2019
Vol.20 No.2

POLISH JOURNAL OF MANAGEMENT STUDIES
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FEMALE BORROWERS AND CREDIT CONSTRAINTS IN SME LOAN MARKET: AN ANALYSES FROM THE VISEGRAD COUNTRIES

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Abstract. There is an ongoing issue in entrepreneurial finance that due to gender discrimination in the loan market, the female borrowers are facing more financing difficulties compared to the male borrowers. Considering the fact, the aim of this paper was to analyses the credit constraints experienced by female borrowers in the context of Visegrad countries. Specifically, we wanted to shed light whether gender discrimination phenomenon in SME loan market is also relevant in these countries or not. To understand financing difficulties for female-based firms, this paper utilizes the data provided by the BEEPS (Business Environment and Enterprise Performance Survey) survey conducted by the EBRD (European Bank for Reconstructions and Development) during the period 2012-2014. By using a sample of 1296 SMEs in these four countries, we found that the SMEs owned by the female borrowers are not being discriminated by banks or external lenders. We found that both male and female borrowers have a similar perception of financing difficulties and getting a similar level of priority while asking for bank loans. Hence, it shows that gender discrimination is not a case in the Visegrad countries. However, we found that borrowers experience can have a positive effect on getting bank loans, that means borrowers with higher experience can facilitate in getting external loans. We also show that firms with an audit report have better access to external loans than firms without an audit report. We did not find any significant evidence that innovative firms are financially constraints than the non-innovative ones.

Keywords: credit constraints, female borrowers, SMEs, Visegrad countries

DOI: 10.17512/pjms.2019.20.2.36

Article history:
Received July 30, 2019; *Revised* September 12, 2019*; Accepted* September 29, 2019

Introduction

The financing difficulties experienced by SMEs is an ongoing issue in the financial market. The impact of SMEs in creating employment and alleviating poverty is enormous. Regardless of the significant contribution towards the national economy, SMEs are still facing severe barriers to finding easy access to finance to fund their businesses or to introduce a new product in the market. There is an ample evidence in entrepreneurial finance that the lack of access to finance hinders the growth of SMEs, because they cannot easily access finance as like as the large firms (Berger and Udell, 2002; Petersen and Rajan, 2002; Beck et al. 2006; Haneder et al., 2014;

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Kozubikova et al., 2015; Vojtovic, 2016; Belas and Sopkova, 2016; Rahman et al., 2017; Kljucnikov et al., 2017; Dobes et al., 2017; Cepel et al., 2018; Kliestik et al., 2018; Belas et al., 2019).

While financial problems to SMEs is a general issue in entrepreneurial finance, existing literature shows that female based SMEs are facing more difficulties in the loan market than the SMEs owned by their male peers. The contribution of female-owned enterprises to the development of the local economy is undeniable, but it is also alarming that female-owned firms find it harder to access bank loans. Gender discrimination in loan markets is under severe scrutiny from both policymakers and researchers. It is a serious concern that firms owned and operated by the females face difficulties in getting access to bank finance due to stereotype gender discrimination (Carter and Rosa, 1998). The studies show that female borrowers are more risk-averse than the male borrowers and as such, they would like to have full control of the business (Croson and Gneezy, 2009). The lack of risk-taking attitude of the female borrowers could be one of the reasons for which women participation in the loan market is lower than the male-owned enterprises. As research shows that women are reluctant to accept bank credits since they are afraid of losing control over their business (Watson et al., 2009).

