Trendy v podnikání, roč. 6, číslo Special Issue, s. 4-10, 2016.
Business Trends, vol. 6, no. Special Issue, p. 4-10, 2016.

INFLUENCE OF STRATEGIC MANAGEMENT IN CZECH SMES AND THEIR GROWTH RATE

Jaroslav Vrchota[1], Petr Řehoř[2], Monika Maříková[3], Ladislav Rolínek[4]
[1] Ing. Jaroslav Vrchota, Ph.D., University of South Bohemia in Č. Budějovice, Faculty of Economics, vrchota@ef.jcu.cz
[2] doc. Ing. Petr Řehoř, Ph.D., University of South Bohemia in Č. Budějovice, Faculty of Economics, rehor@ef.jcu.cz
[3] Ing. Monika Maříková, University of South Bohemia in Č. Budějovice, Faculty of Economics, marikova@ef.jcu.cz
[4] doc. Ing. Ladislav Rolínek, Ph.D., University of South Bohemia in Č. Budějovice, Faculty of Economics, rolinek@ef.jcu.cz

Abstract: The aim of the managers in SMEs is to have a competitive enterprise on the market, to develop and achieve some positive results. The successful strategic management has to adapt to the external environment, analyse emerging issues in time and react quickly and flexibly to changes. With the increasing amounts of business entities, strategic analysis and strategy as such acquire their importance. The basic data for the creation of strategy includes information about the external environment, i.e. about the market and its surroundings and internal business environment. Those managers, who can use the advantages of their enterprise and market opportunities and reduce the effect of weaknesses and threats, may ensure their enterprise prosperity and increase their growth rate. However, they must choose a competitive strategy, with which it is possible to succeed on the market. Such strategy provides SMEs the possibility of differentiation, setting a higher level of services offered to enhance customer satisfaction which is the most important. The paper deals with finding whether the strategic management of SME influences the growth rate of an enterprise. Data were gathered as questionnaires and interviews from 183 enterprises operating in the Czech Republic. The research was made in the period of 2014-15.

Keywords: strategy, growth rate, SME, management, sectors of economy

JEL Classification: M10, L20

INTRODUCTION

Sectors of SMEs are variable and dynamic. Continuous monitoring and analysis of the environment is a key strategic task of top managers. Responding organizations to environmental changes are the conditions of their survival in a competitive environment (Pošvář, Erbes, 2002). All sectors of the SMEs are characterized by certain developments and trends, which gradually or even very intermittently causes the industry changes that require a strategic response of the participating businesses. Life cycle industry is heavily dependent on the development of demand, which is then reflected in the growth rate of the industry. An important characteristic of industry are competitive forces that operate in the sector. They affect the success of the enterprise (Sedláčková, Buchta, 2006).

The traditional method is Porter's five forces model – there are new entrants; threats of substitutes; bargaining power of buyers and suppliers; and industry rivalry (Porter, 1994). These dynamic factors determine the profitability of the sector because they influence the prices, costs and required investments of enterprises in the industry (Porter, 1993). If an organization has a mission and goals, the managers know what they want. The next task for managers is to determine how the objectives can be achieved. This task will not only determine the strategy (Donnelly, Gibson and Ivancevich, 2007).

As reported by Sedláčková (2006), a strategy focuses on building the company's unique position within the industry. Strategies and goals are strongly influenced by the attractiveness of the field in which the company operates and its strategic situation as a whole (Keřkovský, Vykypěl, 2003). Strategy is about how an organization sets about getting to where it wants to get (Thompson, Martin, 2010). Developing organisational strategy can help organisations and destination to avoid or limit the severity of rapid change induced by crises or disasters (Ritchie, 2004). It is crucial that every company has clearly defined conception of their future. They define this conception by clear and proper strategy (Řehoř, 2013). The ability of business owners/managers to think strategically in the midst of a crisis is a key factor in an organisation's long-term survival, but at present there is very little advice available on how to do this most effectively (Vargo, Seville, 2011). The field of strategic management is largely concerned with how firms generate and sustain competitive advantage (Ambrosini, Bowman, 2009).

