Joanna Duda*, Maciej Woźniak**

Bank policies towards SME sector in Poland and selected countries worldwide

1. Introduction

The sector of small- and medium-sized enterprises is the driving force of economic development globally, owing for instance to the sheer multitude of such businesses their substantial contribution to the GNP and a significant share of employees. Their operations encounter a range of legal, legislative, or financial barriers, however, which slow their development. Financial barriers impede access to funding (including bank credit) to finance innovative activities. Micro-, small-, and medium-sized enterprises face serious problems obtaining bank credit; therefore, the authors aimed to investigate whether the problem of financing SMES (especially microenterprises) is only a Polish problem or if it is a wider problem for other countries as well. Are micro enterprises also facing problems related to obtaining bank loans in other countries? How do banks in other countries solve the problem of the high risk of financing microenterprises?

In order to achieve the goal and answer the questions posed, we conducted literature research and our own research into banks in Poland. It was also supported by research carried out by the Ministry of Economy and research conducted by an organization that promotes and supports the Polish SME sector – the Polish Confederation of Private Employers "Lewiatan." The collected results of the research in Poland served to diagnose the current state in the field of bank policies towards Polish SMEs. Next, we analyzed analogous international surveys, which served as examples of good practices and benchmarks in order to create recommendations for banks operating in Poland.

 * AGH University of Science and Technology, Krakow, Poland, Faculty of Management, Department of Organizational Management, Human Resources Management and Economic Law, e-mail: aduda@zarz.agh.edu.pl
** AGH University of Science and Technology, Krakow, Poland, Faculty of Management, Department of Economics Finance and Environmental Management, e-mail: mwozniak@zarz.agh.edu.pl

2. Literature review

Small- and medium-sized enterprises (SMEs) have a very important influence on the development of a national economy. This is connected with the creation of jobs, growth of the living standard, and maintenance of a balanced regional development (Bhalla and Kaur, 2012; Mwengi et al., 2013, pp. 69–76). SMEs have a significant part of the total employment in many countries, but their contribution to economic growth is lower because of the obstacles they face that large companies simply do not experience (Beck and Demirguc-Kunt, 2006, pp. 2931–2943). One of these is insufficient access to external capital. Although lending and equity-based crowdfunding has emerged as new sources of financing, it is rather aimed at small companies. In connection to this, the problem is the subject of significant research interest to academics. It is also an issue of great importance to policy makers (Berger and Udell, 2006, pp. 2945–2966). Given the above, much research has been conducted. According to Mwagi et al. (2013), most of the SMEs in Kenya could not survive their third years because of the lack of adequate and relevant financing information. Among other things, they need information about available loans. In China, banks may lack the incentive to finance SMEs. There are four main reasons. First of all, not all banks are profit-maximizing financial institutions, so lending to SMEs may not be the main goal of their governors. Moreover, even if local branch managers are able to identify credit-worthy SMEs, they do not have full control over the lending process. Bank managers may also not want to work hard because it does not necessarily provide them a better salary. There are also outside factors; for example, government influence or law enforcement that can discourage financing SMEs. The conclusion of the survey made by Shen et al. (2009, pp. 800–811) reveals that, in China, bank size, lending authority, incentives of loan officers, bank competition, and institutional arrangements all influence the financing of SMEs. As a result, state-owned enterprises have indirect financing advantages; but, there is discrimination towards foreign and private companies (Wang et al., 2014). In Colombia, there are also barriers to financing SMEs by banks: inherent characteristics (informality, availability/reliability of financial statements, management skills, family-owned structures), regulations (particularly the interest rate ceiling on loans), the legal and contractual environment (especially with respect to secured credit), and economic policy that provide conflicting signals to financial markets as to the intentions of the government (Stephanou and Rodriguez, 2008).

T. Beck and A. Demirguc-Kunt (2006, pp. 2931–2943) found that innovative lending technologies could provide market-friendly ways of decreasing the constraints for SMEs. However, A. Berger and G. Udell (2006, pp. 32–53) argue that this framework is oversimplified. In connection to this, it overlooks some

crucial distinctions across national financial institutional structures as well as lending infrastructures. It also regards the way in which the elements influence credit availability for SMEs. Suboptimal financial institutional structures as well as lending infrastructures constrain the technologies available for financing SMEs in many countries. It considerably decreases credit availability for these enterprises, which are the most important source of external financing (Berger and Udell, 2006, pp. 2945–2966; Duda 2013, pp. 7–20; Łuczka 2001; Kyaw 2008). P. Behr and A. Guettler (2007, pp. 194–213) confirm that, in capital market-based financial systems (for example, in the United States), SMEs have better access to loans. In many other countries, however, small- and medium-sized companies have significant problems. In India, there is a conservative approach in commercial banks towards SMEs. Banks were reluctant to grant loans, as they were focused on collateral and securities. SMEs had to face high interest rates as well (Bhalla and Kaur, 2012, pp. 69–76). In Germany, bank lending relies on close and long-term relationships between banks and their clients. As a result, changing a bank is expensive. The solution of this problem could be the model that enables SMEs to self-estimate their expected probability of default. Better knowledge about creditworthiness can open opportunities to accessing alternative sources of external financing (Behr and Guettler, 2007, pp. 194–213).