The theories related to gender-based discrimination shows that it is the perception of the lenders to avoid borrowers just because of their gender or personal characteristics. The theory also suggested that due to the gender of the borrower it could be the choice of the lender to deny a certain group of people regardless of their risk class or any credit risk differences between the borrower who is successful in a loan application. The empirical study shows that the external lenders refuse to provide credits to the females, as it is difficult for the banks to make a correct evaluation of their credit risk due to lack of skills, technical knowledge and previous experience (Irwin and Scott, 2010). A later study by Drakos and Giannakopolous (2011) examined credit rationing for SMEs in 26 Transition (15 European and 11 commonwealths dependent) countries. The study highlighted that male-owned enterprises are less credit rationed than the females owned enterprises; the result is showing that there is a 2.8% more credit rationing possibility for female-owned enterprises than the male-owned. Similarly, Irwin and Scott (2010) in their analysis from the UK SMEs found that 43% of the SMEs were owned and managed by women and they were more credit-constrained or self-discouraged borrower than the men owned SMEs. The reason is that women entrepreneurs assumed that, banks will refuse them and hence they even did not go to the bank for loans. A more recent study by Lee et al. (2015) in the context of UK shows that women-owned SMEs are more credit rationed than the male-owned and faced with a higher level of difficulties in accessing finance.

Alesina et al. (2013) investigated whether women-owned microenterprises are paying more for credit lines than the male borrowers. By using a large sample of microenterprises in Italy, they have found that women enterprises do pay more for their credit lines than the men owned microenterprises. More precisely, women entrepreneurs pay around 28 basis points higher than the men for the credit lines amounted to EURO 60000. However, they did not find that women-owned firms are riskier, or they are operated less efficiently than male-owned firms. Even though they have found that male operated firms have defaulted much more than the women-owned and still the interest rates were high for the women. The authors argue that it can be a reason of less bargaining power of the women to access suitable credit or it can be the reason of cultural barriers in Italy that women-owned business is considered as risky by default. Women-owned microenterprises pay comparatively lower interest rates on service and retail sectors than any other sectors, but still, it remains higher than firms owned by a male in the same sector. Hence, sectorial differences can reduce the interest rates for women, but it cannot make an equal distribution of interest rates as like as male micro-entrepreneurs. Authors argue that this difference in interest rates presumably due to larger loan size accessed by male borrowers from the bank or maybe higher switching and bargaining behaviour of the male micro-entrepreneurs. A later study by Stefani and Vacca (2015) in the context of Germany, Italy, France and Spain found that women are less motivated to get loans from the banks, since, they are afraid that their application will be rejected; as a result, women are more interested in using credits from their family members, friends and relatives. They also showed that female-owned firms are mainly operated in the service and retail sectors and as a result, they do not have enough collateral to pledge, and due to the reason, they are credit rationed.

Hanedar et al. (2014) examined gender discrimination in SME loan market by using a sample of 5325 enterprises from the BEEPS survey covering both European and non-European countries. The study hypothesises that if there is gender discrimination in the loan market in that case loan application of the female borrowers will be more rejected than the male borrower. However, the empirical analysis of the study did not find any significant differences between male and female borrowers and their acceptance of loan application. Similarly, the study did not find any significant differences among gender and in their perception to finance difficulties in the loan market. Rahman et al. (2017b) using the BEEPS survey shows that female-owned SMEs need to provide more collateral than the male-owned firms in the context of Visegrad countries. Therefore, having more collateral on a loan contact is increasing financing difficulties for the female operated enterprises. A study by Muravyev et al. (2009) examining the BEEPS data also find some financing difficulties for women-based firms. Research finds that women are credit rationed not due to only their business characteristics but also because of their characteristics, such as lack of education, experience and less family support (Garwe and Fatoki, 2012). A similar study by Belluchi et al. (2010) in the context of Italian female-based SMEs show that firms owned and operated by female entrepreneurs face strict credit conditions from the banks, for example, lower credit limits, higher collateral and interest rates on their loan contract. Hence, the study suggests that female-owned firms are facing more financial constraints than male-owned firms.

The paper aims to analyse whether there are differences in loan application acceptance rate between male and female borrowers. If their isgender discrimination in the SME loan market, in that circumstance, we would see that the loan application of the female borrowers is more likely to be rejected than the male borrowers. If we find that the loan application of the female borrowers is highly rejected than male borrowers, then we can confirm our hypothesis that female borrowers face gender discrimination in the loan market.To the best of our knowledge, this is the first study which is dealing with the gender-based discrimination using the BEEPS data set on the Visegrad countries. Therefore, this research has implications for entrepreneurs, bankers and policymakers to understand the SME loan market and if there are gender differences in loan market than to implement policies accordingly to create a business environment where both male and female borrowers are given the same level of opportunity to have access to finance.

