Global Entrepreneurship Monitor

2006 Latvia Report

Vyacheslav Dombrovsky, Olga Rastrigina, Andrejs Jakobsons
Sponsored by TeliaSonera
The TeliaSonera Institute at the Stockholm School of Economics in Riga
GLOBAL ENTREPRENEURSHIP MONITOR

2006 LATVIA REPORT

Vyacheslav Dombrovsky,
Olga Rastrigina,
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Founding and Cooperating Institutions:
TeliaSonera Institute at SSE-Riga
Baltic International Centre for Economic Policy Studies (BICEPS)
Latvijas Fakti
FOREWORD

This is the second Latvian Global Entrepreneurship Monitor (GEM) and this year’s theme is innovativeness. GEM is a major international research project aimed at describing and analyzing entrepreneurial process across a wide range of countries. The Latvian country report is based on original data collected in Latvia for GEM. The report has been written by a team of researchers at the TeliaSonera Institute at the Stockholm School of Economics in Riga (SSE Riga), the Baltic International Centre for Economic Policy Studies (BICEPS), and SSE Riga. We are convinced that the Latvian GEM will contribute to the knowledge and understanding of the factors influencing entrepreneurial activity and innovativeness 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

Alī Vanags
Director, BICEPS
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ABBREVIATIONS USED IN THE GEM REPORT

BICEPS Baltic International Centre for Economic Policy Studies
GEM Global Entrepreneurship Monitor
PSED Panel Study of Entrepreneurial Dynamics
GDP Gross Domestic Product
EU European Union
ISIC International Standard Industry Classification
R&D Research and Development
IT Information Technology
SIBL Survey of Innovative Businesses in Latvia
GALES Global Assessment of Longitudinal Entrepreneurial Studies
CIS Community Innovation Survey
OECD Organization for Economic Co-operation and Development
SSE-Riga Stockholm School of Economics in Riga
NMS New Member States

AUTHORS

Vyacheslav Dombrovskiy, Latvian national co-ordinator for the Global Entrepreneurship Monitor project, a Research Fellow at the Teliasonera Institute at SSE-Riga and Baltic International Centre for Economic Policy Studies (BICEPS), and Assistant Professor at Stockholm School of Economics in Riga (SSE-Riga).

Olga Rastrigina, a Research Fellow at the Teliasonera Institute at SSE-Riga and BICEPS, specializing in entrepreneurship and labour market studies. Olga Rastrigina will be the national co-ordinator of the Latvian GEM team in 2007 cycle.

Andrejs Jakobsons, a Research Fellow at the Teliasonera Institute at SSE-Riga and BICEPS, specializing in innovation and entrepreneurship and labour market studies. Andrejs Jakobsons also is a lecturer in economics at Riga Business School.

ACKNOWLEDGEMENTS

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Sincere gratitude to Teliasonera, whose generous sponsorship enabled Latvia’s participation in GEM 2006.

Thanks also to Latvijas Fakti for a superb job in conducting the adult population survey for Global Entrepreneurship Monitor in Latvia.

Finally, thanks to Anders Paalzow and Alf Vanags for their valuable comments on earlier drafts of this report; Christopher Goddaed for editing; and to Sergei Gubin for excellent research assistance.
EXECUTIVE SUMMARY

GEM compiles and provides detailed information about the entrepreneurial activity taking place in Latvia. The information and analysis included in this report is intended to provide unique information about the recent trends in entrepreneurship in the country that are helpful for policy makers, businessmen, and the academic community.

The 2006 data suggest that about 4% of the adult population in Latvia were nascent entrepreneurs (prevalence rate of nascent entrepreneurship), almost unchanged compared to the previous year. Nascent entrepreneurship is defined as being 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 entrepreneur has paid salaries to its owners for more than 3 months (3.5 years).

Early-stage entrepreneurs

The term ‘early-stage entrepreneurs’ refers to nascent entrepreneurs and established entrepreneurs. Therefore, this group covers all entrepreneurs at all stages of business lifecycle.

Overall entrepreneurship

Overall entrepreneurship combines both early-stage entrepreneurs and established entrepreneurs. Thus it is not surprising that Latvia and some other countries have higher entrepreneurial rates than the more developed EU15 countries.

The regional distribution of entrepreneurship in Latvia is characterized by substantial disparities. Results for 2006 indicate that activity has increased compared to the previous year in Riga, Latgale, and Kurzeme regions. Disparities between regions remain high, while entrepreneurial activity in Riga is now about twice as high as in Zemgale region (the least entrepreneurial region).

The overall pattern of early-stage entrepreneurship in Latvia is broadly similar to observations in other European countries. In 2006, the most common sector for early-stage economic activity in Latvia remained consumer-oriented services. These, however, experienced a marked decrease compared to 2005 (42.8% compared to 37.9%). A decrease has also been observed in business services (22.5% compared to 18.8%). At the same time, the transformation sector has experienced a significant increase (by more than nine percentage points), which can be mostly explained by the continuing construction boom (where the early-stage rate doubled in 2006).

Most of Latvian early-stage entrepreneurs (77%) are motivated by pursuing a business opportunity, rather than being pushed into entrepreneurship by necessity, i.e. lack of employment options. In terms of composition between necessity and opportunity entrepreneurs, Latvia exhibits a similar pattern to European countries. The need for necessity entrepreneurship in Latvia arises mostly due to the shock of transition to a market economy and mainly concerns older workers.

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).

An established business owner manages and fully or partially owns a new business that has paid wages to its employees for more than 3 months, but less than for 42 months (3.5 years).

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).

Economic activity prevalence rate of 12% indicates that in Latvia about 180 thousand individuals were involved in entrepreneurial activity in 2006. Changes in the various activity rates compared to 2005 suggest that the overall situation can be considered healthy. However, the dynamic aspects connected with transitions of entrepreneurs between various stages of activity are better addressed by the forthcoming Panel Study of Entrepreneurial Dy

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.

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).

Early-stage entrepreneurs

The term ‘early-stage entrepreneurs’ refers to nascent entrepreneurs and established entrepreneurs. 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 entrepreneur has paid salaries to its owners for 3.5 years.

Overall entrepreneurship

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

The portrait of an early-stage entrepreneur in Latvia is a 30 year-old Latvian male with a higher education living in Riga, whose business is most likely in the consumer service or transformation sector. Compared to the previous year, the average entrepreneur has become younger and more educated.

The gender dimension of entrepreneurship in Latvia remains strong. Available data show that imbalance between the activity rates of males and females is likely to continue because the magnitude of the differences is roughly the same both for early-stage and established entrepreneurs. At the same time, the skills levels of men and women are quite similar (this is a unique observation compared to other European countries), which leads to the conclusion that women represent a significant pool of entrepreneurial potential in Latvia.

Entrepreneurs in Latvia are very young compared to other countries (with more than 60% of early-stage entrepreneurs under the age of 34). Activity rates for older people are much lower, which presents a challenge for Latvia to face in the context of an aging population.

Analysis of financing of business start-ups in Latvia suggests that the costs of starting a business have roughly doubled in 2006 compared to the previous year. Own capital is the most important source of funds. In terms of external financing sources, about 70% mentioned friends and family members as a potential source of funds. In terms of informal investment, Latvia ranks fourth among the 42 GEM countries, with total informal investment amounting to 2.5% of GDP.

Nearly half of all Latvian entrepreneurs were at least moderately innovative. The most popular way to innovate in 2006 was through new products, rather than using new technologies. Another important finding is that innovative firms are present almost equally in all industrial sectors. This finding contradicts the popular belief that innovation mainly takes place in the information technology sector, as innovations were also reported in more traditional sectors such as agriculture.

Innovative entrepreneurs are found to be more export-oriented. About 33% of all highly innovative entrepreneurs (core innovators) had more than half of their customers living outside Latvia in 2006 (only 18% for non-innovating entrepreneurs). Another interesting feature is that innovative entrepreneurs have a better knowledge of foreign languages. In particular, there is a significant difference in the knowledge of English between innovators and non-innovators. This suggests that entrepreneurs who speak English enjoy better exposure to foreign markets and are more able to absorb innovative practices. In terms of links between education and innovativeness, there is no simple linear relationship. Nearly half of core innovators had been educated in business or engineering (both in 2005 and 2006), suggesting that this type of educational background promotes ability to innovate. Professional education seems to matter more for innovation as compared to academic education.

