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Working Paper

Bank financing to SMEs in the Republic of North Macedonia: Evidence from survey data

Working Paper, No. 1/2019

Provided in Cooperation with:

National Bank of the Republic of North Macedonia, Skopje

Suggested Citation: Jakimova, Tanja; Popovska-Kamnar, Neda (2019) : Bank financing to SMEs in the Republic of North Macedonia: Evidence from survey data, Working Paper, No. 1/2019, National Bank of the Republic of North Macedonia, Skopje

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National Bank of the Republic of North Macedonia



**Working paper No. 1
2019**

Bank Financing to SMEs in the Republic of North Macedonia: Evidence from Survey Data

Tanja Jakimova, Neda Popovska-Kamnar¹

Abstract

This paper presents the main findings of the Survey for bank financing to small and medium enterprises (SMEs). The key objective was to capture the main features of the “supply side” of SMEs financing in the Republic of North Macedonia and to identify institutional and policy constraints of banks’ involvement with SMEs. The findings reveal that banks considered SMEs lending market as large, competitive, not very saturated, but with very positive outlook. While the main driver for banks’ involvement with SMEs sector is profitability and the good prospects of the SMEs segment, a number of obstacles are present, including SMEs-related factors, macroeconomic factors, legal and contractual environment and some bank-specific factors. The overall conclusion is that SMEs access to finance should be further supported and encouraged in order to increase their contribution to the growth of the economy.

Key words: small and medium enterprises, bank finance, survey data

JEL classification: G20

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1. Introduction

The small and medium enterprises (SMEs) play a vital role in generating growth and employment worldwide. Majority of enterprises globally are SMEs, accounting for approximately more than a half of private sector employment (Ayyagari et al., 2011). SMEs are significantly important for economic health, in both the high-income and the low-income economies. When compared with their larger competitors, SMEs tend to be more labor intensive and concentrated in service sectors. For that reason, they typically achieve lower levels of productivity, although they make a substantial contribution to employment (Wymenga et al., 2011).

SMEs are specific in terms of financing structure. They more often rely on banks' financing than large firms but, at the same time, they are generally more likely to experience greater difficulties in obtaining funds. The reasons for this are structural, more specifically, SMEs are usually perceived both to have a higher probability of default than larger firms and to be more informationally opaque. Additionally, SMEs are often too small to absorb the fixed costs associated with debt issuance in the financial market, as alternative source of financing to bank loans. As a consequence, they are more likely to be affected by excessive bank aversion and thus by outright rationing of credit provision than their larger competitors (ECB, 2014). Without access to finance, SMEs are unable to invest, impairing their capacity to: improve productivity, raise competitiveness, promote innovation, generate employment, and contribute to economic growth and development (OECD, 2006a).

Against this background, it is not surprising that SMEs financing through banks has become an important topic for policymakers in recent years. Governments across countries have recognized the challenges faced by SMEs in the aftermath of the financial crisis, and have given substantial attention to developing policies to support them. The main focus of government interventions has been towards the provision of stimulus packages to strengthen cash flows, to sustain SMEs investment, and to facilitate their access to finance. To encourage access to lending, developed economies have enhanced credit guarantee schemes or resorted to direct lending to SMEs through public institutions.

The increased importance of the SMEs sector in recent years was also highlighted by the International Finance Corporation (IFC). "From a market that was considered too difficult to serve, it has now become a strategic target of banks worldwide", IFC wrote in its guide (2010) and

noted that banks are finally starting to understand the particular needs and preferences of SMEs and are developing tailored approaches to overcome the historical challenges of high credit risk and cost to serve.

Given the importance of SMEs for the economy, the key objective of this paper is to capture the main features of the “supply side” of SMEs finance in the Republic of North Macedonia and to identify institutional and policy constraints of banks’ involvement with SMEs. For that purpose, we conducted a Survey, which we sent to all private-owned banks in the country. The Survey includes 51 questions and covers two broad areas. The first area of the Survey deals with the extent and type of banks’ involvement with SMEs and focuses on determinants of banks’ involvement with SMEs, such as corporate strategy, market structure, government policy and regulation. The second area attempts to give insights into banks’ lending mechanisms and procedures for SMEs and their risk management policies. The Survey includes questions on: the criteria used by banks to define the SMEs segment, banks’ perceptions about government-sponsored programs and regulatory framework and credit risk management.

The analysis of the Survey responses reveals that banks considered SMEs lending market as large, competitive and not very saturated, but with very positive outlook. While the main driver for banks’ involvement with SMEs sector is profitability, a number of obstacles are present, including SMEs-related factors, macroeconomic factors, and the legal and contractual environment and some bank-specific factors. The overall conclusion is that SMEs access to finance should be further supported and encouraged in order to increase their contribution to the growth of the economy.

The paper is organized as follows: section 2 gives an overview of the literature, section 3 presents some stylized facts about the banking system credit activities in the Republic of North Macedonia, section 4 describes the Survey design, providing information on the Survey structure, the way it was conducted, as well as the main characteristics of the surveyed banks, section 5 addresses the Survey results and gives answers to factors behind the stylized facts. The last section concludes.

2. Literature review

Development of dynamic and productive SMEs sector is one of the main goals in the emerging and developing countries, considering their potential to substantially contribute to job creation and to economic development. In order to grow and to be economically productive, this sector needs stable sources of financing. In most of developing countries, with underdeveloped financial markets, the only viable external channel for firms to access funds is through banks (Moder and Bonifai, 2017). Looking from the "supply side" of SMEs finance, many of the banks recognized SMEs as a strategic sector for increasing their profit and revenues. Against this background, there is a growing body of literature that analyzes the importance of this sector for the economy, the obstacles that it faces and ways and measures to create more favorable environment to support its access to finance.

This section of the working paper focuses on the results of various surveys for the process of financing the SMEs. Most of the researches are based on the questionnaires that are conducted among enterprises and banks, as the main source of external finance for SMEs. According to the World Bank analysis (2007b), based on the Survey conducted among the banks in Serbia, the key drivers for the growth of SMEs lending in Serbia are the following: the perceived profitability of enterprises, relationships with large clients, competition, over-exposure and the need for diversification. On the other hand, the most serious obstacles are the legal and contractual environment and macroeconomic factors related regulations. In this context, an important point to note is the negative impact of the obstacles in the legal and contractual environment on the investment climate in Serbia. This research shows that high cost of credit, which according to the analysis was due to the high cost of compliance with the National Bank of Serbia regulations, is also an important obstacle for SMEs finance in Serbia. The nature of lending technology to SMEs has also been mentioned, especially the high cost of transactions, difficulties to standardize products and procedures, and difficulties in supervision and monitoring.

Another research from the region (Kozarević et al, 2015) also proves the strategic importance of the SMEs sector. The research shows that the SMEs sector becomes a strategic sector for the banks in Bosnia and Herzegovina, who are willing to increase their involvement with SMEs clients. The Survey conducted among the banks, draws special attention to the current level of banks' exposure to SMEs, types of financial services offered to SMEs clients by BH banks, drivers of

banks' involvement with SMEs and the obstacles to further development of banks' involvement with SMEs. Based on the banks' responses and results of the research conducted, suggestions to policy makers are given, such as tax reforms, subsidies for the interest rate to SMEs, improvement of judiciary efficiency, simplifying administrative procedures. Also, some recommendations are given to banks, such as the need for better understanding of the requirements of SMEs clients by providing them with more personal approach and creating a partnership, as well as lobbying the government authorities to amend the regulations governing the SMEs sector.

The market for SMEs becomes increasingly competitive in recent years, with profitable growth prospects. The survey that was conducted among 12 developed and developing countries (Torre et al., 2010) shows that private banks view SMEs as a strategic sector and expand or plan to expand their operations aggressively in this segment. The survey suggests that SMEs do not exclusively obtain financing via relationship loans², but also access financing products that do not depend on the bank processing soft information on the firm. It also highlights the importance of developing new business models, technologies, and risk management systems by banks, as ways to approach the SMEs sector.

The banks' lending technologies and their organizational structures with particular emphasis on SMEs financing vary among banks. The foreign, domestic private, and government-owned banks use different lending technologies and their organizational structure differs. This was confirmed by the evidence from the Survey results conducted among 91 large banks from 45 countries (Beck et al., 2009). The Survey studies how SMEs financing by large banks differs across countries and bank ownership types and investigates the link between lending technologies/organizational structures and SMEs finance. According to the Survey, different banks apply different lending technologies and organizational structures. In particular, foreign banks are more likely to use arms-length lending technologies (e.g. asset-based lending, factoring, leasing, fixed-asset lending, credit scoring, etc.) and centralized organizational structures. Also, there is no strong link between lending technologies and organizational structures, on the one hand, and the extent, type, and pricing of lending to SMEs, on the other. The link between lending technologies, organizational structures, and SMEs lending is not consistent with the notion that SMEs finance is based on relationship lending, a type of financing rooted in the use of information and

² Relationship lending relies primarily on "soft" information gathered by the loan officer through continuous, personalized, direct contacts with SMEs, their owners and managers, and the local community in which they operate.

decentralized organizational structures. Also, the Survey highlights that differences in the extent, type and pricing of SMEs loans across countries appear to be driven by differences in the institutional and legal environment.

