




Risk identification in managing small and medium-sized enterprises in Poland

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Abstract

Motivation: When running a business in the form of an enterprise, we agree to take the associated risk. The ubiquitous uncertainty about the future of enterprises, especially from the SME sector, makes risk management more and more important, which includes several successive stages. One of the most important is risk identification. Its purpose is relatively early detection of possible threats that, if they occur, will affect the company and its goals. Knowledge of the factors that may disrupt the functioning of an entity, especially a small and medium one, is the foundation in the approach to the issue of risk accompanying business activity. Properly conducted risk identification should cover all levels of the company's operation and its relations with the environment.

Aim: The article will isolate events, the occurrence of which small and medium-sized entrepreneurs fear the most. The aim of this article is to develop a register of risk sources for SMEs, and to identify the risks that pose the greatest threat to the operation of SMEs.

Moreover, the level of individual sources of risk will be assessed allowing to identify the key disruptors for the operation of SME's. The relationship between the level of risk and the size of the entity will also be examined.

Results: Identification of factors threatening the functioning of enterprises increases the effectiveness of risk management that accompanies the conducted activity. Empirical research allowed to recognize the most important categories and the main sources of risk associated with SME activities. The dependency between risk categories and the size of the business was confirmed, with the strength of this relationship being moderate at best.

Keywords: risk; management risk; risk identification; small and medium-sized enterprises

JEL: D81; G32; L20



1. Introduction

Due to the constantly changing environment and the lack of complete and reliable information, doing business is subject to a high level of risk. It is present during all activities, the effectiveness of which, to a large extent, depends on the ability to foresee, quickly react, and be ready for changes in the external environment, as well as on the ability to take advantage of emerging opportunities while preventing possible threats. Factors that threaten the functioning of an entity can come not only from the environment, but also from within, which is why risk management constitutes a mandatory factor for surviving on the market and the basis for success. Risk cannot be eliminated from the operations of any business, but it can be identified and then managed to reduce its negative effects. Therefore, a key element of the risk management process consists in identifying risk, i.e. identifying the factors to which the entity is exposed in all areas of its business. This is particularly important in the case of SMEs, which, on the one hand, are more likely to make wrong decisions, because due to a number of limitations they are unable or not capable to gather the right information and sometimes interpret it correctly, while, on the other hand, they are characterized by a high degree of flexibility of operation, thanks to which, knowing the factors that threaten their operation, they can react to them more quickly and adapt to the situation. Identifying the main risk factors accompanying the activities of small and medium-sized enterprises allows a better understanding of the environment and the accompanying factors, and the efficient and fast processing of information concerning it works in promote of right and timely decisions. Properly conducted risk identification shapes a company's decisions in terms of its attitudes towards the risk itself.

In various publications it is possible to find descriptions and types of many risks. Nevertheless, they primarily concern the operation of large business entities. There are far fewer classifications of risks associated with the operation of small and medium-sized entities. Moreover, the risk analysis usually concerns selected areas of the company's operations or selected business disruptors. Therefore, there is a research gap covering the detailed identification of factors disrupting the activities of small and medium-sized enterprises and the issue of the relationship between individual risk categories and the size of the enterprise.

The aim of the article, after initially outlining the nature of risk and indicating the importance of its identification in business management, is to isolate the key risk factors and assess the level of individual risks in the operation of companies with up to 249 employees. Achieving a goal assumed in such a manner is facilitated by theoretical considerations of the issue in question and the results of empirical research carried out with the use of a proprietary questionnaire in a group of small and medium-sized entities.

The paper uses a critical literature review, empirical research methods and statistical methods. Based on the results of research conducted in small

and medium-sized enterprises in the Silesian Voivodship, the key factors of the accompanying risk and the impact of individual risks on their operations were determined.