The macroeconomic environment influences the SMEs by an expected growth rate of the economy, the state fiscal policy, monetary offering, expected interest rates, inflation, etc. (Synek, et al., 2011). An entrepreneur or a top manager must be almost equally interested in both prosperity and continuity of the development and performance improvement company (growth rate) and on the prevention, monitoring and risk management, including crisis management.

The key points that should be respected strategic management include:

- As the factors of prosperity - the tendency to associate, focus on entrepreneurship in high-technology,
- As the factors of crisis - eliminating risks leading to reduction or termination of business activities either by virtue of factual or economic crisis (Veber, Srpová, 2012).

If an enterprise grows, it means that the market is interested in the production or services, its management is successful in their work and the enterprise is profitable. The phenomenal aspect of the growth rate of an enterprise is mainly revenue growth (turnover). If sales grow, then usually there is also a need for additional investment not only in buildings, machinery and equipment to provide additional storage capacity, but also need to cover the increase in working capital. Business growth is therefore connected to expanding its activities, but it also raises more risk arising precisely from the growth. Consideration of the "correct" growth rate of an enterprise is one of the strategic decisions of managers (Synek, et al., 2011).

In an enterprise, sustainable growth, high growth or too low growth can be seen. The key measure is the rate of revenue growth. The growth rate is derived from the opportunities of the enterprise market products and services, partly from the possibility of financing growth, i.e. how much and in what structure will be necessary to provide additional resources.

To quantify the growth rate of an enterprise (g) the following formula derived from internal parameters of functioning of the enterprise is usually used:

- g = (sustainable) growth rate
- P = return on sales (Profit / Sales)
- R = activation ratio (1 - Dividend / Earnings per share)
- A = asset turnover (sales / assets)
- T = financial leverage (assets / equity) (Synek, et al., 2011).

Business growth, however, can be solved by an entirely different form. It offers various forms of bonding or splitting enterprises. The most important include:

- A merger - the combination of two or more companies into one,
- Splitting - the original company is split into two (or more businesses), one of which expires and its assets are sold off (Veber, Srpová, 2012).

1. MATERIALS AND METHODS

The aim of this paper is to compare the effect of strategic management at the growth rate of SMEs in Czech Republic. As part of the calculation was laid null hypothesis that the strategic and non-strategic businesses achieve similar growth rates and the alternative hypothesis that strategically managed

enterprises achieve greater growth rates. Data acquisition was carried out under the projects of Gaju 79/2013/S and Gaju 053/2016/S through questionnaires and interviews in 183 companies from the Czech Republic between 2014 and 2015.

A partial objective is to evaluate the relation between the importance of strategic management and a growth of rate within the sectors of the national economy as classified by OECD (2014) at:

- A1 Industry: High and Medium High Technology
- A2 Industry: Medium Low and Low Technology
- B1 Knowledge-intensive market services
- B2 Less knowledge-intensive market services
- C Agriculture, construction and utilities

For the purposes of this paper, an enterprise with strategic management was considered to be an enterprise that said in the survey they have a strategy; as also reported by some authors. Strategic management and strategy are inseparable concepts. Keřkovský and Vykypěl (2006) perceive the strategy itself as a focal point of strategic management. Fotr, et al. (2012) writes that strategy is the core of strategic management. As reported by Dedouchová (2001), a good corporate strategy is one of the basic tools of strategic management and it is vitally important for the successful long-term development of an enterprise.

Data were tested using two-sample Wilcoxon test and his asymptotic variant. This test is a non-parametrical two-sample test, which is most frequently used, when the condition of data normality is not met. Let X1, ..., Xn and Y1, ..., Ym be two independent random samples from two continuous distributions, whose distribution functions can only differ in displacement. x0,50, y0,50 states for the median of the first and second distribution. The hypothesis that the distribution functions of the two distributions are the same is always tested, in other words, the medians are tested for equality. The result of test is compared to the alternative hypothesis (the first of medians x0,50 of companies which have strategies, is greater than the latter) (Freund, Wilson, et al. 2010; Friedrich, Majovská 2010).