In terms of ethnic composition of entrepreneurial activity, the 2006 data show a marked increase in activity rates among non-Latvians. The most likely explanations are related to the fact that the younger cohorts of non-Latvians find it easier to become entrepreneurs due to their knowledge of the Latvian language. Activity rates have increased among all ethnic groups for established entrepreneurs.

The results of GEM suggest that the percentage of those with at least a bachelor’s degree among entrepreneurs is 10 percentage points higher, than among employed non-entrepreneurs. Early-stage entrepreneurial activity has increased among individuals with the lowest education (secondary or less). The parental background has also been found to have an impact on entrepreneurial activity rates: 25% of all entrepreneurs have parents who have been involved in “entrepreneurial-type” activities previously, while the same statistic is only 11% among working non-entrepreneurs.

Analysis of financing of business start-ups in Latvia suggests that the costs of starting a business have roughly doubled in 2006 compared to the previous year. Own capital is the most significant source of financing for new ventures (the share of this source has increased from 60% in 2005 to 76% in 2006). Among half of nascent entrepreneurs plan to start up their business using only their own finance. Nascent entrepreneurs also have high expectations about being able to borrow money they require from financial institutions. From those who do rely on external financing sources, about 70% mentioned at least one informal investor (such as relatives, colleagues, and friends) as a potential source of funds. In terms of informal investment, Latvia ranks fourth among the 42 GEM countries, with total informal investment amounting to 2.5% of GDP.

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1. INTRODUCTION TO GEM AND WHAT IT DOES

The Global Entrepreneurship Monitoring (GEM) research programme produces assessment of entrepreneurial activity across the world. Initiated in 1999 with 10 countries, it had expanded to 42 countries in 2006. GEM 2007 will conduct research in 43 countries. 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. After all, people start new firms, and people determine the entrepreneurial attitude of established firms, regardless of size. 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, even if lacking high growth aspirations. Another individual may be an established business owner who has been operating for some years but remains innovative, competitive, and growth-minded. This individual is also an entrepreneur.

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 up the venture, 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 35,000 individuals, were collected in the 42 countries participating in GEM in 2006. The GEM adult population survey (APS) in Latvia took place in July–August 2006. Lietuvoji Fakti, a professional survey firm, conducted phone interviews with 1,938 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.

GEM surveys only adult individuals between the ages of 18 and 64. Those people who are involved in nascent entrepreneurship and, at the same time, own and manage a new firm are counted only once when the number of early-stage entrepreneurs is calculated.

2. SCOPE OF ENTREPRENEURIAL ACTIVITY IN LATVIA

According to the GEM adult population survey, there were about 60,000 nascent entrepreneurs in Latvia in 2006. This is approximately 4% of adult population - an indicator known as the prevalence rate of nascent entrepreneurship. Nascent entrepreneurs are individuals who took active steps towards fulfilling their business ideas. They are at the earliest stage of business creation. This stage may last from a few weeks to several years until the moment when a viable firm is born.

The prevalence rate of nascent entrepreneurship among the adult population is approximately the same as it was in 2005. However, this does not imply that the same people were nascent entrepreneurs in both 2005 and 2006. Each year, some nascent entrepreneurs succeed in establishing working businesses, some continue their start-up attempts, while others fail and quit entrepreneurship. At the same time, new individuals enter entrepreneurship from the general population. Thus, we find a rather stable turnover of the adult population in the earliest stage of entrepreneurship.

The moment when a nascent business becomes operational in the market marks the birth of a new business, which is the next stage of entrepreneurial activity. According to GEM, the event that marks transition from being nascent to a new firm is paying wages or salaries for more than 3 months. Only firms that have paid wages for less than 3.5 years are considered new. Thus, a new business owner is a person who owns (partially or fully) and at the same time manages a new firm.

Note: The vertical bars in the chart display 95% confidence intervals. If the entire adult population of a country were surveyed, the prevalence rate of early-stage entrepreneurship would fall into this interval with 95% probability.

Figure 1: Early-stage entrepreneurial activity by country, 2006
Although the level of early-stage entrepreneurship has remained nearly the same in the last two years, Latvia’s relative ranking among GEM countries fell in 2006, as compared with 2005. One of the reasons has been observed growth in early-stage entrepreneurial rates in countries such as Croatia, Greece, and Spain. Another reason is that countries like India, Indonesia, Malaysia, and the Philippines, with relatively high early-stage prevalence rates, entered GEM in 2006.1

The prevalence rate of early-stage entrepreneurs is an indicator of dynamism and future potential of the economy. New firms are typically very small in terms of both revenue and employment. Some young firms manage to grow and attain greater weight in the economy. GEM’s concept of established entrepreneurship describes businesses that proved to be sustainable. Established entrepreneurs are defined as owners-managers of firms that have paid wages for more than 3.5 years. We find that there were over 85,000 established entrepreneurs in 2006, or 5.8% of the adult population.

Latvia’s relative rank in the prevalence rates of established entrepreneurship is shown in Figure 2. As with early-stage entrepreneurship, the level of established business ownership in Latvia can be characterized as average, as compared with other GEM countries. As seen in the figure, there is substantial variation in prevalence rates of established businesses around the world. Latvia’s level of established entrepreneurship is four times that of France, or Russia, but is only a third of the level in Thailand.

A broader indicator of entrepreneurial activity is the overall business prevalence rate, which is produced by combining early-stage and established entrepreneurs. We estimate that more than 12% of Latvia’s adult population was involved in entrepreneurial activity at either the nascent, new business, or established business stage. Thus, nearly 180,000 individuals, or one in eight adults, owned and managed a business or were undertaking steps to set up a business in 2006.

Did Latvia become more entrepreneurial as compared with 2005, when we conducted the first GEM survey? The main indicators of entrepreneurial activity in 2005 and 2006 are presented in Table 1. The overall entrepreneurial activity has increased to 12.2% in 2006, as compared with 11% in 2005. This increase took place because of increase in the rate of established business ownership. The level of early-stage entrepreneurship remained unchanged.

Growth in overall entrepreneurial activity may seem quite natural – some new firms pass through the ‘3.5 years threshold’ and, therefore, move into the ‘established business’ category. However, some business ventures perish because they are not economically viable for one reason or another. According to the GEM survey, around 2% of the adult population shut down their businesses in 2006. Apparently, there were enough successful transitions from nascent entrepreneurs to new firm owners, and from the latter to established business owners to make up for the loss and even increase the overall number of entrepreneurs. This is certainly a healthy sign for the Latvian economy as we may expect, if current trends continue, that the level of entrepreneurship in 2007 will rise even further.

The level of entrepreneurial activity is not set in stone, however. On the contrary, it masks a tremendous amount of churn happening in the economy. Some individuals enter entrepreneurship but, at the same time, others become discouraged and quit. Likewise, some businesses survive and evolve, but some others decay and perish. Take France, for example. Its level of nascent entrepreneurship in both 2005 and 2006 was about the same as in Latvia – about 4% of the adult population. In contrast to Latvia, only a very few nascent entrepreneurs seem to have made it into the new firm stage – only 0.7% of adults fell into this category in both 2005 and 2006. As a result, the prevalence rate of established businesses fell to a mere 1.3% in 2006, against 2.3% a year earlier, with overall entrepreneurial activity declining to 5.7% from 7.5%. Clearly, in France’s case the problem seems to be that too many nascent entrepreneurs get discouraged and quit, or do not succeed in bringing their business ideas into the marketplace. Why this discussion of France? The lesson is that any policy aiming to promote entrepreneurship must begin with diagnosing where the ‘bottleneck’ is. Policies that are effective at promoting nascent entrepreneurship would be quite different from policies effective in helping already functioning firms.

Unfortunately, GEM only provides a snapshot of entrepreneurs at a given point in time. We do not know, for example, what proportion of nascent entrepreneurs succeed in establishing new firms. Nor do we know what factors increase the likelihood of survival. However, we will address these questions with the Panel Study of Entrepreneurial Dynamics (PSED), which would track development of nascent businesses over time. The PSED survey is discussed in more detail in section 6.

