SME LIFE CYCLE MODEL UNDER GLOBALIZATION
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Abstract
The importance of SMEs for economy has been confirmed by a number of global and European studies. However, SMEs are more at risk than large businesses because of the global as well as the national market; and they are jeopardized by global as well as by national factors. That is why economists pay attention to both causes and consequences of SMEs high mortality rate. Based on empirical data, our paper presents SME mortality curve and life cycle of small and medium enterprises, three stages of their development and two growth crises. Nevertheless, SMEs are important for the economy that is for economic growth and employment rate, regional development and development of declining rural areas; and they are also politically important because their owners come from the middle class which is the basis of political stability and democracy.

Key words: SME, life cycle, global threat, national threat, reasons for SME death, mortality line, firm disappear

JEL Code: L25, M13, M20

Introduction
Small and medium-sized enterprises defined by the 2003/361/EC Recommendation are considered a significant factor of national and particularly of regional economy. If the SMEs are successful, the regions are developing, the economy is growing and the employment rate increases at the same time. That is why the SMEs are considered to be the economy backbone. What causes problems in the Czech Republic and also on the global scale, is the high mortality of small enterprises.

The importance of SMEs was described in many renowned analyses, such as European Comission (2007), or European Comission (2009). SMEs undoubtedly have many advantages, of which we will mention the most important ones:

- they are the key stabilizing factor of the economy which is able to absorb a substantial part of labour force that is made redundant in the large enterprises due to structural changes,
- they fill those parts of the market which are not effective for large enterprises, they are flexible and they can quickly adjust to market changes,
- they also operate in areas not interesting for large enterprises and thus they help to develop even the declining regions, towns and villages,
- they are able to profit from the local resources and to build the business on the ground of local traditional products and craft,
- they are beneficial for large enterprises which take advantage of flexibility, adaptability and efficiency of SMEs in subcontracting relationships,
- they have a great potential of female entrepreneurship, which has not been fully made use of and which has not been studied theoretically.

The enumeration of benefits of the SMEs to economy could be continued.

1 Small enterprises and threats coming from global market

European and global market pose significant challenges especially on small entrepreneurs; such large markets bring new opportunities but also threats. These threats can be characterized as follows:

- Establishment of new types of customers – resulting in new segmentation of markets.
- Legal complexity of international treaties and law enforcement.
- There is price pressure from the large competitors on the market which forces SMEs to align prices; many SMEs cannot withstand the pressure.
- SMEs are often dependent on only one customer and they can lose sales in case of demise of the customer.
- In countries that underwent transformation, there is considerable shadow economy that constitute unfair competition to small enterprises.
- The export from SMEs is usually provided by foreign distributors, which usually reduce the final exercise prices.
- The complicated and often also expensive protection of products (trade mark) makes abusing of design, know-how etc. easy.

Apart from the above mentioned factors applying to SMEs anywhere in the world, there are factors specific for the Czech Republic:

- Price levels balancing causes decrease of cost competitiveness. According to Eurostat, the price level of the Czech Republic in 2010 was 75.2 % of the EU-27 average price level. The price and wage competitive advantage is being gradually exhausted.
The lack of quality work force trained in technology and craft, on which the SMEs depend, has already had an impact on domestic market.

- The weak position of small enterprises on the market and lack of will to create alliances, to merge and to create networks cause weak negotiating position against the pressure of large competitors.

- The limited financial resources of SMEs cause limited possibilities of product and technology innovation, of advertising and of business or product presentation.

- Small enterprises constantly face the danger of becoming secondarily insolvent, which might end in bankruptcy.

- The lack of orientation in the possibilities of support for the SMEs, such as the Regional Information and Counseling Centres (RICC), business and innovation centres, regional development agencies (RDA), Solvit counseling centres, CEBRE - Czech Business Representation to the EU in Brussels, cluster structures, Czech Chamber of Commerce, Association of SMEs and Crafts of the Czech Republic, business incubators, technology centres etc.

- Cooperation with universities and research institutions, as an opportunity to transfer research findings and innovations into practice, is next to none.

- Small enterprises focus on price while neglecting factors of competition, which makes them more vulnerable, mostly due to flow of inexpensive products from abroad.

- The orientation of SMEs in the possibilities of using non-bank financial sources such as risk capital, business angels etc. is also not very advanced.

- Another problem is often the incompetent management: technically skilled and successful entrepreneur loses the ability to manage all activities of a growing business, mainly the strategic management. Their management and planning is mostly operational.

In her study based on her own extensive research of 250 SMEs in Silesia, Kuczowic (2004) found out that the basic method of deciding about investments is entrepreneur's intuition. With the development of the business, the role of intuition becomes stronger.