Most of the studies (including the research already mentioned) concerns only one country and have different methodologies. Given the above, it is difficult to make an international comparison.

The following research questions have been made:

Q1: Does the size of a bank affect financing SMEs in Poland?

Q2: Is the problem of financing SMEs (especially microenterprises) only a Polish problem or is it also a broader issue for other countries?

Q3: Do microenterprises also face problems related to obtaining bank loans in other countries?

Q4: How do banks in other countries solve the problem of the high risk of financing microenterprises?

3. Theories

There are many theses that explain the problems of SMEs accessing bank credit. One of these is the concept of lending discrimination towards small and medium enterprises by J.K. Galbraith (1957, pp. 124–133). It is particularly important for SMEs because of the limitations of other forms of financing their growth. Moreover, these enterprises face the process of declining equity in all developed countries in the long term. Galbraith put the thesis that, in oligopolistic market

conditions and during the restrictive monetary policy implemented by a central bank, SMEs are discriminated towards in their access to bank credit. Large companies are always capable of extra-budgetary funding from different sources and have a much better chance of getting credit through various contacts with banks. Through the use of monetary policy instruments, a central bank tries to control the inflation process. According to Galbraith, this is effective only with respect to SMEs (Galbraith, 1957, pp. 124–133).

The empirical verification of this concept was made by Dawis and Yeomans. They relied on verification of the thesis not on the impact of lending discrimination but on the system of granting credit. The result of a restrictive monetary policy is a decrease in the economic situation of SMEs. Therefore, it also decreases their value of credit, resulting in a rise in their requirements. They proved that the creditworthiness criterion is dependent on the size of the company during the reduction in the supply of credit by the central bank. Further analyses made by other economists also support the thesis about lending discrimination towards SMEs (Łuczka, 2001).

Another thesis regarding the problem of SMEs in accessing foreign capital is credit rationing. This is the concept of the rationalization of credit with asymmetric information formulated by Stigliz and Weiss (1981, pp. 393–410). It can occur in two cases:

– the creditworthiness of the borrowers is the same; however, only some of them could obtain credit while others are rejected (even if they accepted a higher interest rate);
– some borrowers do not receive credit regardless of the interest rate.

Credit risk varies in proportion to the asymmetry of information between the bank and the client. This asymmetry is due to the costs of obtaining relevant information about the investment and creditworthiness as well as the intensity of the information. Banks want to reduce the cost of credit that applies to borrowers with high intensity information (including SMEs). On the other hand, there are customers who have large financial resources and established positions in the market. Credit rationing is applied proportionally to the net assets. Under these circumstances, credit rationing weakens the effectiveness of the monetary policy of a central bank.

Bhalla and Kaur (2012, pp. 69–76) argue that the most important reason for the conservative approach of commercial banks towards SMEs was the information asymmetry between these entities. Moreover, the survey of Mwangi et al. (2013, pp. 16–25) revealed that, besides the reputation effects, information asymmetry has a greater influence on SMEs than other factors. Empirical studies revealed that the most important factor for the differentiation of interest rate bank credit is

the size of the company (Łuczka, 2001). Studies of other economists also confirm this assertion (Woźniak, 2007, pp. 127–135).

There are several explanations for this state of affairs. The first is the relationship between the size and the average cost of the credit. This was confirmed by the results of empirical studies. In connection to this, credit for SMEs has a higher interest rate because of the higher average cost per unit of credit than in the case of larger credit. The second explanation concerns the risk of the loan. The risk of lending to SMEs is high, unlike in the case of a large company. In addition, the cost of a bank account for a large company is lower than for SMEs. This leads to the strong competitive pressure on large customers and stiffening the offer for small- and medium-sized companies. Moreover, SMEs have a lower price flexibility of demand for credit than large enterprises do. Therefore, banks are not willing to lower the interest rate on the credit, and SMEs must accept the rigid conditions of banks or seek credit elsewhere. They are not in a position to exert pressure on the market due to the limited alternative sources of external financing (Cowling and Westhead, 1996, pp. 52–60; Łuczka, 2001; Deakins et al., 2008, pp. 7–20; Cowling, 2010, pp. 36–44).