Data, method, and variables

The data set we used for our analysis is obtained from the BEEPS V survey, which is a joint project of the European Bank for Reconstruction and Development (EBRD) and the World Bank (WB) conducted from 2012-2014. BEEPS survey is conducted in 30 transition economies, including Russia to examine the business environment conditions of the enterprises. The data set covers 15,883 enterprises that range from micro, small, medium and large firms.

The BEEPS data set covers 254 firms in the Czech Republic, 268 firms in the Slovak Republic, 542 firms in Poland and finally, 310 firms in Hungary. However, as the aim of this paper is to examine financing difficulties for firms only in the segment of SMEs and considering the fact, we have excluded firms, which are not in the categories of SMEs. SMEs are defined, according to the criteria given by the organisation for economic cooperation and development (OECD) and BEEPS, when the number of employees is not more than 250. By excluding large firms and all other missing data, we have obtained 240 firms in the Czech Republic, 260 in the Slovak Republic, 500 in Poland and 296 firms in Hungary and which gives a total of 1296 SMEs for our analysis. Among these 1296 SMEs, 314 firms have applied for external loans or lines of credit and 277 firms obtained it.

The paper aimed at examining the likelihood of loan application acceptance rate of the female borrowers compared to the male borrowers. Hence, considering the fact, our dependent variable is a binary variable where the outcome is loan application acceptance or rejection of the female-owned enterprises. Empirical research quite frequently uses the logit and probit model to encounter this type of problem (Hanedar et al., 2014; Rahman et al., 2018; Rahman and Khan, 2013). Due to the nature of our outcome variable, we have employed a logistic regression model for our empirical analysis. Our empirical models to be estimated are as follows:

$$\Pr(Accepted = 1) = \beta_0 + \beta_0 + \beta_{1\,\text{Female}} + \beta_2\, Owner \text{ controls} + \beta_3 \text{ Firm controls} + \varepsilon_i$$

Where Accepted is a binary variable, it takes a value of one (1) if the loan application was successful and zero (0) otherwise.

To examine our model on gender discrimination in the loan market in the Visegrad countries, we have grouped our independent variables into three categories: our main independent variable is the female, that takes a value of 1 if one of the owners among the owners is a female and zero otherwise. We also have borrower-specific and firm-specific controls in our mode.

In terms of owner specific control, we have borrower experience. Experience is the years of experience of the top manager. It was found that a more experienced manager can manage the firm well, which can reduce the default rate of the firm (Wetter and Wennberg, 2009). Therefore, an experienced borrower can be more confident about the prospect of the firms and hence, he/she can apply for more bank finance for investment and similarly, the experience can positively affect the loan application acceptance rate due to better management of the SME.

With respect to firm-specific control variables, we included seven variables along with four sector dummies. Age is the number of years the firm has been operating. Existing literature suggests that older firms may need less external finance because of their internal financial reserve (Petersen and Rajan, 1995) but their loan acceptance rate can be higher than the younger firms due to less credit risk (Kirschemann, 2016). Audit, one if external auditors check the firm financial statement and zero otherwise. The audit report can have a positive effect on loan application and application outcome. It was argued in the literature that firms having audit report are more transparent and can have easy access to finance (Berger and Udell, 2002; Ferri and Murro, 2015). Regarding Quality, one if the firm has an internationally recognised quality certificate and zero otherwise. The International quality certificate may reflect better borrower quality (Hanedar et al., 2014) and can have a positive effect on access to finance. R&D is one if the firm invested in R&D within the last three years and zero otherwise. Then we evaluate the effect of crime in our study. Crime is one if the firm has experienced any losses because of theft, robbery, vandalism or arson and zero otherwise. Firms affected by criminal activities may apply for more bank loans due to poor financial conditions, but they can encounter more rejections due to high credit risk (Hanedar et al., 2014; Duarte et al., 2017). The number of firms has been divided according to the sectors. Sector 1 is if the firm is a manufacturing firm, Sector 2 is if the firm is a wholesale or retail firm, Sector 3 is if the firm is a service-oriented firm and Sector 4 is if the firm is a transport, construction, real estate and others. Product Innovation is one if the firm has introduced any new products within the last three years and zero otherwise and Process Innovation is one if the firm has introduced any new process within the last three years and zero otherwise. Innovative firms are more likely to apply for external loans than the non-innovative ones to support their innovative ideas (Mina et al., 2013). However, they are more likely to be rejected due to a high risk of failure and lack of information transparency (Freel, 2007; Lee et al., 2015).