2. Literature review

A phenomenon commonly found in various situations consists in risk, which takes on different dimensions depending on the context (Penela & Miguel, 2023). The risk arises because it is not possible to accurately predict the outcome of future events (Lochan et al., 2021). Due to the ambiguity and different interpretations, many scientific disciplines lack a single coherent definition that identifies all planes of existence of this phenomenon (Jelonek, 2006). In general, risk can be defined as any obstacle that may interfere with the achievement of business goals (Sajiah et al., 2019). When defining risk it is possible to expose its effects in action, and on the other hand the possibility of failing to achieve the intended goal, so that risk should be viewed in two ways (Meshkova et al., 2018; Zachorowska, 2006). On the one hand, it can be regarded as a negative phenomenon, i.e. a threat that may cause losses or, at best, failure to achieve the intended objective, while on the other hand, it can be regarded as a positive phenomenon, meaning an opportunity to achieve an effect contrary to the one expected (Jajuga et al., 2015). Risk can also be perceived as a deficit of information concerning the feasibility of achieving a certain goal, and therefore needs to be taken into account in the decision-making processes of companies (Kaczmarek, 2008). This is particularly significant in the case of small and medium-sized entities, which face higher information asymmetries and uncertainty compared to bigger companies (Burkhardt, 2016). Nevertheless, SMEs are usually reluctant to adopt a formal risk management strategy (Florio & Leoni, 2017; Gorzeń-Mitka, 2019), what's more often even overlook this element of economic activity, although one of the fundamental processes that contribute to ensuring business continuity is the process of risk management (Korombel, 2013; Ślusarczyk & Grondys, 2019). It's also worth adding, that there are a number of benefits resulting from risk management in SMEs. The main effects are visible in the gradual increase in the financial performance of SMEs; improving the position of SMEs in the business segment; improving services/products for customers and employee productivity (Dvorsky et al., 2021; Games & Rendi, 2019; Psarska et al., 2019). Whereas failure to manage risk in SMEs might be one of the reasons why SMEs experience difficulties to grow and be sustainable (Mthiyane et al., 2022). High volatility of the economic environment intensifies the uncertainty and unpredictability of economic factors, increasing the risk associated with running a business (Gengatharan et al., 2020).

Risk management, that is making decisions and carrying out actions aimed at achieving an acceptable level of risk by an entity, referred to as risk appetite (see more: Bakos & Dumitraşcu, 2021; Korombel, 2017) should constitute an integral part of business management regardless of the size of the business

(Meshkova et al., 2018). Risk management involves, in particular, identifying potential events or situations to which an entity is exposed, estimating their impact and likelihood of occurrence, identifying and applying proper responses, and monitoring risks (Czerwińska & Jajuga, 2016; Korombel, 2013), as it is a process rather than a one-off action allowing to continuously adjust the level of risk to an acceptable level.

In order to operate efficiently on a dynamic and competitive market, it is particularly important to identify risks, meaning to discover events that represent a source of risk and therefore constitute a potential obstacle to achieving objectives of a company (Korombel, 2013). Identification aimed at determining the risks to which an entity is exposed (Jajuga et al., 2015) requires analyzing the company as a whole and identifying all possible sources of risk affecting the entity, taking into account the characteristics of each one of them (Szczerbak, 2009).

When identifying the factors that could disrupt the operation of an enterprise, it is important to indicate which risks and to what extent they have impact on it at a particular time and which risks may affect an entity in the future. As part of the identification, an initial risk analysis is carried out and the identified risk factors for the business are prioritized (Dziawgo, 2012). A condition necessary for an effective risk identification process, and thus a risk management process, is to gather as much information of good quality as possible and not to overlook any source of risk, as factors not recognized at this stage will not be taken into account in subsequent stages of risk management. It follows, that the identification of risk sources in SMEs is the most important phase of risk management, as preventive actions can only be developed to eliminate the identified risk (Dvorsky et al., 2021; Gorzeń-Mitka, 2019).

The sources of risk accompanying business activity rest in the macro-, meso- and micro-environment. Macroeconomic factors result from the globalization of economic processes and a country-wide economic analysis. A company's high sensitivity to macroeconomic factors results in an increase in the risk of the conducted activity due to the lack of any influence on changes in the remote environment (Syrová & Špička, 2023). Meso-economic factors come from the sector in which a given entity operates. To a certain extent, a company can have an impact on changes taking place in the closer environment thus reducing the degree of risk in its operations. On the other hand, microeconomic factors are determined by the company's internal situation. Entities that are most dependent on internal risk have the greatest ability to have an impact on changes in risk generating factors and are therefore better able to control the risks accompanying their operations (Kokot-Stępień, 2015; Wiczorek-Kosmala, 2009).