In the first stage, all (n + m) values X1, ..., Xn and Y1, ..., Ym are arranged in ascending order by size. The entire process takes place electronically using test statistics software and this step is not described in the article, because it is a lapidary operation. Furthermore, the totals of orders X1, ..., Xn are identified and stated as T1. The sum of the values in the order of companies which do not have strategy Y1, ..., Ym will be stated as T2. The next step was to calculate the test statistics for U1 and U2, while applies that U1 + U2 = mn (Friedrich, Majovská, 2010).

If statistics min {U_(1,) U_2 } ≥ tabulated critical value, for the selected ranges of both selections and chosen level of significance, then than we may reject the null hypothesis of the identity of the compared groups on the significance level α = 0.05 and α = 0.1. Since for both samples in all test cases applies that n, m are greater than 30 the asymptotic variant of the Wilcoxon test (Mann-Whitney test) is undertaken, which is used for n and m higher than thirty (Budíková, Králová, 2010, Wonnacot, 1995). Critical codomain for right-side alternative id W= <K2,n>. Non-negative values k1 and k2 are strictly defined in critical literature. H0 is rejected on the level of significance α, if U0∈W (Freund, Wilson, et al., 2010, Friedrich, Majovská, 2010).

2. RESULTS AND DISCUSSIONS

Using a two-tailed Wilcoxon test (Mann-Whitney U test) at the chosen significance level α = 0.05, where X = Strategic Management and Y = nonstrategic management hypotheses H0 = x0,50 - y0,50 HA = 0 and = x0,50> y0,50 are tested for the entire sample of 183 businesses and individual sector enterprises divided according to the OECD. For greater clarity, the final data of the software Statistics are summarized in the following Table 1, and each category accompanied by a graphic representation of results and a brief commentary.

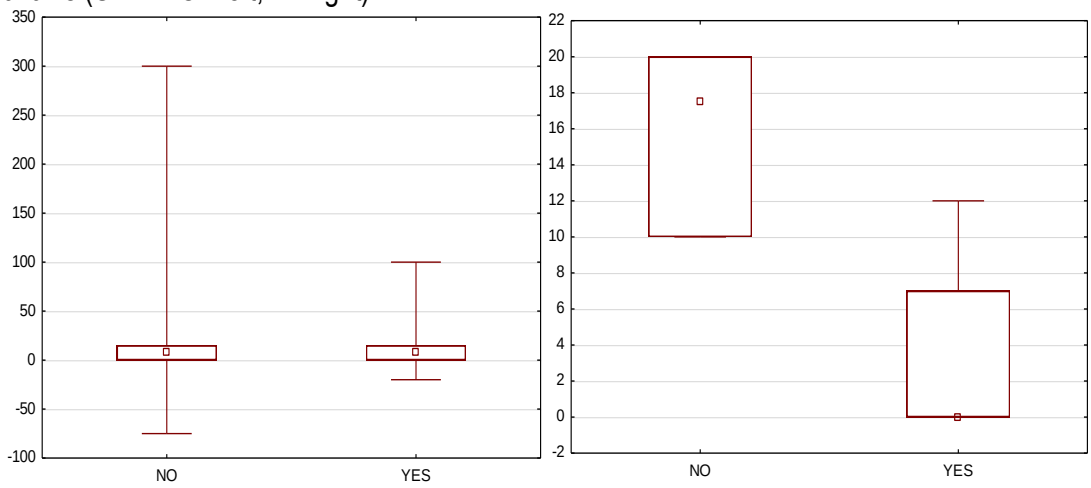
Tab. 1: Mann-Whitney U test: The relation of strategic and non-strategic businesses and the growth rate