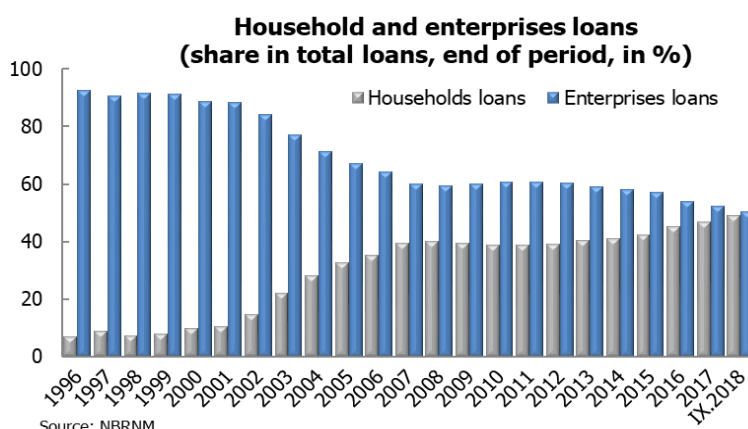
The strategic importance of SMEs segment for banks is also highlighted by the Survey, which was conducted six years ago among four African countries: Kenya, Tanzania, Uganda and Zambia (Calice et al., 2012). The SMEs market in these countries is considered large and very competitive. According to the Survey, there were several constraints in that period, that influenced on the involvement of banks with SMEs in the region: inherent SMEs characteristics; interest rate and exchange rate instability; the business regulatory framework; the legal and contractual environment, particularly judicial inefficiencies; inorganic government approach to this crucial segment of the economy; prudential regulation and some bank-specific factors. Regardless of these obstacles, the banks in the region established separate organizational units to be more responsive to the needs of their SMEs clients, allocated resources to provide training to their SMEs clients to improve their management skills and financial reporting. Banks were also pursuing innovation and differentiation as a part of their SMEs strategy.

Regarding the factors that affect the access to finance of SMEs, IMF research (Öztürk, B. Mrkaic, M. 2014) shows that changes in bank funding costs and borrower leverage matter for firm's access to finance. Increases in bank funding costs and borrowers' debt-to-asset ratios are significantly and negatively associated with firms' access to finance. The results of the IMF paper estimations show that the use of subsidies significantly improves access to finance of SMEs and that access to finance is positively related to firm size and firm age. Based on the results, certain policy recommendations were given: the need for strengthening the bank balance sheets that will make banks more resilient to a possible future shock; establishment of well-developed markets in order to create a more sustainable and diversified set of financing options that complement the traditional role played by banks.

Generally speaking, the literature shows that SMEs become a strategic sector for economic and social development for every market. This sector participates in creating jobs, profit for banks, and supports the economic growth. The banks are finally starting to understand the needs and preferences of SMEs, and are developing different approaches to reduce the high credit risk and cost to serve. Continuous support to the SMEs sector should be part of the economic policy of every country, based on appropriate sources of financing and stable macroeconomic environment.

3. Banking system in the Republic of North Macedonia - some stylized facts

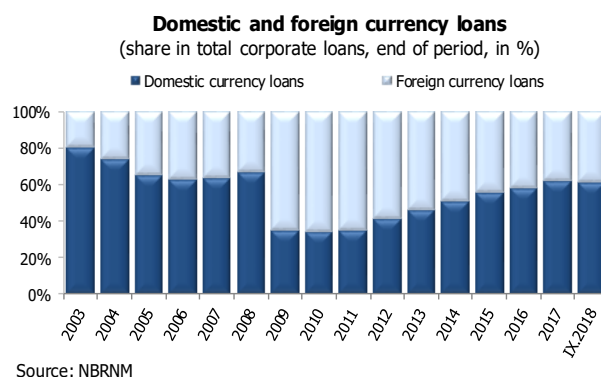
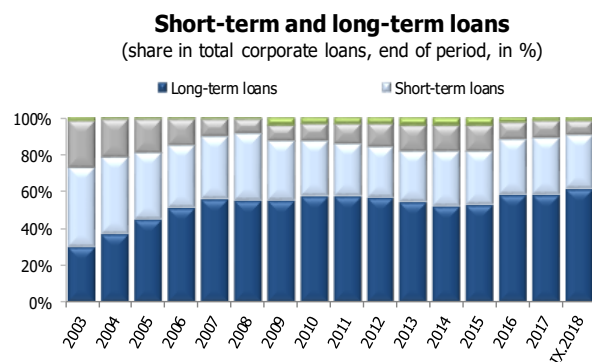
In the absence of more detailed statistics for credits to SMEs, this section presents data for credits granted by banks to the total corporate sector in North Macedonia, giving an indicative picture for the developments of the SMEs sector. The banking system in the Republic of North Macedonia includes 14 commercial banks and one state-owned bank (Macedonian Bank for Development Promotion).



Within the commercial banks, there are five large banks, six medium and three small banks. The five largest banks represent around 75% of total assets in the banking sector. According to the latest data³, the share of foreign capital in the total capital of the banking system is 71.9%. Six banks are subsidiaries of foreign banks, of which four are based in the euro area. The composition of the domestic banks' credit portfolio has changed during the years. Twenty years ago, enterprises were the dominant sector in the banks' loan portfolios, comprising more than 90% of the total loans. Over the years, the interest in household loans was continuously increasing. In September 2018, households and enterprises had similar share in the total banking loans (49.1% and 50.4%, respectively).

Domestic banks are predominant in funding of the corporate sector. According to the Bank Lending Survey (NBRNM) during the period 2006-2018, increase in demand for loans to enterprises was mainly driven by their need to finance inventories and working capital investments, and to a lesser extent for fixed investments and debt restructuring. According to NBRNM data, enterprises are interested in long-term loans and loans in domestic currency (75,7% and 58,2% of total corporate loans, respectively as of the end of September 2018).

³ Basic indicators for the banking system 2004-2018, NBRNM, www.nbrm.mk



*According the NBRNM monetary statistics, until the end of 2008, the domestic currency loans with foreign clause were included in the total domestic currency loans. From 2009, the domestic currency loans with foreign clause are included in total foreign currency loans.

SMEs in the Republic of North Macedonia, according to the most widely used criterion for determining this sector - firm size, represent 99.7% of total enterprises, with micro entities being predominant. This sector accounts for two thirds of total value added in the economy and nearly three quarters of total private sector employed.

Table 1

Composition of private sector entities in the RNM, by class size, number of persons employed and value added

Class size	Number of enterprises		Number of persons employed		Value added	
	Number	Share, in %	Number	Share, in %	Millions of euros	Share, in %
Micro	49.689	90,0	123.077	31,9	881	20,8
Small	4.572	8,3	87.466	22,7	952	22,5
Medium-sized	794	1,4	77.801	20,2	862	20,4
SMEs	55.055	99,7	288.344	74,8	2.696	63,7
Large	148	0,3	97.384	25,2	1.537	36,3
Total	55.203	100	385.728	100	4.232	100

Source: State Statistical Office, data as of the end of 2017

The latest Financial Stability Report for the Republic of North Macedonia (2017) shows increase of the corporate debt to domestic banks, after the decline in the previous year. This growth was a result of the faster growth of the domestic corporate sector credits by the banks, compared to the modest growth of the total corporate deposits. About 80% of the total loans to non-financial

companies are divided into three activities: industry, wholesale and retail trade, construction and real estate activities.⁴

Table 2

Corporate sector debt to domestic banks

Activities	Amount of debt to domestic banks (in millions of denars)				Structure of debt to domestic banks (in %)				Absolute change of debt to domestic banks (in millions of denars)				Relative change of debt to domestic banks (in %)			
	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
Agriculture, forestry and fishing	4,919	4,828	4,695	4,509	3.4	3.1	3.2	3.0	411	-91	-133	-186	9.1	-1.8	-2.8	-4.0
Industry	52,433	53,870	49,129	49,630	36.3	35.0	33.3	32.7	4,173	1,437	-4,741	501	8.6	2.7	-8.8	1.0
Construction	14,848	16,232	16,810	17,525	10.3	10.5	11.4	11.5	1,119	1,384	578	715	8.2	9.3	3.6	4.3
Trade, transport, storage and tourism	59,962	65,553	64,531	67,292	41.5	42.5	43.8	44.3	3,366	5,591	-1,022	2,761	5.9	9.3	-1.6	4.3
Information and communication	2,122	2,294	2,023	2,139	1.5	1.5	1.4	1.4	456	172	-271	116	27.4	8.1	-11.8	5.7
Real estate activities, professional, scholar, technical, administrative and auxiliary services	10,255	11,290	10,128	10,845	7.1	7.3	6.9	7.1	1,197	1,035	-1,161	716	13.2	10.1	-10.3	7.1
TOTAL	144,538	154,067	147,316	151,939	100	100	100	100	10,723	9,529	-6,751	4,623	8.0	6.6	-4.4	3.1

*The amount of written-off credit debt by domestic banks during 2016, because of regulatory imposed compulsory write-off of nonperforming credit exposure which was fully covered with impairment losses continually for period of two years, in amount of 10.807 millions of denars, is not classified by type of dominate activity of the debtor, due to unavailable data.