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 3). 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 Latvia and other new member states exhibit entrepreneurial rates higher than in the EU-15. The graph below demonstrates this U-shaped relationship between GDP per capita and the early-stage entrepreneurship index in European countries.

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1 A year-on-year comparison of relative standings should be made with caution, since countries-participants changed. Austria, New Zealand, Sweden, and Venezuela discontinued their participation after GEM 2005. Columbia, the Czech Republic, India, Indonesia, Malaysia, Peru, Philippines, Russia, Turkey, the United Arab Emirates, and Uruguay joined GEM 2006 as new members.

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Table 1: Prevalence rates of entrepreneurial activity in Latvia

<table>
<thead>
<tr>
<th>Year</th>
<th>Nascent entrepreneurs</th>
<th>New business owners</th>
<th>Early-stage entrepreneurs</th>
<th>Established business owners</th>
<th>Overall entrepreneurial activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>4.2%</td>
<td>2.0%</td>
<td>6.6%</td>
<td>5.0%</td>
<td>11.0%</td>
</tr>
<tr>
<td>2006</td>
<td>4.0%</td>
<td>2.7%</td>
<td>6.6%</td>
<td>5.8%</td>
<td>12.2%</td>
</tr>
</tbody>
</table>

---

Figure 2: Established business ownership by country, 2006

Figure 3: Early-stage entrepreneurial activity and GDP per capita in European countries, 2006
Table 2: Prevalence rates of entrepreneurial activity across countries, 2006

<table>
<thead>
<tr>
<th>Region</th>
<th>Nascent Entrepreneurial Activity</th>
<th>New Business Owners</th>
<th>Early-stage Entrepreneurial Business Owners</th>
<th>Established Business Owners</th>
<th>Overall Business Owners</th>
<th>Number of Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>6.4%</td>
<td>4.1%</td>
<td>10.2%</td>
<td>7.0%</td>
<td>16.4%</td>
<td>1,755</td>
</tr>
<tr>
<td>Australia</td>
<td>7.3%</td>
<td>5.7%</td>
<td>12.0%</td>
<td>9.1%</td>
<td>20.6%</td>
<td>1,971</td>
</tr>
<tr>
<td>Belgium</td>
<td>1.8%</td>
<td>1.1%</td>
<td>2.7%</td>
<td>2.1%</td>
<td>4.6%</td>
<td>2,001</td>
</tr>
<tr>
<td>Brazil</td>
<td>3.5%</td>
<td>8.6%</td>
<td>11.7%</td>
<td>12.1%</td>
<td>23.4%</td>
<td>2,000</td>
</tr>
<tr>
<td>Canada</td>
<td>4.1%</td>
<td>3.2%</td>
<td>7.1%</td>
<td>5.1%</td>
<td>12.0%</td>
<td>1,697</td>
</tr>
<tr>
<td>Chile</td>
<td>3.7%</td>
<td>3.9%</td>
<td>9.2%</td>
<td>6.8%</td>
<td>15.4%</td>
<td>2,007</td>
</tr>
<tr>
<td>China</td>
<td>6.7%</td>
<td>10.5%</td>
<td>16.2%</td>
<td>9.0%</td>
<td>24.7%</td>
<td>2,399</td>
</tr>
<tr>
<td>Colombia</td>
<td>10.9%</td>
<td>12.6%</td>
<td>23.5%</td>
<td>10.4%</td>
<td>31.5%</td>
<td>2,000</td>
</tr>
<tr>
<td>Croatia</td>
<td>6.4%</td>
<td>2.5%</td>
<td>8.6%</td>
<td>4.1%</td>
<td>12.5%</td>
<td>1,549</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>6.4%</td>
<td>2.0%</td>
<td>7.9%</td>
<td>3.4%</td>
<td>12.2%</td>
<td>1,628</td>
</tr>
<tr>
<td>Denmark</td>
<td>2.9%</td>
<td>2.8%</td>
<td>5.3%</td>
<td>3.3%</td>
<td>10.3%</td>
<td>10,000</td>
</tr>
<tr>
<td>Finland</td>
<td>2.9%</td>
<td>2.4%</td>
<td>5.0%</td>
<td>3.7%</td>
<td>13.0%</td>
<td>2,500</td>
</tr>
<tr>
<td>France</td>
<td>3.8%</td>
<td>0.7%</td>
<td>4.4%</td>
<td>1.3%</td>
<td>5.7%</td>
<td>1,519</td>
</tr>
<tr>
<td>Germany</td>
<td>2.9%</td>
<td>1.7%</td>
<td>4.2%</td>
<td>3.0%</td>
<td>6.8%</td>
<td>4,049</td>
</tr>
<tr>
<td>Greece</td>
<td>5.7%</td>
<td>2.3%</td>
<td>7.9%</td>
<td>8.2%</td>
<td>16.1%</td>
<td>2,000</td>
</tr>
<tr>
<td>Hungary</td>
<td>3.2%</td>
<td>3.0%</td>
<td>6.0%</td>
<td>6.7%</td>
<td>12.6%</td>
<td>2,000</td>
</tr>
<tr>
<td>Iceland</td>
<td>8.1%</td>
<td>3.8%</td>
<td>11.3%</td>
<td>7.4%</td>
<td>18.2%</td>
<td>2,001</td>
</tr>
<tr>
<td>India</td>
<td>3.4%</td>
<td>5.3%</td>
<td>10.4%</td>
<td>5.6%</td>
<td>15.6%</td>
<td>1,916</td>
</tr>
<tr>
<td>Indonesia</td>
<td>9.6%</td>
<td>11.5%</td>
<td>19.3%</td>
<td>17.6%</td>
<td>35.2%</td>
<td>1,998</td>
</tr>
<tr>
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<td>4.5%</td>
<td>2.9%</td>
<td>7.4%</td>
<td>3.8%</td>
<td>14.5%</td>
<td>1,961</td>
</tr>
<tr>
<td>Italy</td>
<td>2.2%</td>
<td>1.4%</td>
<td>3.5%</td>
<td>3.0%</td>
<td>6.2%</td>
<td>1,626</td>
</tr>
<tr>
<td>Jamaica</td>
<td>11.6%</td>
<td>9.2%</td>
<td>20.3%</td>
<td>10.3%</td>
<td>38.1%</td>
<td>3,554</td>
</tr>
<tr>
<td>Japan</td>
<td>1.6%</td>
<td>1.4%</td>
<td>2.9%</td>
<td>4.8%</td>
<td>7.5%</td>
<td>1,923</td>
</tr>
<tr>
<td>Latvia</td>
<td>4.0%</td>
<td>2.7%</td>
<td>6.6%</td>
<td>5.7%</td>
<td>12.1%</td>
<td>1,958</td>
</tr>
<tr>
<td>Mexico</td>
<td>4.1%</td>
<td>6.2%</td>
<td>11.1%</td>
<td>7.3%</td>
<td>18.4%</td>
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<tr>
<td>Netherlands</td>
<td>4.6%</td>
<td>1.9%</td>
<td>5.4%</td>
<td>3.1%</td>
<td>7.4%</td>
<td>1,893</td>
</tr>
<tr>
<td>Norway</td>
<td>4.5%</td>
<td>4.9%</td>
<td>9.1%</td>
<td>6.0%</td>
<td>14.4%</td>
<td>1,961</td>
</tr>
<tr>
<td>Peru</td>
<td>30.0%</td>
<td>15.1%</td>
<td>40.2%</td>
<td>12.4%</td>
<td>49.6%</td>
<td>1,954</td>
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<tr>
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<td>15.6%</td>
<td>20.4%</td>
<td>19.7%</td>
<td>39.2%</td>
<td>2,000</td>
</tr>
<tr>
<td>Russia</td>
<td>3.5%</td>
<td>1.7%</td>
<td>4.9%</td>
<td>1.2%</td>
<td>5.6%</td>
<td>1,894</td>
</tr>
<tr>
<td>Singapore</td>
<td>2.7%</td>
<td>2.5%</td>
<td>4.9%</td>
<td>3.4%</td>
<td>7.9%</td>
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</tr>
<tr>
<td>Slovenia</td>
<td>2.9%</td>
<td>1.8%</td>
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<td>9.6%</td>
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<tr>
<td>South Africa</td>
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<td>5.9%</td>
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</tr>
<tr>
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<td>4.4%</td>
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<td>5.5%</td>
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</tr>
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<td>1.4%</td>
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<td>1.0%</td>
<td>8.4%</td>
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</tr>
<tr>
<td>Thailand</td>
<td>4.1%</td>
<td>11.5%</td>
<td>15.2%</td>
<td>7.4%</td>
<td>31.7%</td>
<td>2,000</td>
</tr>
<tr>
<td>Turkey</td>
<td>2.2%</td>
<td>4.0%</td>
<td>6.1%</td>
<td>1.1%</td>
<td>17.0%</td>
<td>2,417</td>
</tr>
<tr>
<td>Uni. Arab Emirates</td>
<td>1.7%</td>
<td>2.2%</td>
<td>3.7%</td>
<td>1.4%</td>
<td>5.0%</td>
<td>1,903</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>3.2%</td>
<td>2.8%</td>
<td>5.9%</td>
<td>3.4%</td>
<td>10.9%</td>
<td>34,956</td>
</tr>
<tr>
<td>United States</td>
<td>7.5%</td>
<td>3.3%</td>
<td>10.0%</td>
<td>5.4%</td>
<td>14.7%</td>
<td>2,325</td>
</tr>
<tr>
<td>Uruguay</td>
<td>8.4%</td>
<td>4.6%</td>
<td>12.6%</td>
<td>6.9%</td>
<td>19.1%</td>
<td>1,618</td>
</tr>
<tr>
<td>GEM Average</td>
<td>5.4%</td>
<td>4.6%</td>
<td>9.5%</td>
<td>6.9%</td>
<td>15.9%</td>
<td>156,575</td>
</tr>
<tr>
<td>EU Average a</td>
<td>3.4%</td>
<td>2.4%</td>
<td>5.5%</td>
<td>5.2%</td>
<td>10.4%</td>
<td>101,889</td>
</tr>
<tr>
<td>NMS Average b</td>
<td>4.1%</td>
<td>2.4%</td>
<td>6.3%</td>
<td>5.6%</td>
<td>11.5%</td>
<td>9,094</td>
</tr>
</tbody>
</table>

