## MAREK MATEJUN

# The role of flexibility in building the competitiveness of small and medium enterprises

#### 1. Introduction

In most countries, small and medium (SMEs, including micro-size companies) play significant economic and social roles (Ayyagari, Beck, Demirgüç-Kunt 2007, pp. 415-434; Robu 2013, pp. 84-89), being at the same time support and the main driving force of the EU economy (Schmiemann 2009, pp. 2-8; Wymenga, Spanikova, Barker, Konings, Canton 2012, pp. 15-20) and of the regional and local development (Misztal 2011, pp. 309-320; Brylska-Michałek 2013, pp. 27-40). The SME category is determined on the basis of different criteria (Dominiak 2005, pp. 27-37), among which the leading (most basic) ones are qualitative criteria (Łuczka 2001, pp. 16-20), which in the most basic way shape the specificity of these entities in the field of management (Łuczka, Lachiewicz, Stawasz 2010, p. 446). One of such characteristics is high flexibility of operation - a feature which is nowadays perceived as the key factor determining competitiveness and a competitive edge of contemporary organisations (Dreyer, Grønhaug 2004, pp. 484-494).

Ph.D. Eng. Marek Matejun Łódź University of Technology Department of Management

Taking this into account, the aim of this article it to present and evaluate the possibilities and conditions of using flexibility to enhance the competitiveness of SMEs. To achieve this aim, empirical research was conducted in the form of a survey on a sample of 61 SMEs from the Lodz region.

# 2. The notion, kinds and significance of flexibility in small and medium enterprises

In the last years, reflections on the flexibility of organisations became an important issue in the field of management sciences. In general approach, the notion of flexibility is related to the ability of an organisation to quickly and easily implement changes (to adapt) in response to internal or (more often) external impulses. However, the notion of flexibility is not precisely defined and different authors propose different approaches, additionally distinguishing specific kinds of flexibility (Volberda 1999, pp. 84-106). A broad summary of these definitions is presented by R. Krupski and G. Osbert-Pociecha (2008, pp. 15-23). Here, flexibility is defined as a characteristic (quality) as well as an ability of an organisation (see more: Czakon 2012, pp. 146-151) enabling it to remain resilient through responding freely to new and changing circumstances (impulses), altering and engaging in beneficial activities. Flexibility is described through a scope of possible states (options, goals, actions) as well as the time and costs necessary to achieve them. Moreover, it requires concentration and liquidity of the organisation's resources. R. Krupski (2006, p. 9) emphasizes also the twodimensional character of flexibility, which is composed of: the promptness of reaction (or creation) and the level of adaptation in each of the organisation's elements alone and in all of them together.

The many kinds of flexibility include:

- reactive, adaptive and inert flexibility, and pre-emptive flexibility (Krupski 2005, p 24),
- internal flexibility (adaptive to the environment's requirements) and external flexibility related to an ability to influence the environment (Ansoff 1988, p. 44),
- operational flexibility related to modifying the intensity of activities, structural flexibility involving the right location of activities in appropriate structures, strategic flexibility involving the most radical changes, e.g. the changes in the goals of the organization (Volberda 1997, p. 171).

Flexibility plays an important role in many contemporary concepts of management, such as: Knowledge Management and Organisational Learning, Process Management, Lean Management, Time Based Management, TQM, virtual or web organisation (Ziębicki 2010, pp. 390-392). An organisation operating in a flexible way is characterised by its ability to be up-to-date with changes in the environment and to develop faster than the competition, by an efficient system of getting feedback from customers and by quick reactions to their expectations, as well as by short decision-making processes, taking place in a flat organisation structure in conditions of high empowerment of accustomed to changes personnel (Brilman 2002, p. 391).