	NO	YES	U	Z	p-value
SME - CZ	12726,00	4110,000	3075,000	0,095600	0,923838
A1	72,00000	48,00000	3,000000	2,769502	0,005615
A2	287,0000	178,0000	77,00000	-0,989868	0,322239
B1	828,0000	162,0000	117,0000	1,163829	0,244494
B2	1347,000	483,0000	171,0000	-2,15298	0,031321
C	499,0000	96,00000	64,00000	-0,389012	0,697268

Source: authors

As seen from the results, we failed to reject the null hypothesis for the entire sample of 183 companies and demonstrate the different growth rate for strategic and nonstrategic enterprises at a significance level α = 0.05. The box plot (Figure 1) however, shows differences in maximum and minimum values, whereas the medians in both samples are similar.

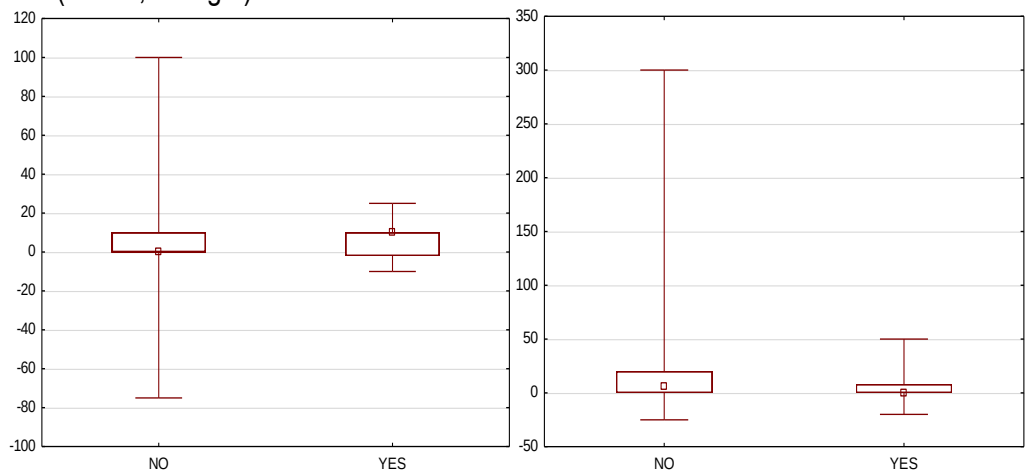
Fig. 1: Box plot of strategically and non-strategically managed enterprises with their growth rate on the vertical axis (SME – CZ left, A1 right)



Source: authors

For a sample of enterprises A1 (production of metals, chemicals, electrical machinery, cars), we managed to reject the null hypothesis in favour of the alternative hypothesis through p-value = 0.0056. Strategic management has worse outcomes, as confirmed by the graphical representation (Figure 1, A1 right). The median of the enterprises with strategic management is at 0% growth rate, compared to the 17.5% growth rate of enterprises without the strategy.

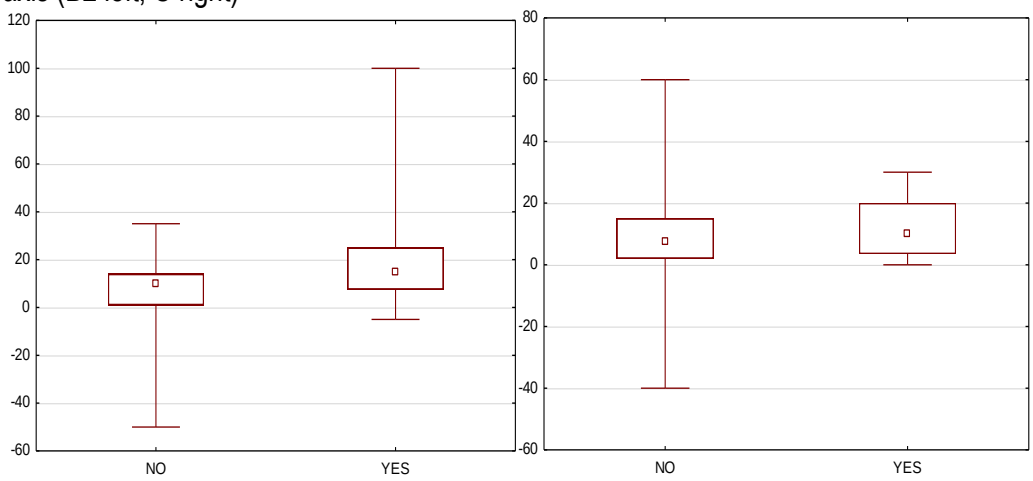
Fig. 2: Box plot of strategically and non-strategically managed enterprises with their growth rate on the vertical axis (A2 left, B1 right)