In reference to large enterprises, ready-made risk categories with their registers can be found, among others, in a report prepared by the AON company (Słabosz & Ziomko, 2009). There are also studies relating to smaller entities. In one of them, the risk accompanying the activities of micro and small en-

terprises are divided into fourteen categories (Global Risk Alliance, 2005). In another study, the classification identifies ten types of risk typical of SMEs (CPA Australia, 2009). Virglerova et al. (2022) group risk into eight categories, focusing on the interrelationships between sources of business risk, operational results and the company's market position. Czerwiński and Grocholski (2003) classify sources of risk in six groups, indicating the categories of risk factors in each group. Grondys et al. (2022), dividing the risk into four categories, assess the market, economic, financial and operational risk as a result of the threat of the pandemic risk, and Cepel et al. (2020) assess the impact of the COVID-19 crisis on entrepreneurs' attitudes towards selected business risks in the SME sector. Dvorsky et al. (2019) indicate and assess the most important sources of market, economic and financial risk, recognizing them as the most important risks that determine the quality and results of small and medium-sized enterprises, while Hudakova et al. (2021), assessing the impact of the duration of entrepreneurship on the perception of the most important business risks, focus on market and economic risks, considering them the most threatening to the business. In turn, Ślusarczyk and Grondys (2019) indicate that one of the key threats to the activities of small and medium-sized enterprises is financial risk, and Durst et al. (2019), examining the relationship between knowledge risk and organizational performance, emphasize that every organization is exposed to certain knowledge risks that may not only seriously jeopardize the organization's operations, but also seriously delay or prevent their implementation.

3. Methods

The study starts with a critical analysis of the literature and reports relating to the discussed issue, on the basis of which a morphological table has been prepared including the most important groups of risks and risk factors. In order to identify the most important category of risks and the impact of individual risks on the operation of small and medium-sized enterprises operating in the Silesian Voivodship in various industries, a survey was carried out in the second half of 2021, using the CAWI method, and taking advantage of an original survey questionnaire. The selection of the research group was not representative, therefore the research results should be treated as directions for in-depth quantitative research in the future. The study primarily covered manufacturing companies that had been operating on the market for at least 3 years before the outbreak of the pandemic, so that their observations would not focus solely on the risks associated with COVID-19. A total of 162 responses were received (not all received surveys were suitable for further research), of which 90 complete and correctly filled out surveys were received from companies employing no more than 49 people, while 72 surveys suitable for analysis were received from companies employing less than 250 people. The survey questionnaires,

consisting of a metric and a section concerning risk, were completed by the target respondents, i.e. business owners or employees in managerial positions.

The conducted research aimed to answer the following questions:

1. Which categories of risks pose the greatest threat to operations of small and medium-sized enterprises?
2. Which factors disrupt the operation of SMEs the most and which the least, so which events do entrepreneurs fear the most?
3. What is the level of risk in each risk category?
4. What is the level of individual risks?
5. Is there a correlation between risk categories and the size of the conducted business?

Questions concerning the discussed research issue were closed-end questions, which respondents answered using a five-point Likert scale, where 1 means the least impact of a given risk on business operation, and 5 the greatest impact. At the end of the survey space was provided for expanding or adding to the selected answers, if necessary. Descriptive statistics was used for the assessment as a generally accepted method of economic research. The obtained results, subjected to quantitative analysis using an Excel program and qualitative analysis provided the base for formulating conclusions.

Risks grouped into 6 categories were adopted for the study, including in particular: market risk, financial risk, operational risk, risk related to human resources, Risk related to business management, IT risk. Typical risks affecting the operation of SMEs were assigned to each of them, thus providing a risk register for each of the indicated categories (Table 1). Then the Chi-2 correlation coefficient and the V-Cramer test were used as commonly used statistical methods for non-parametric variables (Table 3).