Table 3

Corporate sector debt to domestic banks - currency structure and structure of loans by type of interest rate

Activities	Currency structure of debt to domestic banks								Structure of debt to domestic banks by type of interest rate											
	Denar debt				Debt with FX component				Fixed interest rate				Variable interest rate				Administratively reviewable interest rate			
	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
Agriculture, forestry and fishing	44,0	53,8	59,9	63,9	56,0	46,2	40,1	36,1	13,5	7,8	6,5	12,0	11,8	4,4	2,6	17,1	74,7	87,8	90,9	70,9
Industry	41,9	45,1	44,9	51,1	58,1	54,9	55,1	48,9	9,4	8,8	7,8	18,2	16,0	14,2	13,0	27,2	74,7	77,0	79,2	54,6
Construction	61,5	68,4	68,9	76,1	38,5	31,6	31,1	23,9	7,2	6,9	6,8	13,3	6,5	4,1	5,3	15,1	86,3	89,0	87,9	71,6
Trade, transport, storage and tourism	54,3	58,4	62,2	64,8	45,7	41,6	37,8	35,2	10,1	9,1	9,1	20,1	11,9	9,2	6,3	19,8	78,0	81,6	84,6	60,1
Information and communication	50,9	65,7	64,2	59,4	49,1	34,3	35,8	40,6	6,2	2,1	1,4	9,4	6,3	2,3	2,3	18,9	87,5	95,5	96,3	71,7
Real estate activities, professional, scholar, technical, administrative and auxiliary services	48,0	51,8	60,4	62,3	52,0	48,2	39,6	37,7	6,3	6,7	8,6	10,8	21,2	21,6	11,8	27,1	72,5	71,8	79,6	62,0
TOTAL	49,7	54,3	57,0	61,3	50,3	45,7	43,0	38,7	9,3	8,4	8,2	17,6	13,4	11,1	8,6	22,1	77,3	80,5	83,2	60,3

*For calculation of the structural features of corporate sector's debt to domestic banks by dominant type of activity of the debtor in 2016 and 2017, the amount of the write-off debt by banks during 2016 and 2017 because of regulatory imposed compulsory write-off of nonperforming credit exposure which was fully covered with impairment losses continually for period of two years.

Source: Financial stability reports for the Republic of Macedonia in 2015 and 2017, Annex, NBRNM

⁴ Financial Stability Report for the Republic of Macedonia in 2017, NBRNM

4. Survey design

Given the importance of SMEs for the economy, our goal was to capture the main features of the “supply side” of SMEs finance, and moreover, to identify institutional and policy constraints of banks’ involvement with SMEs. For that purpose, we conducted a Survey⁵, which includes 51 questions and covers two broad areas. We used the originally developed Survey by the World Bank and made some adjustments, given the characteristics of the Macedonian banks and their business models. The first area of the Survey deals with the extent and type of banks’ involvement with SMEs and focuses on the determinants of banks’ involvement with SMEs, such as corporate strategy, market structure, government policy and regulation. The second area attempts to give insight into banks’ lending mechanisms and procedures for SMEs and their risk management policies. The Survey includes questions on: the criteria used by banks to define the SMEs segment, banks’ perceptions about government-sponsored programs and regulatory framework and credit risk management.

The Survey was sent to fourteen private-owned banks in the country, representing 97% of the total assets of the banking system in the country⁶. Eleven out of fourteen surveyed banks are predominantly owned by foreign shareholders (with a share of 70.8% in the total assets of the banking system, as of the end of March 2018), and six of them are foreign bank subsidiaries, with a share of 57.9% in the total assets of the banking system, as of the end of March 2018⁷. One of the surveyed banks is an international bank specialized in SMEs lending. The other three banks are domestic private-owned banks.

The Survey was conducted in the period June-July 2017. All surveyed banks completed the Survey, though in several cases not all questions were answered⁸. The Survey includes quantitative and qualitative questions. For quantitative questions, the percentages referred to in this paper were calculated based on the sample of total banks surveyed. By definition, each bank

⁵ World Bank SME Access to Finance Survey.

⁶ The state-owned bank, the Macedonian Bank for Development Promotion (MBDP) was excluded from the Survey, considering its role as an intermediary for most of the government-sponsored programs for financial support to SMEs.

⁷ NBRNM’s Report on the risks in the banking system of the Republic of Macedonia in the first quarter of 2018.

⁸ Data processing was confidential and conducted by the NBRNM staff. Banks were informed that data would be reported only in an aggregate way without disclosing the strategy or positions of individual banks.

accounted for 7.1 of the total sample⁹. Information on the qualitative questions is conveyed by reporting the percentage of banks that choose each option provided under each question.

5. Survey results - what is behind the stylized facts?

5.1. Definition of SMEs

The term “SMEs” (small and medium enterprises) covers a variety of definitions and measures. Criteria usually include a large number of full-time employees, annual sales and amount of total assets in the firm (Senderovitz, 2009). Some countries (such as the USA and South Africa) even apply different criteria for specific business sectors. However, the number of employees is the most widely used criterion for determining firm size. SMEs are usually defined as firms with fewer than 500 employees, although a large number of countries, including those in the European Union, use a lower cut-off point of 250.

The definition of SMEs in the Republic of North Macedonia is provided by the Law on Trade Companies (2004, amended in 2005 and 2007). It is based on the classification by: the number of employees, annual turnover and/or total assets, which is broadly consistent with the criteria used to define SMEs in the European Union. However, minor differences regarding the level of thresholds for turnover and total assets of the firm are present, reflecting the size of the economy.

The analysis of the surveyed banks’ responses reveals that the banks have individual approach in classifying the clients in SEs or MEs and use different criteria. The most widely used criterion includes the average sales. The amount of average sales that defines the SEs is up to Euro 2.000.000 and up to Euro 10.000.000, for MEs clients¹⁰. The range for average sales varies from bank to bank, with higher sales amounts by larger banks. In addition, banks highlighted the number of employees and the credit exposure as criteria to classify clients in the SMEs¹¹. Small firms are mostly considered to be firms with fewer than 50 employees, while the upper limit for MEs is 250 employees. One important point to note is that most of the banks use more than one criterion to define SMEs. Total assets are also used to define SMEs, but to a lesser extent. Two

⁹ For example, if ten out of fourteen banks responded positively to a question, the quoted percentage would be 71.4 percents.

¹⁰ The amounts mentioned here refer to the lower and upper limits of the range provided by each bank.

¹¹ Banks were asked to provide their own definition of SMEs. In particular, banks were asked to provide a range in terms of: 1. average sales, 2. firms’ total assets, 3. number of employees, and 4. credit exposure/loan size.

banks reported that they do not have specified criteria for classifying SMEs, with the explanation from one of them that standard definition of the Central Registry is used.

Banks do not use the same definition for SMEs, which reflects the heterogeneity of banks and the banking system, in a sense that large banks usually serve SMEs with high average sales, while small banks tend to focus on smaller SMEs. The lack of a common definition of SMEs makes comparison between bank lending practices somewhat inconsistent. Nevertheless, we follow the approach used in similar studies (Beck et al, 2008 and 2010; De la Torre et al, 2010) and we ignore the heterogeneity of ranges observed in the definition of SMEs.

5.2. Banks' involvement with SMEs

All banks reported that they have SMEs among their clients. The importance of the SMEs segment is also observed by the fact that half of the banks have separate SMEs departments, at the time when the Survey was conducted. At the same time, more than half of the banks reported that they have separate units for monitoring and granting credits to SMEs.

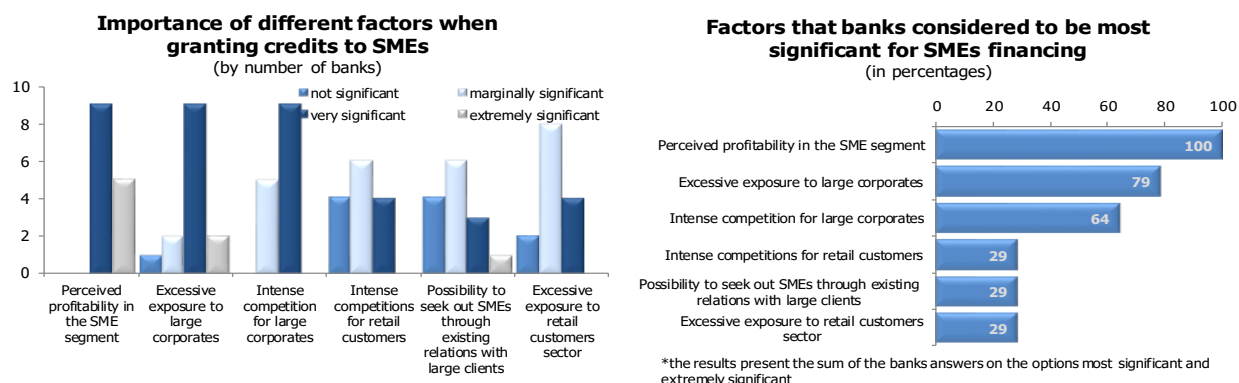
In terms of type of products that banks use to engage with SMEs, almost all banks disclosed that they offer traditional banking (deposit and lending) products, except one bank that primarily offers loans. Besides deposit-credit activities, other products (overdrafts, bank guarantees and payment system activities) are mostly used by all banks. The most important lending products are short-term loans and overdrafts, followed by investment loans. Pre-trade financing is also considered important, while factoring is not mentioned at all. Different criteria that banks use to detect potential SMEs clients suggest the pro-active approach of banks in reaching out to SMEs, despite the strong demand.

Despite the high importance of SMEs, most of the banks (around 60%) are not able to measure their exposure to the segment in terms of costs. However, all banks have an assessment of how much SMEs contribute to the banks' credit risks (most of the banks answered to 10% and above 50%). This suggests that banks are experiencing a learning process about how to deal with SMEs.

