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SECTORAL DIFFERENCES IN THE CREDIT ACCESS IMPEDIMENTS OF TURKISH SMEs

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Abstract

Contributions of Small and Medium-sized enterprises (SMEs) that have been operating in various sectors to economies have increased over the years especially in job creation and growth. In an attempt to continue their activities in different conditions, SMEs need financing although they encounter some impediments. When it comes to the problems that firms perceive during their credit access, their feelings may differ because of being in different industries. In this context, the purpose of this research is to reveal if sectoral differences exist in perceptions of bank loan constraints for SMEs in manufacturing and service industries. Higher collateral requirements of banks, high expenses of loans and high number of procedures in credit application are the impediments that the research investigates. The sample of the study consists of 424 Turkish SMEs that are affiliated in Ankara Chamber of Commerce (ATO). Moreover, face to face surveys were performed to gain the responses from these businesses. By using Chi-Square and Z score statistics, and analyzing p values from these statistics, the study confirms that perceptions of SMEs that are in manufacturing and service sectors differ regarding to the selected credit access impediments. But contrary to the assumptions in the hypotheses that presume service firms are more likely to face with these impediments than manufacturing firms, the research finds that more SMEs in manufacturing sector perceive the chosen statements as obstacles in their credit application process than service firms do. Therefore, the research partially accepts the hypotheses. The study elucidates that manufacturing firms usually have high level of financial needs because of being exposed to higher amount of sunk costs and capital requirements to continue their activities and also make more export. These facts can make manufacturing firms risky from the banks' point of view. As a consequence of that, banks can take actions that cause tough loan conditions for SMEs in manufacturing industry and this can be the reason why more manufacturing firms in this study perceive the selected facts as obstacles than service firms do.

Keywords: Credit Obstacles, Bank Credit, SMEs, Manufacturing, Service, Turkey

1 INTRODUCTION

Nobody can ignore the contributions of Small and Medium-sized Enterprises on economic growth and workforce of countries. 98% of firms are SMEs that create 67% of work force and 58% of gross value added in European Union (EC, 2012). Moreover, SMEs consist of small, medium and microenterprises and 93.6 % of SMEs are microenterprises in Turkey (TSI, 2013). According to Turkish Official Gazette (2012), those firms differentiate regarding to their staff headcounts, turnovers and financial balance sheets. For example, the number of staff differs between 1 to 9 for microenterprises, 10 to 49 for small firms and 50 to 249 for medium-sized firms respectively. Furthermore, 75.8% of workforce, 55% of GDP and 59.2 % of export are provided by SMEs in this developing country (The Union of Chambers and Commodity Exchanges of Turkey, 2014). SMEs operate in different sectors such as manufacturing, service,

construction, trade, mining, etc. According to Turkish Statistical Institute (2015), 12.6% of SMEs carry on their activities in manufacturing industry.

In order to produce and develop new products, expand their activities, such as R&D and improve their economic growth SMEs need to be financed (Kira & He, 2012). SMEs may not be competitive in an international market and may not enlarge its' businesses if they cannot get external finance (Osano & Languitone, 2016) because SMEs usually do not have a high amount of internal funds. For this reason, the study mainly focuses on bank credit that is the major external source for most of SMEs in Europe (Badulescu A. & Badulescu D., 2012) and Turkey (Uyar & Guzelyurt 2015).

Yet, due to having information asymmetry between SMEs and banks in relation to those firms' credit default problem, enterprises face with several credit obstacles. Furthermore, characteristics of entrepreneurs and firms are also vital factors that may provide firms to get easier credit access. For instance, sizes and ages of firms and difficulties that they encounter in gaining bank loans have been analyzed by some researchers (Okura, 2009; Zarook, 2013). Some other studies also exist in the literature that compare sectors such as manufacturing and service industries regarding to their innovation and R&D activities (Lejpras, 2009), international growth strategies (Kathuria et al., 2008), innovation and internationalization strategies (Forsman, 2011) and strategic abilities in their export performance (Raymond et al., 2014). But when it comes to the differences between SMEs in manufacturing and service industries and their perception on credit impediments, there are just a few studies in the literature.