* 16 out of 21 EU countries participated in GEM 2006: Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Netherlands, Slovenia, Spain, Sweden, United Kingdom.
* Only 4 out of 12 new member states participated in GEM 2006: Czech Republic, Hungary, Latvia and Slovenia. All entered EU on 01.05.2004.

REGIONAL DISTRIBUTION

Latvia is characterized by substantial disparities across its five regions in terms of income, unemployment, and demographic composition. GEM surveys also point to significant differences in early-stage entrepreneurial involvement across regions both in 2006 and 2005 (Figure 4). In both years, Riga and Vidzeme were found to be the most entrepreneurial regions, whereas Kurzeme and Zemgale are the least entrepreneurial. Regional disparity seems to have increased in 2006 as compared with 2005, with the level of early-stage entrepreneurship in the most entrepreneurial region (Riga) being twice as high as in the least entrepreneurial region (Zemgale). However, these results should be viewed with some caution because the sample size is relatively small.

Figure 4: Early-stage entrepreneurial activity by region, 2005 & 2006

We also find substantial differences in the composition of early-stage entrepreneurship across regions in 2006. Nearly half of the early-stage ventures in Riga are nascent entrepreneurs, whereas the corresponding statistics for Vidzeme and Latgale are 70 % and 80 %, respectively. This gives rise to two possible implications. On the one hand, it may imply that entrepreneurship is on the rise in Vidzeme and Latgale. On the other hand, it may point to low survival rates of nascent entrepreneurs in these regions and, therefore, a need for deeper analysis of the underlying reasons.

To ensure the accuracy of the data, we should consider the following:

1. **Sample Size**: The sample size is relatively small, which can lead to certain inaccuracies in the results.
2. **Statistical Significance**: The results should be viewed as suggestive, not statistically significant.
3. **Regional Variations**: There are significant regional variations, indicating the need for deeper analysis.
4. **Entrepreneurship Levels**: The levels of entrepreneurship vary significantly across regions, with Riga being the most entrepreneurial.
5. **Survival Rates**: Nascent entrepreneurs in Riga have a survival rate of 80%, while in Vidzeme and Latgale, it is 70% and 80%, respectively.
6. **Comparison**: Comparing 2006 and 2005, the level of early-stage entrepreneurship in 2006 is found to be higher.

These findings highlight the importance of further research and deeper analysis to better understand the dynamics of entrepreneurship across regions.
SECTORAL DISTRIBUTION

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

- **Extraction**: agriculture, forestry, fishing, and mining (i.e., extraction of products from the natural environment).
- **Transformation**: construction, manufacturing, transporta
tion, 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).

According to the GEM survey, most early-stage entrepreneurs (nearly 38 %) were active in consumer-oriented services in 2005 (Figure 5). Consumer-oriented services are also by far the most popular business start-up activity in other countries. This is a sector where personal skills are the main factor of production and, with its low investment requirements, attracting a majority of aspiring entrepreneurs around the world.

We observe a sharp increase in early-stage entrepreneurial activity in the transformation sector, with the share of entrepreneurs in this sector growing to 34.3 % in 2006, as compared with 25 % in 2005. However, much of this increase is explained by the ongoing construction boom, which draws resources from other sectors of the economy, including entrepreneurial talent. The share of early-stage entrepreneurs in the construction sector has doubled in a one-year period (from 5.2% in 2005 to 10.6% in 2006).

According to GEM data, the pattern of early-stage entrepreneurial activity in Latvia is broadly similar to that observed, on average, in other European countries. Two notable exceptions appear, in the shape of a high share of entrepreneurship in the extraction sector (e.g., agriculture), and a relatively low share of activity in business services. Compared to Ireland, for example, the share of early-stage entrepreneurs in extraction in Latvia is twice as high, whereas the proportion of entrepreneurs in business services is nearly half. GEM research explains such differences by a country’s level of economic development. Entrepreneurship in predominantly extractive sectors of the economy is common in less developed countries. In contrast, as the economy develops and becomes more sophisticated, its business sector increases its demand for such services as consulting, and advertising. In turn, emerging opportunities draw young entrepreneurs into the booming sector. Thus, as the Latvian economy continues to develop we expect a gradual decline of early-stage entrepreneurship in the extraction sector, and an increase in the number of business start-ups in business services.

Differences in sectoral distribution of early-stage and established businesses tell a similar story. The share of early-stage entrepreneurs in the extraction sector is smaller than the share of established businesses in this sector. In contrast, the share of early-stage entrepreneurs in business services is substantially greater than the share of established firms. This indicates that entrepreneurs perceive few business opportunities in extraction and plenty of opportunities in business services. Thus, we expect that in the near future the Latvian economy should move away from the extraction sector and towards greater reliance on business services.

ENTREPRENEURIAL MOTIVATION

‘Janis’ is a single, twenty-year-old undergraduate from Riga, who also has a part-time job, is a fluent speaker of English, German, and French, and is setting up a new business in information technologies. He plans to offer a product that all of his customers will find new. About ten per cent of his customers are expected to be outside Latvia. Janis says he wants to achieve greater independence and he is starting his own venture because he perceives a business opportunity.

‘Sergejs’ is a divorced, fifty-four-year-old engineer from Daugavpils district. Sergejs is unemployed, with a secondary education, and he does not speak any foreign languages. He is in the process of starting up a business to resell textile products and footwear because he has no better choices for work. Both ‘Janis’ and ‘Sergejs’ are real people, but they are given fictional names to ensure anonymity. According to the GEM classification, ‘Janis’ is an opportunity entrepreneur, whereas ‘Sergejs’ is a necessity entrepreneur.

Necessity-entrepreneurs are forced into the market because of lack of employment opportunities. They use business income mostly to support themselves and their families. They are less likely to re-invest and are mostly seen as non-innovative and non-growth-oriented entrepreneurs. Naturally, high rates of necessity-based entrepreneurship signal deficient labour markets and are often signs of troubled economies. As a rule, entrepreneurship is driven by opportunity motive in developed countries like Denmark, Norway, and Sweden (Figure 6). In contrast, necessity-based entrepreneurship is widespread in developing countries like Brazil, Philippines, and China. There are notable exceptions, however. Relative numbers of necessity entrepreneurs in Germany and France are closer to countries like Colombia and Turkey, than to their counterparts in Western Europe.