5.3. Drivers of banks' involvement with SMEs

To understand the extent and type of involvement described above, banks were asked to indicate the drivers of SMEs lending and to describe how significant these factors are in defining their

level of involvement with the segment. Three main drivers were highlighted by the banks that answered this question¹². The summary of banks' answers about what drives their interest in SMEs lending (in percentages and by number of banks) are shown on the figures below.

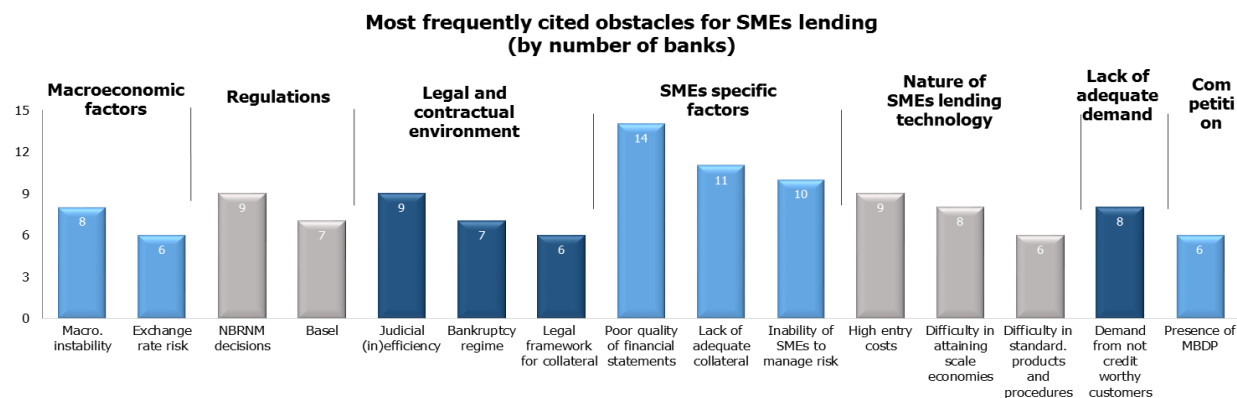


First, the perceived profitability of the segment was mentioned by the banks as a significant factor for motivation to attract SMEs clients. Banks estimate that the profit potential from SMEs lending is higher than for large corporates, which can also be connected with the second cited important factor by banks: excessive exposure to large corporates. Banks estimate that potential profits and capacity for market growth of the SMEs segment will make a positive contribution to their total exposure to the corporate sector, and will more than compensate the higher cost of lending to SMEs segment and more unstable risk profile in the SMEs segment. Third driver, mentioned as significant by nine banks (64% of the banks), as a reason for their interest in SMEs, is intense competition for large corporates. The decreasing profitability noted in other segments, which is due to high competition, has induced banks to focus on SMEs.

5.4. Obstacles to SMEs lending

While the bank involvement with SMEs is driven by the factors mentioned above, it is useful to assess the extent to which banks' involvement with SMEs is affected by certain obstacles. Below, we discuss the most important factors, perceived as obstacles by domestic banks.

¹² One bank did not answer this question, so analysis of this part is made by results from 13 banks.



First, one of the obstacles is related to SMEs-specific factors. These are factors related solely to SMEs and not to other firms that operate within the same regulatory and contractual environment. Among this group of factors, all banks cited poor quality of SMEs financial statements, with 50% of them perceiving this factor as the most important obstacle¹³. Lack of adequate collateral was cited as the second most important obstacle by the banks, followed by the inability of SMEs to manage risks. Inability to initiate court proceedings in the event of default is also perceived as a barrier for banks approaching SMEs, but its significance is less important in comparison with the three previously mentioned factors.

Second, related to the previous group of factors, legal and contractual environment is also an important obstacle for banks approaching SMEs. In this category, judicial inefficiency, bankruptcy regime and legal framework for collateral (including the Law on Contractual Pledge) are the most usually cited factors by the banks. The first factor was mentioned by 9 banks or 63% of the total number of banks, while the second and third factors in this category was cited by almost half of the banks.

Third, the nature of lending technology to SMEs is also an important obstacle. In this group, high entry costs, difficulties in attaining scale economies and difficulties related to standardizing products and procedures (screening, monitoring, risk management), are cited as the most important barriers for SMEs lending. The lack of demand was cited by more than half of the banks, with the most frequently cited argument that demand exists, but it is from not credit-worthy customers.

¹³ To increase the level and quality of information available to banks on firms' debts (large corporates and SMEs), the NBRNM organizes and maintains a registry of all credits extended by the commercial banks to legal entities and individuals. For more details see Annex II.

Fourth, in the area of regulations, the NBRNM regulation/Decisions¹⁴, 78% of the banks have positive attitude regarding prudential regulation and have stated that it has a positive effect on their activities. However, as part of the responses regarding credit risks management, most of the banks cited that definition of secured claims (in terms of collateral) in the Decision on the methodology for determining capital adequacy may be an obstacle for granting loans, i.e. it increases the cost for granting loans, considering that the non-real estate collateral is difficult to monitor and that there is a lack of liquid secondary market, thus making pricing of collateral more difficult. Additionally, less than a half of the banks, cited the Basel regulation as an impediment related to SMEs lending.

Fifth, macroeconomic factors are cited as less important obstacle, with macroeconomic instability and exchange rate risks as the most mentioned obstacles by the banks.

Sixth, competition in the SMEs segment is also an obstacle observed by the banks' perspective, while SMEs benefit from it. Several most important factors cited by the banks are the following: presence of banks with cheap sources of external financing (including presence of MBDP¹⁵ and credit lines from parent banks' financing). However, some of the banks (21%) do not perceive competition as an obstacle at all.

5.5. Market environment

Most of the banks perceived that the market is big and competitive¹⁶. However, the market structure for SMEs-related financial services appears to be atomized, meaning many banks are active and target similar SMEs. There is no consensus on the degree of saturation of the market (50% of the banks believe that there is still room for new competitors, while the rest believes that the SMEs market is saturated). More detailed analysis shows that three large banks (with a share of 58.1% in the total banking assets, as of the end of March 2017¹⁷) and one bank that is almost fully active with the SMEs sector are in the group with a statement that the market is not saturated, which suggests that the market is partially saturated. Banks do not appear to have a

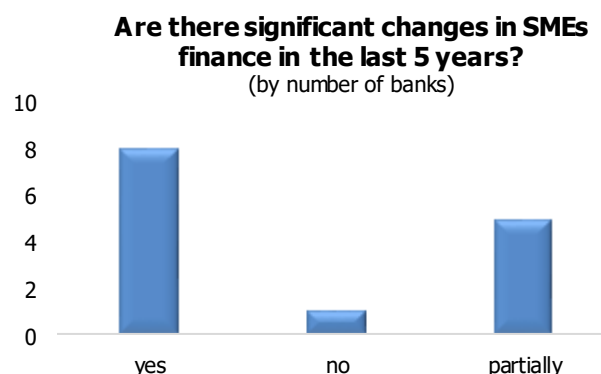
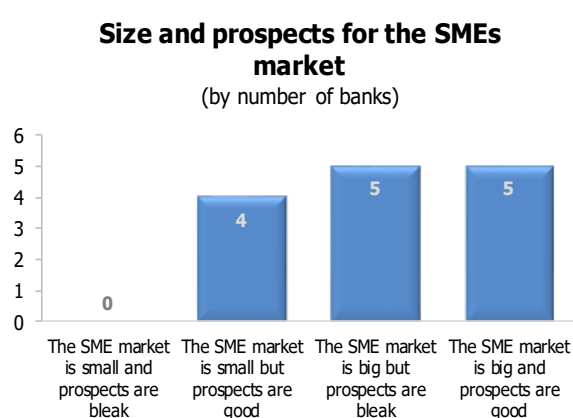
¹⁴ Decisions on credit risk management and Decision on the methodology for determining capital adequacy.

¹⁵ The Macedonian Bank for Development Promotion (MBDP) administers a number of credit lines, including credit lines from international financial institutions and bilateral donors.

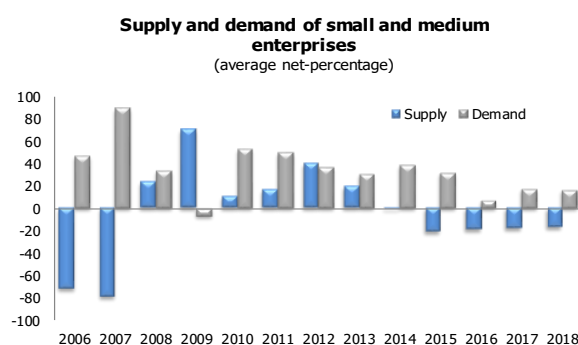
¹⁶ This corresponds with the results from the Bank Lending Survey, which shows continuously easing of the credit conditions for the SMEs.

¹⁷ Report on the risks in the banking system of the Republic of Macedonia in the first quarter of 2017 (NBRNM).

sector-specific or regional focus when targeting SMEs but, they try to gain market share in every sector and region and tend to cover as broad basis as possible.



Asked about whether they noticed considerable changes in SMEs financing in the last 5 years, more than half of the banks (57%) responded positively, which confirms the growing prospects of this segment. In the next five years, the banks plan around half of their total credit portfolio to be directed toward the SMEs sector.



