SURVIVAL ANALYSIS OF NEWLY FORMED COMPANIES IN THE YEARS 2009–2013

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INTRODUCTION

Enterprises, next to farms and households, are a fundamental component of the economic system and have a significant impact on the functioning of the entire socio-economic system. At the same time, the conditions in which they operate are constantly changing, which means that businesses (especially those just starting up) have to respond quickly to changing realities in order to remain competitive and stay in business. Those which fail to do so disappear from the market.

Survival analysis of newly formed companies has been the subject of studies by different institutions. One of them is the Enterprise Europe Network (EEN), the world’s largest network supporting micro-, small- and medium-sized enterprises in internationalisation. The EEN’s analysis of data from the years 2001–2004 confirms that the first year in business is the most difficult to survive. In fact, 40% of companies bankrupt; 43.8% of the companies created in 2004 did not encounter any barriers; another 38.8% of companies encountered demand side difficulties, while 13.9% experience both – demand and supply-side challenges and only 3.5% strictly supply-side problems. Among the various types of difficulty on the demand side, companies most frequently point to competition on the market. Slightly more than 50% of companies indicated two other obstacles: price-cutting by competitors (a frequent occurrence in highly competitive markets), and customers’ insufficient financial resources. Insufficient company funds and difficulties in obtaining a bank loan were two less frequently mentioned supply barriers (www.een.org.pl, accessed: 14.04.2016).

Similar analyses have also been conducted by CRIF Group, whose research results suggest it is not the first year of operating, but the third, that is crucial to a company’s future. Based on data from the years 2006–2013, CRIF research suggests that businesses shut down most commonly between the 25th and 36th months of operation. In the first
year, the company usually has the financial resources it needs to function and pick up customers. However, companies that fail to take care of that early customer base and product portfolio eventually encounter problems – and it is, unfortunately, often too late to change strategy\(^1\).

The PARP report shows that among companies established in Poland in 2011, the first 12 months of operation lasted nearly 86% of companies survived the first 12 months, 70% the first 24, and 54% the first 36. The survival rate after the fourth and fifth years was 47 and 44%, respectively (www.parp.gov.pl, accessed: 15.02.2016).

Company survival is crucial for the economy, but because of the constantly changing external environment, the data need to be constantly updated, and analyses carried out in order to properly assess the current condition of enterprises.

**PURPOSE AND METHOD**

The aim of the article is to analyse the survival of Polish enterprises and the most common causes of bankruptcy. Statistical data and studies prepared by the Central Statistical Office as well as the Ministry of Economy were used. To ensure reliability, the most up-to-date data from the five last years were used. The 2009 recession and global crisis had a significant impact on companies, which is why the analysis starts from that year.

**NEWLY CREATED COMPANIES IN POLAND IN THE YEARS 2009–2013**

Analysis of the number of newly established enterprises in Poland, starting from 2009, shows ups and downs, with a slight decrease in 2011 and 2013. At 94–95%, the vast majority of newly established enterprises were run by single individuals, while the remaining 5–6% are legal persons. In 2009, 275,307 new companies were registered, while the number fell to 268,404 in 2013 – a 3% drop in five years. Table presents data on the number of start-ups in 2009–2013, along with number of entities involved in a range of sectors and activities. Most enterprises for the period were established in business services. In 2009 there were 83,443 such companies, which accounted for a full 30% of all the companies created; in 2013, both numbers fell: 75,299 business services companies accounted for 28% of the total created. The second biggest category of new industry was construction, accounting for about 17% of all emerging players in 2009, and about 15% in 2013.

The smallest number of new businesses created was in cultural activities, entertainment and recreation. In 2009 the total number established was only 2,086 entities, which accounted for nearly 1% of all business start-ups. Only slightly more – 2,411 – set up in real estate in 2009.

Variation in the number of individual industries certainly is associated with the ease with which a company can run its business, and then keep it on the market. The business services industry is the least burdened by licenses and permits to be acquired and various legal provisions to be met.

\(^1\) Material derived from CRIF Group.
Together with the annual decrease in the number of newly founded companies, the enterprise survival rate after a year of operation also decreased. About 77% of companies established in 2009 were still operating after a year, while only 74% established in 2013 survived as long, a 3 percentage points drop over the five-year period, or about 9 thousand fewer companies (see Fig. 1).

**FIG. 1.** The survival rate of new enterprises in Poland after a year on the market, 2009–2013

Source: the author based on GUS [2012, 2015].