In 2006, about 16 % of early-stage entrepreneurs in Latvia were classified as motivated by necessity, and about 77 % were opportunity entrepreneurs. The extent of necessity entrepreneurship in Latvia is close to the average in European countries, which was about 17 % in 2006. A likely explanation of necessity entrepreneurship in Latvia is the shock of transition from the Soviet-style planned economy to a Western-style market economy. Many workers, especially the old, found it difficult to be competitive in today’s economy.

As shown in Figure 6, substantial variation exists in entrepreneurial motivation across countries. Substantial variation can also exist across a country’s regions. In Latvia, for example, almost 95 % of early-stage entrepreneurs in Latgale are opportunity-driven, as opposed to only 60 % in Kurzeme.

Figure 6: Motivation of early-stage entrepreneurs by country, 2006

- Opportunity motive
- Necessity motives
- Both

1 A few respondents cannot be coded unambiguously into one of these categories since they are involved in business for both reasons.

2 Three categories are distinguished in GEM methodology: ‘opportunity’, ‘necessity’ and ‘both’.

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Figure 5: Early-stage entrepreneurial activity in Latvia, percentage of total by sector
3. PORTRAIT OF LATVIAN ENTREPRENEURS

Ultimately, human resources define the entrepreneurial capacity of a country. After all, individuals start up businesses, own and manage them. Knowing the individual backgrounds of entrepreneurs is an important step towards understanding why some individuals choose to become entrepreneurs while others do not. Scholars of entrepreneurship in a variety of disciplines agree that age, gender, education, income, and family background are all significant socio-economic factors in a person’s decision to start a business.

The average early-stage Latvian entrepreneur of 2006 was a 30 year-old male living in Riga, ethnically Latvian. He had higher education (bachelor’s degree or higher) and his business was in consumer services or in the transformation sector.* As compared with a year before, the average early-stage entrepreneur was younger and more educated. In 2005, the average entrepreneur was a 34 year-old male from Riga, ethnically Latvian, with secondary vocational or professional education, whose business was in consumer services. In what follows, we provide a more detailed picture of the entrepreneur’s personal background and also analyze the possible relationship between individual factors and the behaviour of both early-stage and established entrepreneurs in Latvia.

Figure 7: Early-stage and established entrepreneurial activity, by gender, 2005 & 2006

**Figure:** Early-stage and established entrepreneurial activity, by gender, 2005 & 2006

![Figure 7](image-url)

As in many other countries, entrepreneurship in Latvia has a strong gender dimension. Only four out of one hundred women were involved in early-stage entrepreneurship in 2006, as compared with about nine out of one hundred men (Figure 7). Thus, a female was only half as likely to be an early-stage entrepreneur, as compared to a male. Moreover, the gender gap was of about the same magnitude among early-stage entrepreneurs and established entrepreneurs, suggesting that the imbalance is not likely to diminish in the near future.

However, when asked about skills and experience suitable for entrepreneurial activity, answers provided by men and women are quite similar. The percentage of women who claimed that they have good skills and competence to start up a business is almost the same as among men. Latvia is the only country in Europe where this is the case.

Fear of failure is also not a particular characteristic of Latvian women either. Almost the same percentage of women and men answered that fear of failure can prevent them from starting a business. If European countries are compared with respect to answers on this question, only in Belgium and Norway is the difference between male and female attitudes smaller than in Latvia.

Thus, at least from a subjective point of view, there seems to be considerable entrepreneurial potential in the female population of Latvia. That this is not reflected in actual entrepreneurial rates is puzzling and deserves serious investigation.

Figure 8: Early-stage entrepreneurial activity in selected countries by age cohorts, 2006

**Figure:** Early-stage entrepreneurial activity in selected countries by age cohorts, 2006

![Figure 8](image-url)

* We used medians for gender, age and ethnicity, mode for region, educational level, and business activity.

**GENDER**

A striking feature of entrepreneurs in Latvia is that they are, on average, very young as compared to non-entrepreneurs, and also to entrepreneurs in other countries. Moreover, more and more young people are becoming involved in entrepreneurship. For example, early-stage entrepreneurs were about ten years younger, on average, than established entrepreneurs in 2006. The percentage of entrepreneurs among those aged 34 years and less rose from about 8% in 2005 to almost 11% in 2006.

International comparison of age profiles of early-stage entrepreneurs is provided in Figure 8. Nearly 27% of early-stage entrepreneurs in Latvia are 18 to 24 years old. This is the highest rate of entrepreneurship among the young in Europe, with the exception of Croatia. In this regard, Latvia is more similar to the US rather than European countries. Interpreting this result is difficult. On the one hand, high rates of entrepreneurship among the young are commendable as they reflect the dynamism, self-confidence, and optimism of young entrepreneurs. On the other hand, lack of experience may have an adverse effect on the long-term viability of these young start-ups. There is a view that acquiring industry experience is crucial for forming a successful venture. Undoubtedly, the question of optimal time to enter entrepreneurship is very important for entrepreneurship education, for example. Further studies using newly developed PSED data should shed more light on this issue.

In contrast to high involvement rates for the young, entrepreneurship among the old is very rare in Latvia. In the oldest age cohort (55-64 years old), the rate of early-stage entrepreneurship in Latvia is less than five per cent. This is substantially less than, for example, in the United States. One explanation is that people of the older generation, who grew up in the centrally-planned economies, have found it especially difficult to adapt to market economy conditions. Involvement in early-stage entrepreneurship in other post-communist countries such as Hungary, Slovenia, and the Czech Republic are very similar to what we observe in Latvia. However, generally lower rates of entrepreneurial activity among the old are also seen in other European countries. This may suggest that aging populations would have a negative effect on the rate of entrepreneurship in Europe and in Latvia.
ETHNICITY

In our 2005 GEM report we destroyed a popular myth from the early nineties, namely that ethnic Latvians are typically farmers and state employees, whereas ethnic Russians are businessmen. On the contrary, the GEM 2005 survey showed that ethnic Russians were underrepresented in the categories of early-stage entrepreneurship and established business ownership.

The results of the 2006 GEM survey are equally startling. We find a marked increase in the prevalence rate of early-stage entrepreneurship among ethnic Russians and people of “other” [than Latvian] nationalities and a decline in entrepreneurship among ethnic Latvians (Figure 9). There is no longer any statistically significant difference in early-stage entrepreneurship among ethnic Russians and Latvians. Inflow of nascent entrepreneurs accounts for most of the increase in entrepreneurship among ethnic minorities. Although ethnic minorities were more active in early-stage entrepreneurship, the percentage of owners of established businesses was greater among ethnic Latvians.

We have two possible explanations for the greater involvement of ethnic minorities in early-stage entrepreneurship. First, for young people of Russian ethnicity it is easier to integrate in the entrepreneurial environment than for ethnic Russians of the older generation, since the former do not have difficulties with the state language. Secondly, the difference could be explained, at least in part, by changes in sampling design in 2006.10 If this is the case, then this year’s results for ethnic entrepreneurship should be interpreted with some caution.

EDUCATION

Empirical evidence from the GEM project shows that education is important for entrepreneurship. Better educated individuals are more likely to start new businesses and also more likely to be owners of established businesses. Prevalence of early-stage entrepreneurship among adults with higher education was 9 % in 2006, as compared with only 4.9 % among adults with secondary or less than secondary education (Figure 10). On average, therefore, entrepreneurs are better educated, as compared with non-entrepreneurs.

However, as seen from Figure 10 the relationship between the level of educational attainment and entrepreneurship has not been stable over time. The percentage of early-stage entrepreneurs increased in the group with relatively low educational attainment and decreased among adults with higher education. Theoretically, the effect of educational attainment on entrepreneurship is ambiguous. On the one hand, better-educated individuals are well rewarded in the labour markets and, therefore, may have little incentive to enter entrepreneurship. On the other hand, education may impart skills that would increase the chances of being a successful entrepreneur. A decrease in the rates of early-stage entrepreneurship among the better-educated may signal that the labour market offers better opportunities to these individuals in 2006, as compared with 2005.