Source: authors

For the enterprises in the categories of A2, B1 and C, we failed to reject the null hypothesis at a significance level of alpha. The graphical representation (Figure 2 and 3) as seen in the box plot illustrates the relatively high dispersion in maximum and minimum values in all groups. Enterprises focusing on trade, hotels and restaurants, public administration and defence in B2 group are different, as confirmed by the p-value = 0.031, which is lower than the alpha, which makes them able to reject the null hypothesis in favour of right-sided alternative hypothesis that saying that strategic management achieve higher growth rates than that those who do not benefit from the strategy.

Fig. 3: Box plot of strategically and non-strategically managed enterprises with their growth rate on the vertical axis (B2 left, C right)



Source: authors

Results of the Statistica software also confirmed the Figure 3 (B2 left) where it is seen that the maximum value in the group of strategically managed enterprises are at 100%, compared to 37% in the second group. Also, the minimum values for sample nonstrategic enterprises managed at the level of -45% compared to strategically manage at the level of -5%. Both groups have positive values of the upper and lower quartiles.

CONCLUSION

Currently, the SMEs operate in a turbulent environment that is constantly changing. For the enterprises it means threats but also potential opportunities to gain a comparative advantage in the competition. All businesses

should strive to align their activities with the current changes. The changes are more frequent and more dramatic, still less predictable. Each market is differentiated in their conditions, how to motivate customers, and how they compete. The reconciliation process should be directed to a greater susceptibility to potential opportunities. Understanding these aspects of the sectoral environment is a prerequisite for an effective strategy. An important role in this process is the strategic analysis of opportunities and threats, which also examines the capabilities and resources of an enterprise.

According to survey results, only 1/4 from a total of 183 organizations in Czech Republic formulated their strategy. The organizations managed this way can adapt to changes in the environment. They also can flexibly change its strategy and fight against potential crises. Unfortunately, almost 3/4 of SME managers in the Czech Republic are not yet able to look further into the future. In SMEs, each manager who wants to be successful should build a clear strategic plan, which would involve the most detailed information about the market. Properly formulated mission and objectives, both qualitative and quantitative, and related strategies must be "tailored" for each enterprise (as confirmed by Synek, 2011). But there is no universal strategy that would guarantee the excellent level of profitability and high growth rates. It's not just the right strategy formulation, its implementation, which only brings real effect and grow the business must follow.

If an organization has a mission and goals, the managers know what they want. If an enterprise grows, it means that the market is interested in the production or services, its management is successful in their work and the enterprise is profitable. The phenomenal aspect of the growth rate of an enterprise is mainly revenue growth (turnover).

The authors reported a surprising result. Although, they expected that managers of SMEs with strategic management of future plans of their organization will achieve a higher growth rate; within hypothesis testing, however, they failed to prove that enterprises of the sample that have their strategy and are therefore strategically managed would achieve greater growth rates. Enterprises with strategic management achieve similar growth rates to those without strategic management. During a detailed analysis of the sector, the impact of the strategy on growth rate was confirmed for technologically demanding industry (A1 – there is a negative effect, because the growth rate is lower) and less knowledge-intensive services (B2 - enterprises achieve higher growth rates).

These results may be related to the fact that each MSP includes a unique group of resources and capabilities of their managers and human resources. Achieving success is not so different in different sectors, but also within a sector where changes in competitive conditions and driving forces take place. According to the results of the paper, it cannot be confirmed that the formulation of strategy and strategic management affects the growth rate in organizations.