4. Results & discussion

By identifying the risk, the sources and causes of risks that disrupt business operations are identified. For practical reasons, it is important to develop a risk source register. In a study aimed at identifying the most significant risks affecting the operation of small and medium-sized enterprises, the register of risk sources included 25 issues grouped into 6 collective categories covering, in particular: external factors coming from the market on which a given entity operates, factors resulting from the manner and effectiveness of the entity's management, financial factors affecting the financial health of the enterprise, operational factors related to internal potential, employee-related issues, as well as factors concerning the IT systems used in the enterprise and data storage (Table 1).

In the entire SME sector, and separately in small and medium-sized enterprises, the market risk, which unfortunately does not depend on the decision of the individual entrepreneur, was assessed the highest. A category of a slightly lesser significance, but also important, is financial risk, which entrepreneurs can have an impact on, although of course not always and not fully. However,

they perceive the least threat in terms of business management, which is certainly due to the possibility of having the greatest influence in this area (Chart 1).

In the market risk group (Table 2), respondents considered increasing competition, which on the one hand constitutes a consequence of increased consumer demand for goods, and on the other hand is the result of better adaptation of entrepreneurs to the prevailing market conditions, to be the factor most threatening the functioning of SMEs. A company's competitive position, which is the result of the market's assessment of its offer, depends on a wide variety of factors, and that is why when operating in a turbulent environment, it is very important to react correctly to any market changes in order to avoid irreversible loss of market share caused, among others, by the emergence of new competitors or price wars. Treating competition as a key risk and taking it into consideration in one's operations is particularly important for entities having limited resources.

Recently, the operation of all businesses (Table 2), regardless of size and type of conducted business, but also the lives of all people in general, has been affected by the COVID-19 pandemic, which increased the rate of change of market factors while causing an economic downturn, which have been recognized as another important risk in the market risk category. The increasing stagnation related to the pandemic has had an impact on the loss of customers, which became another significant factor threatening the business of small and medium-sized enterprises. The numerous restrictions accompanying the pandemic were reflected in consumer behaviour and preferences, in many cases causing a decline in the sales of all goods.

In the case of financial risk, the factor that most strongly threatens the operations of SMEs consists in the loss of liquidity, which is related to an increase in the cost of doing business and problems in settling commercial receivables. As a result of rising product prices, increased energy prices, rising wage costs, as well as additional purchases due to the need to guarantee the sanitary safety of employees and customers at the time of pandemic, an increase in the cost of doing business can be seen. This, in turn, raises concern about the risk of maintaining an inappropriate ratio of recurrent expenditure and the possible and actual income. A rapid increase in costs, even at a stable revenue growth, results in declining margins and adversely affects the financial situation. All this, as well as the lockdown introduced in the aftermath of the pandemic, led businesses to fear losing liquidity, i.e. the ability to pay their most important obligations on time. Nevertheless, it is worth noting that companies are getting better and better at dealing with excessive cost pressures by better aligning their offers with their capabilities. Moreover, due to the unreliability of some contractors and related payment delays, the surveyed entrepreneurs indicated that they have started to enter into new contracts more cautiously, verify possible partners more thoroughly, and react more quickly to financial arrears. This is good, because a steady flow of funding is crucial, especially for smaller entities who unfortunately often have limited access to external funding in the form

of bank loans. That is because, fearing excessive risk, banks are wary of financing the SME sector, faulting businesses for a lack of credit history, legal security for repaying liabilities to the bank, or limited liquidity.