Fig. 1: The way of deciding about investment in SME 1998-2004

Source: Kuczowic (2004)

- Another characteristic feature of SMEs is their narrow specialisation. It is mainly based on the skills of the entrepreneurs, who focus only on the product or the service that they have command of and which they understand. The lack of risk diversification and narrow focus on a specific group of customers is another risk factor for their business.

- The business plan is missing or none, when from the beginning their basic business strategy is to produce and sell what they "can produce" or "can do" and not what the customers want.

- Informal management and flat governance structure create informal relations between the staff; this however leads to the staff wanting to come with their own work flow which is determined mostly by everyday operation instead of a set of norms defined by the entrepreneur.

  On the other hand, this structure leads to more flexible and faster reaction to customers' needs and usually, it also reduces bureaucracy within the business and therefore reduces administrative costs.

- Distrust in information sharing. Contrary to large enterprises, which create various alliances and use the synergy effect of their size, the small entrepreneurs stand alone with their businesses of 2 people on average in the Czech Republic (in other countries, there are usually 10 – 15 employees in a SME). The innate distrust of Czech entrepreneurs in information sharing leads to lack of will to create alliances.

2 Failure of small businesses and its causes

The prosperity and dynamics of the business sector is closely related to the state of the business environment. It is therefore necessary to be informed about the dissolved businesses, be it closure of micro-businesses of natural persons or liquidation or bankruptcy of legal persons. Such information would be nevertheless necessary to prepare various measures and
programmes focused on support of business development and business environment improvement.

At the moment, the official data on number, regional spread and causes of closure of businesses in the Czech Republic are insufficient. Kupka (2007) states: "The absolute number of established and closed business changes from year to year, their balance then represents the year-to-year increase (or decrease); the number of newly established businesses is usually higher than the number of the closed ones. It is important that the relative number of established and closed subjects [of active businesses [from a sample of active businesses (farms, public administration bodies and charities are not included)] does not change too much – it is about 10 %. The survival of businesses is spread into a longer period by geometric series (in the first year, the number of businesses established in particular year decreases to 80 %, in the second year to 63 %, in the third year to 55 % and in the fourth year it is already to under 50 %). The average period of existence of a business appears to be ten years."

In the whole world, many studies were conducted on the topic of the life-time of small businesses. The conclusions of causes of the failure, which will be summarized in the end of the paper, were also very informative. Among the above mentioned studies are:

A study by DTI for the British government (Gov.uk, 2009); it suggests that about 72 % of businesses last to their third year (only companies registered for VAT purposes), see Chart 1. Compared to the following studies, this study comes to the most optimistic conclusions.

**Fig. 2: Percentage of businesses surviving the third year in relation to the first year businesses**

![Chart 1](source: Gov.uk (2009))
C. Barrow et al. (2005) state that larger enterprises have got better chance to survive. Thanks to their size, they overcome loss of a key customer or a key employee more easily, their production portfolio is broader and their greater financial strength enables them to overcome demand drop-out or fluctuation caused by economic cycles. This study shows that the mortality percentage is directly related to the time of the existence of the business.

The following Chart 3, see European Comission (2000) shows that according to the worst estimate, about 40% of businesses end their activities after three years, and only 40% to 50% of businesses live up to five years. There are various reasons and a general conclusion can be made: the young businesses are underfinanced, the products are "poor" and there is lack of marketing. As the business gets older, the impact of the lack of strategy and ignorance of business environment is growing; and the lack of managing abilities to solve the situation becomes evident.

**Fig. 3: Percentage of surviving companies in the course of their existence (the dashed curve represents the worst option, the full curve represents the best option)**

Source: European Comission (2000)

SBA (2001) mentions results of a similar research in the USA, see Chart 4. According to this study, 30% of businesses survive eight year (the vertical axis represents the percentage of closed businesses).
In her paper, Mason (2011) says that according to the Canadian statistics of the year 1999, 145,000 businesses were established and 137,000 were closed down.

Another paper by Peacock (2000) report that more than a half of businesses are closed within five years and that 8 out of 10 businesses are closed in the course of five years. These papers also suggest that 80 % of businesses fail in their first five years.

Statistics from New Zealand show that 53 % of small enterprises fail in the first three years. The main reason for the failure is financial problems caused by poor financial management.

Another paper by Headd (2000) from the Center for Economic Studies states that enterprises in the USA with up to 20 employees have 37% chance to survive four years and that only 9 % of them survive ten years. "Entrepreneurs do not plan their business to fail, they fail in planning." The study suggests that there are industries where mortality rate is even higher. For instance, 70 to 80 % of businesses in hospitality industry fails in their first year and only half of these still operates in five years. Headd also says that two thirds of new companies live to the age of two years and half of them live to the age of four years. One in three entrepreneurs claim their businesses to be successful in the time of liquidation. The main factors helping businesses to survive are: sufficient capital, sufficient size of the business that allows hiring employees and degree of entrepreneur's education. The main motivation to
establish a business is the absolute freedom of work and conviction of one's financial and decision making independence.