There is also the distressed-bank barriers hypothesis. Banks in financial distress are less likely to finance SMEs. This is directly linked to the income of the loan manager, because the risks of such financing cannot be easily verified. Moreover, research found that tougher supervisory standards in examining bank portfolios decrease SME lending.

There is a view that small banks are better-suited to finance SMEs. The reason is supposed to be that the soft information gathered through direct contact with small- and medium-sized enterprises mitigates opacity problems. The literature has emphasized that small banks have an advantage in accessing such information. There is an assumption that such banks will fully utilize this. This is reasonable for profit-maximizing financial institutions that provide loan managers enough incentives to collect and use it. Moreover, some research suggests that large banks have a comparative advantage of financing SMEs through lending technologies such as factoring leasing or credit scoring.

Some scientists argue that government-owned banks find that the macro-economic environment and bank regulations are the most important barriers. Foreign and privately-owned domestic banks rank the degree of competition in the SME sector and the macroeconomic environment as the most important barriers. International research on a sample of 91 banks from 45 countries reveals that access to credit history information is very important for banks in developing countries. This barrier is also more relevant for foreign banks. They rely more on hard verifiable information for lending decisions as well as real estate as collateral. Nevertheless, they do not seem to lend less to SMEs than domestic banks do (Beck et al., 2006, pp. 2931–2943).

4. Research methodology

In order to achieve the goal and answer the research questions posed, the results of our own research and those of our secondary research were used.

In Poland, we surveyed seven banks: six are big international players, and one is a public bank. They include 50% of the banking market in Poland. The research was carried out in 2015 as a questionnaire for competent bankers. While preparing the survey questionnaire for research in Poland, we based it on the research conducted by Augusto de la Torre, María Soledad Martínez Pería, and Sergio L. Schmukler (2010, pp. 2280–2293). The questionnaire consisted of a questionnaire head, 15 closed questions, and specifications. The questions concerned the policies of the banks regards micro-, small-, and medium-sized enterprises. Banks were asked to define this sector and indicate what percentage of their clients are individual-sized classes of enterprises. In addition, they were asked about the type of banking products addressed to SMEs, standardization of the offers, elements of creditworthiness testing, risk assessment, risk management, preferred loan collateral, barriers limiting cooperation with SMEs, incentives to cooperate, and impact of the crisis on SME services. The research was conducted among the managers who deal with loans for Polish SMEs.

In order to show the image of the entire Polish SME sector, the results of the research elaborated and presented by Ministry of Economy, Forecast, and Analysis Department as part of a survey among 6000 enterprises and on research by the Polish Confederation Lewiatan, who surveyed 1650 SMEs.

The benchmarks that were used to refer to the results of the Polish research were used by studies carried out by the World Bank in Argentina, Chile, Columbia, and Serbia.

In Argentina, the World Bank examined 14 banks: 6 foreign, 6 private domestic, and 2 state banks, accounting for 75% of the banking sector and 75% of all bank assets. The survey in Chile covered four foreign banks, three private domestic, and one public bank, which constitutes 79% of the banking assets in that country. The Colombian surveys were conducted with seven private banks and one leasing firm, which manage 60% of the banking assets nationally. Eight banks, including five branches of European banks, one international bank specializing in lending to SMEs, and two large local banks were queried in Serbia – 70% of the entire SME crediting market and 60% of the banking assets.

Comparisons are made more difficult by the fact that each of the countries (and even each bank in Poland) applies classification criteria of their own to the enterprises. The criteria of classifying enterprises as SMEs in the selected countries are shown in Table 1.

Table 1

Criteria of classifying enterprises as SMEs in selected countries

Country	Criteria of classifying enterprises as SMEs
Argentina	average annual turnover between US $300,000 and 30 million
Chile	average annual turnover between US $90,000 and 24 million
Colombia	average annual turnover between US $400,000 and 13 million (small domestic banks apply other criteria: average annual turnover between US $100,000 and 5 million)
Serbia	average annual turnover between €500,000 and 10 million

Source: own compilation on basis of Torre et al., 2010

All businesses with average annual sales below the figures in Table 1 are treated as micro-enterprises. In Poland, the criteria of classifying enterprises as SMEs vary across banks. Each bank has its own criteria in spite of the prevailing Ustawa z dnia 2 lipca 2004 r. o swobodzie działalności gospodarczej (Dz. U. 2004, nr 173, poz. 1807). The criteria are shown below in Table 2. Bank names are not provided due to banking secret considerations.