These features are to a large extent the characteristics of SMEs, so their flexibility is perceived as one of the basic qualitative features in this category of entities (Saus 2005, p. 49; Verdú-Jover, Lloréns-Montes, García-Morales 2006, pp. 334-349; Alpkan, Yilmaz, Kaya 2007, pp. 152-172; Lachiewicz, Matejun 2012, pp. 15-17). O. Nicolescu (2009, pp. 405-413) mentions it in the set of 10 general features of SMEs organizational systems. A. Skowronek-Mielczarek (2003, pp. 6-7) relates flexibility to a dynamic approach to environment, quick reaction to emerging needs and preferences of clients and mobility in engaging financial resources in profitable investments. Natural agility combined with engagement in activities in market niches constitutes the foundations of SMEs' competitiveness and enables them to gain a competitive edge over large enterprises. K. Safin (2008, pp. 39-42) draws attention to the flexibility of structural solutions, personnel and technological potential in small companies which enables them to identify impulses coming from the market. The early recognition of these signals allows SMEs to react appropriately and in advance, and to concentrate resources on concrete, current needs.

Therefore, flexibility is directly related to many qualitative features of SMEs, including: a relatively simple organisational structure, the promptness of decision-making processes and high sensitivity to external conditions. R. Gélinas and Y. Bigras (2004, pp. 271-272) even emphasize that the strategic framework of an SME operation is based on their reaction, adaptation to the environment and on their perception of anticipated changes over a short planning horizon. As a result, these companies are perceived as highly flexible and potentially very dynamic entities, which – in the face of limitations concerning their other resources – should become the main pillar of competitiveness and a competitive edge of SMEs.

Flexibility performs very important functions in the organisational systems of SMEs. For example, B. Rundh (2011, pp. 330 - 347), basing on the results of a study conducted in 212 productive SMEs indicated that flexibility, next to the quality of products, is the key factor in their export marketing strategy. The results of the research by J. Mesu, M. Van Riemsdijk and K. Sanders (2013) conducted in

50 Dutch SMEs indicated a crucial role of flexibility in HR management and in the development of the involvement of employees. Flexibility is also treated as an important factor supporting the market orientation of SMEs (Raju, Loniala, Crum 2011, pp. 1320–1326). At the same time, Z. Sakieva (2009, pp. 22-23) perceives flexibility as one of the key factors determining the innovative potential of these entities. This is facilitated by remaining close to the market and following the needs of buyers, which results in the introduction of innovations based on opportunities. It also constitutes an important advantage in the development of open innovation (Lee, Park, Yoon, Park 2010, pp. 290–300).

The results of the above-mentioned research indicate a multi-dimensional role of flexibility in building competitiveness of SMEs, which enables them to achieve their goals in the arena of market competition in an efficient, effective, beneficial and economical way (Stankiewicz 2005, p. 36). High competitiveness enables them to be more effective than the competition in satisfying the needs of their clients (Olczyk 2008, p. 15) and to create their market attractiveness. A. Adamik and M. Nowicki (2012, pp. 99-120) indicate that flexibility is a significant internal determinant of the competitiveness of SMEs and enables them to take advantage of the potential of the environment (especially micro-environment) to gain a steady competitive advantage. Flexibility can have a positive impact on the competitiveness of SMEs also through such effects as: an ability to promptly react to changing external conditions, a capability of satisfying various expectations of clients, an ability to introduce more modern methods of operation or immunity to external threats.

Nevertheless, the research conducted by R. Krupski (2011, pp. 15-25) did not show higher flexibility of SMEs in comparison to large enterprises. This is due to the fact that what matters is not only the sheer existence of flexibility in a company but also its quality. For example, M. Levy and P. Powell (2005, pp. 51-) distinguish in SMEs four kinds of flexibility: preemptive, exploitive, protective and corrective, where the first two are offensive in character and enable an enterprise to gain a competitive edge, whereas the latter two are defensive and crucial only for the enterprise's survival. Hence, the flexibility of an organisation can be gradated, which was reflected in the proposed concept of four levels of enterprise flexibility (own study based on: Grajewski 2012, p. 13):