In this regard, the purpose of the study is to examine whether some differences exist between the perceptions of bank loan constraints for SMEs in manufacturing and service sectors or not. In relation to bank credit obstacles, the study will consider some of the most common credit difficulties for SMEs in worldwide, namely, high costs of credits, high collateral requirements of banks and the existence of the high number of procedures in credit application. The contribution of the research is twofold. First, it emphasizes the credit impediments and then shed on lights on the sectoral differences in the credit access of SMEs. By focusing on the selected credit problems, this study can make the financial impediments more understandable for SMEs that operate in different sectors and this can be a key point in their growth and development. The data that study analyzes was obtained in 2011 when the financial system of Turkey was recovering from the global financial crunch. Hence finding differences between SMEs from different sectors in connection with bank loan issues can be a significant value addition to the SMEs financing literature especially after the financial crises. Also, governments and financial institutions can gain some advantages from the results of this study and they can apply some policies that may provide easier credit conditions or provide more financial support for these kinds of businesses.

The answers of the research question, the impediments of bank loans and the reasons for these issues will be explained in Section 1. Next, the way how the research question is examined will be described in Section 2. The results of the study and discussion that suggest some managerial implications will be clarified in Section 3. Lastly, section 4 ends with suggestions for further research and limitations of this study.

2 LITERATURE REVIEW

SMEs not only provide benefits for the economic development of countries, but also improve entrepreneurial characteristics of firms' executives. For instance, by carrying their business owners of SMEs can gain some abilities, make strategic decisions in competitive markets on the spur of the moment (Rahman et al., 2016) and can promote their firms' entrepreneurial and innovative operations (Erdogan, 2015). In order to continue those operations and develop their entrepreneurship access to finance is a critical factor for entrepreneurs (Naude et al., 2008). But entrepreneurs are prone to gain credits from banks because they usually have lack of internal sources such as personnel assets, supports from their families and friends (Ogubazghi & Muturi, 2014). Within this context, Yilmaz (2016) examines owners of 296 Turkish SMEs and finds that bank credit is the primary financing source for around 71% of those entrepreneurs.

However, compared with larger businesses, SMEs in emerging market economies such as Turkey have more constraints to gain bank loans (Erdogan, 2015). One of the reasons of this fact can be the crises that Turkey has faced through the last ten years. These crises have caused to SMEs to face with more obstacles comparing with the countries that have more stable markets (Karadag, 2015). By investigating small enterprises in USA and Mexico, Hayes et al. (2015) find similar results that compare to developing countries, small firms in developed countries face with lower difficulties when they need to access to finance.

Moreover, Makler et al. (2013) investigate SMEs in Brazilian market and outline the percentage of larger firms that gained funds from banks is higher in comparison with smaller businesses. The reason for this can be small firms' lack of transparency that creates difficulties for banks to assess small firms' capabilities and their credit ratings (Erdogan, 2015). So, information asymmetry problem comes into existence between those firms and banks and banks meet with some troubles to give correct credit decision. In order to cope with these issues, banks implement some regulations that hinder credit access of SMEs.

Corresponding to credit risk issues, in case of borrowers' bankruptcy and probability of default (Trenca & Bolocan, 2010) and also borrowers' financial deterioration can create credit risks for banks due to causing financial losses for them (Nurgaliyeva, 2014). Moreover, SMEs have high amount of intangible assets (Zhang et al., 2014), lower level of return, a higher amount of transaction costs (Pandula, 2015) higher amount of debt, lack of assets to collateralize, lower level of cash flows (Belás et al., 2014). So, lending to SMEs becomes more riskier for banks in comparison with bigger firms and to minimize their financial losses and also to close the information gap between them and firms (Pandula, 2015) banks charge SMEs with higher prices (Cowling et al., 2012), look for more collateral requirements, (Ghimire & Abo, 2013) and set cost for small firms with higher rates of interest and expenditures (Yildirim et al., 2013).

Considering the most common problems that SMEs encounter to gain bank loans, Pandula (2015) asserts that the lower level of collateral that is provided by firms, complex and too many procedures in credit application process and the high amount of loan costs are the main credit obstacles in Sri Lanka. Yilmaz (2016) also states that high numbers of procedures and requirements, collaterals and high level of loan rates are the main constraints for the majority of Turkish SMEs. Because of these reasons this study considers these three most common bank loan impediments for SMEs' credit access namely, too many procedures in loan applications, high level of collateral requirements and high costs of credits.

