

Position of Slovenian High-Growth Firms within the European Context

Stojan Črv*

ITW Appliance Components d.o.o., Poljubinj 89E, 5220 Tolmin, Slovenija
stojan.crv@gmail.com

Abstract

Purpose and Originality: This research aimed to present the position of Slovenian high-growth firms (HGFs) or gazelles in the European area and compare Slovenian high-growth firms with their European counterparts in terms of their growth rates. This research is based on a systematic review of high-growth firms and their position in Slovenia and Europe. The comparison of data on Slovenian high-growth firms and those in the European area enabled us to position the Slovenian high-growth firms within the broader European context.

Method: The survey is based on a systematic review of the Financial Times newspaper ranking of the 1000 high-growth firms in Europe and the Dnevnik publishing house ranking of the 500 high-growth firms in Slovenia, as well as on data obtained from the statistical office of the European Union and Slovenia. Using the Minitab software, we verified the normality of the distribution of the considered data, performed the transformation of non-normal distributed data and calculated the Pearson correlation coefficient »« between the individual considered factors, based on which we then confirmed the hypotheses. The distribution of data was shown with Pareto and bar charts.

Results: The research showed the position of Slovenian high-growth firms in the European area. According to the research findings, it is evident that both Slovenian and European high-growth firms are mostly smaller organizations. The biggest share of high-growth firms is in Germany, while the biggest share of such firms in Slovenia is in the Osrednjeslovenska (Central Slovenia) region. The growth rate of high-growth Slovenian and European firms is comparable. The level of sales revenues and the number of employees do not show any impact on the companies' growth rates, while gross domestic product, on the other hand, contributes positively to their growth rate. By comparing the Slovenian and European high-growth firms considered in the survey, we found that the European firms show a higher growth rate than their Slovenian counterparts, while they are comparable in sales revenues.

Society: The research enables better visibility of high-growth firms among the general public. The wider society evaluates the impact, operation and social responsibility of high-growth firms in a given environment. Last but not least, a well-informed public can positively contribute to the success of high-growth firms.

Limitations / further research: This research is limited to comparing Slovenian high-growth firms with those in the European area based on two HGF rankings. Based on the fact that Slovenia is a small country in the common European area, it would be appropriate to conduct a survey or comparison with smaller European countries and to position Slovenian high-growth firms within this group. The other possibility would be to use a greater number of representative rankings and repeat the existing survey.

Keywords: high-growth firms, gazelles, Slovenia, Europe, companies' performance indicators, growth rate.

1 Introduction

There has been a growing interest in high-growth firms lately (Hölzl, 2014, p. 199). Different factors and their impact on companies' (in)ability to cope with rapidly changing environment are widely researched and discussed, especially in periods of greater economic fluctuations or even in times of major crises. Successful companies thus attract public interest, but the real interest and attention are given to high-growth firms (Krasniqi & Desai, 2016, p. 1075). This is due to the widespread opinion that fast-growth firms significantly contribute to creating jobs and have a positive impact on economic growth (Henrekson & Johansson, 2009, str. 227).

According to an increasing body of literature on this subject, the vast majority of high-growth firms, also known as gazelles, are small and young businesses (Pereira & Temouri, 2018, p.11-14). Among the potential positive factors of these firms' growth and entrepreneurial dynamics are the research and development activity, innovation and organization flexibility, which are the principal modes of operation and which enable them to respond promptly to external and internal changes as well as to structural economic changes (Segarra-Blasco, Teruel & Jové-Llopis, 2018, p. 661-662). However, high-growth firms are not immune to institutional, social, cultural and economic characteristics of the environment in which they originate (Giner, Santa-María, & Fuster, 2016, str. 75). Therefore, these factors have a direct or indirect impact on these firms. Nevertheless, regardless of the environment in which they originate, they all operate in common markets, either in the European Union or global markets.

Slovenian high-growth firms, operating also in the EU market, are compared with one another on Slovenia's relatively small geographic territory. The comparisons have been made since 2001 by the Dnevnik publishing house within the framework of the Gazelle project. This raises the question of Slovenian high-growth firms' position within the European context where the comparison of the fastest growing firms is made by the Financial Times newspaper.

The research allows for a comparison of a list of high-growth firms in Slovenia with that of their counterparts elsewhere in Europe. Furthermore, Slovenia and Europe's comparison provides Slovenian high-growth firms and those with such aspirations an insight into a wider economic area and their position therein. The research aims to stimulate Slovenian high-growth firms to implement continuous improvement processes and thus, vigorously enhance their competitiveness and performance.

2 Theoretical framework

There is a constant public interest in successful companies. The increased interest in high-growth firms has been driven by their remarkable ability to create new jobs (Brown & Mawson, 2016, p. 207). The two authors conducted research among Scottish high-growth firms. They observe that high-growth firms adopt more aggressive forms of international expansion when compared with other firms.

However, high-growth firms also differ in many other aspects, such as their geographical location and industry in which they operate. In this regard, high-growth firms are the subject of many studies examining individual factors that are at work in these firms. Henrekson and Johansson (2009, p. 240) undertook a detailed analysis of the existing studies on high-growth firms and found that these studies differ in their definitions of gazelles, measures of growth and time periods over which growth was measured. Moreover, high-growth firms also differ in size, industry affiliation, age and geographic location. High-growth firms exist in all industries but are still somewhat overrepresented in service industries. The authors also note that a certain proportion of high-growth firms generate a disproportionately large share of new jobs compared to non-high-growth firms. They also state that size is not a factor that would significantly impact the growth of a firm. It seems that the factor of newness is more important than size.

Different studies deal with the analysis of factors that have an impact on the rapid growth of firms. One of these studies was conducted by Pereira and Temouri (2018, p.11-14) on a sample of firms from 11 European emerging countries. The survey results suggest that there is a negative correlation between a firm's age and the likelihood of it becoming a high-growth firm. This means that younger firms are more likely to become high-growth firms. The authors note that smaller firms are those that are most likely to become high-growth firms. Regarding institutional factors, the authors emphasize that an improvement in an institutional environment positively impacts the likelihood of firms becoming HGFs. Reduction of bureaucracy and its greater efficiency seem to have a larger positive impact as compared with corruption and investment climate. A study covering 179,970 firms from nine European countries, which was conducted by Weinblat (2018, p. 33), indicates that among the most important variables affecting a firm's growth are the number of employees and the firm's age.

The growth rate differs between firms. Characteristics of Slovenian firms with different types of growth were examined by Tajnikar, Ponikvar and Bonča (2016, p. 43-45). Their findings show that firms' rapid growth is based on the better use of existing capacities and the adjustment of the volume of capacity to changing market conditions. Such firms are mainly export-oriented. The majority of HGFs are in manufacturing (HGF stands for a high-growth firm). Authors point out that fast growth can only last a short while because different companies emerge as generators of fast growth in different years. As regards the life cycle, it could be said that younger companies start growing by investing in production capacity and employing workers, whereas older companies try to utilize their existing capacity better. The study also shows the negative side of fast growth, which may be reflected in the company's reduced liquidity and indebtedness.

The fact that HGFs do not grow in the same way was also established by Delmar, Davidsson and Gartner (2003, p. 211) who conducted an analysis of Swedish firms. They found that different forms of growth are measured with different growth measures. Nevertheless, the authors note that a firm's growth is systematically related to the firm's age, size and industry affiliation.

When it comes to successful long-term operation of a company or instead the life cycle of HGFs, some researchers focus their attention on the duration of the period of rapid growth. In relation thereto, Hölzl (2014, p. 225-226) examined the factor of the survival of companies in Austria in the period of three to nine years after becoming HGFs. As is evident from the research results, the mere fact that a company is a high-growth firm does not increase the likelihood of its survival compared to other companies. Moreover, the majority of HGFs are not able to repeat this exceptional growth. The classification of a company as a high-growth firm is probably related to the large one-off project of the company's expansion.

As was already mentioned in the introduction, HGFs also differ in terms of their geographic location. This diversity also includes the factor of the state as the institution that sets the rules and thus helps shape the factors affecting the high growth of firms. Krasniqi and Desai (2016, p. 1075) conducted a research of the role of state institutional factors in HGFs in twenty-six transition countries, including Slovenia, and discovered that the interaction between formal and informal institutions positively influences HGFs. They further found that formal institutions in fast-reforming transition economies discourage HGFs, while informal institutions in slow-reforming transition economies encourage them.

Nowadays, institutions stimulate companies through various mechanisms to move towards the so-called green way of working. This is where the ecological awareness and orientation of HGFs, as well as their use and utilization of the so-called green technologies, comes into focus. The role of ecological or rather green technologies in 5,498 manufacturing firms in Italy was analyzed by Leoncini, Marzucchi, Montresor, Rentocchini and Rizzo (2019, p. 900). The study confirmed the important role of green technologies in fostering the firms' growth, as measured by employment growth. By using green technologies, firms enter green markets more easily, while on the other hand they optimize their internal operations by decreasing production costs due to greater resource efficiency and possibility of recycling these resources. All this contributes to a higher growth of firms.

There are many studies that emphasize the leading role of HGFs in job creation. Of course, these jobs vary in terms of their complexity, affecting the need for employment of people with different skills and levels of education. In her study of Danish firms, Eklund (2020, p. 700-701) establishes that the correlation between a firm's high growth and highly educated employees' share is rather important. Moreover, a firm's high growth is facilitated by its organizational as well as human capital. The author also concludes that innovation capabilities can significantly contribute to a firm's high growth.

It is the innovations that positively impact a firm's growth and are actually a synonym for its long-term existence and performance. In addition to green technologies, innovations are those that today receive a lot of attention and incentives. The role of innovation in HGFs in EU countries was studied by Segarra-Blasco, Teruel and Jové-Llopis (2018, p. 655-659). The countries were classified into three clusters (core countries, Mediterranean countries and new EU member states, including Slovenia). The key finding of the research is that there is a

positive and highly significant correlation between investments in R&D and the likelihood of introducing innovations. In terms of size, the study notes that medium and larger firms show a larger propensity to innovate than small firms. Moreover, a firm is more likely to be innovative if it is an export-oriented firm and one that cooperates with other firms within a group because this provides them with greater support in carrying out innovative activities. This is especially evident in the Mediterranean and new EU member states. While institutional cooperation seems to be more important for core country firms, Mediterranean firms rely more on market cooperation. Cooperation with other firms that belong to the group positively affects new EU member states' ability to innovate. Access to public funds, including EU subsidies, is also a variable that positively impacts innovation and significantly affects the likelihood of a firm being an innovative firm and thus also a high-growth firm.