With operational risk (Table 2), SME entrepreneurs are most concerned about supply chain disruptions. The economic downturn and the pace of changes of not only market but also geopolitical factors are forcing companies to adapt their supply chains to changing conditions very quickly. Restricting the activities of companies in various industries, closing borders as a result of the omnipresent pandemic have disrupted supply chains not only in Poland but also globally, which in turn has led to a severe shortage of materials, thus posing a major threat to the operations of companies, especially smaller ones with a small impact. Subsequently, easing and lifting the imposed restrictions resulted in a surge in demand. In that situation, companies are unable to provide enough raw materials for production, for which there is suddenly a high demand, and this in turn has affected shortages for other entities. Long lead times due to the lockdown, widespread shortages accompanied by rising prices of raw materials and difficulties in transporting products have significantly disrupted SME businesses thereby increasing business risks. Unusual disruptions caused by numerous prohibitions and orders resulting in temporarily closing or restricting businesses in various industries have resulted in closing many small and medium-sized enterprises. Although business interruption is an inherent risk of running a business, in order to minimize its impact, entrepreneurs must better prepare themselves for the disruptions accompanying reality by developing various options of action to manage it effectively, bearing in mind that even a short-term absence on a competitive market can result in a loss of trust among key customers and thus open the door to competition. The technical condition of the fixed assets used in the production provision process is also significant, which, due to the often limited possibilities of financing investment activities in SMEs, is not always satisfactory. The degree of physical wear and tear on machinery and equipment as well as their economic obsolescence resulting from dynamic technical progress are particularly noteworthy. Modernizing the machinery undoubtedly reduces the business risk, as it contributes to lowering production costs, reducing the number of breakdowns and stoppages, decreasing the accident rate and, above all, allowing the quality of manufactured products to be improved.

In the category related to human resources (Table 2), problems with obtaining employees possessing proper education and qualifications were considered to be a factor significantly threatening the functioning of SMEs. The risk related to human resources results mainly from an ageing population, health problems reflected in more frequent employee absences, and staff shortages in the market due to not only population decline but also to changes in work culture that may have occurred as a result of low unemployment and people from the subsequent generation entering the labour market. Moreover, people are increasingly driven not only by financial considerations and salaries when deciding



to work in a particular place, but attitudes towards employees as well as the social and ethical values of companies are also important to them, so the battle for the best employees remains a challenge. The key to the success of any economic unit consists in attracting and retaining talented people, for it is talented employees who are responsible for the shape and development of the business. This is a particularly significant risk for small and medium-sized entities, which are often not in a position to fight for an employee, either with wages, development opportunities, or even benefits. Focusing on attracting people with the right knowledge and skills demonstrates recognizing the interdependence between the various risks, as the failure to attract talented people to the company may cause or exacerbate competitiveness or innovation problems in the near future.

Within the group of factors related to business management (Table 2), the biggest concern is the loss of reputation, because reputation constitutes a factor that often has an impact on establishing cooperation with contractors, access to capital, and the level of demand concerning the products offered by an entity. The risk of losing reputation is largely due to the pervasiveness of the media, including social media. Entrepreneurs operate in an environment where everyone, customers, suppliers, business partners, or competitors, have uninterrupted access to information that is not always under control. Moreover, it is not always possible to put one's own response forward in the information overload. It is also worth adding that, more and more often, the risk of losing reputation is caused by incidents that are sometimes not at all related to the products offered by the company, but result from internal workplace relations or links with other companies, industries, or suppliers.

A worrying phenomenon in SMEs is that insufficient attention is paid to the problem of innovation, which now seems to be even more important than before in achieving business success. This is because the implemented innovations increase the entity's market position, have a positive impact on its reputation and, above all, result in increased profits. The lack of any innovative activity can weaken an entity's competitiveness, and it is then much more difficult to catch up with its competitors and fight for customers.

In the case of the last of the mentioned categories (Table 2), meaning IT risk, businesses are primarily concerned about the violation, or even loss, of any company data. A factor enabling both business survival during the blockades associated with the spread of COVID-19 and the subsequent acceleration of business activity after reopening undoubtedly consisted in technology. As a result of the situation, the transition of remote working from an option turned into a necessity almost overnight, forcing businesses to accelerate their investment in appropriate equipment. The change in the technological system in many entities was so rapid that sometimes security vulnerabilities have been overlooked or simply accidentally created by less advanced companies, which in turn increased the risk of data violations. In doing so, it should be emphasized that in order to effectively deal with any cyber threat, it is important to follow the ze-

ro-trust principle, a security concept according to which a company always verifies requests to connect to its systems.