• Level I: a total lack of flexibility. The company rejects adaptive changes and expects that it can protect itself from the changes in the environment. There is no positive approach to changes, no inner motivation, no time and/or resources to make changes. Possible results: crisis, collapse or takeover;

- Level II: adaptive flexibility. The company responds to impulses but only after some time and usually if threatened. The problem here is slow reaction, which may result in high costs and insufficient effects of changes;
- Level III: parallel flexibility. The company actively identifies impulses and responds to them in a way which does not require a break in the company's activity. This reduces the costs of changes and makes it possible to maintain the company's high position on the market and keep up with the industry leaders;
- Level IV: pre-emptive flexibility. The company recognises impulses using the rules of a learning and intelligent organisation and surpluses of resources enable it to implement changes anticipating impulses. This enables the company to build the position of a market leader but also generates a high risk of failure.

Judging from the above, flexibility may play an important role in building competitiveness of SMEs but it is important to secure an appropriate level and liquidity of resources (Flaszewska, Zakrzewska-Bielawska 2013, pp. 224-225); apart from that, it is also important to develop a high level of flexibility allowing for pre-emptive actions.

## 4. The methodology of the empirical research and the characteristics of the respondents

The aim of this work was achieved through conducting empirical research¹ on the sample of 61 SMEs in the Lodz region, defined on the basis of administrative criterium as the Łódź Voivodeship. The research method applied was the survey method and the tool was developed by the author himself in the form of a questionnaire to be completed by owners and managers of the analysed enterprises. The surveyed companies were selected in a convenient way and the questionnaire was delivered directly to 100 entities. The return level was 65%; 61 complete and correctly filled in questionnaires were qualified for the final analysis. The actual survey, preceded by a pilot stage, was conducted in July and August 2013.

The companies which took part in the survey were micro (31%), small (28%) and medium (41%) enterprises meeting the unified formal definition

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of a SME included in the European Commission Recommendation (2003) and in the European Commission Regulation (2004). They were mostly (more than 80%) entities operating as natural persons, civil law partnerships (Polish *spółki cywilne*) and limited liability companies (Polish *spółki z o.o.*) which have been on the market longer than 5 years (80%). Most of the companies (58%) operate at least on the domestic market, usually in the field of traditional technologies (57%), mostly in the sector of services (50%). Most of the respondents (72%) were the owners of the analysed companies. They were mostly men (61%), people aged 31-40 (33%) or over 50 (28%), with higher education (66%).

# 5. The results of the research conducted in small and medium enterprises in the Lodz region

In the first part of the questionnaire the respondents were asked for a subjective evaluation of the level of flexibility in their enterprises. This part of the questionnaire used the model of four levels of flexibility proposed in the theoretical part of the article. Additionally, other dimensions of the described ability were evaluated, which is presented in table 1

Table 1. The evaluation of the level of flexibility and the identification of its dimensions in the analysed enterprises<sup>2</sup>

| Level of flexibility in analysed enterprises      | Total | Micro | Small | Medium |
|---|-------|-------|-------|--------|
| No flexibility                                    | 0%    | 0%    | 0%    | 0%     |
| Adaptive flexibility                              | 23%   | 42%   | 24%   | 8%     |
| Parallel flexibility                              | 59%   | 53%   | 76%   | 52%    |
| Pre-emptive flexibility                           | 18%   | 5%    | 0%    | 40%    |
| Dimensions of flexibility in analysed enterprises | Total | Micro | Small | Medium |
| Internal operational                              | 64%   | 58%   | 71%   | 64%    |
| External operational                              | 28%   | 21%   | 35%   | 28%    |

<sup>2</sup> In the table the levels and dimensions of flexibility are presented in a shortened version but in the questionnaire they were accompanied with definitions, enabling the respondents to better understand the notions.