Source: Bank Lending Survey, NBRNM.
Negative net-percentage of the supply present easing of credit standards, positive net-percentage is tightening of credit standards. Negative net-percentage of the demand present decreasing of credit demand, positive net-percentage is increasing of credit demand.

5.6. Government programs

Since 2008, the progress with policy measures aimed to facilitate access to finance, including better access of SMEs to bank loans, and by providing grants to start-ups in the Republic of North Macedonia, was assessed as moderate (European Commission¹⁸). The focus has been on bank loans, and guarantee schemes, provided through the MBDP. The government has provided guarantees and interest rate subsidies for the loans, granted by the MBDP. The Fund for Innovation and Technology Development (FITD) has also been established and started providing financial support for innovation and technology development¹⁹.

¹⁸ European Commission, 2016 SBA Fact Sheet - the former Yugoslav Republic of Macedonia.

¹⁹ The instruments that are available under the FITD are the following: co-financing grants for start-ups, for spin-off companies and for innovations; co-financing grants and conditional loans for commercialization of innovations; co-financing grants for technology

Small amounts of funds from the Budget were allocated for education and training activities by the Agency for Promotion of Entrepreneurship, as well as for co-financing of projects for non-financial support to SMEs. In the period 2009-2013, credit lines in a total amount of Euro 350 million were provided as a support to 1 758 SMEs investments, which created around 7 000 new jobs²⁰. These credit lines were used through cooperation with the European Investment Bank (EIB). Most of the government-sponsored programs aimed to stimulate the SMEs financing, were run by the MBDP (List of the programs supported by the government is provided in [Annex I](#)).

Access to finance remains a major challenge for SMEs in the Republic of North Macedonia, especially access to alternative non-banking sources, such as venture capital, equity & mezzanine and business angels' financing. Venture capital market is still in the early stage of development. Factoring activities are limited, offered only by the MBDP and one private company. There is no specific legal framework in place that would encourage such services to be developed by providing more legal certainty and transparency (European Commission)²¹. The Republic of North Macedonia should continue to strengthen the institutional, regulatory and operational environment for SMEs. The new government plan for economic growth (2018-2020)²² includes measures for further financial support to SMEs in order to increase their growth, support innovations and professional development of newly employed young people. When asked about the impact of the government programs/policies in terms of: 1) increased SMEs financing and 2) the degree of program's risk sharing with the public sector, the banks gave similar responses. In general, the most frequent explanation by the surveyed banks for the government-sponsored programs, is that these programs facilitate SMEs access to finance, considering their more favorable terms (lower interest rates) and that they have a positive impact on credit risk sharing.

5.7. Financial infrastructure and credit risk management

The credit risk is one of the primary risks in the banking and important part of the banks' risk management framework. The goal of credit risk management is to maximize a bank's risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters (BIS,

transfer; technical assistance through business-technology accelerators, and technical assistance regarding equity and mezzanine investments. The allocated funds during the period 2014-2016 are a total of EUR 8 million.

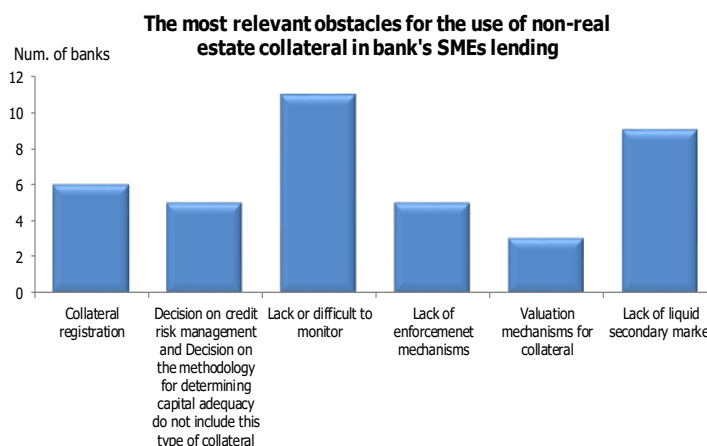
²⁰ European Commission, 2017 SBA Fact Sheet - the former Yugoslav Republic of Macedonia.

²¹ European Commission, 2017 SBA Fact Sheet - the former Yugoslav Republic of Macedonia.

²² Published in January 2018.

1999). Considering the importance of this area for the banking system, part of the Survey was dedicated to the most important issue - the financial infrastructure and credit risk management. From the aspect of suitability of the regulatory documentation requirements for commercial lending to SMEs, 78.6% of the surveyed banks estimated that the documentation is appropriate and beneficial. Three banks responded that the documentation is excessive only for some products. For example, there is no need for complete analysis for each credit request of a client who is already managed through different instruments and information by the bank. Also, shorter model for credit analysis is needed for the off-balance exposure, in order to analyze only certain points of the client working.

One of the main issues of the credit risk management is the collateral, which is defined in two NBRNM regulations: Decision on credit risk management and Decision on the methodology for determining capital adequacy. When asked whether the definition of secured claims used in the Decision on credit risk management makes granting loans to SMEs more difficult, banks were equally divided between positive and negative opinions. Four banks responded that this was insignificant. From the aspect of the definition of secured claims used in the Decision on the methodology for determining capital adequacy, 57% of the banks responded that the way it is defined makes the granting of loans more difficult.



The use of collateral, or the specific non-real estate collateral is part of lending agreements. Most of the surveyed banks (around 76%), highlighted that one of the most relevant obstacle for the use of non-real estate collateral in SMEs lending is the difficulty or the lack to monitor this type of collateral. Banks also stressed the absence of liquid secondary market and collateral registration.

Credit reporting systems are essential for creating sound financial infrastructure that facilitates lending and helps expand access to credits to a significant share of individuals, microfinance, and SMEs. Also, they help satisfy lenders' need for accurate, credible information that reduces the risk

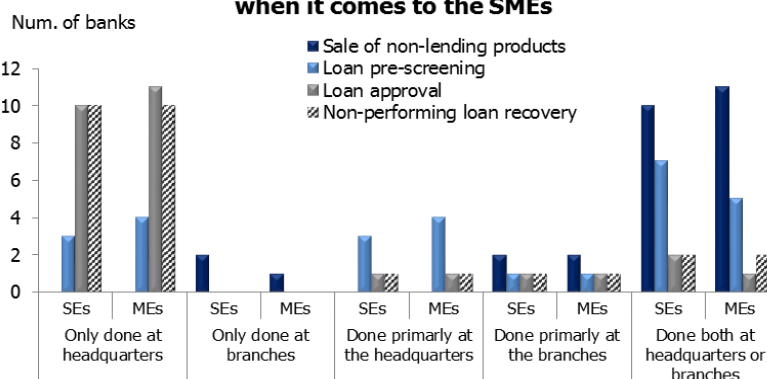
of lending and loan losses. Efficient credit reporting service providers decrease information asymmetries between borrowers and lenders, allow lenders to more accurately assess risks and improve portfolio quality. Research indicates that lending is higher and credit risk is lower in countries where lenders share information, regardless of the private or public nature of the information-sharing mechanism.

Banks emphasized the importance of financial infrastructure facilitating the credit risk assessment. All banks were highly appreciative of credit reporting service providers (Credit Registry, organized and maintained by the NBRNM, the Macedonian Credit Bureau, maintained by the Clearing House KIBS AD Skopje, as a company owned by the banks) as well as the Central Registry in the Republic of North Macedonia (for more details, see [Annex II](#)).

All surveyed banks confirmed that the existence of private credit bureau/NBRNM credit registry makes the lending process to SMEs easier. Some of the banks point that there is a need for improvement of the operation of the private credit bureau from the aspect of better data structure and bank visibility, timely update and improvement in the credit exposure display.

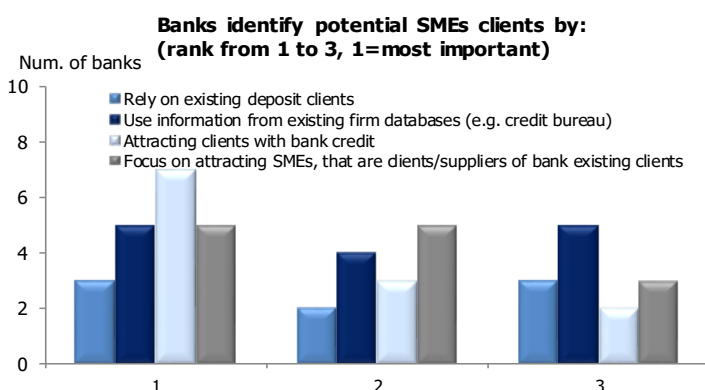
A strong organizational structure could help banks to mitigate the credit and other type of risks that they face in working with SMEs. Also, it helps to reduce the cost of financing and create closer cooperation with the clients. The activities of the banks are performed in the headquarters

Which of the following decisions/actions are taken in the bank when it comes to the SMEs



and branches of the bank. According to the organization plan of the banks, certain activities are performed in the headquarters, branches, and sometimes in both facilities. Most of the surveyed banks perform the activities for the approval of loans and the non-performing loans recovery for the SMEs in their headquarters. On the other hand, the sale of non-lending products and loan pre-screening are performed in the headquarters and bank branches. In most of the cases, the banks use their branches only for financial services and to perform some back-office functions.