Table 2

Criteria of classifying enterprises as SMEs by selected banks in Poland

Bank	Criteria
1	Businesses with average annual headcount of below **50** and the following annual turnover: a) self-employed individuals and private partnerships – up to PLN **20 million,** b) commercial companies and other legal entities – up to PLN **10 million**, c) sector – no limitations
2	Businesses with **double-entry books of accounts** and annual sales revenue below €**7 million**
3	Enterprises with annual turnover below PLN **20 million**
4	Small businesses with the so-called **single-entry books of accounts and annual sales revenue below** €**800,000** Medium-sized companies with **double-entry books of accounts** and annual sales revenue below €**800,000**
5	Enterprises as defined by the **Law on Business Activity**, individual professionals and non-profit entities providing services to households with annual net sales revenues or annual budgets of up to PLN **5 million** in the most recent calendar year

Source: own compilation

In Poland, Chile, Serbia, Colombia, and Argentina, banks with more-developed business models of SME sector service distinguish between small- and medium-sized enterprises. Those without such models apply the same criteria to the SME sector in its entirety.

In this work, the uniform definition of SMEs is omitted and the definitions adopted by each country and by each bank are adopted, which complicates the analysis. However, one definition cannot be established because everyone has their own. Therefore, the results of the international surveys are examples of good practices and show how the problem of financing micro and small enterprises by banks is solved in other countries. However, they are not subject to a comparative analysis.

5. Involvement of banks in financing SMEs in selected countries

The review of international surveys shows that the relationships between banks and the SME sector are significant in almost all countries. Almost all banks (93% in Argentina, 100% in Chile, 88% in Columbia, and 100% in Serbia) have small- and medium-sized enterprises among their active and important clients. The banks recognize SMEs as a strategic sector, especially in Argentina and Chile. In connection to the above, they restructured and hired a person specifically qualified to analyze the situation of the SME sector (Torre et al., 2010, pp. 2280–2293). Similarly, banks in Poland also have special departments that deal with the assessment of the SME sector. This means that not only large enterprises but also micro-, small-, and medium-sized enterprises are becoming more and more important for the banking sector.

Analyzing the available data, it can be noted that banks provide significant numbers of loans to the SME sector. Loans granted to SMEs as related to the entire private sector (including retail sales) reached 37% in Argentina and 14% in Chile in 2006. The granting of loans to SMEs by banks is significant, reaching 62% of all loans granted in Argentina and 28% in Chile. The situation was similar in Columbia, where the number has doubled since 2003 (accounting for 25% of all loans granted in 2006). In contrast, 34% of the loans were granted to the SME sector in Serbia (as related to all loans granted for small-, medium-, and large-sized companies). This indicator was much lower in developing countries (according to research by the IFC – International Finance Corporation, a member of the World Bank); the lending rate for SMEs amounted to just 16%. These results encouraged us to conduct research in Poland and to check whether the policies of banks operating in Poland are similar to those used by banks in other

countries and to obtain answers to the questions that were set out in Section 2 of this article.

The data shows that large or foreign banks usually support the SME sector. This is 100% of the banks in Argentina and Serbia, 88% of the banks in Chile, and 75% in Columbia. Only in Argentina and Chile do medium-sized and national banks support SMEs (56% in Argentina and 16% in Chile).

According to the studies by Torre et al. (2010), there are many factors that cause banks to cooperate with the SME sector.

In some countries (Argentina and Serbia), the most frequently mentioned reason was the increase of profit. In addition, the banks in Argentina also pointed to the relationships of SMEs with large companies as a factor that encouraged cooperation. More than half of the banks in Argentina consider the SME sector as strategic and profitable. In Chile, the most important factor was the possibility of entering other sectors and high competitiveness in other sectors financed by banks. In Serbia and Argentina, the next reasons were the relationships of banks with large clients followed by competitiveness in other sectors financed by banks and the possibility of entering new markets (Tab. 3).

Table 3

Encouraging factors (motivators) for banks to cooperate with SME sector

Factors	Argentina	Chile	Serbia
	percent of banks		
Perceived profitability	92	63	75
Relationships with large clients	69	25	50
Strategic sector	54	25	0
Competitiveness in another sector	31	50	38
Opening to enter other sectors	8	75	38
Social goals	15	25	0

Source: Torre et al., p. 2285

Another factor motivating cooperation with SMEs is the fact that large foreign banks in the world have experienced a decline in revenues from financing the company sector. This was connected with competitiveness on local capital markets (companies acquire other sources of funding) and with the large competitiveness of financial and non-financial institutions such as shopping malls or chain stores that offer installments and loans on the market of individual clients.