| Internal structural | 18% | 11% | 6%  | 32% |
|---------------------|-----|-----|-----|-----|
| External structural | 15% | 16% | 18% | 12% |
| Internal strategic  | 33% | 21% | 35% | 40% |
| External strategic  | 16% | 26% | 18% | 8%  |

Source: own study based on research results

The obtained results indicate that the level of flexibility grows with the size of an entity. Although, all three categories of companies usually declared parallel flexibility, micro companies often showed only adaptive flexibility, whereas medium companies much more often than other enterprises manifested preemptive flexibility. The analysis of the dimensions shows that the kind of flexibility most developed in the analysed companies is operational flexibility, followed by strategic flexibility, whereas structural flexibility is the least common. This may be related to small sizes of micro and small enterprises, as medium enterprises show a significantly higher level of development of this kind of flexibility. We should also pay attention to the fact that the analysed entities declared the development of external flexibility to a much lesser extent, which is related to a limited impact of SMEs on their environment.

Next, the direct impact of flexibility on the competitiveness of the analysed companies was evaluated. The respondents were asked to subjectively evaluate the level of competitiveness of their enterprises (in relation to the market on which they operate); they were presented with three options: high, medium and low. None of the surveyed selected the lowest level and the results concerning the relations between these two variables are presented in table 2.

Table 2. The dependencies between the flexibility and competitiveness of surveyed enterprises

|   | Competitiveness level in analysed companies |            |        |            |       |  |
|---|---|------------|--------|------------|-------|--|
| Flexibility level in analysed companies | Medium                                      |            | Н      | T-0-1      |       |  |
|   | Number                                      | Percentage | Number | Percentage | Total |  |
| Adaptive flexibility                    | 12  | 86%        | 2      | 14%        | 100%  |  |
| Parallel flexibility                    | 21  | 58%        | 15     | 42%        | 100%  |  |

| Pre-emptive flexibility | 3  | 27% | 8  | 73% | 100% |
|-------------------------|----|-----|----|-----|------|
| Total                   | 36 | 59% | 25 | 41% | х    |

Source: own study based on research results

The results indicate that statistically the level of competitiveness is significantly related to the level of flexibility of the analysed enterprises,  $\chi^2_{Yates}$  (2, N=61) = 6,467,  $p < 0.05^3$ . The strength of this relation is measured with Cramer's coefficient V=0.33 and indicates a moderate interdependency between the analysed variables. Apart from that, the empirical data show that more flexible enterprises tend to describe their level of competitiveness as high more often than others.

Further, detailed analyses brought the identification of other statistically significant interdependencies between selected features:

- 1. Flexibility level is significantly related to the quality of strategic management in the analysed companies (see more: Zelek 2012, pp. 65-77),  $\chi^2_{Yates}$  (2, N=61) = 9,833, p < 0.01. The strength of this relation is measured with Cramer's coefficient V=0.40 and indicates a moderate interdependency between the analysed variables. The results show that companies manifesting a more formalised approach to strategy (having a business plan or strategic documents or analyses) are more flexible than entities of a lower level of strategic management.
- 2. Flexibility level is significantly related to the level of technological advancement of the analysed companies,  $\chi^2_{Yates}$  (2, N=61) = 12,198, p < 0.01. The strength of this relation is measured with Cramer's coefficient V = 0.45, which indicates a moderate interdependency between the analysed variables. The empirical data indicate that enterprises operating in the field of advanced technologies are characterised with pre-emptive flexibility significantly more often than companies operating in traditional sectors.
- 3. Flexibility level is significantly related to an opportunity-oriented attitude in the analysed firms,  $\chi^2_{Yates}$  (2, N = 61) = 6,36, p < 0.05. The strength of this relation is measured with Cramer's coefficient V = 0.32 and indicates a moderate interdependency between the analysed variables. The empirical data indicate

<sup>3</sup> In the calculations Cramer's coefficient V with Yates' continuity correction was used due to the occurrence in contingency tables' fields with numbers smaller than 5.

that enterprises of a higher level of flexibility are more often strongly oriented at seizing opportunities (mostly these opportunities which appear in their environment).