Innovation as an impact factor was also emphasized by Brüderl and Preisendörfer (2000, p. 66-67) who mainly focused on employment effects and the growth potential of newly established businesses in Upper Bavaria, Germany. The authors claim that job creation can be attributed to a small number of fast-growing firms, while a firm's size and innovation are a strong predictor of rapid growth.

Slovenian HGFs operate in a domestic market and, above all, in external or international markets because they are mostly export-oriented. This is the competitive environment in which they operate and in which they compare themselves with other foreign HGFs. Although the growth rate is based on the positive change in sales value within a specific period of time, the absolute value of sales in the examined body of literature is not identified as an independent factor that would positively impact growth rates of HGFs. On the other hand, the number of employees is identified as a significant factor affecting a firm's growth rate. Finally, it should be noted that the geographical locations of HGFs or the environments in which they operate differ greatly. Moreover, access to public funds and subsidies as well as the economic power of the country in which HGFs are located cannot be ignored because all these are factors that contribute to innovation and result in faster growth of firms.

Our research aimed to examine these statements. Therefore, a number of hypotheses were formulated that relate to correlations between the characteristics of HGFs in Slovenia and those in other European countries.

Hypothesis 1: »The growth rate of Slovenian HGFs is comparable to that of other European HGFs.«

Hypothesis 2: »The number of employees does not impact a firm's rapid growth.«

Hypothesis 3: »Sales revenues do not impact a firm's rapid growth.«

Hypothesis 4: »The level of gross domestic product has a positive impact on the number of HGFs.«

3 Method

The Financial Times newspaper uses its own method of selecting HGFs in Europe by means of which it compiles the FT 1000 ranking featuring 1000 fastest growing companies in Europe. A significant indicator on the basis of which companies make a list is the firms' growth rates in the last three years. The selection committee conducts an extensive inquiry of companies and their data with the purpose of making the ranking as complete and representative as possible, but the ranking is not ideal as some companies do not want to make their figures public or do not participate for other reasons. Companies that wish to participate may apply via the website of Financial Times or company Statista. In addition, through research in company databases and other public sources, Statista identifies the companies in Europe that could be potential candidates for the FT 1000 ranking. These companies are then invited to participate in the competition by post, email and telephone.

Companies that wished to be listed in the ranking for 2020 had to meet the following criteria:

- revenue of at least € 100,000 generated in 2015,
- revenue of at least € 1,500,000 generated in 2018,
- the company is independent and not a subsidiary or branch office of another company,
- the revenue growth between 2015 and 2018 was primarily organic and
- if a company is listed on a stock exchange, its share price has not fallen by 50 % or more since 2018.

The countries that were eligible to participate in the competition for the fastest growing companies in Europe in 2020 were as follows: Austria, Belgium, Bosnia & Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Monaco, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom. The minimum average growth rate required to be included in the FT 1000 ranking for 2020 was 38.4 per cent.

The Dnevnik publishing house performs the selection of HGFs or gazelles in Slovenia. The selection is based on the firms' growth in the last six consecutive financial years with the purpose of promoting companies that are focused on long-term growth. The selection is conducted in five steps. In the first step, company Bisnode analyzes financial data and compiles a ranking of the fastest-growing companies in six Slovenian statistical regions defined in the Dnevnik methodology. These regions are the following: Dolenjsko-Posavska (Lower Carniola-Sava), Dravsko-Pomurska (Drava-Mura), Gorenjska (Upper Carniola), Osrednjeslovenska (Central Slovenia), Primorsko-Notranjska (Littoral-Inner Carniola) and Savinjsko-Zasavska (Savinja-Central Sava). Companies can make the regional list if they have a minimum of 15 employees, net revenues from sales of € 400,000 in the selected year, if they operate profitably and have exhibited the highest revenue growth in the last five years. In addition to the listed criteria, companies' ranking also depends on their credit rating, profit, personal incomes, management efficiency, and values of sustainable growth. Members of the

selection committee then have interviews with the firms' owners and managing directors through which they establish some other attributive factors, such as the level of internal communication, corporate social responsibility, sales orientation and target markets, level of development and innovation, possible patent protections as well as the implementation of the firms' vision, strategy and goals. In the third step, the committee takes into consideration all firms identified in the first two steps and nominates three of them for the title of the fastest-growing firm or gazelle within its region. Innovative companies and those operating internationally are given precedence. The selection committee then selects the first, second and third fastest growing firm within each region. The regional winner is then eligible to compete on a national level and list the fastest growing firms in the country. In the final stage, three fastest growing firms in Slovenia are selected and presented with the Golden Gazelle, Silver Gazelle and Bronze Gazelle awards based on their economic performance, growth rate and positioning in the wider environment.

A comparison between the methods of the Financial Times and Dnevnik shows differences between the two. The ranking compiled by Financial Times is based on the growth rate in the preceding four consecutive financial years, while the Dnevnik ranking takes into consideration the growth rate in the preceding six consecutive financial years. The method of entering the ranking also differs. While companies cannot apply to enter the Dnevnik ranking by themselves, this is possible with the Financial Times ranking. The Dnevnik method of ranking the 500 fastest growing companies in Slovenia does not change in a given year, while the entry conditions according to the Financial Times method are adjusted every time a new ranking of 1000 fastest growing European countries is compiled. However, both rankings include data on the growth rate, sales revenues, and the number of employees of each firm listed in the ranking.

Our research was conducted on the basis of the Financial Times ranking of Europe's 1000 fastest growing companies and the Dnevnik ranking of Slovenian gazelles or the 500 fastest growing companies in Slovenia. Data for our research was taken from these two rankings, namely for the first 500 HGFs from each ranking. The research model (Figure 1) illustrates the main steps to verify the set hypotheses and the positioning of Slovenian HGFs within the European context based thereupon.

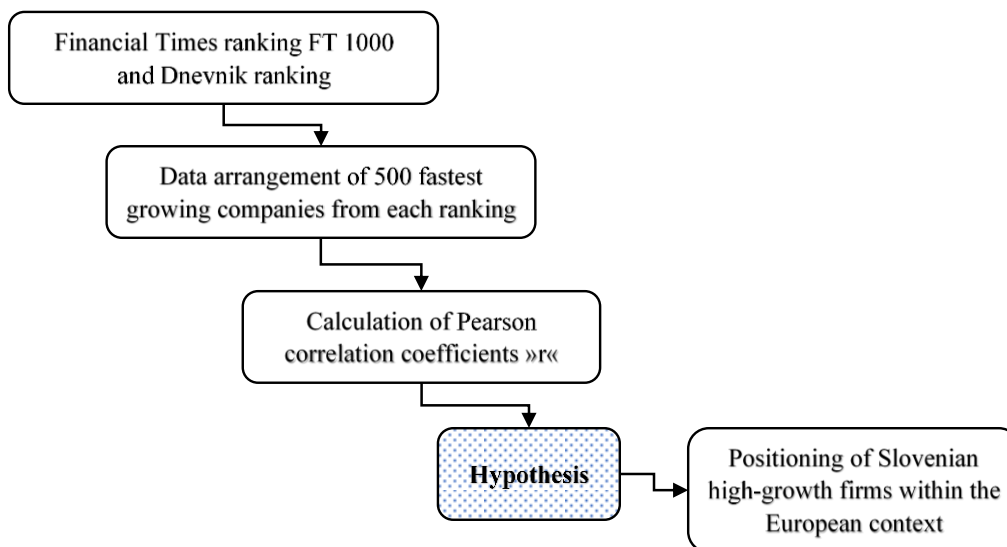


Figure 1. Research model.

Figure 2 shows factors considered in our research and the set hypotheses.

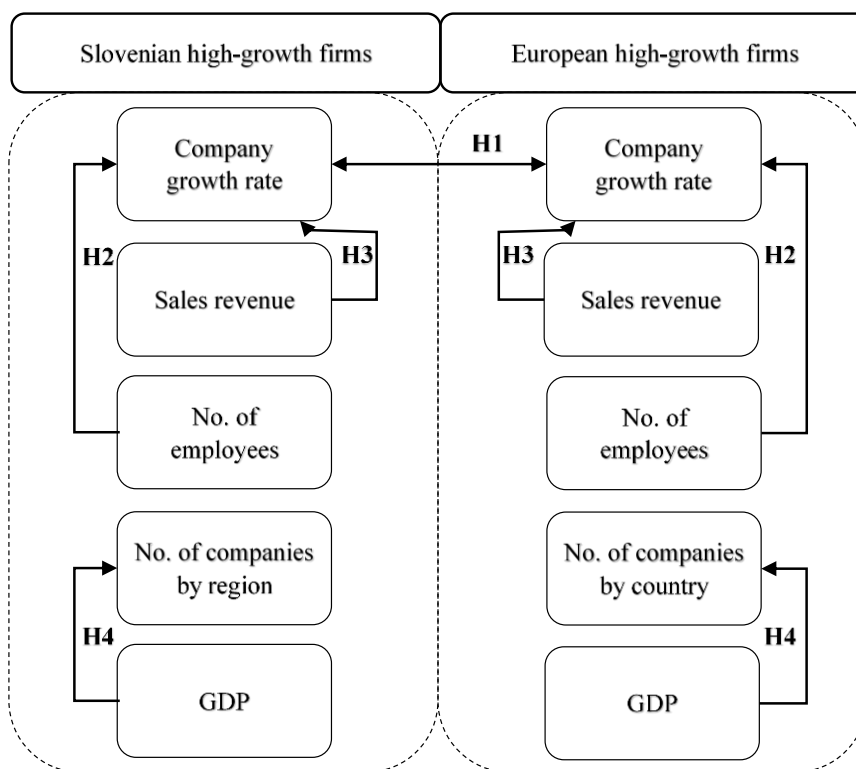


Figure 2. Factors considered in Slovenian and European HGFs, and the set hypotheses.

The Financial Times ranking illustrates the growth rates of the 1000 fastest growing companies in Europe in a four-year period from 2015 to 2018 inclusive, while the Dnevnik ranking of the 500 fastest growing companies in Slovenia illustrates the growth rates for a six-year period, from 2013 to 2018 inclusive. The survey includes data on sales revenues and number of employees for 2018, as they are considered in both rankings. Because the Dnevnik

ranking lists 500 fastest growing companies, we only considered data for the first 500 companies listed in the Financial Times ranking. We thus made sure that the sample size was equal. Comparing the above-mentioned data for the same factors ensured the validity of the method of our research. Data on gross domestic product for 2018 was obtained from the European Union's statistical office (Eurostat) and that of the Republic of Slovenia.

When selecting the fastest growing companies, both Financial Times and Dnevnik verify the data's reliability and validity according to their methods. Moreover, both newspaper companies have been compiling the ranking of the fastest-growing companies for several years, thereby enabling the analysis of the trends of the rapid growth of companies and the measuring suitability of the selection methods. The same applies to the statistical offices of the European Union and the Republic of Slovenia. By making this information publicly available, they all guarantee their reliability and credibility.