### TABLE. Number of new entities registered in the years 2009–2013, overall and by type of business

<table>
<thead>
<tr>
<th>Specification</th>
<th>Year 2009</th>
<th>Year 2010</th>
<th>Year 2011</th>
<th>Year 2012</th>
<th>Year 2013</th>
</tr>
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<tbody>
<tr>
<td>Industry</td>
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<td>26192</td>
<td>25419</td>
<td>25524</td>
<td>24385</td>
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<tr>
<td>Construction</td>
<td>46232</td>
<td>49189</td>
<td>45549</td>
<td>45225</td>
<td>40862</td>
</tr>
<tr>
<td>Business services</td>
<td>83443</td>
<td>85802</td>
<td>79103</td>
<td>78938</td>
<td>75299</td>
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<tr>
<td>Transport</td>
<td>16023</td>
<td>15818</td>
<td>16488</td>
<td>15182</td>
<td>14361</td>
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<tr>
<td>Hotels and restaurants</td>
<td>12540</td>
<td>11139</td>
<td>11309</td>
<td>12142</td>
<td>9717</td>
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<tr>
<td>Information and communication</td>
<td>11073</td>
<td>12747</td>
<td>11755</td>
<td>13070</td>
<td>13404</td>
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<tr>
<td>Finances and insurance</td>
<td>4766</td>
<td>4433</td>
<td>4812</td>
<td>4787</td>
<td>4594</td>
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<tr>
<td>Real estate</td>
<td>2411</td>
<td>2732</td>
<td>2776</td>
<td>2854</td>
<td>2824</td>
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<tr>
<td>Professional, scientific and technical</td>
<td>25224</td>
<td>28960</td>
<td>28217</td>
<td>28969</td>
<td>31991</td>
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<td>Administration and support</td>
<td>10569</td>
<td>12050</td>
<td>11634</td>
<td>13274</td>
<td>14015</td>
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<tr>
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<td>7452</td>
<td>8116</td>
<td>7921</td>
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<tr>
<td>Health care</td>
<td>13508</td>
<td>12570</td>
<td>15011</td>
<td>14403</td>
<td>13444</td>
</tr>
<tr>
<td>Cultural activities, entertainment and recreation</td>
<td>2086</td>
<td>2125</td>
<td>2037</td>
<td>2059</td>
<td>2114</td>
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<tr>
<td>Other services activities</td>
<td>13742</td>
<td>14413</td>
<td>12894</td>
<td>14189</td>
<td>13473</td>
</tr>
<tr>
<td>Total</td>
<td>275307</td>
<td>286203</td>
<td>274456</td>
<td>278732</td>
<td>268404</td>
</tr>
</tbody>
</table>


### RESEARCH RESULTS

Together with the annual decrease in the number of newly founded companies, the enterprise survival rate after a year of operation also decreased. About 77% of companies established in 2009 were still operating after a year, while only 74% established in 2013 survived as long, a 3 percentage points drop over the five-year period, or about 9 thousand fewer companies (see Fig. 1).
The survival rate after two years is much lower than that after a year. However, during the analysis of these data we can see that over the years there are fewer companies entering the market and a much higher percentage closes down. Of the companies launched in 2009, 60% were still in business after two years (Fig. 2), while 2012 show the percentage falling to 56%. The percentage of failing companies also decreased from the previous year. Among the companies created in 2012, after a year of operations 24% had gone out of business, and 20% after two years.

The survival rate after three years was still lower. This time, however, the falling rate does not coincide with the passage of time. Figure 3 plots the decreases and increases for the three-year timeframe. In relation to the number of active companies after two years of operation, in 2011, there were only 11% fewer companies after three years.

The number and survival rate of start-ups in different time intervals very clearly show that a decreasing number of enterprises remained on the market. Over the course of the 2009–2013 period, the number of enterprises continuing operations decreased with each passing year. Discussion remains open as to the causes. Is this actually a worst situation on the market, less experienced companies, or large number of the business that have to operate only two years after obtaining the funds from the European Union. Though the
Survival analysis of newly formed companies in the years 2009–2013

figures show the situation is improving, relatively few companies remain on the market for more than three years. Regardless of the reasons, it is of the utmost importance that the authorities move to address the situation.

DIFFICULTIES ENCOUNTERED IN BUSINESS OPERATIONS

Analysis of the figures shows that 25% of newly enterprises closed down after a year, a number that jumped to about 45% after two years, and 55% after three. This means that companies encounter a number of difficulties during their activity at every stage of their existence. The CSO survey highlighted two main groups of difficulties, demand-side and supply-side. After a year of operating over 50% of companies indicated a lack of any difficulties in business. About 35% of them cited demand difficulties as the main barrier to remaining on the market, while only 2% indicated supply difficulties. The remaining 10% said they faced both types of barriers.