The next part of the research was focused on the indirect impact of flexibility on competitiveness of analysed firms. This impact is specified by identification of a number of benefits arising from ability to act flexibly, influencing the development of competitiveness. The results are presented in table 3.

Table 3. The components of competitiveness arising from the development of flexibility in the analysed companies

| Advantages related to development of flexibility in analysed firms         | Total | Micro | Small | Medium |
|--|-------|-------|-------|--------|
| An ability to promptly react to the changing conditions of the environment | 92%   | 100%  | 88%   | 88%    |
| Developing a sustainable and strong competitive edge                       | 82%   | 74%   | 82%   | 88%    |
| More immunity to adverse external factors                                  | 56%   | 53%   | 65%   | 52%    |
| An ability to satisfy clients' changing needs                              | 39%   | 63%   | 29%   | 28%    |
| Greater openness to change   | 30%   | 37%   | 29%   | 24%    |
| Improving the company's immunity to crises                                 | 21%   | 11%   | 18%   | 32%    |
| Quick learning of new methods of operation                                 | 21%   | 26%   | 12%   | 24%    |

Source: own study based on research results

The results indicate that the respondents identify many manifestations of flexibility's indirect impact on the competitiveness of their enterprises, mostly in improved promptness of response to the changing conditions of the environment and the increase in the sustainability and significance of the competitive edge. For more than a half of the surveyed another important aspect was also a better resilience to harmful external conditions. Other benefits were identified by the respondents significantly less often, and more than a half of micro enterprises declared that thanks to flexibility they are significantly better attuned to the changing expectations of their clients.

The study involved also indicating barriers to the development of enterprises' flexibility, presented in table 4.

Table 4. Barriers to the development of the flexibility of the analysed enterprises

| Barriers to development of flexibility of analysed enterprises      | Total | Micro | Small | Medium |
|---|-------|-------|-------|--------|
| No or low willingness to change                                     | 46%   | 53%   | 41%   | 44%    |
| Slow reaction or no reaction to the needs of the market             | 41%   | 32%   | 59%   | 36%    |
| No or insufficient reaction to feedback from customers and partners | 33%   | 26%   | 47%   | 28%    |
| Negative impact of crises and other external factors                | 30%   | 42%   | 24%   | 24%    |
| Difficulties in modifying processes, strategies and products        | 20%   | 11%   | 6%    | 36%    |
| No financial resources  | 18%   | 16%   | 24%   | 16%    |

**Source:** own study based on research results

The results indicate that the respondents only to a limited extent (on average – below 50%) identify different types of barriers to the development of flexibility. The barriers are mostly related to unwillingness to change and the lack of response to the impulses coming from the environment. The development of flexibility is also to an extent limited by high sensitivity to external factors and resource limitations of the analysed enterprises. It should be emphasized at this point that conclusions based on presented research are not representative and generalizations based on it may contain difficulties of interpretation and a significant amount of error. The next issue is a significant level of subjectivity in respondents' assessments, what cause that presented considerations should be trated rather as preliminary results requiring confirmation within the indepth quantitative analysis.

In the final part of the research, the respondents were asked to indicate factors which they expect to shape the competitiveness of their enterprises in the future (in 5-10 years). As the key factor 69% of the surveyed indicated the flexibility of actions and adapting their offer to the changing expectations of their clients. Other important factors included the quality of the offered products and services (54%), but also the quality and efficiency of customer service (43%)<sup>4</sup>. What is interesting (and of advantage for the analysed enterprises), only 33% of the surveyed assumed

<sup>4</sup> The responses do not sum up to 100% because the surveyed could indicate 3 crucial factors.

that in the future they were going to build their competitiveness basing on low prices. An unfavourable trend identified in the study is a very limited extent to which competitiveness is built basing on innovative products and services (11% responses) or the enhancement of the company's resources through external funding sources (3%) or increasing the share capital (2%). The lack of action in these fields may significantly limit the firms' ability to act flexibly and may contribute to reducing the level of competitiveness of analysed SMEs.