According to Civelek et al. (2016) banks ask many procedures in an attempt to evaluate creditworthiness of SMEs. Those procedures enable banks to be informed about present and future performance of SMEs (Fatoki & Asah, 2011) so information asymmetry and credit risk can be minimized. On the other hand, by investigating some SMEs in Greek market Daskalakis et al. (2013) submit that bureaucratic procedures are the most common impediments for these firms.

With respect to collateral issues, banks ask for collateral to reduce the impacts of information asymmetry, uncertainties and monitoring costs regarding to the credit risks of businesses (Yildirim et al, 2013). This is because collateral plays as an assuring role for banks against information asymmetry problem (Newman et al., 2010). By asking collateral banks can be informed of the capacity of repayment and financial information of firms (Wangmo, 2015). Fatoki and Asah (2011) express that collateral is a significant factor that plays a determining role to access to loans. By providing their personal assets or their firms' assets entrepreneurs can get loans from banks (Fatoki & Asah, 2011). But higher amount of collaterals that are required by banks is negatively related with the credit application of SMEs (Abdesamet & Wahab, 2014) and poses an obstacle for these firms to gain bank loans.

When examining the high costs of credit, legal fees, stamp tax and credit evaluation fee are the expenses that can increase credit costs for SMEs (Pandula, 2015). By collecting data from 241 Jordanian SMEs, Al-Hyari (2013) finds that high cost of financing is one of the most significant constraints for the development of these firms. In the wake of the financial crises, SMEs have encountered higher interest rates that have caused a rise in the costs of bank loans (Ključnikov et al., 2016). Furthermore, when lenders provide finance for SMEs in imperfect markets, they increase the cost of loans to cope with issues related with the uncertainness, riskiness and, information asymmetry (Cowling et al., 2012). This is because the information that is insufficient and opaque increases the cost of having accurate information for banks (Jenkins & Hussain, 2014). Moreover, Magda (2014) implies that banks make credits more costly for SMEs because of monitoring these businesses and evaluation of SMEs' credit worthiness. Also, economy of scale creates more costs for SMEs compared to bigger firms because information and transaction costs rise when the size of enterprises decreases (Okura, 2009). In order to reimburse those extra costs, banks apply for some loan pricing policies that increase the cost of credits for SMEs.

Regarding to sectors of firms, the industry that businesses carry on their activities is an important factor for businesses to get loans (Domeher et al., 2017). For instance, by analyzing 557 Libyan SMEs Zarook et al. (2013) find the positive relationship between sector of firm and access to finance. Similarly, Kira and He (2012) investigate 163 Tanzanian SMEs and result that a positive and significant relationship exists between industries of firms and being funded by debt financing. The reason for this can be the difference functions of each sector. For instance, the services that are provided by enterprises in service sector are usually intangible, personal and perishable. A service can be called as intangible when there is not any standard process to do the business. Due to depending on customers' wants and requests a service may differ for each person thus it can be called as personalized. Moreover, a service can consist of abilities of human and their innovation skills so those factors make services perishable (Raymond et al., 2014). On top of that SMEs in service industry usually have intangible and perishable assets that cannot be stored. For this reason their assets cannot play an assuring role against their debts (Silva & Carreira, 2010) and service firms may not collateralize those assets

to banks in order to gain credit. For these reasons, to reduce their credit risks, banks can charge service firms with more costs and can apply for more procedures to give service firms a loan. Hence firms in service sector encounter more difficulties regarding to access to loans (Silva & Carreira, 2010).

On the other hand, products of manufacturing industry have higher level of standardization compared to firms in service sectors (Lejpras, 2009). Manufacturing firms have value chains that enable them to trade, make transportation and make their products non-perishable. Those activities might be linked to their manufacturing processes. By having these opportunities, it can be easier for manufacturing firms to grow globally. Also, manufacturing firms have lots of tangible assets that can be used as collateral to face with reduced loan obstacles (Chakraborty & Mallick, 2012). Furthermore, Donati (2016) finds that the average amount of cash flows is higher for businesses in manufacturing industry comparing to the enterprises in service industry.

By having tangible assets, higher cash flows, efficient standards in value chains and more chances to grow globally manufacturing firms can provide more collateral, encounter with less procedures and credit costs. For these reasons, the study assumes and hypothesizes that manufacturing firms are less likely to face with bank credit constraints in comparison with the businesses in service sector.