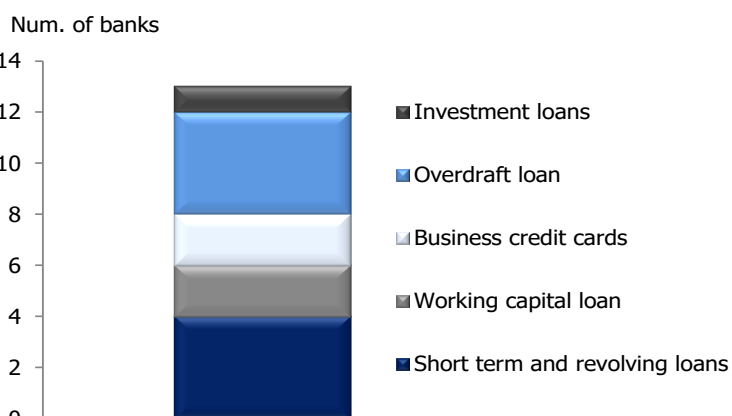
In the lending process of SMEs, one of the most important issue is to determine which SMEs will be bank target. Most of the surveyed banks choose SMEs as a client according to the company size, expected profitability and the credit quality. Also, banks take into consideration the industry sector to which the company belongs. The geographic area where the company



operates and the exposure size are less important factors. Despite the strong demand, most of the banks need to find their way to reach out to SMEs. Around 28% of the surveyed banks actively seek clients because of the weak demand for their bank products. Banks identify the potential SMEs by attracting clients with bank credits, and also use information from existing firm databases like credit bureau. Some of the banks focus on attracting SMEs that are clients/suppliers of their existing clients. In some cases, certain banks in this process rely on existing deposit clients. In the period of targeting new clients, almost all banks do not have particular sequencing between deposits and loan products.

Every bank has specific financial product offered to SMEs which is more or less profitable for them. According to the Survey, the most profitable products for the banks are the short-term and revolving loans and the overdraft loans. Also, as the most profitable, the banks highlighted the working capital loans, business credit cards and overdrafts and investment loans. As less profitable are the long-term loans, guarantees, project loans, etc. The procedures for the main profitable financing products differ between the banks. Most of the banks point that from two to seven days are needed to process a disbursement under pre-approved

Most profitable financing products offered to SMEs



client limit. Usually the days to process a request without pre-approved limit is from two to twenty days. In the process of disbursement, most of the banks require documentation, like the loan

agreement and collateral. The collateral required presents 30% to 300% of financing according to the banks²³.

The products that the banks offer to SMEs can be standardized or tailored. The products that are offered to medium enterprises (according to 43% of the banks) are mostly in a similar proportion of standardized and tailored products, while the rest of the banks offered products that are fully standardized or tailored. The products that are offered to small enterprises are fully standardized (43% of the banks), while one third of the banks offered similar proportion of standardized and tailored products. Around 21% of the banks mostly offered some tailored products. From the aspect of product pricing, around 86% of the banks responded that sales personnel have limited flexibility in pricing SMEs products. One bank responded that the pricing for SMEs products is fully standardized, and one that this is done by the Credit Committee.

The collateral requirement is essential part of the bank lending procedure as protection against the increase in credit risk. Regarding the importance of this segment, the banks were asked about their collateral requirement between SMEs, small enterprises, medium enterprises, large corporates and consumers (credit card or overdraft, non-collateralized). Mostly the responses in these segments are similar. Most of the banks responded that the company needs to pledge collateral, but in some cases it depends on the requested amount. For consumers, most of the banks responded that there is no need for collateral, or is needed above certain amount. All banks responded that the acceptable collateral includes real estate collateral, agriculture land, etc.

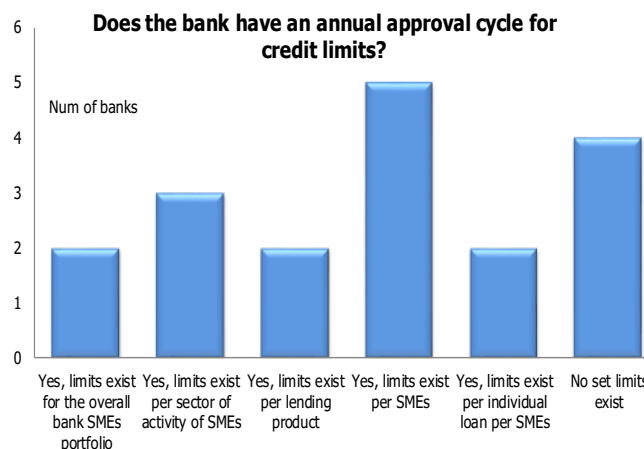
Banks required higher collateral for SMEs than for large corporates, because the SMEs are more unstable (43% of the banks) and SMEs are harder to evaluate (36% of the banks). In some cases, banks required higher collateral for SMEs than for consumers, because SMEs loans are larger and their risk is more difficult to diversify.

²³ "According to the calculations of the National Bank based on the Credit Registry data, the ratio between the loan amount and the estimated value of the collateral for granted housing loans is 56.8%", Financial Stability Report 2018, NBRNM.

5.8. Credit risk assessment

According to the BIS (2006)²⁴, the bank's Board of Directors and senior management are responsible for ensuring that the banks have appropriate credit risk assessment processes and effective internal controls. Banks should have a system in place to reliably classify loans on the basis of credit risk. Also, bank's policies should appropriately address validation of any internal credit risk assessment models and adopt a sound loan loss methodology, which addresses credit risk assessment policies, procedures and controls. A bank's credit risk assessment process should provide the bank with the necessary tools, procedures and observable data to use for assessing credit risk, accounting for impairment of loans and for determining regulatory capital requirements (BIS, 2006).

In order to protect themselves, the banks put internal credit limits according to the type of company, lending products or sector. Most of the surveyed banks have a limit for each SMEs. Few banks have limits for legal entities and individuals, according to products, activities, etc. On the other hand, around 28% of the banks do not have credit limits. One of the reason is that the bank has no special limits for SMEs and large companies.



As one of the most important tools of the banks for measurement of the credit risk is the system for internal ranking of exposure. According to the Survey, around 57% of the banks have internal ranking of exposure to SMEs. Certain bank implements the internal ranking system according to a methodology for non-financial legal entities based on qualitative and quantitative criteria. One bank has a methodology for solvency classification and determination of the upper borrowing limits, on the basis of which the ranking of exposures of SMEs is carried out. In some cases, the internal ranking for SMEs is the same for all legal entities. The exposure for SMEs is ranked according to internal financial rating for certain SMEs by some banks.

²⁴ "Sound credit risk assessment and valuation for loans", Basel Committee on Banking Supervision, June 2006.

Table 4

Main indicators used by banks with internal ranking for SMEs

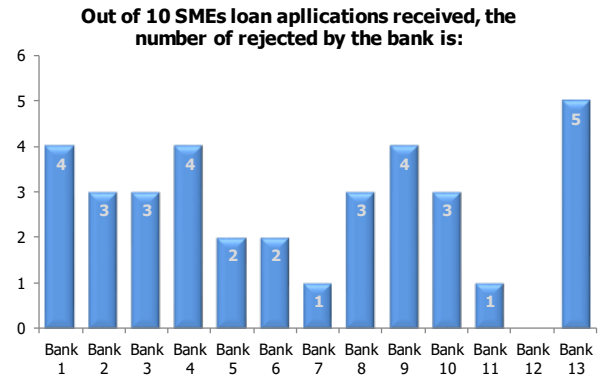
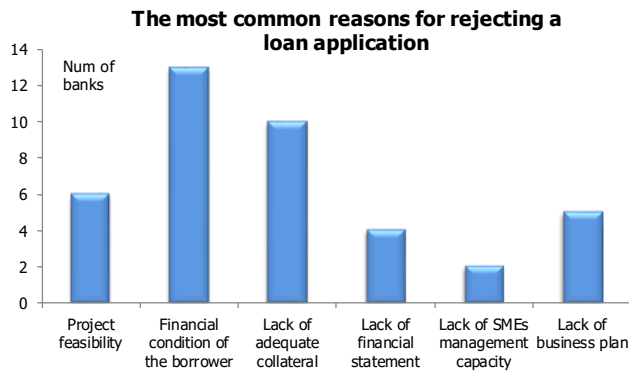
	Bank 4	Bank 7	Bank 8	Bank 9	Bank 10	Bank 12	Bank 13	Bank 14
1	Financial indicators	Level and dynamics of the movement of business revenues	Financial indicator for Income statement	Income and financial results	Financial condition of the client and the movement of financial parameters	Profit before taxation/Total liabilities-money	Repayment capacity	Profitability
2	Activity	Operating profitability	Days of late payment	Credit discipline	Financial liabilities	Money/Short term obligations	Indebtedness level	Credit history
3	Business relationship with the client	Financial liabilities	Risk category at the level of the banking system	Credit exposure	Changes in the operating activities of the client	Total gross income/total liabilities	Credit history	Business model
4	Collateral	Management of the assets and liabilities	Gyro account blocking data	Activity	Market conditions and competitions	Credit history	Sector	Indebtedness
5	Settling liabilities			Management	Expectation for recovery on collateral activation	Negative information for the client/debt	Quality management	Management and organization structure

Around 64% of the banks use portfolio approach in order to manage credit exposure to SMEs according to the Decision on credit risk management. The percentage of exposure to SMEs as part of the banks' loan portfolio varies among the surveyed banks.