Distribution of data that illustrate the number of HGFs in individual countries of the European Union and regions of Slovenia is shown by Pareto and bar charts.

Prior to statistical analysis of data by means of the Minitab software, the normality of the distribution of the considered data was verified. Non-normal distributed data was transformed with Johnson transformation. Normal distributed data obtained in this manner was then applied to verify the hypotheses. Correlations between the companies' growth rates, sales revenues and the number of employees, as well as between gross domestic product and the number of HGFs were examined by means of the Pearson correlation coefficients »r«.

4 Results

4.1 HGFs in Slovenia regions and European countries

According to the Companies Act of the Republic of Slovenia (ZGD-1), companies are classified as micro, small, medium-sized and large companies. This classification also takes into consideration the number of employees, namely:

- a micro company: up to 10 employees,
- a small company: from 11 up to 50 employees,
- a medium-sized company: from 51 up to 250 employees and
- a large company: more than 250 employees.

In view thereof, European HGFs from the Financial Times ranking for 2018 and Slovenian HGFs from the Dnevnik ranking for 2018 were distributed by size (Figure 3).

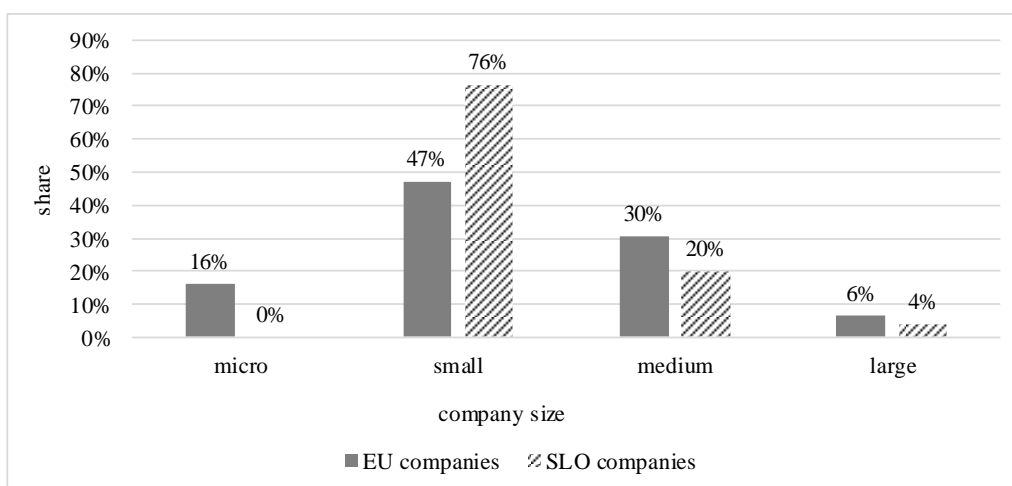


Figure 3. European and Slovenian HGFs distributed by size.

Among the considered companies, small companies' share is the highest, followed by medium-sized, micro and large companies.

The Dnevnik ranking for 2018 lists HGFs from six Slovenian regions (Figure 4).

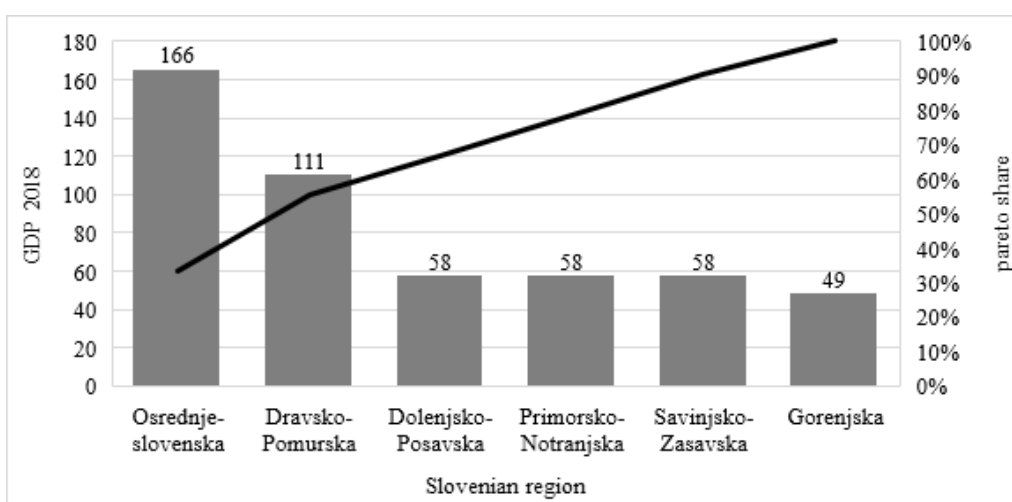


Figure 4. Number of high-growth firms by individual Slovenian regions.

Slovenian regions are illustrated with bar charts, while the sum of Pareto shares is shown with a line. There is a significantly higher number of HGFs in the Osrednjeslovenska (Central Slovenia) region, followed by the Dravsko-Pomurska (Drava-Mura) region, while the number of HGFs in other regions is very similar.

The Financial Times ranking for 2018 lists HGFs from 27 European countries (Figure 5).

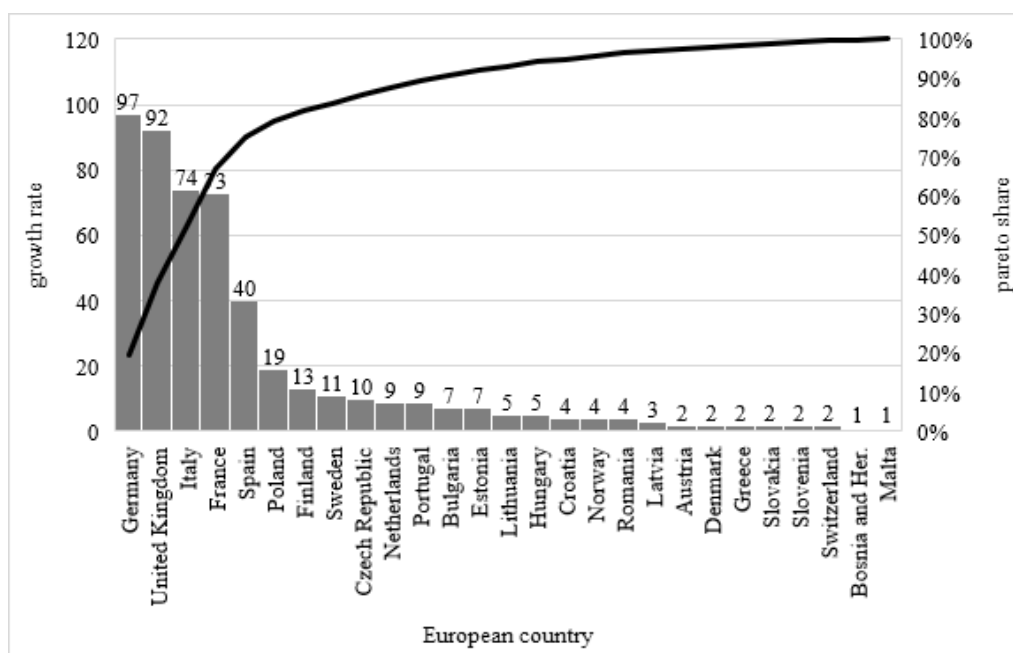


Figure 5. Number of high-growth firms by individual European countries.

Figure 5 shows European countries illustrated with bar charts, while the sum of Pareto shares is shown with a line. Germany and the United Kingdom stand out as the two leading countries; Italy and France follow them closely, while Spain comes in fifth place. Other countries constitute the lower part of the ranking.

4.2 Comparison of growth rates of HGFs in Slovenia and elsewhere in Europe

Correlations between various factors were examined by means of the Pearson correlation coefficients »r«. The critical value of the Pearson correlation coefficient for 500 high-growth firms (N = 500) at a level of confidence of 95% ($\alpha = 0.05$) is at **0.0877**. The same critical value was considered in all the correlation calculations that follow.

A possible correlation between the growth rates of Slovenian firms listed in the Dnevnik ranking for 2018 and those listed in the Financial Times ranking for 2018 is shown in Table 1.

Table 1. The Pearson coefficient values for the correlation between the growth rates of Slovenian and European companies.

	Growth rate EU
Growth rate SLO	$r = \mathbf{0.997}$ Confidence interval (CI) = 0.997; 0.998 $p < 0.001$ Standard deviation = 3.022

The correlation coefficient has a significant positive value indicating a complete correlation between the growth rates.

The first thirty European HGFs exhibit significantly higher growth rates than Slovenian HGFs, after which the growth rates gradually converge (Figure 6).

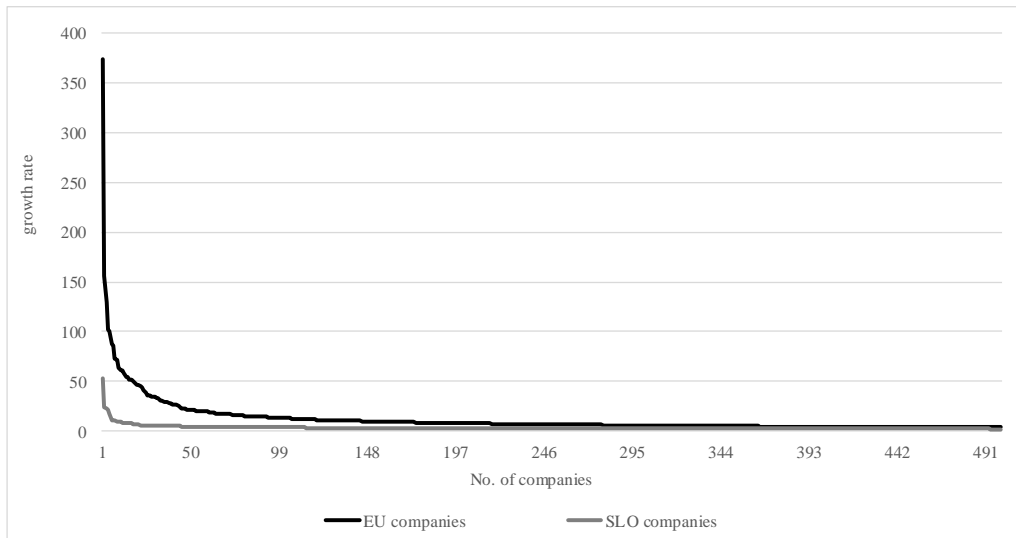


Figure 6. Comparison of growth rates of HGFs in Slovenia and elsewhere in Europe.

The matrix plot of growth rates is shown in Figure 7.