Considering the different types of risks from all categories, respondents considered loss of liquidity, increasing competition, and the economic downturn as the most significant risk factors in the SME sector (Table 2). However, while for the second of the indicated sub-areas there was a high degree of consistency in the answers provided by respondents, for the third there were also similar responses, but the level of standard deviation was significantly higher in terms of loss of liquidity, indicating that the answers were somewhat more dispersed. However, entrepreneurs from the SME sector, especially the smaller ones, attach the least importance to social responsibility of their business, which is a pity, because this means that they focus far too much on their activity, neglecting the social interest, environmental protection, and relations with their environment. Unfortunately, such activities don't contribute to the company's competitiveness, hence perhaps a high indication of the threat posed by the increasing participation of entities operating in the same industry, especially the larger ones, which are more likely to implement CSR, thereby standing out from their competitors and building a positive corporate image.

The conducted research shows that in small businesses (Chart 2 and Table 2), market risk and financial risk were assessed as the highest (3.72 and 3.62 respectively on a 5-point scale), while business management risk was assessed as the lowest (2.96). Threats that have the greatest impact on the operation of companies with less than 50 employees are loss of financial liquidity (average of just over 4) and increasing competition (average of almost 4). In both cases, respondents were consistent in their opinions, as evidenced by the low standard deviation, fluctuating around 0.9. Less significant factors, but nevertheless also important, are the economic downturn, increasing costs of doing business and the loss of customers translating into fewer orders, thus reducing the level of revenue that would be able to cover the incurred costs. In this case, once again, the responses were similar, as evidenced by the level of deviation. Respondents from small businesses also called attention to the threat of changing legislation. Unfortunately, legislative processes and regulations often become cumbersome and, in addition, incomprehensible to entrepreneurs, thus constituting a barrier for their development, as reflected in the responses of owners or managers of companies employing up to 50 people. In contrast, a relatively wide dispersion of responses and therefore a rather high level of deviation can be seen for the risk of losing reputation which closes the list of top ten risks in small businesses.

Medium-sized enterprises (Chart 3 & Table 2), like small ones, are most concerned about market and financial risks (3.82 and 3.63 respectively), while they are least concerned about risks arising from managing the entity (3.17). The conducted research shows that the business of entities employing up to 250 people is most threatened by increasing competition and the COVID pandemic-related economic downturn, resulting in an increase in market stagnation

and a decrease in sales levels and thus in the value of generated revenue. In both cases, there is a high degree of agreement in terms of the opinions of respondents, as the deviation does not exceed 0.9. Furthermore, medium-sized enterprises are significantly concerned about risks in the distribution process as well as fluctuations in the price of raw materials, which constitute a major challenge, especially for entrepreneurs who have signed long-term contracts with fixed prices that are difficult to comply with and which, under the existing circumstances, often lead to losses. However, it is worrying that many entrepreneurs, most likely seeing themselves as contractors, providers of certain services or products, rather than as creators, pay far too little attention to innovation. This, in turn, makes it more difficult for them to attract talented, well-educated people to the company who would have the opportunity to implement their ideas. It is also worth mentioning that some respondents (highly varied responses) underestimate the risks associated with computer hardware failure, even though the COVID-19 pandemic has forced many companies to change their work organisation and quickly implement new technologies enabling remote working.

The Chi-2 concordance test used to determine the relation between the level of each risk category and the size of the companies, with a significance level of 0.05, confirmed a statistically significant relationship. The strength of this relationship was determined on the basis of the V-Cramer ratio, which can be considered moderate for market and financial risk, for operational risk it is on the borderline between moderate and weak, while for other categories this relationship is weak.

The issue of risk is widely discussed in the literature, however, most publications focus on either selected risk categories, or on determining the impact of risk on the company's results, or analyze the threats to SME activity in connection with a specific crisis situation. In addition, the issue of risk identification itself, which is the basis for the risk management process in the enterprise, is discussed in a too superficial way. There is also no universal register of risk sources with clearly defined threats to the activity of enterprises in the SME sector.