As Figure 4 shows, the barriers enterprises cited varied by percentage from year to year, but the main problems remained the same, with demand difficulties accounting for the bulk of those cited.

Figure 5 shows that, among the demand difficulties, companies pointed out four main problems, two of which were attributable to competition. The first, which over 80% of companies in 2009, and nearly 80% in 2013 cited, is that there is too much competition on the market, a problem many companies that specialise in the same type of products or services must face. Companies operating in the same area compete with each other by advertising, diversifying their offer, offering additional services or products, and sometimes reducing their price. Competitors reducing their prices is the second largest demand

![Graph showing difficulties encountered by newly established companies in Poland, 2009–2013]

FIG. 4. Difficulties encountered by newly established companies in Poland, 2009–2013

FIG. 5. Demand difficulties encountered by newly established companies in Poland in 2009–2013 (in %)

FIG. 6. Supply difficulties encountered by newly established companies in Poland, in 2009–2013 (in %)
barrier on the market. Roughly 60% of the business owners surveyed indicated as much in recent years, while in 2009 the number was close to 70%. Less frequently cited, though still significant barriers included insufficient client funds, as well as the difficulty in gaining recognition on local markets.

In addition to the demand difficulties, some companies also reported supply difficulties, which are presented in Figure 6. A much smaller group of entrepreneurs indicated that both groups of difficulties are equally important. As many as 80% of them indicated insufficient financial resources as a major barrier to remaining on the market. The companies also pointed to limited access to credit and difficulties in collecting receivables. Both problems were reported in 2013 by nearly 30% of respondents, while about 20% of companies pointed out lack of skilled labour, and about 15% a lack of technology. Just less than 10% of respondents struggled with shortages of raw materials.

Both demand-side and supply-side difficulties pose significant barriers for new companies. The full range of problems presented in Figure 6 can cause businesses to shut down. That is why it is important to find methods to overcome them, or at least mitigate their effects.

**THE PROSPECTS FOR DEVELOPING ENTREPRENEURSHIP**

Entrepreneurship on the Polish market has huge growth opportunities. Every year new actors appear on the market, firm in their conviction and desire to run their own business. By encountering many difficulties and overcoming barriers, many learn how to deal with the difficulties encountered. New companies do not have this knowledge, so help should be addressed especially to them.

It is essential to carefully analyse the range of barriers cited by start-ups and to find ways to enable enterprises to overcome them. This may come in the form of special funding, training, or assistance programmes that would map out potential further steps companies may take. Today in large cities there are institutions – the Polish Agency for Enterprise Development, Academic Business Incubators or Labor Offices, to name three – which advise individuals on how to start and run a business. Such services should be expanded to the country’s other regions to promote interest. Very often entrepreneurs, especially those from small- and medium-sized enterprises, have no idea about the existence of such institutions in their area.

In addition, businesses should be supported primarily by local authorities, which depend to a great extent on the development of entrepreneurship. Companies are the backbone of the entire economic system, though most operate locally, in their immediately surroundings, which helps the region they call home to develop.

**CONCLUSIONS**

Creating a new company that will survive and develop depends on many factors, not the least of which is the entrepreneur himself, with his enthusiasm and aptitude, and the entire external environment pressing him. It is external factors and demand barriers that
entrepreneurs usually identify as the most troublesome. However, despite the difficulties, from year to year the survival rates were slightly less favourable. Figure 7, which compares the three types of indicators in recent years, indicates as much.

![Survival rates after one, two and three years from start up, 2009–2013 (in %)](image)

The hardest year to survive is the first, while in subsequent years the survival rate drops considerably less drastically. The longer a company exists on the market, the more experience and ways of overcoming difficulties it develops. The implementation of appropriate measures to help overcome these barriers will certainly contribute to more companies surviving.

**REFERENCES**


Summary. New companies are an opportunity to develop a region, increase its employment and GDP, and push a country’s economy forward. However, only some of them survive the barriers and vicissitudes the economy throws up before them. Analysis of data on Poland allow us to assess whether the country’s economy enables newly formed companies to survive more than a year or two, or if tends to close the door on them before they can fully develop their activities. The article also shows the types of barriers that are most burdensome for newly formed companies, and what should be changed so that Polish enterprise can grow.

Key words: analysis, company, barrier

JEL: D21, D22

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