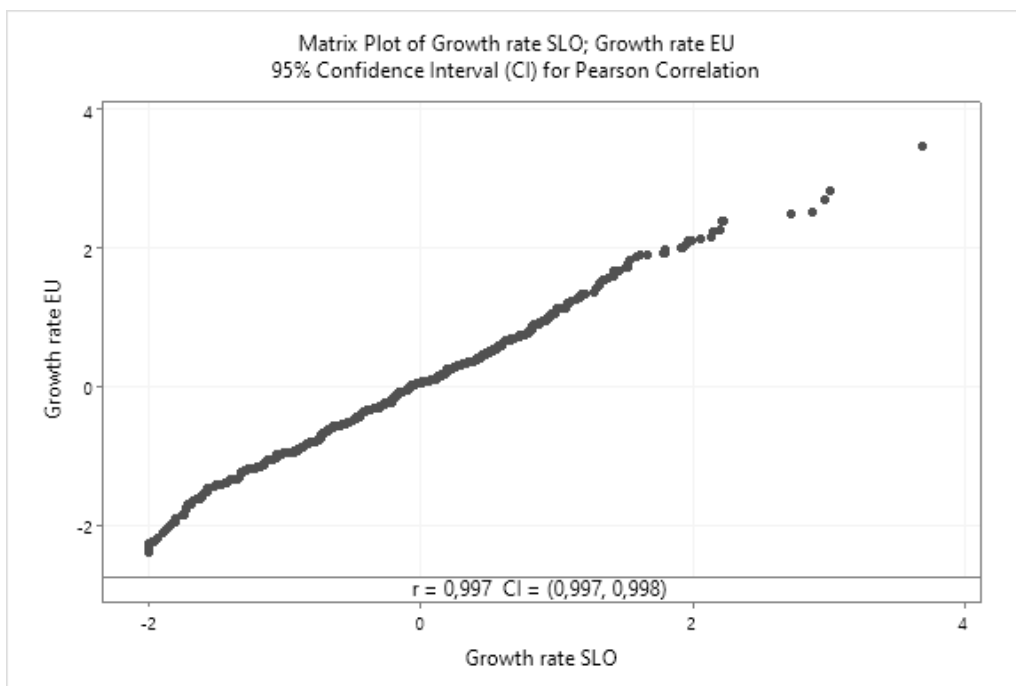


Figure 7. Matrix plot of growth rates of HGFs in Slovenia and elsewhere in Europe.

The matrix plot of growth rates illustrates a complete correlation between the growth rates of Slovenian and European companies as well as a significant positive value of the Pearson correlation coefficient (Table 1).

4.3 Correlation between sales revenues, number of employees and growth rate

The correlation between sales revenues and the growth rate and the number of employees and the growth rate of Slovenian HGFs is shown in Table 2.

Table 2. The Pearson coefficient values for correlation between sales revenues, number of employees and growth rates in Slovenian HGFs.

Slovenia	Growth rate
Sales revenues	$r = 0.071$ Confidence interval (CI) = -0.017; 0.158 $p < 0.112$ Standard deviation = 81.39
Number of employees	$r = 0.029$ Confidence interval (CI) = -0.059; 0.116 $p < 0.524$ Standard deviation = 184.12

No correlation between sales revenues and growth rates in Slovenian HGFs was identified. The same applies to the number of employees and the growth rate.

Correlations between sales revenues and growth rates as well as between the number of employees and growth rates of European HGFs are shown in Table 3.

Table 3. The Pearson coefficient values for correlation between sales revenues, number of employees and growth rates in European HGFs.

Europe	Growth rate
Sales revenues	$r = \mathbf{0.193}$ Confidence interval (CI) = 0.108; 0.276 $p < 0.001$ Standard deviation = 51.81
Number of employees	$r = 0.078$ Confidence interval (CI) = -0.010; 0.165 $p < 0.081$ Standard deviation = 245.50

There is a weak correlation between sales revenues and growth rates in European HGFs, while no correlation was identified between the number of employees and growth rates.

Sales revenues of Slovenian HGFs are comparable to those of European HGFs (Figure 8).

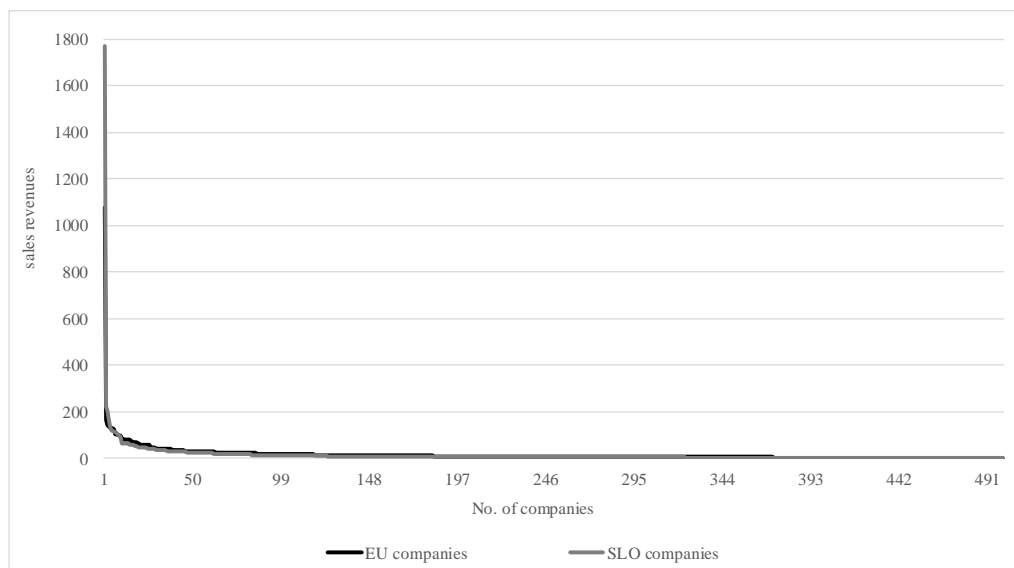


Figure 8. Comparison of sales revenues of HGFs in Slovenia and elsewhere in Europe.

4.4 Correlation between gross domestic product and the number of HGFs

Gross domestic product (henceforth GDP) is often used to compare different regions or countries' development levels. These development levels may be reflected in a higher number of HGFs. A correlation between gross domestic product and the number of HGFs in Slovenia (Table 4) and elsewhere in Europe (Table 5) was thus explored.

Table 4. The Pearson coefficient values for the correlation between the gross domestic product and the number of HGFs in Slovenia.

Slovenia	Number of companies
GDP	$r = \mathbf{0.954}$ Confidence interval (CI) = 0.631; 0.995 $p < 0.003$ Standard deviation = 4,861

There is a strong correlation between the gross domestic product and the number of HGFs in Slovenia.

Table 5. The Pearson coefficient values for the correlation between the gross domestic product and the number of HGFs in Europe.

Europe	Number of companies
GDP	$r = \mathbf{0.770}$ Confidence interval (CI) = 0.552; 0.890 $p < 0.001$ Standard deviation = 872,803

As regards the European companies, the correlation between the two considered factors is also strong.

5 Discussion

Slovenian and European HGFs studied in the research were mostly small companies with up to 50 employees (see Figure 3). The proportion of such companies in Slovenia is at 76 %, while in Europe it is 47 %. They are followed by medium-sized companies with up to 250 employees, constituting 20 % of HGFs in Slovenia and 30 % in Europe. In Slovenia, there are no micro-companies with up to 10 employees among HGFs, while the share of such companies elsewhere in Europe is at 16 %. Large companies with over 250 employees come last. The percentage of such companies in Slovenia (4 %) is similar to that in Europe (6 %). The findings of our research are consistent with those of some other studies, noting that the share of small companies among HGFs is rather significant (Henrekson & Johansson, 2009, p. 240) because the likelihood of small companies becoming HGFs is higher (Pereira & Temouri, 2018, p. 12).

As regards the number of HGFs in Slovenia, the Osrednjeslovenska (Central Slovenia) region comes first, followed by the Dravsko-Pomurska (Drava-Mura) region. The number of HGFs in these two regions is higher than elsewhere in Slovenia. Compared with the Osrednjeslovenska (Central Slovenia) region, the share of HGFs in the Dolenjsko-Posavska (Lower Carniola-Sava) region, which is in the third place, is lower by as much as 65 %. These regions are then followed by the Primorsko-Notranjska (Littoral-Inner Carniola), Savinjsko-Zasavska (Savinja-Central Sava) and Gorenjska (Upper Carniola) region (see Figure 4). The number of HGFs in these last four regions is very similar. In more developed regions, conditions for the creation and development of HGFs seem to be better. Other studies (Tajnikar, Ponikvar & Bonča, 2016, p. 43) also found that the number of HGFs is the highest in the most developed Slovenian regions.

Among the 27 studied European countries, the highest number of HGFs listed in the Financial Times FT 1000 ranking is in Germany followed by the United Kingdom, Italy, France, Spain and others (see Figure 5). The fifth country in the ranking is Spain, with a proportion of HGFs smaller by 59 % than that in Germany, which is in the first place. Central and Eastern European countries are not to be found among the leading countries in the ranking. For example, Poland comes in sixth place, while the Czech Republic is in ninth. The share of HGFs in Slovenia is at 0.4 %, ranking the country in the 24th place among the 27 studied countries. It probably comes as no surprise that in Germany, the economic superpower, the number of HGFs is the highest. The more competitive the country is, the better the conditions for creating companies, particularly smaller ones, resulting in a higher number of HGFs (Pereira & Temouri, 2018, p. 13).

In the study, we calculated the Pearson correlation coefficients for predefined factors (see Chapter 4) by means of which the set hypotheses listed in the following chapter were confirmed or refuted.