5. Conclusion

The effectiveness of the risk management process depends primarily on identifying the factors that threaten the operation of enterprises, as risks that are not identified at this stage will not be taken into account during subsequent stages of risk management and it is not going to be possible to reduce their negative impact on the conducted business. During risk identification, which should be a repeatable process, it is important to thoroughly analyse potential risk factors, i.e. any events that could jeopardise achieving the entity's intended objectives. Their source can be both the enterprise itself and the environment in which it operates, which is why a properly conducted risk identification should take into



account not only all planes of an entity's activity, but also the relations linking it with its environment.

Looking for areas of risk and recognizing the factors that threaten business has an impact on the effectiveness of not only risk management, but also the entire enterprise. In order to facilitate identifying risks accompanying the operation of economic entities it is important to prepare a risk register on the basis of which it is possible to identify the most important disruptive factors for small and medium-sized entities.

The biggest threat to the operation of both small and medium-sized enterprises consists in market factors from the environment in which the business operates and financial factors that can deteriorate the financial situation of the entity. The conducted research confirmed that there was even the slightest correlation between the individual risk categories and the size of the company. In the case of market and financial risks, the correlations were at the highest level, while in the case of company management risks, the correlations were definitely the lowest.

When comparing the results of the survey in the two groups of companies that make up the SME sector, it is possible to see a great convergence among the indicated threats. In the top ten, most of the sources overlap, the only element that differs is the impact of individual factors on the operations of companies classified by size. Entrepreneurs employing up to 49 people are most concerned about the loss of accounting liquidity, followed by increasing competition and the economic downturn. These factors are to some extent related, as the strong impact of the indicated sources of market risk can result in difficulties in converting assets into cash with which to settle financial liabilities when they are due to be settled. On the other hand, medium-sized enterprises, in addition to increasing competition and the economic downturn, are also significantly concerned about disruptions in the distribution process, as the inability to deliver a given product to the customer on time may increase the activities of competitors, thus affecting the decrease in market share.

The main limitation of the current research is a rather small research group, therefore the challenge for the future is to create and conduct broader research in the area of risk identification in SME sector entities. In order to increase the precision of the obtained results, it is also important to identify factors that threaten the activities of enterprises operating in specific industries.

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Appendix

Table 1.
Register of risks in small and medium-sized enterprises

market risk	economic downturn increasing competition loss of customers (decrease in demand) material and commodity price fluctuations changes in legal regulations
financial risk	availability and cost of capital loss of liquidity rising costs of business late payments by contractors currency fluctuations
operational risk	halts in doing business disruption/interruption in the distribution process product quality/increase in the number of complaints physical damage to property technological failure
risk related to human resources	employee absences difficulty in retaining qualified staff employee accidents lack of proper staff on the market employee dishonesty
risk related to business management	social responsibility loss of reputation lack of innovation
IT risk	data violation/loss failure of information systems

Source: Own preparation.



Table 2.
The level of individual types of risk

Types of risk	Small		Medium		SME	
	Average	SD	Average	SD	Average	SD
economic downturn	3.89	0.87	3.99	0.84	3.94	0.86
increasing competition	3.99	0.86	3.97	0.89	3.98	0.87
loss of customers/decrease in demand	3.73	0.91	3.77	0.96	3.75	0.94
material and commodity price fluctuations	3.67	1.07	3.86	0.92	3.77	1.00
changes in legal regulations	3.46	1.24	3.53	1.11	3.45	1.18
availability and cost of capital	3.52	0.98	3.48	0.88	3.5	0.93
loss of liquidity	4.03	0.89	3.72	1.28	3.87	1.09
rising costs of business	3.83	0.87	3.82	0.97	3.83	0.92
late payments by contractors	3.61	0.99	3.71	0.93	3.66	0.96
currency fluctuations	3.11	1.32	3.39	1.02	3.25	1.17
halts in doing business	3.59	0.97	3.67	1.03	3.63	1.00
disruption/interruption in the distribution process	3.69	1.04	3.89	0.92	3.79	0.98
product quality/increase in the number of complaints	3.43	1.16	3.33	1.29	3.38	1.23
physical damage to property	3.07	1.27	2.86	1.42	2.97	1.35
technological failure	3.32	1.18	2.98	1.28	3.15	1.23
employee absences	3.36	1.19	3.28	1.22	3.32	1.21
difficulty in retaining qualified staff	3.42	1.10	3.41	1.19	3.42	1.15
employee accidents	2.96	1.29	2.71	1.32	2.84	1.31
lack of proper staff on the market	3.39	1.18	3.62	1.02	3.51	1.10
employee dishonesty	3.16	1.06	2.96	1.26	3.06	1.16
social responsibility	2.14	1.47	2.98	1.33	2.56	1.40
loss of reputation	3.45	1.21	3.78	1.05	3.62	1.13
lack of innovation	3.01	1.23	2.71	1.39	2.86	1.31
data violation/loss	3.13	1.08	3.42	0.98	3.28	1.03
failure of information systems	3.04	1.11	3.12	1.06	3.08	1.09