## 5. Recapitulation

The results indicate a moderate role of flexibility in building the competitiveness of the analysed SMEs. Its role is manifested in a number of advantages related mainly to quick responding to changing conditions of the environment, an ability to seize opportunities and ward off external threads, which makes it possible to strengthen and maintain a competitive edge. The results indicate, however, that flexibility developed by the analysed companies is characterised by a relatively low quality, as the dominant approach is parallel flexibility on the operational level.

The development of flexibility is positively influenced by such qualities as: high quality of strategic management, technologically advanced companies and a strong opportunity-oriented attitude. The ability to act flexibly is also determined by the level of possessed and controlled resources, i.e. it grows with the size of an enterprise.

It seems that small and medium enterprises should concentrate more on the development of higher levels of flexibility, which could be one of the key determinants of the competitiveness of these entities. This, however, requires constant improvement in this field and securing resources necessary for enhancing this strategic ability of SMEs.

When presenting the conclusions and practical recommendations some methodological limitations of the conducted research must be mentioned. They include: a relatively low size of the sample, the subjectivity of the respondents' responses, the simplified method of identification of particular variables, as well as the occurrence of small numerousness in contingency tables used in Chi-Square Test of Independence. Therefore, more research is planned on a larger SME sample in the European Union. This future research will focus more on the operationalisation of variables, which will take the form of synthetic indicators, later unified with the use of the classical method in order to apply the multiple regression analysis method.

## **Summary**

# The role of flexibility in building the competitiveness of small and medium enterprises

Flexibility is perceived as the key factor determining the competitiveness and a competitive edge of contemporary organizations, as it is one of the most basic qualitative features of this category of entities. Taking this into account, the author of the article decided to present and evaluate the possibilities and conditions for using flexibility in building competitiveness of SMEs. The aim of the article was achieved through conducting surveys on the sample of 61 companies from the Lodz region.

*Keywords:* 

small and medium-sized enterprises, flexibility, competitiveness, competitive advantage.

#### Streszczenie

# Rola elastyczności w budowaniu konkurencyjności małych i średnich przedsiębiorstw

Elastyczność traktowana jest jako kluczowy czynnik budowania konkurencyjności i przewagi konkurencyjnej współczesnych organizacji. Odgrywa ona szczególną rolę w funkcjonowaniu małych i średnich przedsiębiorstw, stanowiąc jedną z podstawowych cech jakościowych tej kategorii podmiotów. Biorąc to pod uwagę jako cel artykułu wyznaczono prezentację i ocenę możliwości i warunków wykorzystania elastyczności w budowaniu konkurencyjności firm sektora SME. Realizacji celu pracy poświęcono badania ankietowe przeprowadzone na próbie 61 firm z regionu łódzkiego.

#### Słowa

*kluczowe*:

małe i średnie przedsiębiorstwa, elastyczność, konkurencyjność, przewaga konkurencyjna.

### References

- 1. Adamik A., Nowicki M. (2012), Budowa konkurencyjności małych i średnich przedsiębiorsyw, in: M. Matejun (ed.), Zarządzanie małą i średnią firmą w teorii i w ćwiczeniach, Difin, Warszawa.
- 2. Alpkan L., Yilmaz C., Kaya N. (2007), Market Orientation and Planning