Reynolds et al. (2002), who conducted a research on business in Africa and Latin America states, say that people start their own business not because they have an opportunity to become successful but because they are forced to do so by the environment with lack of employment opportunities. The more developed a country is, the less people decide to establish a business under the pressure of the environment; they take business as self-fulfillment which leads to success.

Some studies came to similar conclusions: many entrepreneurs close their business not because e. g. financial difficulties but because they take an opportunity to get employed. Authors of these studies state that it would be more precise to talk about "disappearance" of entrepreneurs than of their failure. This view might help Europeans to put up with the stigma of associating entrepreneurs with potential failure. They might take inspiration from the American point of view, which sees business liquidation not as a failure but only as a new and useful experience.

Studies in Brazil show that 49 % of enterprises survive to the third year.

Hisrich (2004) states that in 2002, there were about 2 million new businesses in the USA and he assumes that after five years, more that 80 % of them will have been closed.

3 SME life cycle and mortality curve

On the basis of above mentioned empirical findings, it is possible to say that the SME life cycle has got three major evolutionary stages. The trigger to transformation from one stage to another is the so called growth crises which bring the need of new approach of the entrepreneurs to their business. We can generally say that a small enterprise goes through three evolutionary and each transformation from one stage to another brings a business growth crisis:

- embryonic stage,
- growth stage,
- maturity stage.

The embryonic stage is very short - one or two years. At this stage, key factors developing future existence of the business are established. The entrepreneur did either not estimate the demand correctly and the business did not turn out promising and he therefore was not "at the right place at the right time"; or the business plan was suitable for the market and the natural
pressure on size growth of the business occurs immediately. At this stage, the entrepreneurs
do actually not own any businesses, they own only their work and visions. (Gerber, 2006).

The first growth crisis comes very soon. The entrepreneurs put the visions aside and
dedicate themselves only to "work" which quickly exceeds their time and performance limits.
The only solution to overcome this first growth crisis is to hire employees. The business goes
from the embryonic stage to the growth stage.

At the second stage, the entrepreneurs should become managers. They should stop
working at their current position and focus on operational and strategic management. The
entrepreneurs only now become owners of a genuine business and they should start building
it. If they do not recognize the shift of the roles, the business functions in self-management
mode, which can last up to several years only thanks to excessive efforts of the owners.
However, the owners deal with ex post chaos and they do not recognize that they themselves
and their failure in the role of managers and entrepreneurs is the cause of the chaos.

If the entrepreneurs cannot cope with it, the business can go back to the embryonic
stage when they did all the work themselves or they can decide to close the business down.
Nevertheless, if the business owners recognize their role – that is to build up the firm and not
only "run" it, they overcome the second growth crisis and they enter the maturity stage. They
control the business, it has got its place on the market, and entrepreneurs do only work on
strategy. The position of the firm on the market is relatively stable.

On the basis of the above, it is possible to deduct the SME life cycle and to depict it as
the SME "mortality" curve, see Chart 5. The Chart is based on compressed data from studies
mentioned in the second part of our paper.

Fig. 5: SME mortality curve

![SME mortality curve](chart.png)

Source: Chart created by the authors
The mortality curve is well described by the Z-curve. The embryonic stage is characterized by a moderate decline the number of SMEs of 10 to 15 % in the first two years. During the first crisis, the number of SMEs falls down. At this stage, a decisive number of firms terminate their activities. The second growth crisis is overcome by about 30 to 20 % of businesses. At the maturity stage, the decline in the number of enterprises is lower, the Z-curve declines moderately. Only one in the businesses survives up to ten years; these then constitute the stable supply on the market.

Conclusion

SMEs are an important part of economy; they stabilize it economically as well as politically because their owners come from the middle class that creates political stability in the society. Many foreign studies suggest that despite this importance, there are no generally applicable tools which could significantly help to stabilize SMEs. As discussed above, the main causes of SME closure can be redefined as follows:

- size and related limited capital resources,
- high risk related to limited scope of supply,
- dependency on a key employee,
- dependency on a key customer,
- insufficient customer knowledge (non-existing marketing),
- insufficient business environment knowledge,
- insufficient business, language and financial competence,
- not creating business vision and mission and subsequently underestimating the importance of planning,
- insufficient motivation to grow.

The SME life cycle is usually short and only less than 10 % of businesses achieve long term stability. The other 90 % do not survive to the maturity stage and they close down during the first or the second growth crisis or at the growth stage, as is described by our mortality curve.

References


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