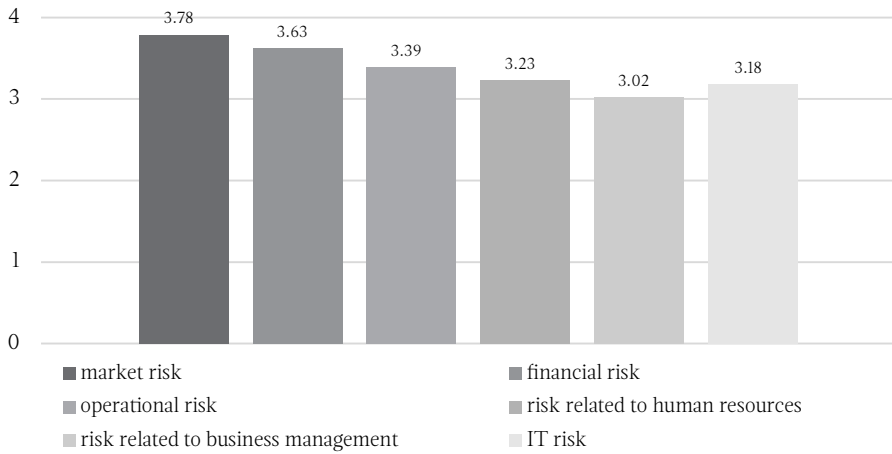
Source: Own preparation.

Table 3.
Chi-2 statistics and V-Cramer coefficient for individual risk categories

Risk category	Chi-2	V-Cramer
market risk	221.250	0.384
financial risk	189.503	0.315
operational risk	161.492	0.281
risk related to human resources	114.723	0.237
risk related to business management	51.258	0.158
IT risk	120.358	0.243

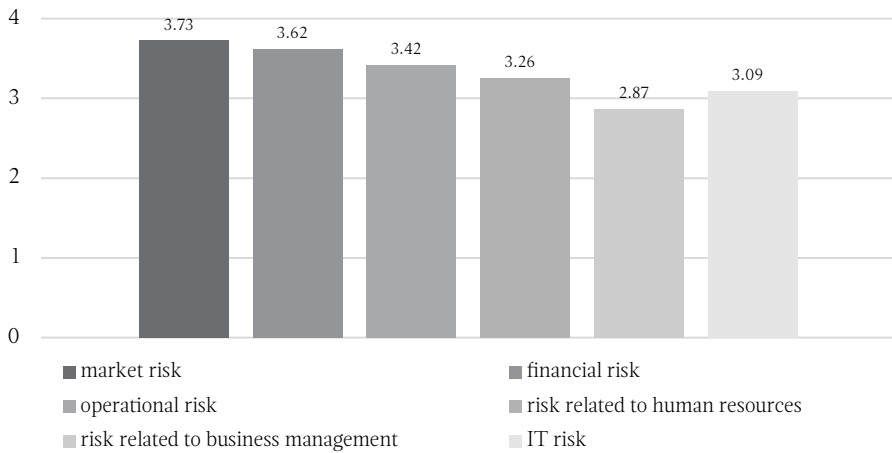
Source: Own preparation.

Chart 1.
The level of individual risk categories in SME sector enterprises



Source: Own preparation.

Chart 2.
The level of individual risk categories in small enterprises



Source: Own preparation.



Chart 3.
The level of individual risk categories in medium-sized enterprises



Source: Own preparation.