Empirical results

Descriptive analysis

In table 1, we present the perception of male and female borrower towards financial difficulties in the Visegrad countries. We have used the BEEPs survey in identifying the perception of male and female-owned firms and their difficulties in accessing bank loans. The survey data covers from 1 (no obstacle) to 5 (very severe obstacle). The survey uses terminologies like, high-interest rates, high collateral, short loan maturity and so on to identify the access to financial difficulties. At first, we can see that about 48% of the male and 47% of the female-owned firms perceive access to finance is not a problem in doing business. About 19% of the male and female borrowers perceives access to finance is a minor difficulty for them while doing businesses. However, about 22% of the female-owned firms perceive access to finance is a moderate problem for them while. 17% of male-owned firms agree that access to finance is a moderate problem for their business.

Interestingly, 10% of the male-owned firms perceived access to finance is a major problem while 6% of the female-based firms perceived access to finance is a major problem for them. Finally, about 3% male and 4% of female-owned firms perceive access to finance is a very severe problem in the Visegrad countries. The initial data shows that there are not many differences between male and female-owned firms and their perception of access to financial difficulties.

Table 1: Gender and finance difficulties

Access to Finance	Male Owned Firms	% of Male owned firms	Female Owned firms	% of Female Owned firms	Total
No Obstacle	375	0.48	243	0.47	618
Minor	154	0.19	101	0.19	255
Moderate	136	0.17	113	0.22	249
Major	82	0.10	33	0.06	115
Severe	27	0.03	22	0.04	49
Total	774	1	512	1	1296

Source: BEEPS survey data, authors own analysis.

In table 2, we present the BEEPs survey data of loan applications by gender. In the table, first we have grouped firms that applied for loans and their gender, and in the second group, we have presented the firms that applied for loans then what was the outcome of the loan application. The data suggests that 24% of the male-owned firms applied for bank loans and 76% of the borrower did not apply for loans. We did not conduct analysis the reasons for not being applied for loans, and it could be that firms do not require external loans are discouraged borrower, or it might be possible that the firms do not need external loans. It is possible to see that 25% of the female-owned firms applied for loans and 75% of the firms did not apply for bank loans.

Second, the number of accepted loans between male and female borrowers are quite identical in our analysis. We can see that24% of the male borrowers that applied for loans, about 88% of the firms got their loans. Similarly, 25% of the female borrowers that applied for loans about 88% of the female-owned firms also got their loans from the bank. Thus, it could be a good sign for the firms owned in the Visegrad countries that the banks and external lenders do not discriminate based on their female ownership.

Table 2: Gender and loan applications

	Male owned firms	% of male-owned firms	Female owned firms	% of Female owned firms	Total number of firms	% of Total
Applied for loans	187	24	128	25	315	24
Not applied	597	76	384	75	981	76
Total	784	100	512	100	1296	100
Accepted	164	88	113	88	277	87
Rejected	23	12	15	12	38	13
Total	187	100	128	100	315	100

Source: BEEPs survey, authors own processing

With respect to firm and country-level descriptive analysis (Tables not reported due to page limitation), it was found that about 40% of the SMEs have at least one owner who is female *(Female)* and female participation is highest in the micro-segment (46%). It indicates that females are more comfortable to have a small firm, which is easy to manage. More importantly, when the firm is small, it requires less capital investment and lesser financial support from the external lenders. The age distribution of the firms is about 18-20 years old; micro firms are about 17 years old. It was found that 59% of the medium firms have audited financial statements *(Audit)* and only 23% of micro firms have their statements audited.