Although growth is connected to expanding the activities, and therefore is seen as favourable season, at the same time it is worth nothing that many businesses cannot cope with the situation in the period of growth. This may lead to their demise. To ensure that this scenario does not become actual fact, an enterprise should prevent such situation by product innovation and adequate quality (as stated by Veber, Srpová, 2012). Due to globalization, the emergence and development of new technologies and industries, small and medium-sized businesses have more chances to expand in new fields and in new markets. Accession to the European Union also enabled these enterprises to use subsidies and grants that make each area of business much more profitable.

This paper was supported by GAJU 79/2013 / S and GAJU 053/2016/S.

REFERENCES

Ambrosini, V., Bowman, C. (2009). What are dynamic capabilities and are they a useful construct in strategic management? *International Journal of Management Reviews*, 11 (1), 29–49.

Budíková, M., Králová, M. (2010). *Průvodce základními statistickými metodami*. Praha: Grada.

Dedouchová, M. (2001). *Strategie podniku*. Praha: C H Beck.

Donnelly, J.H., Gibson, J.L. and Ivancevich, J.M. (2007). *Management.* Praha: Grada.

Fotr, J., Vacík, E., Souček, I., Špaček, M. and Hájek, S. (2012). *Tvorba strategie a strategické plánování: Teorie a praxe*. Praha: Grada Publishing a.s.

Freund, R. J., Wilson, W. J. (2010). *Statistical methods*. Boston: Elsevier.

Friedrich, V., Majovská, R. (2010). *Výběr z ekonomické statistiky: od OECD k České republice.* Praha: Wolters Kluwer Česká republika.

Furková, A. (2014). Multiple selections of alternatives under constraints: Case study of European Countries in area of research and development, Plzeň, *Trendy v podnikání* 5(1).

Keřkovský, M., Vykypěl, O. (2006). *Strategické řízení. Teorie pro praxi*. Praha: C.H.Beck.

OECD (2014). *Eurostat indicators on High-tech industry and Knowledge - intensive services. Annex 3 – High-tech aggregation by NACE Rev. 2*. Retrieved September 2015. from http://ec.europa.eu/eurostat/cache/metadata/Annexes/htec_esms_an3.pdf

Porter, M.E. (1994). K*onkurenční strategie*. Praha: Victoria Publishing.

Porter, M.E. (1993). *Konkurenční výhoda*. Praha: Victoria Publishing.

Pošvář, Z., Erbes, J. (2002). *Management*. Brno: MZLU.

Ritchie, B.W. (2004). Chaos, crises and disasters: a strategic approach to crisis management in the tourism industry. *Tourism management,* 25(6), 669-683.

Řehoř, P. (2013). Municipal management strategies of regional development and quantification the position of regions. *Journal of Central European Agricultere*, 14(3), 197-208.

Sedláčková, H., Buchta, K. (2006). *Strategická analýza*. Praha: C.H.Beck.

Synek, M. et al. (2011). *Manažerská ekonomika.* Praha: Grada.

Thompson, J.L., Martin, F. (2010). *Strategic management*. Awareness and change. South-Western publishing.

Ubrežiová, I., Mura, L. and Kozáková, J. (2014) Pozicia malých a stredných podnikov SR v kontexte internacionalizacie podnikania. Plzeň, *Trendy v podnikání*, 4(3).

Vargo, J., Seville, E. (2011). Crisis strategic planning for SMEs: finding the silver lining. *International Journal of Production Research*, 49(18).

Veber, J., Srpová, J. a kol. (2012). *Podnikání malé a střední firmy*. Praha: Grada.

Vrchota, J., Švárová, M. and Kubecová, J. (2014). Vnímání rizik z hlediska doby působení na trhu. Plzeň, *Trendy v podnikání*, 4.

Wonnacot, T. H. (1995). *Statistika pro obchod a hospodářství*. Praha: Victoria Publishing.