When assessing companies from the SME sector, large banks in Argentina, Chile, and Serbia pay attention to the cooperation of SMEs with large companies (their large clients). They choose those SMEs that act as providers or outsourcing companies for larger enterprises. In this way, banks acquire knowledge about SMEs from the large companies that cooperate with small enterprises. This knowledge can help reduce the level of risk and asymmetry of information, which are the biggest problems banks face in handling the SME sector.

Unfortunately, there are also many barriers that discourage banks from co-operating with the SME sector.

In Argentina, the largest obstacle was the high competition among the banks in the sector and the weak demand for loans in the SME sector. In all of the ana-lyzed countries, one can notice that the largest obstacle is the specificity of the SME sector and regulations as well as macroeconomic factors (Tab. 4).

Table 4

Obstacles/barriers of cooperation between banks and SME sector

Obstacle/barrier	Argentina	Chile	Columbia	Serbia
	percent of banks indicating obstacles			
Specificity of the SME sector	46	50	88	69
Competition in sector	69	13	0	63
Macroeconomic factors	46	13	63	63
Regulations	23	50	88	75
Legal and contractual environment	31	38	75	88
Lending techniques for SME sector	23	38	38	63
Lack of adequate demand	46	0	0	38
Characteristic factors for banks	23	13	25	13

Source: Torre et al., p. 2285

Research conducted by the World Bank shows that banks specializing in financing the SME sector have special branches to finance these enterprises (77% in Argentina, 88% in Chile, 100% in Columbia, and 88% in Serbia). In Chile and Argentina, many banks have created branches that are adjusted not only to the size of an enterprise but also to the specific conditions of the sectors

in a given region of a country. This approach is aimed at reducing risk. In order to minimize the risk that always accompanies the financing of these enterprises, banks standardize their offered products. It was noticed that the bigger the company, the more individual (specially tailored) set of products that are offered. The smallest enterprises (especially micro enterprises) tend to get standard products as an offer.

Banks view the standardization as the same products with certain adjustments (such as changing the main credit line) in order to adapt it to the production cycle of a given industry (for instance, selling a specific product or providing financing).

Risk assessment is a natural and even necessary element from the point of view of banks, which is why it always accompanies investment loans. In most banks, risk assessment is separated from the sale of loans. In order to reduce costs, banks do not keep departments for analyzing and assessing risk in each branch but create central branches of risk analysis.

In all banks, the assessment of risks takes place in the head office, not in the regional branches. Specially created risk management departments have clear independence, and their opinion has a very large impact on the decision to grant a loan.

In order to minimize the risk, banks use skimming tools to capture less risky SME clients. They usually specify the size and threshold of this loan through the utility of the skryming tool. They also use tests to determine the efficiency of an automatic scoring system. When assessing larger companies, banks use an individual risk assessment. The automatic system forms the basis for a risk assessment analysis, but it is not the only tool. After granting the loan, the banks apply a monitoring system and apply early warning systems in the event of the risk of non-payment of a loan by an entrepreneur.

Authors Augusto de la Torre, María Soledad Martínez Pería, and Sergio L. Schmukler (2010, pp. 2280–2293), also analyzed the impact of the crisis on changes in bank financing of the SME sector based on research conducted by the World Bank in Argentina (ten banks), Chile (six banks), and Colombia (eight banks). This analysis shows that, as a result of the financial crisis in 2009, the banks did not stop financing the SME sector and did not reduce the amount of financial means allocated to these entities. The reason for these decisions is the fact that the crisis affected not only SMEs but all companies, including large ones and individual clients. As compared to large companies and individual clients, the crisis affected SMEs to a lesser extent.

However, it can be noted that the banks increased its interest rates and shortened its lending time for SME entities. This is a natural behavior during a crisis. The companies also reduced their investment and, therefore, showed less interest in loans and other banking finances (Tab. 5).

Table 5

Changes regarding SME sector. How crisis affected financing of SME sector

Changes regarding SMEs	Argentina	Chile	Columbia
	percent of banks		
Fewer funds to borrow for SME sector	0	0	0
Increase in interest rates for SMEs	40	50	25
Shortening time of crediting	90	33	13
Increased risk due to macroeconomic instability	70	83	88
Increased risk due to macroeconomic instability	0	17	38
Bank prefers to grant loans to other sectors	0	0	0
Fall in demand for loans from SMEs	70	33	63
Fall in demand from SMEs on other services	20	33	13
Increase in demand for loans from SMEs	0	33	0
Increase in demand from SMEs on other services	10	17	0

Source: Torre et al., pp. 2282–2288

6. Involvement of banks in financing SMEs in Poland – results of own research

In Poland (as in other countries such as Argentina, Chile, Serbia, Columbia, and Serbia), banks that provide finances to the SME sector are primarily large banks with an international operating range. Only in Argentina do public and niche banks have a significant share in financing the SME sector. In Poland, 86% of the large banks finance the SME sector with only 14% of public banks doing so (Tab. 6).