Interestingly, the best performers in secondary schools were more likely to be entrepreneurs, but this was not the case for the best performers in universities. When asked about performance in secondary school 50 % of early-stage entrepreneurs reported being in the top 10 % of students, as compared with about 35 % among non-entrepreneurs.11 However, self-reported assessment of performance in higher educational establishments was not significantly different for entrepreneurs and non-entrepreneurs. This is not surprising, as the best performing university graduates are likely to get better offers in the labour market and, therefore, starting their own businesses is less attractive to them. Talented individuals make better entrepreneurs, but talent is also demanded by large firms in the marketplace. As the Latvian economy continues to develop, greater competition will arise between the rewards offered by large businesses, on the one hand, and independent entrepreneurship, on the other hand.

In general, GEM research documents a strong correlation between level of educational attainment and involvement in entrepreneurship. As shown in Table 3, all around the world adults with higher education (bachelor’s degree or higher) are significantly more likely to be early-stage entrepreneurs than adults with some secondary degree.12 In the EU, on average, the former group are nearly twice as likely to be early-stage entrepreneurs as compared with individuals in the latter group.

Figure 9: Early-stage entrepreneurial activity in Latvia by ethnicity, 2006

Figure 10: Early-stage entrepreneurial activity, by education level, 2005 & 2006
PARENTAL BACKGROUND

Many studies documented that, in many countries, children of parents-entrepreneurs were also more likely to be involved in entrepreneurship, as compared with children of non-entrepreneurial parents. We find the same pattern in Latvia, in 2006 and in 2005. According to the GEM survey, about 25% of all entrepreneurs have or had parents who themselves were involved in entrepreneurship at some point in their lives. By comparison, only 11% of non-entrepreneurs have or had entrepreneurial parents. Several theories were put forward to account for the role of parental background. The first, and the most trivial, explanation is that children simply inherited their parents’ businesses. According to the second explanation, children of entrepreneurial parents have better access to capital for their business start-ups, if parents own a successful business. The third explanation points to transfer of tacit skills, knowledge, and attitudes that take place within an entrepreneurial family.

### Table 3: Early-stage entrepreneurial activity in education groups, selected countries, 2006

<table>
<thead>
<tr>
<th>Country</th>
<th>Adults with some secondary degree</th>
<th>Adults with higher education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Croatia</td>
<td>7.2</td>
<td>13.6</td>
</tr>
<tr>
<td>Latvia</td>
<td>4.7</td>
<td>9.0</td>
</tr>
<tr>
<td>United kingdom</td>
<td>2.8</td>
<td>7.6</td>
</tr>
<tr>
<td>France</td>
<td>3.1</td>
<td>4.2</td>
</tr>
<tr>
<td>Sweden</td>
<td>1.6</td>
<td>4.8</td>
</tr>
<tr>
<td>Ireland</td>
<td>3.7</td>
<td>11.1</td>
</tr>
<tr>
<td>EU average</td>
<td>3.7</td>
<td>7.1</td>
</tr>
<tr>
<td>United states</td>
<td>7.9</td>
<td>10.3</td>
</tr>
<tr>
<td>Russia</td>
<td>1.4</td>
<td>7.3</td>
</tr>
</tbody>
</table>

14. This could be entrepreneurship after restoration of independence or “entrepreneurial-type” activities in Soviet times.

4. FINANCING OF NEW BUSINESSES

The information compiled in GEM 2006 regarding the financing of business start-ups in Latvia presents a picture that shows a potential threat of more difficult access to starting entrepreneurial activities. In particular, start-up costs have been on the rise in absolute terms in Latvia comparing to the previous year. At the same time, a more detailed analysis of the sources of finance shows that in Latvia the prevalence rate of informal investors as a source of finance is higher than in GEM peer countries. GEM 2006 also indicates that shares of start-up financing obtained from relatives in Latvia are considerably higher than elsewhere. This situation suggests that, in order to start entrepreneurial activities, family connections are important; moreover, that those who lack access to this source of funds might have a much harder time to become entrepreneurs. Finally, the share of governmental programs as a share of start-up financing in Latvia remains very low compared to the other countries involved in GEM.

START-UP COST

The average cost of starting-up a business in Latvia has doubled since 2005. The rapid increase of start-up costs has been fuelled by rising inflation, the construction boom, and shortages in the labour market. While the average start-up cost for nascent entrepreneurs was around 36,000 EUR in 2005, in 2006 the estimated average is as high as 73,500 EUR. While in 2005 half of the businesses in Latvia were established with capital below 9,960 EUR, in as little as a year later time half of the start-ups required at least 21,300 EUR. The increasing cost of starting up business presents a puzzle as to whether it stems from overall increases in labour force costs, rental of premises, and other expenses, or from firms trying to move up the technology ladder so that new start-ups are focusing on more advanced activities that require a more significant initial investment. In the latter case, certainly the situation is promising; however, GEM 2006 does not provide a concrete answer to this claim.

Indeed, the available evidence shows that starting an innovative business is more costly. However, while in 2005 a significant difference between start-up costs in innovative enterprises and regular businesses could be observed (in the former the cost was more than four times higher than in the latter), in 2006 start-up costs grew for both innovative and non-innovative businesses. Ultimately, the disparity between innovative and non-innovative start-up costs narrowed and became statistically insignificant due to the relatively small sample size.
OWN CAPITAL IS A HIGHLY IMPORTANT SOURCE OF FINANCING FOR NEW VENTURES IN LATVIA. ON AVERAGE, 60% OF START-UP CAPITAL IN 2005 AND 76% IN 2006 IS PROVIDED BY THE OWNERS THEMSELVES. THE SURVEY IN 2005 REVEALED THAT OWN RESOURCES ARE PARTICULARLY IMPORTANT FOR SMALL BUSINESSES (WITH A START-UP CAPITAL OF LESS THAN 9,960 EUR). THESE ENTREPRENEURS PRODUCED ALMOST 80% OF THE FINANCING THEMSELVES. IN CONTRAST, THOSE WITH HIGHER FINANCIAL REQUIREMENTS (MORE THAN 9,960 EUR) PLANNED TO PROVIDE ONLY ABOUT 40% THEMSELVES. LARGER PROJECTS WERE MORE SUCCESSFUL IN ATTRACTION OF FUNDING FROM EXTERNAL SOURCES, PROBABLY BECAUSE THESE PROJECTS HAD BETTER CHANCES OF OBTAINING BANK LOANS. THE 2006 DATA DO NOT DEMONSTRATE A SIMILAR PATTERN. LARGER PROJECTS RELY ON SELF-FINANCING TO A SIMILAR EXTENT TO SMALLER ONES.

ACCOUNTING TO THE GEM 2006 SURVEY, AROUND HALF OF NASCENT ENTREPRENEURS IN LATVIA PLAN TO START-UP A BUSINESS USING ONLY THEIR OWN FINANCE. THE OTHER HALF WHO RELY ON EXTERNAL RESOURCES WERE ASKED TO SPECIFY WHAT SOURCES OF FINANCE THEY ARE LIKELY TO USE. THE RESULTS ARE SUMMARIZED IN FIGURE 11.

THE PERCENTAGE OF ENTREPRENEURS WHO EXPECT TO OBTAIN SOME OF THEIR START-UP FINANCING FROM BANKS OR FINANCIAL INSTITUTIONS IS HIGH. INDEED, IT RANKS THE HIGHEST AMONG ALL SOURCES MENTIONED IN GEM. MORE THAN HALF OF THE START-UPS IN LATVIA (53.9% COMPARED TO 42.2% OF START-UPS IN GEM COUNTRIES) RELY ON BANKS AND FINANCIAL INSTITUTIONS AS A SOURCE OF FINANCE. HOWEVER, THESE FIGURES MAY BE REGARDED AS OVEROPTIMISTIC. MANY NASCENT ENTREPRENEURS ARE ONLY IN THE PROCESS OF STARTING UP A BUSINESS AND THEY ARE LIKELY TO BE NAIVE ABOUT THEIR CHANCES OF OBTAINING A BANK LOAN.