Hypothesis 1: »*The growth rate of Slovenian HGFs is comparable to that of other European HGFs.*«

The calculated Pearson coefficient value for correlation between the growth rate of HGFs in the Dnevnik ranking for Slovenia and the growth rate of HGFs in the Financial Times FT 1000 ranking for Europe has a significant positive value ($r = 0.997$). Although studies of other authors emphasize differences in measures of growth (Henrekson & Johansson, 2009, p. 240) or growth rate measurement methods (Delmar, Davidsson & Gartner, 2003, p. 211), our research confirms that there is a complete correlation between the studied growth rates (Table 1). *Based on the calculation, it can be established that Hypothesis 1 was confirmed by our research.*

Hypothesis 2: »*The number of employees does not impact a firm's rapid growth.*«

The calculated correlation coefficient between the number of employees in Slovenian HGFs listed in the Dnevnik ranking and these companies' growth rate is low ($r = 0.029$). There is an insignificant correlation between the two studied factors (Table 2). The calculated correlation coefficient between the number of employees in European HGFs listed in the Financial Times FT 1000 ranking and these companies' growth rate is also low ($r = 0.078$). Also in this case, the correlation between the number of employees and the growth rate is insignificant (Table 3). Although Weinblat (2018, p. 33) finds in his research that a company's growth rate is affected by the number of employees, our research did not establish any correlation between the two factors. *Based on the calculation of both correlation coefficients, it can be established that Hypothesis 2 was confirmed by our research.*

Hypothesis 3: »*Sales revenues do not impact a firm's rapid growth.*«

A potential correlation between sales revenues and growth rates of HGFs listed in both rankings that were studied in our research was determined on the basis of the calculated correlation coefficient. The correlation coefficient for Slovenian HGFs ($r = 0.071$) shows that there is an insignificant correlation between the two factors (Table 2). In view of the calculated correlation coefficient for European HGFs ($r = 0.193$), it was established that there is a weak correlation between the two factors (Table 3). Sales revenues do not impact the rapid growth of Slovenian HGFs, while, based on the statistically significant correlation coefficient, sales revenues in European HGFs seem to have a slight effect on their rapid growth. *Based on the calculation of both correlation coefficients, Hypothesis 3 can only be partially confirmed.*

Hypothesis 4: »*The level of the gross domestic product has a positive impact on the number of HGFs.*«

The calculated correlation coefficient between the gross domestic product of individual Slovenian regions studied in the research and the number of HGFs in those regions ($r = 0.954$) confirms a very strong correlation between these two factors (Table 4). Moreover, the

correlation coefficient between the gross domestic product of individual European countries and the number of HGFs in those countries ($r = 0.770$) confirms a strong correlation between the two (Table 5). *Based on the calculation of both correlation coefficients, it can be established that Hypothesis 4 was confirmed by our research.*

The Pearson correlation coefficients calculated in the research have demonstrated the existence or non-existence of correlations between the examined factors. On the one hand, the calculated correlation coefficients are low, while on the other, they are very high which means that correlations between individual factors are weak, insignificant or strong. No medium or moderate correlations were established in our research, making the confirmation of hypotheses easier. For our research, the critical value of the Pearson correlation coefficient was at **0.0877**.

At the beginning of our research, we were interested in the position of Slovenian HGFs within a wider European context and their position in respect of the comparison of Slovenia and other European countries in terms of their growth.

By confirming Hypothesis 1, it was established that growth rates of Slovenian and European HGFs are comparable as there is a complete correlation between the studied growth rates (Table 1). Growth rates are shown in Figure 7.

There are two Slovenian companies among the 500 fastest growing companies in Europe listed in the Financial Times FT 1000 ranking, namely in the 92nd and 284th place. Both companies are classified as micro companies having less than ten employees. These two companies were not listed in the Dnevnik ranking of the 500 fastest growing companies in Slovenia. This can be attributed to different entry conditions for both rankings (see Chapter 3).

Based on the studied growth rates, we positioned Slovenian HGFs within the context of other European HGFs as well as within the wider European area. For this purpose, we merged the Financial Times FT 1000 and Dnevnik rankings and arranged HGFs in order by their growth rates. Although other authors also acknowledge that growth rates are calculated using different methods (Delmar, Davidsson, & Gartner, 2001, p. 32), the only difference in our study is the time component. The Financial Times FT 1000 ranking period is two years longer than that of the Dnevnik ranking. Nevertheless, both calculations are representative, taking into consideration four or rather six consecutive financial years. Moreover, when merging the two rankings, we took into consideration the fact that, based on the calculated Pearson correlation coefficient between the growth rate of HGFs in the Dnevnik ranking for Slovenia and that of HGFs in the Financial Times FT 1000 for Europe, there was a complete correlation between the two (Table 1).

HGFs in the merged ranking were thus ranked by their growth rates from the highest to the lowest (Appendix). The merged ranking represents the first 608 HGFs since from here on out follows only Slovenian HGFs. As regards the growth rates for 2018, the first place was taken

by a company from the United Kingdom having a growth rate of 37.463 %. The highest-ranked Slovenian HGF was the golden gazelle for 2018 positioned in the 16th place with a growth rate of 5.288 %. The second highest-ranked Slovenian HGF or the silver gazelle was in the 46th place with a growth rate of 2.377 %, while the third HGF or the bronze gazelle was in the 48th place with a growth rate of 2.270 % (see Appendix).

In view of sales revenues in 2018, the position of Slovenian HGFs among their European counterparts is better. The first place in the merged ranking was thus taken by a Slovenian company with sales revenues of EUR 1,771 million, followed by a Czech company with revenues of EUR 1,079 million. The third and fourth places also belonged to Slovenian companies with sales revenues of EUR 221 million and EUR 203 million respectively. There are as many as ten Slovenian companies among the top twenty HGFs.

When compared with growth rates (Figure 6), sales revenues of Slovenian HGFs are much more comparable to those of European HGFs (Figure 8).

6 Conclusion

The research was based on the analysis of HGFs in Slovenia and elsewhere in Europe, and comparisons between them. The results of our research show that the studied HGFs are mostly small businesses, which is also consistent with the findings of authors Henrekson and Johansson (2009, p. 240) who note that the biggest share of HGFs is made up of small companies. It was also established that most HGFs in Slovenia are located in the Osrednjeslovenska (Central Slovenia) region. It is namely a fact that the majority of HGFs are concentrated in the most developed regions of Slovenia, such as the Osrednjeslovenska (Central Slovenia) region (Tajnikar, Ponikvar & Bonča, 2016, p. 43). Our research shows that Germany stands out among the European countries with the highest number of HGFs, followed by the United Kingdom, Italy, France and Spain. Conditions for establishing smaller companies are better in more competitive countries (Pereira & Temouri, 2018, p. 13), resulting in a higher number of HGFs. Our research confirmed that growth rates of Slovenian and European HGFs are comparable since the calculated value of the Pearson correlation coefficient (Table 1) indicates that there is a complete correlation between the studied growth rates. It is also noteworthy that the number of employees and the amount of sales revenues do not affect the rapid growth of a company, although Weinblat (2018, p. 33) argues that the number of employees also impacts the rapid growth of companies. Our research shows that the growth rate is positively affected by the level of gross domestic product. A comparison of all considered HGFs in our research showed that the first three Slovenian HGFs or rather the golden, silver and bronze gazelle rank between the 16th and the 48th place among the European HGFs. When it comes to growth rates, European HGFs exhibit higher growth rates than the best Slovenian HGFs. However, in terms of sales revenues, Slovenian HGFs are fully comparable with their European counterparts.

There are a number of studies (Brown & Mawson, 2016, p. 207; Hölzl, 2014, p. 225-226; Krasniqi & Desai, 2016, p. 1; Leoncini, Marzucchi, Montresor, Rentocchini & Rizzo, 2019, p.

900) that explore HGFs in individual countries or communities of countries. No scientific research was found that would compare Slovenian HGFs with larger territories or global markets and that would show positive effects in terms of facilitating competitiveness, growth and potential collaboration with other companies. Our research is based on a systematic review of HGFs in Slovenia and their counterparts elsewhere in Europe, which is a much greater territory to explore. Based on the comparison of data on Slovenian HGFs and their European counterparts, Slovenian HGFs were positioned within the wider European context and thus internationalized. We believe that our approach to the research is applied rarely, if at all.

Our research helps Slovenian HGFs gain insight into their position among other European HGFs in terms of their growth rates and sales revenues. Companies can use such comparisons to plan or upgrade their business strategies or draw up their business plans to improve their business operations. Moreover, other fast-growing companies that are likely to become HGFs can use the data to compare themselves with their counterparts and to analyze the environment they are entering. The purpose of our research is also to increase the visibility of HGFs among the general public. The wider society evaluates the impact of HGFs, their attitude towards the stakeholders and corporate social responsibility towards the environment in which they operate. Better visibility of HGFs on the one hand and a well-informed public familiar with the activities within these HGFs on the other can have a positive impact on the companies' performance.

The research that we conducted was limited to only two representative rankings of HGFs – the Financial Times FT 1000 ranking of European HGFs and the Dnevnik ranking of Slovenian HGFs – and five factors, namely the growth rate, sales revenues, number of employees, number of companies by individual countries and gross domestic product. These two rankings provided us with enough data to confirm the hypotheses in our research and to position Slovenian HGFs within the wider European context. In view of the small geographical size of Slovenia, our research was limited to the European territory.

Considering the scope of our research, further research studies that include a greater number of comparable rankings of HGFs and data of national as well as European statistical offices would be recommended. Such research studies could also consider a more significant number of factors than those studied in our research. Research comparing Slovenian HGFs with firms from neighbouring countries or countries comparable in size to Slovenia (e.g. the Czech Republic, Slovakia or Croatia) would also be interesting. Such studies could provide suggestions for the harmonization of the so-called entry conditions for HGFs to be listed in various rankings as well as for the implementation of uniform criteria for the calculation of individual factors. All this would contribute to an easier and more transparent implementation of studies, classification and comparisons in the future.

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Appendices: Common ranking of the fastest growing firms

The Dnevnik ranking of the 500 Slovenian and the Financial Times ranking of the 500 European HGFs were merged into a new common ranking which represents the first 609 HGFs by their growth rates in 2018 from the highest to the lowest. After 609th place there are only Slovenian HGFs and therefore are not listed in the following ranking. Slovenian companies are listed in bold italics.