3 DATA AND METHODOLOGY

The data that the study analyzes is gained from a thousand Turkish SMEs by face to face survey in 2011. The survey is based on 23 questions that are not only related to demographic characteristics of firms and respondents (location, number of years that firms have been operating, size, industry of firms and job position of respondents etc.) but also related to firms' financial indicators (firms' annual sales, total sales, the percentages of sales from import and export activities). Moreover, some other survey questions exist regarding to financial constraints that enterprises have encountered when funding from external sources. The firms that are investigated operate in various industries such as manufacturing, service, construction and agriculture and are members of Ankara Chamber of Commerce. Furthermore, companies' owners, executives, shareholders and accountants are the survey respondents of this study.

The sample is chosen to fit the purpose of the study. For this reason, the study focuses on firms that have gained bank loans and also operate in manufacturing and service sectors. Due to having higher numbers of respondents from those industries, the study compares both of them and tries to find differences between their perceptions of credit difficulties. Hence, 424 SMEs are selected to examine. The structure of the sample consists of 250 respondents (59%) from service sector and 174 respondents (41%) from manufacturing industry. Corresponding with the bank loan obstacles, the study choses three following problems, "Many procedures exist in credit application", "Banks ask for collateral that is higher than the requested credit by firms", "Costs of credits are expensive". Five points Likert Scale is employed to scale the responses from these questions (1-totally disagree, 2-disagree, 3-partially agree, 4-agree, 5-totally agree). The study excludes the response of "partially agree" from the tests because it is not an obvious choice that can be considered. Three hypotheses that are located below are set up in connection with the selected aim.

H1: There is a significant difference between sectors of firms and the perception of the impediments that many procedures exist in the credit application. The study professes that SMEs in service sectors perceive the selected fact as a constraint more than manufacturing firms do.

H0: No statistically significant differences exist between the sectors and the perception of the obstacle that many procedures exist in the credit application.

H2: A statistically significant difference exists between sectors of the enterprises and the perception of the credit difficulty that banks ask for collateral that is higher than the requested credit by firms. The study posits that the businesses in service industry are more prone to perceive this statement as a loan obstacle compared with enterprises in manufacturing industry.

H0: No statistically significant differences exist between the sectors and the perception of the impediment that banks ask for more amount of collateral than the requested credit amount of firms.

H3: There is a statistically significant difference between sectors and the perception of the loan problem that costs of credits are expensive. The study presumes that manufacturing firms are less likely to perceive this case as a problem when applying to credit in comparison with service firms.

H0: No statistically significant differences exist between the sectors and their aspects of the credit constraint that the credit costs are expensive.

In order to find differences between the sectors and their perceptions of credit impediments, the study applies Chi-Square test and Person statistics at 5% level of significance. Moreover, P values from Z score are employed to test whether the differences from individual responses are statistically significant or not. The study accepts the null hypotheses if p values from Z score are higher than 10% confidence level. In case of having p values less than 10%, the study rejects the null hypotheses that assume the non-existence of statistically significant differences between the sectors and their perception of credit problems. Ms Excel and a software that exists at this website: http://www.socscistatistics.com/tests are employed to make calculations. Moreover, Z score is also performed by the same software that is in existence in the following website: http://www.socscistatistics.com/tests/ztest/Default2.aspx.

4 RESULTS AND DISCUSSION

In this section, the study briefly explains the results that are found by statistical analyses. Moreover, the study makes some comments regarding to these findings and support them by providing some empirical studies from literature. The results regarding to the obstacle namely, high numbers of procedures in credit application and its perception by SMEs in different sectors are reported by Table 1.

Table 1 Evaluation of the perception of the selected loan impediments among firms in different sectors.

Source: Own processing.

Many procedures exist in credit application.	Total	Manufacturing	Service	Z-score/ p-value
Completely agree and agree	303	132 **(75.9)**	171 **(68.4)**	1.6737 **0.09492**
Partially agree	62	31 (17.8)	31 (6.84)	1.5526 0.12114
Completely disagree and disagree	59	11 (6.3)	48 (19.2)	-3.7689 0.00016
Total:	424	174	250	
chí - square/ p-value		15.0852 **0.00053**		

Table 1 illustrates that the P value from Chi-square is significant at 5% significance level (χ^2 (1, N = 424) = 15.08, p = .00 < 0.05). This result proves that a difference exists between manufacturing and service firms regarding to their perception of the stated bank credit obstacle. Moreover, the table demonstrates that around 76% of manufacturing firms agree with the fact that banks ask too many procedures in their credit application while this percentage is 68% for firms in service industry.