- Flexibility in SMEs. Performance Implications and an Empirical Investigation, "International Small Business Journal", vol. 25, no. 2.
- 3. Ansoff I. (1988), The New Corporate Strategy, John Wiley & Sons, New York.
- 4. Ayyagari M., Beck T., Demirgüç-Kunt A. (2007), *Small and Medium Enterprises Across the Globe*, "Small Business Economics", vol. 29, no. 4.
- 5. Brilman J. (2002), Nowoczesne koncepcje i metody zarządzania, PWE, Warszawa 2002.
- 6. Brylska-Michałek K. (2013), *Rola mikroprzedsiębiorstw w rozwoju gospodarki województwa łódzkiego,* "Studia Ekonomiczne Regionu Łódzkiego", nr 9.
- 7. European Commission Recommendation (2003) no. 2003/361/EC of 6 May 2003 Concerning the Definition of Small and Medium-Sized Enterprises, "Official Journal of the European Union", L 124, 20.5.2003.
- 8. European Commission Regulation (2004) no 364/2004 of 25 February 2004 amending Regulation (EC) No 70/2001 as regards the extension of its scope to include aid for research and development, "Official Journal of the European Union", L 63/22, 28.2.2004.
- 9. Czakon W. (2012), Sieci w zarządzaniu strategicznym, Oficyna a Wolters Kluwer business, Warszawa.
- 10. Dominiak P. (2005), Sektor MSP we współczesnej gospodarce, PWN, Warszawa.
- 11. Dreyer B., Grønhaug K. (2004), *Uncertainty, Flexibility, and Sustained Competitive Advantage*, "Journal of Business Research", vol. 57, no. 5.
- 12. Flaszewska S., Zakrzewska-Bielawska A. (2013), Organizacja z perspektywy zasobów ewolucja w podejściu zasobowym, in: A. Adamik (ed.) Nauka o organizacji. Ujęcie dynamiczne, Oficyna a Wolters Kluwer business, Warszawa.
- 13. Gélinas R., Bigras Y. (2004), *The Characteristics and Features of SMEs: Favorable or Unfavorable to Logistics Integration?*, "Journal of Small Business Management", Vol. 42, No. 3.
- 14. Grajewski P. (2012), Procesowe zarządzanie organizacją, PWE, Warszawa.
- 15. Krupski R. (2005), Elastyczność organizacji, in: R. Krupski (ed.), Zarządzanie przedsiębiorstwem w turbulentnym otoczeniu. Ku superelastycznej organizacji, PWE, Warszawa.
- 16. Krupski R. (2006), *Elastyczność organizacji elementy teorii*, "Zeszyty Naukowe WWSZIP", nr 9.
- 17. Krupski R. (2011), Rozwój małych i średnich firm w świetle badań empirycznych. Kontekst strategiczny, in: S. Lachiewicz, M. Matejun (eds.), Zarządzanie rozwojem małych i średnich przedsiębiorstw, Oficyna a Wolters Kluwer business, Warszawa.
- 18. Krupski R., Osbert-Pociecha G. (2008), *Elementy teorii elastycznej organizacji*, in: R. Krupski (ed.), *Elastyczność organizacji*, Wyd. UE we Wrocławiu, Wrocław.