5.9. Monitoring and risks analysis

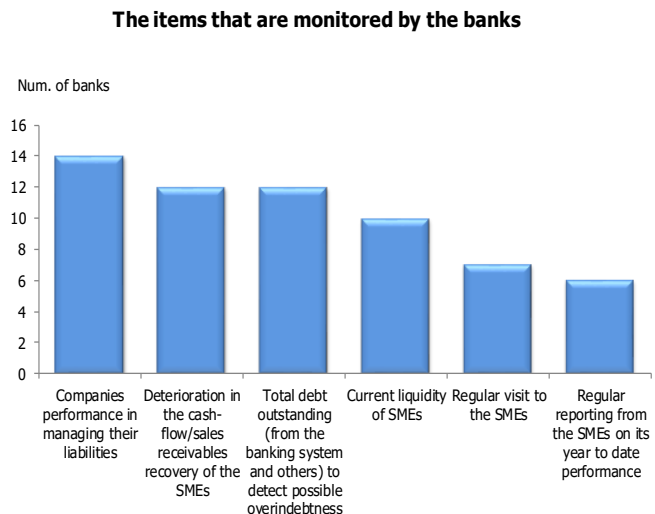
The banks are very careful in the process of accepting and approving of loan applications. The proper scanning of the applications can reduce the credit risk and can have positive influence on the banks' revenues. According to the Survey, most of the banks reject 3-4 out of 10 loan applications.

Almost all banks cited the financial condition of the borrower as the main reason for rejecting a loan application, but the lack of adequate collateral is also very important reason. Some of the banks also highlighted the project feasibility and the lack of business plan. Around 28% of the banks responded that the incomplete documentation is also a reason for rejection of the loan application. The surveyed banks are not satisfied with the quality of the SMEs financial statements. Around 78% of the banks responded that the quality of financial statements provided by SMEs are average, while the rest of the banks responded that they are low.



From the aspect of the quality of financial data, the banks are almost equally divided between low and average data. The average time that banks spend on reviewing financial data provided with SMEs loan applications, in most of the cases, is between 3 and 5 hours. But there are banks that need more than one day to review the application data. Apart from the SMEs financial statements, the banks are also not satisfied with the quality of the SMEs financial data. More than half of the banks admit the need for improvement of the quality of the SMEs financial data, which will significantly reduce their operational cost. One third of the banks responded that the improvement of the financial data will only moderately reduce their costs.

Regarding the monitoring by the banks, around 85% of the banks responded that there are preventive indicators that are monitored to detect a possible deterioration in the credit outlook of the SMEs. The items that are monitored by almost all the banks are the companies' performance in managing their liabilities, deterioration in the cash-flow/sale receivables recovery of the SMEs and total debt outstanding.



6. Concluding remarks

In the Republic of North Macedonia, SMEs represent 99.7% of the total number of firms. They provide over 64% of value added in the economy and account for 74% of total employment, above the respective EU averages of 57% and 67%²⁵. The government has significantly improved the environment for doing business.

This paper presents the findings of a survey of SMEs lending with 14 banks in the Republic of North Macedonia. The Survey offers reliable overview of the banks' attitudes and perceptions towards SMEs lending. The evidence from Survey data suggests that all banks in the Republic of North Macedonia consider the SMEs segment strategically important and are actively expanding their lending activity to this sector. The importance of the SMEs segment is also observed by the fact that the banks have separate departments for managing SMEs. The banks primarily offer deposit and lending products to the SMEs and also other products like overdrafts, bank guarantees and payment system activities. The key driver of the banks' interest in SMEs lending is the perceived profitability, excessive exposure to large corporates and intense competition for large corporates. On the other hand, the main obstacles in the bank lending to SMEs include the companies' specific factors such as poor financial statements, lack of adequate collateral, and inability of SMEs to manage risks. High entry costs, lack of adequate demand, difficulty in attaining scale economies and legal efficiency in the country are also obstacles, which were highlighted in the Survey. Moreover, according to the Survey results, there is a need for further improvement in the credit risk management, as one of the most important part of the bank's risk management framework.

Despite the obstacles, the SMEs market in the Republic of North Macedonia is big and competitive, and many banks are active and target similar companies. Still, banks believe that there is a room for new competitors on the market. In the last five years, the banks noticed considerable changes in SMEs financing, which confirms the growing prospects of this market segment. The banks also expect that SMEs market will continue to grow. All banks confirmed that the existence of private credit bureau/NBRNM credit registry makes the lending process to SMEs easier. In the process of identification of the SMEs as potential client, banks use information from existing firm databases, such as credit bureau/NBRNM credit registry. Still, some of the banks believe that there is a need

²⁵ European Commission, SBA Fact sheet – Republic of Macedonia (2017).

for improvement from the aspect of better data structure and bank visibility, timely update and improvement in the credit exposure display.

The most profitable financing products that banks offered to SMEs are short-term and revolving loans and overdraft loans. Working capital loans and business credit cards are also highlighted as profitable financing products by the banks. Regarding the scope of their activities and the sensibility of their work, banks have different mechanisms in order to protect themselves. One of them are the credit limits that are used according to the type of company, lending products or sector. The internal ranking of exposure to SMEs, which is an important tool in the measurement of the credit risk, is also used by half of the surveyed banks. The banks are very careful in selecting their potential clients. Most of the banks reject 3-4 out of 10 loan applications, and their decisions are based on the financial conditions of the borrower and lack of adequate collateral. In this section, the banks emphasize the need for improvement of the received financial statements and data from SMEs, which were assessed by the banks as average or low.

While progress has been made over the past years, small and medium enterprises continue to perceive access to finance as an important challenge to their operations. Further actions to support such access should be considered. The Republic of North Macedonia should continue to strengthen the institutional, regulatory and operational environment for SMEs. As the Survey results showed, support is needed in improvement of the company's financial statements, usability of adequate collateral, risk management, decreasing the entry costs and amendments to the regulations. The new government plan for economic growth includes measures for further financial support to SMEs in order to increase their growth, support innovations and professional development of newly employed young people. Still, the SMEs access to finance should be further supported and encouraged in order to stimulate the involvement of banks with SMEs.

7. References

- Ayyagari, M., Demiguc-Kunt, A., and Maksimovic, V., (2011) "Small vs. Young Firms across the World Contribution to Employment, Job Creation, and Growth", Policy Research Working Paper No. 5631, World Bank.
- Beck, T. Demiguc-Kunt, A., and Martinez Peria, M.S., (2008) "Bank financing for SMEs around the World, Drivers, obstacles, Business models, and lending practices", Policy Research Working paper No. 4785, World Bank.
- Beck, T. Demiguc-Kunt, A., and Martinez Peria, M.S., (2009) "Bank financing for SMEs: Evidence across countries and bank-ownership types", European Banking Center Discussion paper No. 2009-20, European Banking Center.
- Beck, T. and Demiguc-Kunt, A., (2006) "Small and medium-size enterprises: Access to finance as a growth constraint", *Journal of banking and finance* 30, 2931-2943.
- Beck, T., Demiguc-Kunt, A., Laeven, L., and Maksimovic, V., (2006) "The determinants of financing obstacles", *Journal of international money and finance*, 25, 932-952.
- Beck, T., Demiguc-Kunt, A., and Maksimovic, V., (2005) "Financial and legal constraints to firm growth: does firm size matter?", *Journal of finance*, 60, 137-177.
- Beck, T., Demiguc-Kunt, A., and Maksimovic, V., (2008) "Financing patterns around the world: are small firms different?", *Journal of financial economics*, 89, 467-87.
- Berger, A. N., Rosen, R.J., and Udell G. F., (2007) "Does market size structure affect competition? The case of small business lending", *Journal of banking and finance* 31, 11-33
- Basel Committee on Banking Supervision (2006) "Sound credit risk assessment and valuation for loans", BIS,
- Calice, P., Chando, M. V., Sekioua, S., (2012) "Bank financing to small and medium enterprises in East Africa: Findings of a Survey in Kenya, Tanzania, Uganda and Zambia", ADBG Working paper No. 146.
- De Haas, R., Ferreira, D., Taci, A., (2010) "What determines the composition of banks' loan portfolios? Evidence from transition countries", *Journal of banking and finance* 34, 388-398.
- De la Torre, A., Martinez Peria, M.S., and Schmukler, S. L., (2009) "Drivers and obstacles to banking SMEs: the role of competition and the institutional framework", CESifo Working Paper, No. 2651.

De la Torre, A., Martinez Peria, M.S., Schmukler, S. L., (2010) "Bank involvement with SMEs: Beyond relationship lending", *Journal of Banking and finance*, 34, 2280-2293.

EBRD (2013), *Transition Report 2013: Stuck in transition?*, London.

EBRD (2015), *Rebalancing finance*, London.

ECB (2014) "SME Access to finance in the euro area: barriers and potential policy remedies", *Monthly Bulletin*, July.

ECB (2017) "Survey on the Access to Finance of Enterprises in the euro area ", November 2017

European Commission (2015), SBA Fact Sheet-Former Yugoslav Republic of Macedonia

European Commission (2016), SBA Fact Sheet-Former Yugoslav Republic of Macedonia

European Commission (2017), SBA Fact Sheet-Former Yugoslav Republic of Macedonia

Government of the Republic of Macedonia (2017), *"Plan for economic growth"*

IFC (2010), *The SME Banking Knowledge Guide*

IMF (2015), *The Western Balkans: 15 Years of economic transition*, March 2015

Kovachev, G., (2012) "Agricultural credit discount fund – Agribusiness support credit line: Macedonian experience", *CEA Journal of Economics*, Volume 7, Issue 2, 2012

Kozarevic, E., Kokorovic Jukan, M., Softic, A., (2015) "An overview of small and medium-sized banking development in Bosnia and Herzegovina", *Journal of economic and social studies*, Volume 5, No.1.