On the other hand, P value from Z score is also significant at 10% significance level (z=1.67, p=.09 < 0.10). So, P value from Z score confirms that the difference in the perception of the selected loan constraint between manufacturing and service firms is statistically significant. Although the study corroborates the statistically significant difference between various industries, H1 hypothesis can be partially accepted. This is because, the study assumes in the first hypothesis that respondents from service firms are more prone to sense credit procedures as a bank credit impediment comparing to respondents of manufacturing firms. But according to results from table 1, more SMEs in manufacturing industry agree and completely agree that they face with many procedures in their credit application.

Table 2 Evaluation of the perception of the stated credit constraint among SMEs in various industries.

Source: Own processing.

Banks ask for collateral that is higher than the requested credit by firms.	Total	Manufacturing	Service	Z-score/ P value
Completely agree and agree	291	131 **(75.29)**	160 **(64.00)**	2.464 **0.0139**

Partially agree	72	25 (14.37)	47 (18.80)	-1.1957 0.23014
Completely disagree and disagree	61	18 (10.34)	43 (17.20)	-1.9785 0.0477
Total:	424	174	250	
chí - square/ p-value		6.4425 **0.03990**		

Table 2 depicts the results in relation with higher collateral requirements of banks and its perception by the respondents from distinct industries. According to table 2, P value from Chi-Square substantiate that the perception of the highlighted loan constraint for SMEs in manufacturing and service industries differ. The reason for this is p value from Chi-Square statistics is significant at 5% significance level (χ^2 (1, N = 424) = 6.44, p = .03 < 0.05). High collateral requirements of banks are perceived as a credit obstacle by 76% of company owners, executives, shareholders and accountants in the investigated SMEs from the manufacturing sector. 64% of the respondents in service industry also approve that banks ask for collateral that is higher than their credit need. When examining P value from Z score, the result bears out that the difference between SMEs in both manufacturing and service industries in relation with their perception of higher amount of collateral is statistically significant (z=2.46, p= .01 < .05 significant at 5%). But comparing to manufacturing firms, service firms experience the collateral problems less than SMEs in manufacturing industry. So these results refute the assumption of the study in the second hypothesis that service firms tend to be more agreed with the fact that banks ask for more collateral than the requested credit by firms. Hence, the second hypothesis of the study can also be partially accepted.

Next, the study comes to the last analysis by considering manufacturing and service industries and their perception of the following fact as an impediment that "Costs of credits are expensive". By performing Chi-Square and Z tests, the study gains results and indicate them by table 3. Table 3 shows the existence of statistically significant difference between the examined sectors in relation with the problem that firms face in bank credit access. By having significant p values from Z score and Chi-Square at 5% significant level, the statistically significant difference is confirmed by the study. (χ^2 (1, N = 424) = 7.22, p = .03 < 0.05, z= 2,45, p= .01< .05).

Table 3.Evaluation of the perception of the chosen credit obstacle between enterprises in manufacturing and service sectors. Source: Own processing.

Costs of credits are expensive.	Total	Manufacturing	Service	Z-score/ p-value
Completely agree and agree	320	142 **(81.61)**	178 **(71.20)**	2.4505 **0.0142**

Partially agree	73	25 (14.37)	48 (19.20)	-1.2965 0.1936
Completely disagree and disagree	31	7 (4.02)	24 (9.60)	-2.17 0.03
Total:	424	174	250	
chí - square/ p-value		7.2288 **0.02693**		

On the other side, SMEs in manufacturing sector have higher percentage of respondents (81%) that agree with the fact that costs of credits are expensive comparing to the respondents from service firms (71%). For this reason, the supposition of the study in the third hypothesis that service firms are more likely to perceive the high credit costs as a credit difficulty is not confirmed. Thus, the study partly accepts the third hypothesis.