As shown in the figure above, reliance by Latvian entrepreneurs on informal investors (such as relatives, colleagues, and friends) is higher than in GEM peer countries. Approximately 70% of start-ups in Latvia mentioned at least one informal investor as a source of money for a new business. The difference between Latvia and GEM average figures is particularly evident for such informal investors as relations. While only 14.5% of start-ups in GEM countries mentioned “other relatives” as one source to finance the business, in Latvia 43% of nascent entrepreneurs did so. This indicates that family ties when starting a business in Latvia remain very important and may pose a threat of more difficult entry for those not in a position to obtain financial support from relatives. This process may support stratification of the population of Latvia into two classes: a class of entrepreneurs possessing financial resources for starting up a business, and a class of non-entrepreneurs lacking such resources.

In terms of financing sources, the only source that is less popular in Latvia as compared to the GEM average is governmental programs. Only 5% of start-ups in Latvia named governmental programs as a possible source of finance (the GEM average was 19.7%), which clearly indicates that potential entrepreneurs rely very little on government to provide financial support during their start-up phase. Perhaps this could be an important aspect to be considered by policy-makers in Latvia.

The prevalence rate of informal investors in Latvia, which is significantly smaller a year ago. Among the EU countries participating in GEM 2006, Latvia ranks highest according to the prevalence rate of informal investors.

Informal investment in Latvia not only became more widespread, but also seems to have increased in absolute terms. In 2005, half of this type of investment was below 2,130 EUR. In 2006, half of business angels invested more than 3,500 EUR.

Cross-country evidence shows that the amounts of informal investment in Latvia are higher than in other countries. To compare the amount of informal investment across GEM countries, the total amount of informal investment is measured as a percentage of GDP in each country. The values of this indicator range from 0.1% in Brazil to 13% in Indonesia. Informal investment altogether represents 1.5% of the combined GDP of GEM countries. Latvia ranks fourth among the 42 GEM nations with its informal investment equal to 2.5% of GDP.

As supported by the facts above, it seems that informal financ- ing in Latvia is becoming more important. Explanations could be linked to the fact that the amounts of financial resources available to individuals for investment purposes have increased, while the option of simply depositing money in a bank account may no longer seem optimal because of low or even negative real interest rates. Therefore, informal investment provides an alternative opportunity for individuals holding excess cash. This is further supported by the fact that 42% of business angels in 2006 reported that in the next ten years they plan to recover more money than they have invested in a business. By contrast, in 2005 only 25% of investors expected the same to happen.

Figure 11: Sources of start-up financing, 2006

Note: Total is more than 100% as entrepreneurs cited multiple sources of finance.

Figure 12: Prevalence rate of informal investors in selected countries, 2005 & 2006

Figure 13: Total informal investment as percent of GDP, 2006

13 In 2006 in all GEM countries’ combined entrepreneurs provided 62% of start-up capital themselves.
14 The difference is significant at 5% level.

According to GEM methodology, those who hesitate about the answer to this question are also considered informal investors. Therefore, the estimate reflects the upper band of the prevalence rate of informal investing.
5. INNOVATIVE ENTREPRENEURSHIP

"Without innovations, no entrepreneurs, without entrepreneurial achievement, no capitalist returns and no capitalist population," wrote Joseph Schumpeter, a Nobel Laureate and famous scholar of entrepreneurship, almost seventy years ago (Schumpeter 1939, p. 104). Unfortunately, Latvia’s performance in the area of innovativeness has not shine as brightly as its recent economic growth rates. According to the EU rating of innovativeness in 2005, Latvia was the second worst performer after Malta. 20

The World Economic Forum Global Competitiveness Report 2006-2007 also characterized Latvia’s ability to innovate and compete globally as mediocre ranking it 86th among the participating countries. According to Eurostat, gross domestic expenditure on Research and Development (R&D) in 2005 was a mere 0.57% of GDP. By comparison, R&D expenditure was 0.94% of GDP in Estonia, and 3.86% in Sweden. Clearly, a need exists for effective public policy in the area of innovativeness, if Latvia is to catch up with its neighbours and ensure sustainable growth.

Most R&D takes place in established large firms, which often serve as incubators of new ideas and technologies. However, some scholars argue that an entrepreneurial free-market environment is crucial to elaboration of these ideas. For example, it is remarkable how any history of innovations describes a long list of talented people leaving large firms with novel ideas. Many innovations had been originally developed in large firms, but independent entrepreneurs, often former employees in large companies, were best in developing these innovations into successful products. This points to the key role played by innovative entrepreneurs in determining a country’s comparative advantage in the global marketplace. GEM data provide a unique opportunity to assess the magnitude of innovative entrepreneurship in Latvia, as well as to look at individuals at the centre of this process. After all, today’s young but innovative entrepreneurs might be the ones who will establish the giants of tomorrow.

By common definition, a business is innovative if it either offers a new product (service), or employs new technology that allows more efficient production of traditional products. 21 The former is often referred to as product innovation, and the latter as process innovation. In the GEM survey, business owners were asked whether customers see the product or service as "new and unfamiliar," as well as whether they are using new technologies for the production process. Thus, we construct two measures of innovativeness. First, there are businesses that either offer a product that is new to all customers, or that 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. 20-21

We classify the remainder of innovators as ‘regular business.’ The for...
We also find that innovative entrepreneurs are more likely to be export-oriented, as compared with more ‘usual’ businesses. In the GEM survey, all entrepreneurs were asked to evaluate the proportion of their customers living outside Latvia. The results are presented in Figure 17 for years 2006 and 2005. Thus, about 63% of both core and moderate innovators reported having good knowledge of at least one foreign language. What is the significance of knowing foreign languages, and especially English? Clearly, this correlates well with greater export orientation of innovators. Knowing foreign languages facilitates finding business partners abroad and communicating with them. Thus, it might be plausible that innovators learned foreign languages because they wanted to penetrate foreign export markets. However, knowing foreign languages has a more important implication. Entrepreneurs with a good command of English are more likely to find themselves exposed to, and to absorb, innovative practices developed outside Latvia. This may suggest that innovating entrepreneurs became innovators because they knew foreign languages, and, therefore, were more exposed to the circulation of new ideas in the international community. It is probably no coincidence that most Swedes, who regularly occupy top positions in innovation ratings, have excellent command of English from early childhood.

Interestingly, innovative entrepreneurs also report better knowledge of foreign languages.25 About 63% of both core and moderate innovators reported having good knowledge of at least one foreign language in 2006. These findings broadly support the notion that innovative firms are more oriented towards international markets and, therefore, are the engine of export-led growth. This lends additional empirical support to the policy emphasis of promoting innovativeness in order to ensure more sustainable growth.

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Our findings with regard to the amount of education, measured in years, are mixed (see Figure 18). On the one hand, the percentage of innovating entrepreneurs with secondary general education or less is rather small, as compared with non-entrepreneurs. On the other hand, the proportion of core innovators with higher education (bachelor’s degree or higher) was much smaller as compared with moderate innovators, or even non-innovating entrepreneurs in 2006. Moreover, we see that more than 60% of core innovators received a professional education either at secondary or post-secondary level. By comparison, the corresponding statistic is only 29% and 42% for moderate innovators and non-innovators, respectively.

GEM survey respondents were also asked about the field in which they received their education.26 Interestingly, the educational backgrounds of innovating entrepreneurs are highly diverse, ranging from teacher education and humanities to engineering and agriculture. Nearly half of core innovators in both 2006 and 2005 were educated in business or engineering. A similar pattern emerges for moderate innovators in both 2006 and 2005. No core innovator in either 2005 or 2006 had an educational background in the natural sciences, chemistry, physics, or medicine. Such educational backgrounds were also extremely rare among moderate innovators.

Our findings indicate that no simple linear relationship exists between an entrepreneur’s education and innovativeness. Although little education is associated with a small likelihood of being innovative, a high level of educational attainment may not necessarily result in more innovativeness. Professional education seems to influence innovativeness more than academic education. We find no evidence that highly educated individuals with backgrounds in the ‘hard sciences’ became innovative entrepreneurs in 2005–2006. Rather, innovative entrepreneurship seems to be driven by well-educated individuals who received a professional or business education.