Moreover, about 35% of the SMEs have ISO certificate *(Quality)* while 59% of the medium firms have ISO certificate. We can see that about 50% of the firms are in the micro sector and are service-oriented firms and about 40% of the small firms belong to service firms. That suggests SMEs are mainly concentrated in service businesses which require less capital as like as the manufacturing firms. With respect to R&D investment, only about 7% of the micro firms have invested in research and development *(R&D)* activities while about 19% of the medium firms invested in R&D. The survey finds that about 24% of the medium firms have incurred losses due to theft, robbery and arson *(Crime)* and which is the highest in comparison with micro and small firms. In terms of innovation activities, 30% of the SMEs have introduced new products within the last three years *(ProductInno)*, and 21% of the SMEs have introduced new processes within their business *(ProcessInno)*. According to our expectation, the survey result suggests that micro firms have the lowest participation in product innovation (27%) also in process innovation (17%). It may signal that innovation is more likely a characteristic of the larger firms because they can invest more in innovative projects from their internal capital or borrowed funds.

With respect to country-level analysis, the survey finds that female firms own about 40% of the firms in our analysis. The rate of the female owner is highest in Poland, with about 53% of the female ownership. The data also suggests that SMEs are older in Poland than in the other three countries, where the average firm age (*Age)* is about 20 years. It is found that on average 47% of the SMEs in the Czech Republic and the Slovak Republic have audited statements *(Audit)*, but firms in Poland have the lowest level of audited financial statements (15%). The descriptive result also suggests that SMEs in the Czech Republic have the highest level of (22%) involvement in research and development activities *(R&D)*,but only about 7% of the firms in the Slovak Republic invested in R&D which is the lowest. Surprisingly, 36% of SMEs in the Czech Republic reported that the firm was affected by theft, robbery, vandalism and arson *(Crime)*. It suggests that business condition in the Czech Republic is weaker than its neighbour countries. 53% of the firms in Hungary have at least one owner who is female *(Female)*. In contrary, the Slovak Republic has the lowest level (30%) of women participation in SMEs. The survey found that firms in the Czech Republic have the highest level of product and process innovation (*ProductInno*, 50%; *ProcessInno*, 34%) whereas firms in the Slovak Republic have the lowest level participation in both product (19%) and process (13%) innovation. This result may suggest that there is a positive association between investment in R&D and innovation. As the firms in the Czech Republic invest more in R&D, they have more innovative outputs. On the other hand, the Slovak Republic has the lowest investment in R&D, and consequently, they have less innovative outputs.

Empirical analysis

Table 3 presents the estimates on the likelihood of obtaining bank finance by SMEs. With respect to our main test variable, we find an insignificant negative relationship between female *(Female)* ownership of the firms and the likelihood of application acceptance. Because of the insignificant results, we reject our intuition that female entrepreneurs are facing discrimination in the Visegrad countries. Our results suggest that female borrowers are not facing any disadvantages in the loan markets compared to male borrowers. Hence, we can posit that the banks and external lenders treat the female and male borrowers similarly and our analysis shows there is no gender-based discrimination.

With respect to other control variables, we find a positive association between owner experience and the likelihood of being successful in a loan application; this suggests that the level of experience could be a positive signal for banks when evaluating the loan application for a client. As discussed elsewhere that an experienced manager can better manage her/his firm and which reduces the default rates (Wetter and Wennberg, 2009). We find that loan application of the older firms *(Age)* is likely to be rejected irrespective of the firm sizes. However, the results are not statistically significant. It could be the fact that firms are getting older, but they may not have such information quality that can enable them to access external finance more than the younger firms. We did not find any significant results for the audit report *(Audit)* and obtaining external finance. Hence, we reject our intuition that the audit report would make it easier for banks to justify the information quality of the firm and which would increase the likelihood of getting a bank loan. Micro firms having ISO certificate *(Quality)* are more likely to be accepted in their loan application, and the result is statistically significant. It may suggest that the quality certificate may have a positive signalling effect on the likelihood of getting a bank loan in the segment of micro firms, however, which is not true for small or medium firms.
We found a negative effect of loan acceptance rate on R&D *(R&D).* It is probably due to the higher information asymmetry related to the R&D project and more riskiness associated with the R&D investment. Mina et al. (2013) and Freel (2007) also found similar results in the context of the UK and USA. Surprisingly, we found that firms those were affected by theft, robbery, vandalism, and arson *(Crime)* their loan application are also likely to be accepted by the banks. Nevertheless, the results are not statistically significant across the size of the firms. We also find that retail and wholesale firms *(Sector 2)* are more likely to be accepted on their loan application than the manufacturing firms. With respect to innovation and financial constraints, we did not find any evidence that SMEs are discriminated due to their firm sizes and innovation activities than the non-innovative firms. Thus, innovative firms are not facing credit constraints in the loan market due to their innovation tendency in the Visegrad countries.