In order to summarize the all results, the study briefly interprets that statistically significant differences exist between manufacturing and service industries regarding to bank credit obstacles. Contrary to the assumptions of the study, SMEs in service industry face with reduced credit impediments in comparison with manufacturing firms. One of the reasons that firms in service sector face with lower financial constraints might be having lower sunk costs comparing to SMEs in manufacturing industry. Another reason why manufacturing firms are more likely to encounter credit constraints can be the fact that manufacturing firms need more capital to operate in minimum scale in comparison with service firms (Silva & Carreira, 2010) and establishing a manufacturing factory might be more expensive than setting up a business in service sector (Lejpras, 2009).

Moreover, by comparing SMEs in different sectors of US market, Chakraborty and Mallick (2012) posit that the credit gap for service industry is lower than the gap in manufacturing industry. Credit gap consists of borrowers that face with credit constraints and credit limitation, are discouraged because of the possibly of being rejected in their credit application, and also small firm that have lack of credits in their balance sheets (Chakraborty & Mallick, 2012). This high level of credit gap for manufacturing firms can make banks' investments more risky and banks can ask for more collateral, charge them with higher costs or ask for more procedures. Banks are more prone to give credits for sectors that have a more amount of profits and lower level of risks (Dohcheva, 2009). In order to protect themselves against credit risks of manufacturing firms, banks in Turkey might have applied these implementations that create difficulties for SMEs to get credit.

Furthermore, Erdogan (2015) points out firms with higher level of export sales are more inclined to see the process of being funded as difficulty comparing with SMEs that have lower level of export sales. According to study of Kathuria et al. (2008) businesses in manufacturing sector are more prone to develop their international market while firms in service industry usually focus on internal market and aim to improve it. Hence, manufacturing firms are more likely to export comparing to service firms. But uncertainties related to their receivables from their international customers can make exporting SMEs riskier for banks so these SMEs can be faced with more impediments when they access to bank loans especially in the crises period

(Ključnikov & Popesko, 2017). This can be another reason why manufacturing firms in this study face with increased obstacles when they access to finance. The data of this study can also prove to this fact by having higher number of exporting companies in the manufacturing sector in comparison with the service firms.

In the study of Forsman (2011), it is validated that SMEs in the service sector has more abilities to improve their products and services in comparison with manufacturing firms. Service firms are more active to make innovation and make investments for research and development activities while manufacturing firms hire lower number of workers for their R&D activities (Lejpras, 2009). In this research, the banks that SMEs gained credit from, could have considered these innovative activities of service firms when they made their credit decisions about these firms. So banks may have provided easier credit access for the firms in the service industry.

Because of having higher sunk costs, higher capital needs to work in minimum scale and making more exporting activities, manufacturing firms that the study investigates might have asked for more credit and might be seen more risky by the banks. For these reasons, banks might have taken precautions that create impediments for the manufacturing firms and make them to perceive the process of gaining access more difficult in comparison with SMEs in service industry. Moreover, the study suggests that Turkish government, Credit Guarantee Fund, Small and Medium Enterprises Development Organization (KOSGEB) and other financial institutions should support firms in manufacturing industry to provide them easier access conditions such as giving loan with low interest rate, making more credit aid, charging them with lower credit expenses. Having been operated in one of the biggest industries that makes exporting and contribute Turkish economy and workforce, SMEs in the manufacturing sector should be encouraged by those institutions in larger extend.

5 CONCLUSION

The purpose of the research is to explore sectoral differences in the perception of bank credit impediments for SMEs. In line with this objective, the study takes manufacturing and service industries in consideration and compares them. The study pays regard to credit expenses, collateral requirements and procedures in credit application corresponding with credit obstacles. In order to collect the data, the research applies face to face surveys that consist of 424 respondents from Turkish SMEs. The statistical data analyses are performed by means of Chi-Square and Z score. The results of the research vindicate that the perception of loan impediments is diluted for SMEs in the service sector by comparison with manufacturing SMEs.

On the other hand, some limitations exist in this research. For instance, the study is only limited to bank loans, the selected impediments, manufacturing and service industries, Turkish SMEs that have carried their businesses in a the capital city of Turkey and have accessed bank credit in the last three years. Moreover, the study had limited time in data collection so the perceptions of firms' executives were like snapshots. Because of having many problems related to bank credit constraints of SMEs in different markets, the study cannot provide a general solution for each firm. For these reasons, researchers can analyze more financial sources, more financial obstacles, more industries or more characteristics of SMEs, more countries and widen geographical areas in order to provide more detailed and more extensive study.

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