Kresic, A., Milatovic, J., Sanfey P., (2013) "Firm performance and obstacles to doing business in the Western Balkans - Evidence from the BEEPS", EBRD Working paper No.200.

Moder, I., Bonifai, N., (2017) "Access to finance in the Western Balkans", ECB Occasional paper No. 197

NBRNM (2017), Report on the risks in the banking system of the Republic of Macedonia in the first quarter of 2017.

Öztürk, B., Mrkaic, M. (2014) "Access to Finance by SMEs in the Euro Area—What Helps or Hampers?", IMF working paper 14/78

OECD (2006a), *The SME Financing Gap, (Theory and Evidence)*, Vol. I, Paris, OECD.

OECD (undated), "Small Businesses, Job Creation and Growth: Facts, Obstacles and Best Practices"

OECD (2009a) "Top Barriers and Drivers to SME Internationalization", Report by the OECD Working Party on SMEs and Entrepreneurship.

OECD (2009b) "The Impact of the Global Crisis on SME and Entrepreneurship Financing and Policy Responses".

OECD (2015) "Opportunities and constraints of market based financing for SMEs"

OECD (2016), *SME Policy Index: Western Balkans and Turkey 2016: Assessing the implementation of the Small Business Act for Europe*, OECD Publishing, Paris.

World Bank (2007a) "Bank financing to small and medium enterprises: Survey Results from Argentina and Chile". Mimeo.

World Bank (2007b) "Bank lending to small and medium enterprises: The Republic of Serbia". Mimeo.

Wymenga, P., Spanikova, V., Derbyshire, J. and Barker, A. (2011) "Are EU SMEs Recovering from the crisis? Annual Report on EU Small and Medium-sized Enterprises 2010/2011", Report for the European Commission.

Wymenga, P., Spanikova, V., Barker, A. Konings, J. and Canton, E. (2012) "EU SMEs in 2012: At the Crossroads. Annual Report on EU Small and Medium-sized Enterprises 2011/2012", Report for the European Commission.

Annex I - Government-sponsored programs and credit lines for SMEs from international development institutions and bilateral donors

The Macedonian Bank for Development Promotion (MBDP)²⁶ administers a large number of credit lines, including credit lines from international financial institutions and bilateral donors.

European Investment Bank (EIB)

The MBDP has intensified its cooperation with the EIB in 2009, when the first Financial Contract (in the amount of Euro 100 million) for SMEs and priority lending (industrial investments in the fields of economy, energy and environmental protection) was signed. The cooperation continued in the period ahead and new financial contracts for SMEs and priority projects lending were signed (in 2011, 2012 and 2013), in the amount of Euro 50 million, Euro 100 million and Euro 100 million, subsequently. Thus, the total amount of loans approved reached Euro 350 million. The MBDP extended the EIB credit funds in cooperation with the commercial banks through the existing credit programs. The intermediary banks taking part in the EIB credit line disburse credit funds, which were by minimum of 50 bps more favorable, than the interest rate that banks would charge from the end beneficiaries without the EIB participation. There are no currently active credit lines that the banks use through the MBDP cooperation with the EIB.

SMEs Credit line from the German Development Bank (KfW)

The project consists of the provision of financial funds to the German-Macedonian Fund (GMF), a revolving refinancing fund, from which loans denominated in euros are advanced to micro, small, and medium-sized enterprises (MSMEs) on market terms through selected domestic financial institutions. The funds were provided in three tranches in 2000, 2004 and 2007, in a total amount of Euro 20.5 million²⁷.

In Phase I, the state (represented by the Ministry of Finance) was the borrower. The Ministry passed the credit on to the Macedonian Bank for Development Promotion (MBDP) which, as the project executing agency, managed the GMF. In SMEs Phases II and III, the MBDP itself was the borrower, with the Republic of Macedonia as guarantor. The funds from the first phase and Euro 1.7 million of the funds from the second phase were provided to the MBDP (via the Ministry of Finance in case of the first phase) on IDA terms (0.75 percents, 10-year grace period, 40-year maturity), and the remaining funds on standard FC terms (2 percents/10/30). The MBDP then loaned these funds to the financial institutions participating in the project at 3-month Euribor + 1 percent with a maturity of up to four years (up to five years for housing loans). The pricing of loans to microbusinesses was left to the banks; in Phases I and II, the interest rate on loans to SMEs demanded by the partner institutions was supposed to be no more than 10 percents above the cost of interest payable.

Agricultural Credit Discount Fund (ACDF)²⁸

The ACDF credit line is mainly targeted on agribusiness stakeholders i.e. individual farmers, rural households, agricultural, agro-processing and agro-export SMEs, as well as Instrument for Pre-Accession Rural Development Program (IPARD) beneficiaries. It is administered as discount or refinancing facility. Its refinancing operations are co-financing activities undertaken by both the ACDF and selected Participating

²⁶ The MBDP is a joint stock company and the Republic of North Macedonia is a sole founder and 100% owner of the Bank.

²⁷ Amounts of Euro 6.64 million (SME I), Euro 6.18 million (SME II) and Euro 7.66 million (SME III) were provided together with grants for supplementary programs of Euro 1.53 million (SME I), Euro 1.01 million (SME II) and Euro 0.52 million (SME III).

²⁸ Kovachev, G., (2012)

Financial Institutions (PFIs) (10 banks and 2 savings houses). The credit risk in on-lending operations is with the PFIs and there are absolutely none fiscal implications to the state budget. PFIs also provide a portion of the investment capital from their own funds (at least 20 percents of the loan amount) which is a huge incentive for them to insist on on-time repay by their beneficiaries. Each PFI is allowed to apply their own lending policies to sub-loans (i.e. collateral requirements, forms and documentation, repayment period, fees, etc.). For example, the operation fees vary between 0.5 percents and 3 percents of the loan depending the PFI, loan amount, investment type or repayment period. Only the interest rates are capped and defined in the Subsidiary Loan Agreement signed between the PFIs and the Ministry of Finance. Beneficiaries are required to contribute a minimum of 20 percents to the cost of investment. The contribution is not mandatory to be in financial assets but in assets correlated with the investment credited.

Commodity credit line from the Republic of Italy (Revolving Fund)

The bilateral cooperation between the governments of the Republic of North Macedonia and the Republic of Italy resulted in signing of the Financial Convention for approval of a commodity credit line in the amount of Euro 12.7 million. The credit line was completely utilized and closed by 2007. A Revolving Fund was established by the repaid funds which are used for financing of working capital. Beneficiaries of the loans from the Revolving Fund are small and medium-sized companies from the Republic of North Macedonia which are 51% privately owned. Revolving Fund loans will be used for financing of permanent working capital.

Annex II - Financial infrastructure to assist with credit risk assessment²⁹

NBRNM's Credit Registry

The NBRNM organizes and maintains a registry of all credits extended by the commercial banks to legal entities and individuals, according to the NBRNM's Law. Data information provided by the Credit Registry, besides the NBRNM, could be used by banks and savings houses in the RNM, with the purpose of assessing the credit risk. In 2007, the NBRNM started to conduct activities for improvement of the Credit Registry and by the end of 2008, it was replaced with a new, improved one. Improvements were made in: 1) its content, by broadening the type and the scope of data; 2) the threshold of individual exposure, which, as reported by the banks, was reduced from Denar 500,000 to Denar 300,000 for legal entities, and from Denar 150,000 to Denar 5,000 for individuals, while the threshold of individual exposure reported by the savings houses was decreased from Denar 50,000 to Denar 5,000, for individuals, 3) the deadlines for submission and processing of data, which were significantly decreased, thus providing more timely information for the Credit Registry users, and 4) the period of updating data, which was shortened (monthly update of data, relative to quarterly reporting).

Macedonian Credit Bureau

The Macedonian Credit Bureau (MCB) was founded in 2008, based on the Law on the Credit Bureau (Official Gazette of the Republic of Macedonia No. 81/2008, 24/2011 and 166/2014) made by the Clearing House KIBS AD Skopje, as a company owned by the banks. The MCB collects, processes and exchanges data for the liabilities of the legal entities and individuals in order to provide information about their indebtedness/liabilities and timeliness in meeting their liabilities. The MCB database is updated daily, with possibilities for protection from risky activities, through successful management and risk undertaking that could be controlled. The system is used by all banks, savings houses, financial companies, financial leasing companies, other loan lenders, the Public Revenue Office, the pension and insurance funds in the RNM, the city of Skopje and the municipalities, the service providers from the field of communal utilities, energetics and telecommunications, the other legal entities which provide services on the basis of which liabilities appear for the legal entities and individuals and, the individuals which are not considered as sole trader, based on the Law on Trade Companies.

The Central Registry of the RNM

The Central Registry of the Republic of North Macedonia (CR) was founded in 2006, based on the Law on the One-Stop-Shop System and Keeping a Trade Register and a Register of Other Legal Entities. The CR contains the following registries: Property Registry, Direct Investment Registry, Annual Accounts Registry and Real Estate Investment Registry. The companies' database is connected to the European Business Registers, which facilitates the access for the foreign investors. The main role of the centralized system is to provide smoother communications between the government institutions and legal entities.

²⁹ Sources: NBRNM, MCB, CR