The surveyed banks answered that, from their point of view, an important factor encouraging them to finance SMEs is the willingness to improve their own profitability, which was disturbed due to the economic recession on the market and the loss of some large customers. Another important motivating factor for SME financing is cooperation between SMEs and large enterprises. This seems justified because micro and small enterprises are especially not "transparent" to banks because they do not keep full accounts, only simplified ones (or settling

in a lump sum). Therefore, those SMEs that cooperate with large enterprises become more reliable. This was the answer of 100% of the surveyed banks considered. Respondents also indicated that they should expand their activities to the new sector (71%) and that the SME sector is an important element of their strategy (84%). The results are presented in Table 7.

Table 6

Banks financing SME sector in Poland

Type of bank	Percentage of banks
Large banks	86
Public banks	14
Niche banks	0
Other bank brokers	0
Small banks	0

Source: own research

Table 7

Encouraging factors (motivators) for banks to cooperate with SME sector

Factors	Percentage of banks
Perceived profitability	100
Relationships with large clients	100
Strategic sector	84
Competitiveness in another sector	43
Opening to enter other sectors	71
Social goals	0

Source: own research

As presented in the fifth section of this article, barriers limiting the cooperation of banks with SMEs are perceived differently in different countries (Tab. 8). The data presented in Table 13 shows that, for banks in Poland, the specificity of the SME sector is only a small barrier (28%). However, the greatest obstacles

are macroeconomic factors (84%) and regulations (57%). This is due to the fact that most banks have departments prepared to finance SMEs. However, it does not affect the factors independent of them, such as legal provisions and macro-economic factors.

Table 8

Obstacles/Barriers of cooperation between banks and SME sector

Obstacles/barrier	Percentage of banks
Specificity of the SME sector	28
Competition in sector	43
Macroeconomic factors	84
Regulations	57
Legal and contractual environment	0
Technologies lent to SME sector	28
Lack of adequate demand	14
Characteristic factors for banks	28

Source: own research

In most of the surveyed countries mentioned in the fifth section, banks offer standard products to SMEs in order to minimize risk. For large enterprises (which are less risky from the point of view of banks), they offer dedicated products. Studies conducted in Poland show that only 28% of the banks offer standard products to SMEs; this may be one of the reasons for the low rate of bank loans for micro and small enterprises (Tab. 9).

Table 9

Standardization of banking products offered to SME sector in Poland

Mainly standardized products	Similar proportion of standardized and individually customized products	Mainly individually tailored products
percent of banks offering these products		
28	57	14

Source: own research

The low financing level of SMEs by banks in Poland is confirmed by the results of the research published by the Polish Confederation of Private Employers (PKPP) "Lewiatan." They show that the majority of SMEs do not use bank loans (more than 65%) due to the difficulties obtaining them. The loans are least often used by microenterprises and most often by medium enterprises. This is due to the fact that the banks in Poland do not have credit offers adjusted to microenterprises as are available in Argentina, Chile, Columbia, and Serbia. They consider this sector to be very risky and, therefore, do not finance these enterprises (Tab. 10).

Table 10

Percentage of SMEs using/not using bank loans

Size of enterprise	Percentage of enterprises using/not using bank loans	
	yes	no
SMEs	35	65
medium	78	22
small	51	49
micro	30	70

Source: study based on report: *Report: Development trends...*, 2017

The correlation analysis shows that the demand of large companies for loans is actually independent of the criteria for granting. The reason for this is that they also have access to other forms of financing. The situation is different in the case of SMEs, particularly for long-term loans (Tab. 11).

Table 11

Correlations between criteria for granting loans and demand for loans in Poland during years of 2004–2017

	SMEs	LEs
Short-term loans	0.223192	−0.01048
Long-term loans	0.562627	0.284342

Note: $p < 0.05$

Source: own calculation based on www.nbp.pl, January 12, 2018

Due to the non-adaptation of banking offers to the specifics of SMEs, micro-enterprises tend to suffer worse credit conditions. This is confirmed by the data contained in Table 12 (which was intentionally shown for a longer time horizon in order to show the trends).