- 19. Lachiewicz S., Matejun M. (2012), Specyfika zarządzania małymi i średnimi przedsiębiorstwami, in: M. Matejun (ed.), Zarządzanie małą i średnią firmą w teorii i w ćwiczeniach, Difin, Warszawa.
- 20. Lee S., Park G., Yoon B., Park J. (2010), *Open Innovation in SMEs An Intermediated Network Model*, "Research Policy", Vol. 39, No. 2.
- 21. Levy M., Powell P. (2005), Strategies for Growth in SMEs: The Role of Information and Information Systems, Elsevier Butterworth-Heinemann, Oxford.
- 22. Łuczka T. (2001), Kapitał obcy w małym i średnim przedsiębiorstwie, PWN, Warszawa-Poznań.
- 23. Łuczka T., Lachiewicz S., Stawasz E. (2010), Rozwój badań w zakresie zarządzania małymi i średnimi przedsiębiorstwami w polskich ośrodkach akademickich, in: S. Lachiewicz, B. Nogalski (eds.), Osiągnięcia i perspektywy nauk o zarządzaniu, Oficyna a Wolters Kluwer Business, Warszawa.
- 24. Mesu J., Van Riemsdijk M., Sanders K. (2013), *Labour Flexibility in SMEs: the Impact of Leadership*, "Employee Relations", Vol. 35, No. 2.
- 25. Misztal A. (2011), Miejsce i rola sektora matych i średnich przedsiębiorstw w gospodarce województwa łódzkiego, "Studia Ekonomiczne Regionu Łódzkiego", nr 6.
- 26. Nicolescu O. (2009), Main Features of SMEs Organisation System, "Review of International Comparative Management", Vol. 10, No. 3.
- 27. Olczyk M. (2008), Konkurencyjność: teoria i praktyka, CeDeWu, Warszawa.
- 28. Raju P.S. Loniala S.C., Crum M.D. (2011), Market Orientation in the Context of SMEs: A Conceptual Framework, "Journal of Business Research", Vol. 64, No. 12.
- 29. Robu M. (2013), *The Dynamic and Importance of SMEs in Economy*, "The USV Annals of Economics and Public Administration", Vol. 13, No. 1(17).
- 30. Rundh B. (2011), Linking Flexibility and Entrepreneurship to the Performances of SMEs in Export Markets, "Journal of Manufacturing Technology Management", Vol. 22, No. 3.
- 31. Safin K. (2008), Przedsiębiorczość, przedsiębiorca, mała firma zagadnienia podstawowe, in: K. Safin (ed.), Zarządzanie małym i średnim przedsiębiorstwem, Wyd. AE we Wrocławiu, Wrocław.
- 32. Sakieva Z. (2009), The Use of Intellectual Property by Small and Middle-sized Enterprises, GRIN Verlag, Norderstedt.
- 33. Sauś J. (2005), Małe i średnie przedsiębiorstwa a kapitał społeczny, in: T. Łuczka (ed.), Małe i średnie przedsiębiorstwa. Szkice o współczesnej przedsiębiorczości, Wyd. Politechniki Poznańskiej, Poznań.
- 34. Schmiemann M. (2009), SMEs were the Main Drivers of Economic Growth between 2004 and 2006, "Statistics in Focus", No. 71.
- 35. Skowronek-Mielczarek A. (2003), Małe i średnie przedsiębiorstwa. Źródła finansowania, C.H. Beck, Warszawa.

- 36. Stankiewicz M.J. (2005), Konkurencyjność przedsiębiorstwa: budowanie konkurencyjności przedsiębiorstwa w warunkach globalizacji, "Dom Organizatora", Toruń.
- 37. Verdú-Jover A. J., Lloréns-Montes F. J., García-Morales V. (2006), Environment-Flexibility Coalignment and Performance: An Analysis in Large versus Small Firms, "Journal of Small Business Management", Vol. 44, No. 3.
- 38. Volberda H.W. (1997), Building Flexible Organizations for Fast-Moving Markets, "Long Range Planning", Vol. 30, No. 2.
- 39. Volberda H.W. (1999), *Building the Flexible Firm: How to Remain Competitive*, Oxford University Press, Oxford.
- 40. Wymenga P., Spanikova V., Barker A., Konings J., Canton E. (2012), *EU SMEs in 2012: at the Crossroads. Annual Report on Small and Medium-Sized Enterprises in the EU*, 2011/12, Ecorys Nederland BV, Rotterdam.
- 41. Zelek A. (2012), *Jakość zarządzania strategicznego w MSP a odporność firm na kryzys*, "Studia Ekonomiczne Regionu Łódzkiego", nr 7.
- 42. Ziębicki B. (2010), *Elastyczność jako kryterium efektywności organizacyjnej*, "Acta Universitatis Lodziensis. Folia Oeconomica", nr 234.