	1,794	61%	0

<sup>1</sup> Reported Response Rate is calculated as the total number of completed interviews divided by total number of eligible households contacted.

<sup>2</sup> An individual from an eligible household is any resident of the country, fourteen years of age or over. Only those visiting the country, in institutions (prisons, mental institutions) or the military are to be excluded from the sample design.

<sup>3</sup> The number of attempts made to try and contact the selected respondent before abandonment.

<sup>21</sup> According to GEM surveys in Latvia, only about 2-4 % of the adult population are nascent entrepreneurs.

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