	High-Growth Firm	Country	Growth rate		High-Growth Firm	Country	Growth rate
1	OakNorth Bank	United Kingdom	37463%	71	LVS Brokers	Finland	1742%
2	Wolt Enterprises	Finland	15642%	72	Dall Energy	Denmark	1741%
3	Bolt Technology	Estonia	12960%	73	Mediforma, d. o. o.	Slovenia	1730%
4	Elements Global Services	Spain	10233%	74	Sneakers & Jackets	France	1716%
5	Les Eco-Isolateurs	France	10078%	75	Viralize	Italy	1710%
6	Gismart	United Kingdom	8788%	76	Ruehe Healthcare	Germany	1692%
7	Enens	France	8603%	77	Laundryheap	United Kingdom	1663%
8	Qred Företagslån	Sweden	7301%	78	COMATCH	Germany	1638%
9	Mamma 2.0	Italy	7110%	79	NoviCap	United Kingdom	1635%
10	In Touch Networks	United Kingdom	6325%	80	Elvie	United Kingdom	1623%
11	Farmermobil	Germany	6056%	81	GPA Innova (Dlyte)	Spain	1611%
12	Holidu	Germany	6031%	82	Lumenaza	Germany	1604%
13	Feiniko Handelsgesellschaft	Germany	5854%	83	Skills RH	France	1557%
14	Franco Fresco	Germany	5487%	84	ENPIRE	Poland	1530%
15	MessengerPeople	Germany	5378%	85	PALS EHIJOS IMPORT	Spain	1513%
16	MilSped, d. o. o.	Slovenia	5228%	86	Mrs Wordsmith	United Kingdom	1501%
17	Foot District	Spain	5129%	87	Nexolub	Spain	1486%
18	Deelit Ventures	Netherlands	5116%	88	INNOVI Recherche	France	1475%
19	ID Finance Investments	Spain	5019%	89	Parkster	Sweden	1463%
20	getAir	Germany	4706%	90	Bending Spoons	Italy	1450%
21	PastBook	Netherlands	4623%	91	ComplyAdvantage	United Kingdom	1449%
22	Supermercato24	Italy	4567%	92	MAKING SCIENCE	Spain	1430%
23	Donatella	Germany	4495%	93	Società Gestioni Lavori	Italy	1430%
24	Futureplay	Finland	4410%	94	Ooni	United Kingdom	1428%
25	Jobandtalent	Spain	4093%	95	Ubiquicom	Italy	1410%
26	Jungle Creations	United Kingdom	3900%	96	Flight Club Darts	United Kingdom	1408%
27	# sinob	Germany	3614%	97	Narajan	Slovenia	1408%
28	Global-e Online	United Kingdom	3567%	98	Studapart	France	1373%
29	Rinah	Italy	3425%	99	Tylia Invest	France	1359%
30	Domator24.com	Poland	3419%	100	Enesco	Italy	1359%
31	UPLINK Network	Germany	3417%	101	ConceptIF Pro	Germany	1357%
32	Trouva	United Kingdom	3353%	102	Carcamovil	Spain	1354%
33	STA PORTAGE (H2S)	France	3271%	103	Tingopol	Estonia	1350%
34	SoftwareHut	Poland	3090%	104	Samy Road	Spain	1347%
35	Beattie Passive Group	United Kingdom	3027%	105	Grupo Grl (Élite Diseños)	Spain	1317%
36	Fensterblick	Germany	2926%	106	GAP Vehicle Hire	United Kingdom	1314%
37	Eskimoz	France	2900%	107	OTA Insight	United Kingdom	1312%
38	Indie Campers	Portugal	2878%	108	Priomold	Germany	1277%
39	Zonneplan	Netherlands	2807%	109	Nurole	United Kingdom	1276%
40	ITP Nord	Germany	2778%	110	Cru Wine	United Kingdom	1271%
41	Agriconomie	France	2697%	111	InnovaMaxx	Germany	1245%
42	Bettzeit	Germany	2662%	112	Signaturit Solutions	Spain	1227%
43	Blue Motor Finance	United Kingdom	2586%	113	P&W Bau	Germany	1226%
44	Vidsy Media	United Kingdom	2528%	114	Total Tiles	United Kingdom	1212%
45	Darktrace	United Kingdom	2446%	115	Epaper	Italy	1211%
46	Tekoma Marguč, d. o. o.	Slovenia	2377%	116	Kiwi.com	Czech Republic	1189%
47	Sorted Group	United Kingdom	2300%	117	Oradian	Croatia	1167%
48	Aparati, d. o. o.	Slovenia	2270%	118	Egari	France	1167%
49	FOSTEC & Company	Germany	2250%	119	GOVECS	Germany	1157%
50	Stillfront Group	Sweden	2222%	120	Stayincortina	Italy	1155%
51	Tappx	Spain	2157%	121	DMS	Germany	1135%
52	Payment Assist	United Kingdom	2140%	122	We Can Do HR	Poland	1132%
53	Workcapital	Spain	2126%	123	Univers Auto	France	1130%
54	Yoyo Wallet	United Kingdom	2103%	124	Crossflow Payments	United Kingdom	1127%
55	TMT International	Italy	2096%	125	Quantion	Spain	1117%
56	CBE, d. o. o.	Slovenia	2068%	126	Democom	Italy	1110%
57	SourceBreaker	United Kingdom	2021%	127	RTB House	Poland	1108%
58	GlassboxDigital UK	United Kingdom	2020%	128	FirstPhone	Hungary	1102%
59	LittleBIG Connection	France	1990%	129	YouLoveWords	France	1097%
60	Hostmaker	United Kingdom	1962%	130	Landbay Partners	United Kingdom	1089%
61	Golden Bees	France	1958%	131	Verocaffè Italia	Italy	1088%
62	Chez Nestor	France	1951%	132	Soorce	Germany	1085%
63	Solnet Green Energy	Finland	1926%	133	ISO Spaces South West	United Kingdom	1084%
64	Osiway	France	1909%	134	Voxpopme	United Kingdom	1080%
65	Nexumstp	Italy	1898%	135	Vadeca Facility Services	Portugal	1074%
66	MeP Trans	Estonia	1848%	136	Superprof	France	1072%
67	Bluwalk	Portugal	1811%	137	Typeform	Spain	1059%
68	Discover Car Hire	Latvia	1780%	138	Dipe Concept	France	1043%
69	Missoma	United Kingdom	1780%	139	Fitbox	Germany	1042%
70	Grapevine (The Insiders)	Netherlands	1757%	140	MF-CT, d. o. o.	Slovenia	1037%

High-Growth Firm	Country	Growth rate	High-Growth Firm	Country	Growth rate
141 Prodigy Group	United Kingdom	1026%	226 DataValue Consulting	France	760%
142 Pekarna Kaučič, d. o. o.	Slovenia	1025%	227 Seargin	Poland	760%
143 TBT	Italy	1023%	228 A.N.NE	Germany	759%
144 Biochem Organics	Romania	1020%	229 Fram Skandinavien	Sweden	755%
145 Malagris	Lithuania	1016%	230 Versoprobo	Italy	752%
146 Eltim, d. o. o.	Slovenia	1012%	231 Proficio Marketing	Czech Republic	750%
147 Applifting	Czech Republic	1011%	232 Reverse Media Group	United Kingdom	734%
148 MTM Ruhrzinn	Germany	1011%	233 Grabyo	United Kingdom	729%
149 Rezatec	United Kingdom	1009%	234 Housekeep	United Kingdom	727%
150 ACCENTA Music	Germany	1009%	235 Powerspace	France	727%
151 Facephi Biometria	Spain	1000%	236 DUSAPRO Immobilien	Germany	719%
152 Mia	Italy	993%	237 REMA-Solutions	Germany	715%
153 eila Consulting	Germany	992%	238 Eciglogistica	Spain	711%
154 Ankerkraut	Germany	978%	239 Forsyth Barnes	United Kingdom	706%
155 Comexim	Hungary	977%	240 Gute Marken Online	Germany	706%
156 Adsmurai	Spain	974%	241 New Wave Capital	United Kingdom	703%
157 2E Vertriebs-GmbH	Germany	973%	242 My Portage	France	703%
158 Beer52	United Kingdom	964%	243 Born Stahlbau	Germany	698%
159 Circle Imperium	Netherlands	963%	244 tecRacer Consulting	Germany	697%
160 Widget Brain Holding	Netherlands	963%	245 Medical Net	Italy	696%
161 Velotransport	Italy	961%	246 Eksist, d. o. o.	Slovenia	695%
162 Dani AFC, d. o. o.	Slovenia	956%	247 Midstream Lighting	United Kingdom	693%
163 Technobell, d. o. o. Koper	Slovenia	955%	248 Budišin, d. o. o.	Slovenia	693%
164 FIDUCIM	France	953%	249 Good one	Lithuania	691%
165 MatSMART in Scandinavia	Sweden	946%	250 Lapelle	Italy	685%
166 Moluna	Germany	945%	251 Goap, d. o. o.	Slovenia	682%
167 Metis	Germany	937%	252 Eesti Metsameister	Estonia	681%
168 CP Group	Germany	934%	253 Cookies Factory	Italy	681%
169 Ogury	United Kingdom	931%	254 MC2 Technologies	France	675%
170 Elements Talent Consultancy	United Kingdom	931%	255 Stavební Interiérové Systémy	Czech Republic	672%
171 Miyagi	Italy	923%	256 cosos	Germany	670%
172 ARES	France	918%	257 HalalBooking	United Kingdom	669%
173 Q Agency	Croatia	917%	258 Idento	France	668%
174 Binary Subject	Portugal	912%	259 T-WATT	Czech Republic	668%
175 KönigsKinder Immobilien	Germany	904%	260 DrDoctor	United Kingdom	665%
176 Macropix	Italy	903%	261 SKILLSDAY	France	665%
177 New Systems HandelsGmbH	Austria	902%	262 Sonarworks	Latvia	663%
178 Rojen Commerce	Romania	901%	263 griep Baulegistik	Germany	662%
179 YourParkingSpace	United Kingdom	901%	264 checkout.com	United Kingdom	662%
180 Infratech Bau	Germany	900%	265 ZeitWerk Personal	Germany	661%
181 n Dreams	United Kingdom	898%	266 Tresorit	Hungary	657%
182 Nova Cartotecnica Roberto.s	Italy	898%	267 Oxwork	France	657%
183 Geneplanet, d. o. o.	Slovenia	884%	268 STEPS	France	657%
184 Neuhoff Massivbau	Germany	868%	269 VIRTUS Lab	Poland	654%
185 HR XPERIENCE	Germany	863%	270 Aquis Exchange	United Kingdom	653%
186 Ogrodosfera	Poland	857%	271 Eco Pro	France	652%
187 Velvet Media Italia	Italy	857%	272 Maxi Engineering	Italy	648%
188 Sendcloud	Netherlands	853%	273 Alpha Real Estate Holding	Germany	647%
189 Ds Glass	Italy	852%	274 Kumulus Vape	France	646%
190 Liikennevirta	Finland	850%	275 Nuevo Conseil et Formation	France	645%
191 MetaMinds	Romania	845%	276 Recambios Endado	Spain	645%
192 Prestige Car Center	Finland	840%	277 SCA Investments (Gousto)	United Kingdom	637%
193 Eland Oil & Gas	United Kingdom	835%	278 Nu'Art Events	Italy	637%
194 InTradeLog	Hungary	829%	279 Noonie	Italy	635%
195 Gecko Labs	United Kingdom	826%	280 Brodynt Global	Spain	634%
196 Riedl CNC, d. o. o.	Slovenia	824%	281 Dolly Noire	Italy	634%
197 Silko	United Kingdom	822%	282 Ideria	France	634%
198 SOLSOL	Czech Republic	820%	283 Simples Analises	Portugal	627%
199 Ministry of Programming	Bosnia and Herz.	819%	284 Hyper Recruitment Solutions	United Kingdom	626%
200 Range Software Distribution	Germany	819%	285 Italianway	Italy	624%
201 Genius Sports Group	United Kingdom	814%	286 Rosano Dry Fruit	Italy	622%
202 ITP TECHNOLOGIE	France	813%	287 Gruppo Del Barba Consulting	Italy	621%
203 Letisan (RocketBaby)	Italy	813%	288 Oni Foods Overseas	Spain	618%
204 Štolfa GP, d. o. o.	Slovenia	812%	289 Žaga Pogorelc, d. o. o.	Slovenia	618%
205 Santigado	Portugal	809%	290 WeWATCH Security Service	Germany	612%
206 Kombitex	Germany	808%	291 SuperAwesome	United Kingdom	610%
207 Tower Hamlets GP Care Group	United Kingdom	801%	292 Vmway	Italy	609%
208 Mega tekstil, d. o. o.	Slovenia	800%	293 CLICKLEARN Aps	Denmark	603%
209 DEFAMA Deutsche Fachmarkt	Germany	800%	294 Dexatel	Estonia	601%
210 Etno Cafe	Poland	800%	295 BXR IndustrieService	Germany	601%
211 Lockwood Publishing	United Kingdom	800%	296 City Shop West Kiosk	Germany	600%
212 Plan Communications Holding	United Kingdom	798%	297 Helti	Finland	600%
213 Gipin, d. o. o.	Slovenia	798%	298 Zero	Italy	599%
214 Globalwork	Italy	792%	299 BKE Eisenbahn-Service	Germany	599%
215 Parlem Telecom	Spain	791%	300 Naio Technologies	France	594%
216 Anteco Systems (AnyTech365)	Spain	791%	301 Decor Leader	Italy	593%
217 Praesto, d. o. o.	Slovenia	782%	302 Nutrisslim, d. o. o.	Slovenia	593%
218 Xstream Codes	Bulgaria	781%	303 Standal	Spain	592%
219 Mobile Wave Solutions	Bulgaria	780%	304 Mytho	Italy	587%
220 Watt And Volt	Greece	776%	305 Motius	Germany	586%
221 84codes	Sweden	775%	306 Rumi Storitve	Slovenia	586%
222 VH24	Germany	773%	307 Herrero Brigantina	Spain	586%
223 Sagles, d. o. o.	Slovenia	771%	308 Lorefice & Ponzio	Italy	586%
224 JBR Capital	United Kingdom	770%	309 Qaiware	Bulgaria	582%
225 PlasmaPro	Estonia	769%	310 SIMWERT	Germany	580%