Table 3. Logistic regressions: Approved external finance

Variables	All Firms	Micro Firms	Small Firms	Medium Firms
	Accepted (1/0); logit	Accepted (1/0); logit	Accepted (1/0); logit	Accepted (1/0); logit
Female	-0.089	-0.173	-0.779	
	(0.371)	(0.623)	(0.593)	
Owner Characteristics				
Experience	0.0473**	0.0821*	0.017	0.078
	(0.020)	(0.046)	(0.029)	(0.072)

Firm Characteristics				
Age	-0.005	-0.0275	-0.0329	-0.024
	(0.015)	(0.036)	(0.028)	(0.074)
Audit	1.143	-0.124	-0.768	2.557
	(0.373)	(0.734)	(0.593)	(1.947)
Quality	0.534	1.831*	-0.004	-1.553
	(0.401)	(0.978)	(0.620)	(2.018)
R&D	-0.233	-0.502	-1.128	0.521
	(0.573)	(1.65)	(0.859)	(2.237)
Crime	0.313	1.171	0.117	-1.721
	(0.607)	(0.945)	(0.789)	-1.763
2. Sector	1.027**	1.501*	1.568**	-0.038
	(0.473)	(0.811)	(0.766)	(1.764)
3. Sector	0.687	1.021	1.404	
	(0.608)	(0.950)	(1.138)	
4. Sector	-0.131	-0.179	0.369	1.004
	(0.487)	(0.844)	(0.893)	(1.835)
ProductInno	0.0133	-0.59	0.754	-0.515
	(0.465)	(0.754)	(0.848)	(2.166)
ProcessInno	0.141	-0.617	0.703	1.421
	(0.513)	(0.795)	(1.005)	(2.517)
Constant	0.574	-0.376	2.394**	0.957
	(0.607)	(1.317)	(1.075)	-2.77
Observations	314	82	161	42

Note: This table reports logistic regression results of obtained external finance for the full sample and at the firm level. The dependent variable is obtained external finance (Accepted = 1). Female dummy and sector dummy three are removed from the medium firms' regression because there is no variation in the data set.
Source: Authors own estimation. Significance level: *** p<0.01, ** p<0.05, * p<0.1. Standard errors are in parenthesizes.

Concluding remarks

Many theoretical and empirical research shows that because of the gender female borrowers are facing more financing difficulties than the male borrowers in the loan market. Therefore, in this paper, we have investigated the gender discrimination for SMEs in the Visegrad (Czech Republic, Slovak Republic, Poland and Hungary) countries. Specifically, we wanted to shed light on whether female borrowers are facing more difficulties in accessing external loans compared to male borrowers or not. Our data set came from the BEEPS V survey which is a joint project of the European Bank for Reconstruction and Development (EBRD) and the World Bank (WB). The data set suggests that only 24% of the SMEs applied for bank loans in our examined countries. However, we can see that those applied, banks and other external lenders accepted about 80-90% of the loan application. We have defined financial constraints for gender-based SMEs with respect to their number of applications accepted by banks. The preliminary data of the paper shows that male and female borrowers show a similar level of perception on their difficulties in accessing external finance with about 47-48% of both male and female borrowers showed there is no financial obstacle from them to access external finance

The firm-level empirical analysis does not show any evidence that female borrowers are credit constraints than their male counters parts in the Visegrad countries. Therefore, it is plausible to say that gender discrimination is not foreseen in our analysed countries.