Table 12

Average interest rates on loans to SME sector during years of 2008 to 2016

Year	Interest rate of loans						
	micro	small	micro/ small difference	micro/ medium differ-ence	average	small/ medium differ-ence	Total interest rate
2008	10.5	10	0.5	2.0	8.5	1.5	9.0
2009	12	8.5	3.5	4.0	7.0	1.5	10.0
2010	10	8.0	2.0	3.5	6.5	1.5	10.5
2011	11.5	7.0	4.0	3.0	8.0	1.0	9.0
2012	10	7.0	3.0	3.0	8.0	2.0	8.5
2013	9.0	7.5	1.5	3 0	6.0	1.5	8.0
2014	9.0	7.0	2.0	4.5	4.5	2.5	7.5
2015	8.0	6.0	2.0	4.0	4.0	2.0	7.1
2016	6.5	5.0	1.5	2.5	4.0	1.0	6.4

Source: own compilation based on report: *Report: Development trends...*, 2017

The data contained in Table 13 above shows that, due to their higher credit risk, microenterprises have higher-interest bank loans – approximately 2% more than the average interest rate for the entire SME sector. This varied from 0.5% to 4% as compared to small enterprises and from 2% to 4% as compared to medium-sized enterprises. In general, it can be seen that the smaller the enterprise, the higher the interest rate. In addition, the data presented in Table 21 shows that only 20% of bank beneficiaries in Poland are microenterprises. The results presented in Tables 20 and 21 confirm that microenterprises in Poland are discriminated towards by banks and, thus, confirm the theory of information asymmetry by J. Stieglitz and A. Weiss (1981, pp. 393–410).

Table 13

Beneficiaries of bank loans in Poland

Size of enterprise	Percent of banks granting loans
micro	20
small	60
medium	100

Source: own research

One of the reasons for the discrimination towards microenterprises by banks in Poland may be the lack of an individual approach to risk management. If we refer the results of the research presented in Table 14 to the international surveys (Table 10), one can notice very significant differences. Only in Poland is the risk assessment automated, which can have a significant impact on the fact that so few micro and small enterprises acquire bank loans. The reason is because the smallest entities are inherently riskier and require an individual assessment approach.

Table 14

Is risk management at banks largely automated?

Percent of banks that have automated risk management	
Yes	No
84	28

Source: own research

However, there are no significant differences in the approach to the location of the risk assessment. In banks operating in Poland, the risk assessment is separated from the sale of loans and takes place at the head office (Tab. 15). However, in the case of Poland (which is a phenomenon), more than half of the submitted loan applications by SMEs are rejected. The explanation is that the head office of a bank does not always understand the specificity of the region.

Table 15

Is risk assessment separate from sale of loans in banks in Poland?

Percent of banks that have separate risk assessment process	
Yes	No
84	16

Source: own research

However, risk management is always conducted at the banks operating in Poland. There were no other individual cases where risk management would take place in the bank branches. This is a significant distinction between Poland and the other countries (Tab. 16), and this also shows the lack of an individual approach to risk management in the case of SMEs.

Table 16

Is risk assessment held at headquarters (head office) in banks in Poland?

Percent of banks in which risk management takes place at head office	
Yes	**No**
100	0

Source: own research

The next questions in the survey concerned the impact of the crisis on the financing of the SME sector by banks.

The research shows that the banks in Poland hardly felt the financial crisis in 2007. They have applied and continue to apply very restrictive policies towards the SME sector. They practically do not support microenterprises because they are very often required to keep full accounts. This requirement eliminates almost all Polish microenterprises. The characteristic feature in Poland is that 91% of these are single proprietors (EUROSTAT data, 2014), leading to simplified accounting. In contrast to banks in Argentina, Chile, and Columbia, the banks in Poland were not hit by a declining demand for loans from SMEs since, both before and after the crisis, more than half of the enterprises from the SME sector did not apply for bank loans. They considered them to be unavailable (Tab. 17).

Table 17

Did crisis affect financing of SME sector in Poland?

Changes regarding SMEs	Percentage of banks
Fewer funds to borrow for SME sector	0
Increase in interest rates for SMEs	43
Shortening time of crediting	14
Increased risk due to macroeconomic instability	84
Increased risk due to beyond macroeconomic instability	43
Banks prefer to grant loans to other sectors	14
Fall in demand for loans from SMEs	28
Fall in demand from SMEs on other finances	43
Increase in demand for loans from SMEs	43
Increase in demand from SMEs on other finances	0

Source: own research

7. Conclusions and recommendations

The results of our own research and literature studies enabled us to answer the research questions posed in the introduction of the article.