	High-Growth Firm	Country	Growth rate		High-Growth Firm	Country	Growth rate
311	507, d. o. o.	Slovenia	579%	396	Feroles, d. o. o.	Slovenia	473%
312	CogBooks	United Kingdom	577%	397	A..E. Genc Warenhandels	Germany	473%
313	Sierra Paper	Spain	575%	398	Prohit, d. o. o.	Slovenia	473%
314	INDOS Financial	United Kingdom	571%	399	truu wasserweik	Germany	471%
315	Ecosupply	Portugal	568%	400	Kolinpharma	Italy	471%
316	Streetec	Germany	568%	401	Mabotrans, d. o. o.	Slovenia	471%
317	Buzzoole	Italy	562%	402	GSM Telecom Products	Norway	470%
318	Cye Energia	Spain	562%	403	Reech	France	470%
319	Monterosa Productions	United Kingdom	560%	404	Mercur Commerce, d. o. o.	Slovenia	468%
320	Treves, d. o. o.	Slovenia	558%	405	Neo Systems	France	467%
321	PTM	Germany	556%	406	Fountain Partnership	United Kingdom	466%
322	SZM, d. o. o.	Slovenia	552%	407	FUGU	France	465%
323	Mapri, d. o. o.	Slovenia	550%	408	Iplan Gestión Integral	Spain	464%
324	Šeruga VAC, d. o. o.	Slovenia	549%	409	Majstrovina, d. o. o.	Slovenia	464%
325	Gioielleria Duca	Italy	547%	410	New adVentures	Portugal	463%
326	Epidemic Sound	Sweden	547%	411	Pulsar Photonics	Germany	463%
327	TECHPROS	Norway	547%	412	Podium Engineering	Italy	462%
328	gohenry	United Kingdom	543%	413	Vizolution	United Kingdom	462%
329	Northmill Group	Sweden	543%	414	Azuri Technologies	United Kingdom	460%
330	LBBZ	Germany	543%	415	Bitset, d. o. o.	Slovenia	460%
331	Solar Clim - BF Cote d'azur	France	542%	416	BigChange	United Kingdom	459%
332	Assetz Capital	United Kingdom	541%	417	A Day's March Shirts & Staples	Sweden	456%
333	Maxpay	Malta	541%	418	Intito	Finland	456%
334	HiveMQ	Germany	537%	419	Le Slip	France	456%
335	All Good	Poland	537%	420	Home Instead	Germany	455%
336	freestyle	Germany	537%	421	Schneider Financial Solutions	United Kingdom	454%
337	New Truck	Italy	536%	422	ARCESI Occitanie	France	452%
338	Scribbr	Netherlands	532%	423	CSHARK	Poland	452%
339	Heart Apartments	Italy	531%	424	Fill Up Média	France	449%
340	GpasPlus	France	530%	425	Bunker Partner	Estonia	447%
341	Pharazon (PHZ Full Stack)	Finland	529%	426	Holla Online	Finland	446%
342	Personalhaus Bielefeld	Germany	529%	427	lengoo	Germany	446%
343	CLAREO	France	529%	428	ELS Express Logistik Service	Germany	443%
344	Comal Impianti	Italy	527%	429	GROUPE INOVEFA	France	441%
345	C-Astral, d. o. o.	Slovenia	526%	430	Eco CO2	France	441%
346	SPG Steiner	Germany	524%	431	Pan-Jan, d. o. o.	Slovenia	439%
347	Velocity Outlet	United Kingdom	522%	432	Torsion Group	United Kingdom	433%
348	Laser Wire Solutions	United Kingdom	520%	433	ETYO	France	433%
349	CO.NET	Germany	520%	434	Fb.M.	Italy	431%
350	Phenofarm	Italy	519%	435	Farmacosmo	Italy	431%
351	AlterBoutique	France	519%	436	Famoco	France	430%
352	myElefant	France	519%	437	Da.Dif Consulting	Italy	430%
353	Senergica	Italy	518%	438	B-MB, d. o. o.	Slovenia	429%
354	Global Control 5	Poland	517%	439	Durophan Handelsgesellschaft	Germany	428%
355	VIPCON	Germany	516%	440	SI Frais Distribution	France	428%
356	innercircle	Germany	515%	441	A.B.C., d. o. o.	Slovenia	427%
357	Vialterra Infraestructuras	Spain	515%	442	Quickcom	Italy	427%
358	Alprem oprema, d. o. o.	Slovenia	515%	443	Sonet plus, d. o. o.	Slovenia	427%
359	Burgar-teh, d. o. o.	Slovenia	514%	444	MPPM, d. o. o.	Slovenia	426%
360	Transmission	United Kingdom	513%	445	Lämpö-Valli	Finland	426%
361	Zelená pošta	Slovakia	512%	446	Bauer Energiekonzepte	Germany	426%
362	Rhenus logistika, d. o. o.	Slovenia	509%	447	T1 Solution	Czech Republic	424%
363	Trans and Trade 1	Bulgaria	509%	448	Super, d. o. o.	Slovenia	424%
364	SILKHOM	France	508%	449	Tavan Tiefbau	Germany	422%
365	Dato avtomatizacija, d. o. o.	Slovenia	508%	450	Links, d. o. o.	Slovenia	422%
366	LIT Tranzit, d. o. o.	Slovenia	507%	451	SOS sejemске rešitve, d. o. o.	Slovenia	421%
367	Rocksteady Music School	United Kingdom	505%	452	Workable Software	United Kingdom	420%
368	Botron Software Solutions	Bulgaria	503%	453	Lestro-Ledinek, d. o. o.	Slovenia	420%
369	Kariera, d. o. o.	Slovenia	502%	454	eSMART Technologies	Switzerland	419%
370	CSG (Greencell)	Poland	502%	455	Tropic Skincare	United Kingdom	418%
371	JSC Medium Group	Lithuania	500%	456	cerascreen	Germany	417%
372	WED2B	United Kingdom	500%	457	Dein Stellplatz	Germany	417%
373	Xcede Recruitment	United Kingdom	497%	458	Lazer Lamps	United Kingdom	416%
374	LEAD Consult	Bulgaria	494%	459	Awinsi Technologies	France	416%
375	Cloudi-Fi	France	494%	460	Nanushka International	Hungary	415%
376	Pergola, d. o. o.	Slovenia	492%	461	Energia, Innovación y Desarrollo F.	Spain	415%
377	C2A	France	492%	462	Branchspace	United Kingdom	413%
378	Fast-Up Partners	France	489%	463	B-Open Solutions	Italy	413%
379	AFR-IX Telecom	Spain	489%	464	UAB Incorpus	Lithuania	412%
380	StillKom	Norway	489%	465	Aconity3D	Germany	412%
381	raumweltheiss	Germany	487%	466	Bitnet Systems	Romania	412%
382	MyPostcard.com	Germany	485%	467	nanosun	Czech Republic	411%
383	Arpilabe	France	485%	468	PR, d. o. o.	Slovenia	411%
384	I.C.E.	Italy	484%	469	Genba Digital	United Kingdom	409%
385	Alternativa Impianti	Italy	483%	470	GoodCall	Czech Republic	409%
386	Impera, d. o. o.	Slovenia	483%	471	DairyLac	Spain	409%
387	NowaLed	Poland	482%	472	ON ZE AIR	France	409%
388	Rosenbauer, d. o. o.	Slovenia	480%	473	Famiani skupina, d. o. o.	Slovenia	409%
389	bizforward	Germany	477%	474	Pomorska Platforma Pracy	Poland	409%
390	Globalis Viagens e Eventos Corp.	Portugal	476%	475	Ekipa2, d. o. o.	Slovenia	408%
391	Forever Entertainment	Poland	475%	476	Financial Consulting Lab	Italy	408%
392	Cablex Plastik, d. o. o.	Slovenia	475%	477	L - Inox, d. o. o.	Slovenia	408%
393	Excaster	Lithuania	474%	478	MOORE	France	408%
394	Rotra, trgovina, d. o. o.	Slovenia	474%	479	Treesystem	Italy	408%
395	Adrenaline X-Treme Adv. Group	Italy	473%	480	Audensiel	France	407%