To summarize, we document important differences between innovating and non-innovating entrepreneurs, which may be of interest to policy-makers. To the best of our knowledge, this is the first systematic effort to analyze differences between innovators and non-innovators in Latvia using data from high-quality nationally representative surveys. Unfortunately, the amount of policy-relevant information that can be extracted from our data is rather limited because analysis of innovative entrepreneurship is not one of the foremost priorities of data collection with the GEM project.27 However, innovative entrepreneurship occupies one of the top places in the research agenda of the TeliaSo nera Institute. The Panel Study of Entrepreneurial Dynamics in Latvia (PSED-Latvia) and the Survey of Innovative Businesses in Latvia (SIBRL) are more powerful state-of-the-art surveys initiated and implemented by the Institute. These surveys will shed more light on the characteristics and dynamics of innovative entrepreneurship in Latvia.
GEM is an empirically-based research project as it is based on high quality nationally-representative adult population surveys of about 2,000 individuals in each participating country. Thus, GEM findings can be reliably generalized to the whole of Latvia's population and are highly credible. GEM is part of the broader research programme at the TeliaSonera Institute, which aims to inform the public about the causes and consequences of entrepreneurship in Latvia. Collection of state-of-the-art data sets on entrepreneurship in Latvia is the cornerstone of this research programme. These datasets are (i) GEM Adult Population Surveys, (ii) Panel Study of Entrepreneurial Dynamics (PSED) in Latvia, and (iii) Survey of Innovative Businesses in Latvia (SIBiL). Substantial progress has been made since inception of the Institute in 2005. Two GEM surveys were conducted in 2005 and 2006, and the third is under way in 2007. However, PSED and SIBiL initiatives represent even more ambitious data collection efforts and are briefly described below.

### PANEL STUDY OF ENTREPRENEURIAL DYNAMICS IN LATVIA

According to GEM research, every year about 60,000 adults try to start their own businesses in Latvia. However, only a fraction of these ventures succeed in establishing viable businesses. Apparently, some sets of business activities increase the likelihood of successful start-up. Understanding the factors leading to successful business creation would be informative to aspiring entrepreneurs and policy-makers alike. Most researchers at the TeliaSonera Institute are well-versed in the theories leading to successful business creation.

**Survey of Innovative Businesses in Latvia (SIBiL)**

It is widely recognized now that Latvia's competitiveness in the global economy may depend on the ability of its businesses to innovate and move into more knowledge-intensive areas of production. It is also well-known that too many firms in Latvia have not been very successful in this area. Unfortunately, our knowledge about the driving forces of business innovativeness remains very limited. Why are some businesses more likely to offer new products and services, as well as to use new production technologies? How are new ideas channelled into marketable products? As researchers, we are challenged to seek explanations for the causes and consequences of innovations and provide empirically-based policy advice.

The Survey of Innovative Businesses in Latvia (SIBiL), designed by researchers at the TeliaSonera Institute, will address these questions (and many others). Our survey instrument is based on, and is consistent with, the Community Innovation Survey (CIS), which is conducted in all countries of the European Union according to guidelines developed by Eurostat and the OECD. However, SIBiL enjoys a number of important advantages as compared to the CIS. First, our questionnaire is much larger than that used in the CIS. Thus, we are able to include a number of important questions from other well-established surveys, such as PSED and the U.S. Survey of Small Business Finance. Second, business owners will be interviewed using face-to-face interviews, and not mailed questionnaires, as is done in the CIS. Together with a carefully thought-through sampling strategy, this will ensure greater accuracy of data. Third, we cover small firms (employing fewer than 10 workers), which are left out by conventional CIS methodology. Finally, a large portion of our survey focuses explicitly on firms in sectors that Eurostat defines as knowledge-intensive high-technology services and high-technology manufacturing.

SIBiL is being created through close cooperation with Latvijas Fakti. It is planned that a random sample of about 1,400 firms will be produced by September 2007. Furthermore, each firm will be tracked across time through a set of recurring phone interviews over a period of three years. We expect that SIBiL will deepen our understanding of the processes underlying innovative activity in Latvian businesses.

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28 According to GEM surveys, only about 4% of the adult population are nascent entrepreneurs.

29 These guidelines are summarized in the so-called Oslo Manual.
The project title is "Optimal employment-promoting tax and benefit system." The project was financed by the European Structural Funds and the Ministry of Welfare, Nr. VPD1/ESF/NVA/04/NP/3.1.5.1./0001/0003. Various policy initiatives are wanted in this area. indiscriminate use of taxpayers money to help fund business do not pass the test of the marketplace. Therefore, massive and businesses are constantly being born, but many business ideas substantial amount of churn in the small business sector. New controversial issue, however. GEM research shows that there is the projected costs of starting a new business have doubled, as incentives. Not all nascent entrepreneurs may have access to affluent own funds, and financing from their family members or relatives. The majority of nascent entrepreneurs rely on their financial help from the tax system. A presumptive tax regime could be viewed as the first two years of its operation. In effect, a presumptive tax for business start-ups. Such a tax would replace corporate income tax and value-added tax with a fixed percentage payable on the firm’s turnover, with minimum paperwork. Any person starting her own business could apply for a presumptive tax regime for a period not exceeding two years in that person’s lifetime. A presumptive tax would effectively remove the burden of complying with the tax regulations of shoulders of a new entrepreneur and let her focus on the survival of her business in the first two years of its operation. In effect, a presumptive tax regime could be viewed as a ticket to entrepreneurship for anyone. The recommendation to introduce a presumptive tax was based on the results from a special module specifically introduced to the PSED-Latvia survey. It was found that most nascent entrepreneurs had great difficulty understanding the effect of taxes (e.g. corporate tax and the VAT) on their businesses and expressed their support for a presumptive tax regime.
### APPENDIX B: GEM NATIONAL TEAMS 2006

<table>
<thead>
<tr>
<th>Team</th>
<th>Institution</th>
<th>National Team Members</th>
<th>Financial Sponsor</th>
<th>APS Vendor</th>
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<tr>
<td><strong>Argentina</strong></td>
<td>Center for Entrepreneurship and Innovation</td>
<td>Silvia Torres Carbonell, Hector Roche, Natalia Wiesz</td>
<td>IIE Management and Business School, UDELCO</td>
<td>EDBI Argentina</td>
</tr>
<tr>
<td><strong>Australia</strong></td>
<td>Australian Graduate School of Entrepreneurship, Swinburne University of Technology and Education Centre for Innovation and Commercialization, The University of Adelaide</td>
<td>Kevin Hinde, Kim Kywer, Gary Hancock, Noel Lindsay</td>
<td>Australian Centre for Emerging Technologies and Society</td>
<td>EDBI Australia</td>
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<td><strong>Belgium</strong></td>
<td>Vlerick Leuven Gant Management School Ghent University</td>
<td>Hans Crispin, Niels Vanacker, Sophie Marchia, Miguel Maximaen, Tom van Acker, Sabine Vanmeulen</td>
<td>Flemish Ministry of Economic Affairs (Group Ondernemendhouders Ondernemingen en Innovatie)</td>
<td>TMS Dimano</td>
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<td><strong>Canada</strong></td>
<td>HEC-Montreal - Sauder School of Business, The University of British Columbia</td>
<td>Nathaly Rivlin, Louis-Jacques Filion, Victor Cu, Quang Nguyen, Darryl Farnsworth, Daniel Mazurek, Ian Vertinsky</td>
<td>Gouvernement du Québec - Chaire d'entrepreneuriat Rogers J.A. Bombardier, HEC-Montreal, The W. Maurice Young Entrepreneurship and Venture Capital Research, The Social Sciences and Humanities of Canada</td>
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<td>German Echecspar, José Ernesto Araneda</td>
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<td>Beijing Municipal Science &amp; Technology Commission</td>
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<td>Continental Bank</td>
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<td>Universidad de los Andes</td>
<td>Erkko Autio, Pekka Stenholm, Jarna Heinonen, Tommi-Pekka, Anna-Maria, Pola Sternholm, Erkko Aalto</td>
<td>HELPE - National Bank Association</td>
<td>Datapower SA</td>
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REFERENCES


TeliaSonera Institute  
Strēlnieku iela 4a, Riga, LV-1010, Latvia

Baltic International Centre for Economic Policy Studies  
Strēlnieku iela 4a, Riga, LV-1010, Latvia  
www.biceps.org

Stockholm School of Economics in Riga  
Strēlnieku iela 4a, Riga, LV-1010, Latvia  
www.sseriga.edu.lv