Q1: Does the size of a bank affect the financing of SMEs in Poland?

We have shown that the size of the bank affected the financing of SMEs in Poland. The SME sector is financed mainly by large banks and rarely by small or niche banks. The presented data confirmed that banks in Poland support the SME sector; however, the criteria for including enterprises in the SME sector eliminate most microenterprises. Banks finance those entities that keep full accounts. On the other hand, the specificity of the Polish sector is such that 70% of SMEs are microenterprises, and 91% of this group are sole proprietors (whose accounts are settled according to simplified accounting). According to the presented data, the majority of banks in Poland do not support microenterprises. Only 20% of the banks grant loans to microenterprises. 100% of the surveyed banks provide investment loans to medium-sized enterprises, and 60% of them lend to small enterprises.

Q2: Is the problem of financing SMEs (especially microenterprises) only a Polish problem or is it also a wider problem for other countries?

We showed that the problem of financing SMEs (especially microenterprises) is not only a Polish problem but also regards other countries. This issue has been widely studied and discussed. However, in the analyzed countries, banks have developed solutions tailored to the specifics of these entities. These solutions served as benchmarks for the recommendations for banks that finance Polish SMEs.

Q3: Do microenterprises also face problems related to obtaining bank loans in other countries?

In the selected countries (Argentina, Columbia, Chile, and Serbia), microenterprises do not face such big problems related to obtaining bank loans (contrary to Poland). For Polish microenterprises, bank loans are difficult to access. The analysis shows that only 30% of the microenterprises used bank loans as compared to 51% of the small enterprises and more than 78% of the medium-sized enterprises. In addition, the cost of obtaining a bank loan is inversely proportional to the size of the enterprise. The smaller the company, the higher the interest rate for loans. It can therefore be noted that, in reference to the information asymmetry theory of J.E. Stigliz and A. Weiss (1981, pp. 393–410), Polish microenterprises, are discriminated against by banks due to their increased risk.

However, the research conducted by Augusto de la Torre, María Soledad Martínez Pería, and Sergio L. Schmukler (2010) does not confirm the theory of information asymmetry in Argentina, Chile, Columbia, or Serbia.

Q 4: How do banks in other countries solve the problem of the high risk of financing microenterprises?

In order to reduce the risk of financing the SME sector, banks in the analyzed countries have specifically adapted their policies to this group of enterprises. This adjustment is based on the fact that smaller companies receive more standard products while the offers for larger companies are individually adapted. The research conducted in Poland shows that banks very rarely offer standard products at the same time as indicating a high degree of risk for financing microenterprises.

The banks in the analyzed countries have learned to minimize the risk resulting from the incomplete information regarding microenterprises. They pay attention to the cooperation of SMEs with large companies. They believe that large companies do not cooperate with risky entities and verify information about the insolvency of their business partners.

Polish banks do not pay any attention to this aspect when assessing the risk of SMEs. They do not pay attention to the specificity of the SME sector (as opposed to banks in the analyzed countries).

The banks in the chosen countries do not use an automatic risk management system because the SME sector requires an individual risk analysis in each case. This is exactly the opposite in Poland. Eighty-four percent of Polish banks use automatic risk management systems to assess the creditworthiness of SMEs, which results in the fact that only 30% of the micro-enterprises acquire bank loans.

Banks in the analyzed countries have changed their policies for SMEs in recent years, recognizing this sector as strategic and important from their point of view.

Banks in Poland are only at the beginning of this path; nowadays, their policies are focused on the least-riskiest groups of enterprises in this sector – only small- and medium-sized companies (excluding micro enterprises).

Based on the results of our own research and the analysis of international research, we propose the following recommendations for Polish banks:

– Standardization of products for microenterprises and individual offers for large enterprises.
– Offering the so-called relational loans. This means that, apart from loans, banks should offer a set of other banking products (for example, account financing, factoring, leasing, etc.) that allow them to gain better knowledge about their clients and increase the "transparency" of the entities applying for loans.
– An individual approach to the risk assessment of microenterprises instead of automated systems.
– Adaptation of offers not only considering the size of the company but also the type of business (industry).

8. Limitations on directions of future research

The conducted research of banks in Poland allowed us to initially diagnose the policies of the banks for Polish SMEs. The analysis of international surveys has shown that the policies of the banks in the selected countries of the world for SMEs is significantly different than the policies of the banks operating in Poland. This different approach may be one of the important reasons for the large percentage of refusals by banks to grant loans to microenterprises. Our research only allowed for preliminary recommendations for the banks. However, the differences encouraged us to conduct further research in the future using both qualitative and quantitative methods, which will allow for analysis.

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