High-Growth Firm	Country	Growth rate	High-Growth Firm	Country	Growth rate
481 <i>Tips, d. o. o.</i>	Slovenia	407%	545 <i>Varovanje Galekom, d. o. o.</i>	Slovenia	370%
482 <i>Simes, d. o. o.</i>	Slovenia	406%	546 WILLIE BEAMEN	France	369%
483 Basemark	Finland	405%	547 <i>Kompas Novo mesto, d. o. o.</i>	Slovenia	369%
484 <i>Tegar, d. o. o.</i>	Slovenia	404%	548 <i>Interstar, d. o. o.</i>	Slovenia	368%
485 <i>Lesnina MG oprema, d. d.</i>	Slovenia	402%	549 <i>Arhel, d. o. o.</i>	Slovenia	368%
486 Synapsy	Italy	402%	550 SitemMotori Elettrici	Italy	366%
487 <i>Enerdat - S, d. o. o.</i>	Slovenia	401%	551 Fekra Consulting	France	366%
488 OBIZ CONCEPT	France	401%	552 Enark	Slovakia	366%
489 Edubroker	Poland	401%	553 <i>Te-Tis Testen, d. o. o.</i>	Slovenia	365%
490 Werksräder24	Germany	400%	554 <i>Aluvar, d. o. o.</i>	Slovenia	365%
491 Upgrade	Italy	399%	555 Res green Europe	Spain	365%
492 <i>Conditus, d. o. o.</i>	Slovenia	398%	556 <i>Aplast, d. o. o.</i>	Slovenia	364%
493 Edilbiangi	Italy	398%	557 IS Prime	United Kingdom	363%
494 KBS Group	Germany	398%	558 Almac	Italy	363%
495 B&M GmbH	Germany	398%	559 GPS	Germany	363%
496 Fokus Premium	Poland	397%	560 Communis Projektbau	Germany	362%
497 <i>D' agencija, d. o. o.</i>	Slovenia	396%	561 Novastar	Greece	361%
498 VanMoof Global Holding	Netherlands	394%	562 <i>Ledinek Engineering, d. o. o.</i>	Slovenia	361%
499 Stiltz	United Kingdom	392%	563 ITFS	Poland	361%
500 <i>Stilles, d. o. o.</i>	Slovenia	392%	564 <i>Don Don, d. o. o.</i>	Slovenia	361%
501 <i>Haberkorn, d. o. o.</i>	Slovenia	392%	565 <i>Avtoservis Koper, d. o. o.</i>	Slovenia	360%
502 AerFin	United Kingdom	391%	566 ContactEngine	United Kingdom	360%
503 France Bières	France	390%	567 Peter Kenkel	Germany	360%
504 STEBU	Germany	390%	568 hedgehog lab	United Kingdom	359%
505 Microblink	Croatia	390%	569 Innocv Solutions	Spain	358%
506 Omnia Group	Italy	389%	570 <i>Victus, d. o. o.</i>	Slovenia	358%
507 Versandmanufaktur	Germany	388%	571 <i>Sgerm, d. o. o.</i>	Slovenia	357%
508 Autovia	Italy	388%	572 Alpha FX Group	United Kingdom	357%
509 MC Conseil	France	387%	573 Castel	Italy	356%
510 Intellienergy	Italy	387%	574 mVISE	Germany	356%
511 Younited Credit	France	387%	575 <i>Resal, d. o. o.</i>	Slovenia	355%
512 Unify Communications	United Kingdom	386%	576 <i>Mežnar, d. o. o.</i>	Slovenia	354%
513 Readly International	Sweden	385%	577 Thiga	France	354%
514 <i>Fering fam, d. o. o.</i>	Slovenia	385%	578 <i>Škerjanc, d. o. o.</i>	Slovenia	353%
515 <i>Regius, d. o. o.</i>	Slovenia	384%	579 <i>Virš, d. o. o.</i>	Slovenia	353%
516 <i>Zaum, d. o. o.</i>	Slovenia	384%	580 Pekrul ProjektPartner	Germany	353%
517 <i>Mizarstvo Košak, d. o. o.</i>	Slovenia	383%	581 <i>Solid World, d. o. o.</i>	Slovenia	352%
518 Go Concept	France	383%	582 We Exhibit	Italy	352%
519 Demaroller	Germany	383%	583 <i>Willy Stadler, d. o. o.</i>	Slovenia	350%
520 Axopar Boats	Finland	383%	584 Prima Solutions	France	350%
521 The Currency Cloud Group	United Kingdom	382%	585 GomSpace Group	Sweden	350%
522 E-Novia	Italy	381%	586 Tarlogic Security	Spain	349%
523 KEROC	Norway	381%	587 Signor Prestito	Italy	348%
524 DCMN	Germany	381%	588 <i>Berus, d. o. o.</i>	Slovenia	348%
525 <i>MBS vzdrževanje, d. o. o.</i>	Slovenia	380%	589 <i>Vaukan, d. o. o.</i>	Slovenia	348%
526 <i>Liko, d. d.</i>	Slovenia	379%	590 Kiddus Accesorios	Spain	348%
527 FPTP	France	379%	591 <i>Lipar, d. o. o.</i>	Slovenia	347%
528 IGW	Italy	379%	592 RadarServices Smart IT-Security	Austria	347%
529 <i>Coatransporti, d. o. o.</i>	Slovenia	378%	593 <i>A-sprint, d. o. o.</i>	Slovenia	346%
530 <i>T-Momo, d. o. o.</i>	Slovenia	378%	594 <i>Darson, d. o. o.</i>	Slovenia	346%
531 Bulchicken JSC	Bulgaria	377%	595 <i>Ni-Mi, d. o. o.</i>	Slovenia	346%
532 halsdorfer + ingenieure projekt	Germany	377%	596 SGS Facility Management	Germany	345%
533 Norma Meccanica	Italy	376%	597 MyChauffage.com	France	344%
534 Catalyx	Switzerland	376%	598 CCHG (VPZ)	United Kingdom	344%
535 Joannes Distribution	France	374%	599 Fincite	Germany	344%
536 Mediterranean Food Solutions	France	374%	600 <i>Kalit, d. o. o.</i>	Slovenia	344%
537 <i>Ino, d. o. o.</i>	Slovenia	373%	601 Cerámicas Anoru	Spain	344%
538 <i>Solis Straža, d. o. o.</i>	Slovenia	373%	602 Kleine Riesen Nord	Germany	344%
539 <i>Dorssen hrm, d. O. O.</i>	Slovenia	372%	603 <i>Protekt Dolenjska, d. o. o.</i>	Slovenia	343%
540 Infinum	Croatia	372%	604 <i>Euro Grad, d. o. o.</i>	Slovenia	343%
541 Rexy	Czech Republic	372%	605 <i>OKK, d. o. o.</i>	Slovenia	343%
542 WKND	Latvia	371%	606 <i>MDT & T, d. o. o.</i>	Slovenia	343%
543 <i>3fs, d. o. o.</i>	Slovenia	371%	607 Kyo Electric	Spain	342%
544 Aura	Italy	370%	608 Ergos Technology	Spain	342%

Stojan Črv is a doctoral student of Quality Management at the Faculty of Organization Studies in Novo mesto. He has a Master's Degree in Business Sciences and a BSc in Mechanical Engineering. He has also completed the Six Sigma Black Belt training. Mr Črv has been working in the field of quality for more than 20 years and is the quality manager at industrial enterprise ITW Appliance Components d.o.o., which is a part of the American multinational corporation ITW. He is also an external or leading auditor of the quality management system according to ISO 9001 standard, of the environmental management system according to ISO 14001 standard as well as of the occupational health and safety management system according to ISO 45001 standard.

Povzetek:

Položaj slovenskih hitro rastočih podjetij v evropskem prostoru

Namen in izvirnost: Namen te raziskave je bil predstaviti položaj slovenskih hitro rastočih podjetij oziroma gazel v evropskem prostoru in izvesti primerjavo slovenskih hitro rastočih podjetij z evropskimi z vidika stopnje rasti. Raziskava temelji na sistematičnem pregledu hitro rastočih podjetij in njihovem položaju v Sloveniji in Evropi. Prav primerjava podatkov o slovenskih hitro rastočih podjetij in tistih v evropskem prostoru omogoča umestitev slovenskih hitro rastočih podjetij v širši evropski prostor.

Metoda: Raziskava temelji na sistematičnem pregledu lestvice časopisne hiše Financial Times 1.000 najhitreje rastočih podjetij v Evropi in lestvice časopisne hiše Dnevnik 500 najhitreje rastočih podjetij v Sloveniji ter podatkih, pridobljenih iz statističnega urada Evropske unije in Slovenije. Z uporabo programske opreme Minitab smo preverili normalnost porazdelitve obravnavanih podatkov, izvedli transformacijo nenormalno porazdeljenih podatkov ter izračunali Pearsonov koeficient korelacije »r« med posameznimi obravnavanimi faktorji, na podlagi katerih smo nato izvedli potrditev postavljenih hipotez. Distribucijo podatkov smo prikazali s pareto in stolpnimi grafikoni.

Rezultati: Raziskava je pokazala položaj slovenskih hitro rastočih podjetij v evropskem prostoru. Glede na ugotovitve raziskave je razvidno, da so tako slovenska kot evropska hitro rastoča podjetja v večini manjše organizacije. Največ hitro rastočih podjetij v evropskem prostoru je v Nemčiji, medtem ko je največ takih podjetij v Sloveniji v Osrednjeslovenski regiji. Stopnja rasti hitro rastočih slovenskih in evropskih podjetij je primerljiva, višina prihodkov od prodaje in število zaposlenih ne izkazujeta vpliva na stopnjo rasti podjetja, bruto domači proizvod pa na drugi strani pozitivno prispeva k stopnji rasti. S primerjavo v raziskavi obravnavanih slovenskih in evropskih hitro rastočih podjetij smo ugotovili, da evropska izkazujejo višjo stopnjo rasti kot slovenska, iz vidika prihodkov od prodaje pa so med seboj primerljiva.

Družba: Raziskava omogoča boljšo prepoznavnost hitro rastočih podjetij v družbi. Iz tega naslova lahko širša družba oceni vpliv, delovanje in socialno odgovornost hitro rastočih podjetij v določenem okolju. Nenazadnje lahko tudi boljša informiranost družbe pozitivno prispeva k uspešnosti hitro rastočih podjetij.

Omejitve/nadaljnje raziskovanje: Raziskava je omejena na primerjavo slovenskih hitro rastočih podjetij s tistimi v evropskem prostoru na podlagi dveh lestvic hitro rastočih podjetij. Glede na dejstvo, da je Slovenija v skupnem evropskem prostoru majhna država, bi bilo primerno izvesti raziskavo oziroma primerjavo z manjšimi evropskimi državami in umestiti slovenska hitro rastoča podjetja v tej skupini, ali pa uporabiti več reprezentativnih lestvic in obstoječo raziskavo ponoviti.

Ključne besede: hitro rastoča podjetja, gazele, Slovenija, Evropa, kazalniki podjetij, stopnja rasti.

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