Furthermore, the result also shows that borrower experience has a positive effect on accessing and being successful in a loan application. Thus, it could be said that borrower having more experience can find it easier to have loans from banks and other external lenders. We also show that micro firms having a quality certificate finds it easier to access bank loans, and there is a high probability of being successful in their loan application from banks. We also show that firms engaged in R&D and innovation activities are more likely to seek bank finance than the firms that do not engage in R&D or innovation. Hence, we cannot say that SMEs are highly dependent on bank debt to carry out their innovation activities rather it can be highlighted that it is the firm's own choice whether to apply for loans or not and which may not be depended on the R&D or innovation activities.

Our empirical findings do not support the assumption that innovative SMEs are financially constraints. Hence, innovative SMEs are not considered as a risky investment portfolio by banks in our examined countries which was highlighted in the prior literature. With this result, we may infer that financial constraints for SMEs may not be a prime cause of lack of involvement in R&D and innovation, rather it could be a fact that lack of firms' internal ability to innovative quality knowledge product or SMEs is not just interested in making any changes in the product lines.

The empirical findings of this paper have a few policy implications for business practitioner and researcher. First, if there is no financial discrimination in the SME loan market for female borrowers, then female borrowers can be given other incentives such as tax bracket or free financial advice from the financial institutions to engage and motivate more for female entrepreneurship. Similarly, bank managers could think of providing loans to female borrowers with minimum or no collateral as it could be difficult for female borrowers to provide any collateral to get bank loans. Future research may focus on finding the reasons why female borrowers are reluctant to apply for bank loans if there is no gender discrimination in the Visegrad countries.

Acknowledgement

Ashiqur Rahman is grateful to the Internal Grant Agency of FaME TBU No. IGA/FaME/2019/002: The Role of Institutional Environment in Fostering Entrepreneurship" for financial support to carry out this research.

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KOBIETY PRZEDSIĘBIORCY I OGRANICZENIA KREDYTOWE NA RYNKU KREDYTOWYM MŚP: ANALIZY Z KRAJÓW WYSZEHRADZKICH

Streszczenie: W finansach przedsiębiorczości wciąż występuje problem polegający na tym, że z powodu dyskryminacji ze względu na płeć na rynku pożyczek, pożyczkobiorczyni mają większe trudności finansowe niż pożyczkobiorcy płci męskiej. Biorąc pod uwagę fakt, celem tego artykułu była analiza ograniczeń kredytowych doświadczanych przez pożyczkobiorczyni w kontekście krajów wyszehradzkich. W szczególności chcieliśmy wyjaśnić, czy zjawisko dyskryminacji ze względu na płeć na rynku pożyczek dla MŚP ma również znaczenie w tych krajach, czy nie. Aby zrozumieć trudności w finansowaniu dla firm z siedzibą w kobietach, w niniejszym dokumencie wykorzystano dane dostarczone w badaniu BEEPS (badanie otoczenia biznesowego i wydajności przedsiębiorstw) przeprowadzonym przez EBOiR (Europejski Bank Odbudowy i Rozwoju) w latach 2012–2014. Korzystając z próby 1296 MŚP w tych czterech krajach, stwierdziliśmy, że MŚP będące własnością pożyczkobiorców nie są dyskryminowane przez banki ani zewnętrznych pożyczkodawców. Trybunał stwierdził, że zarówno pożyczkobiorcy, jak i pożyczkobiorca, mają podobne zdanie na temat trudności w finansowaniu i mają podobny poziom pierwszeństwa podczas ubiegania się o kredyty bankowe. Dlatego pokazuje, że dyskryminacja ze względu na płeć nie występuje w krajach wyszehradzkich. Stwierdziliśmy jednak, że doświadczenie kredytobiorców może mieć pozytywny wpływ na uzyskanie kredytów bankowych, co oznacza, że kredytobiorcy z większym doświadczeniem mogą ułatwić uzyskanie pożyczek zewnętrznych. Pokazujemy również, że firmy z raportem z audytu mają lepszy dostęp do pożyczek zewnętrznych niż firmy bez raportu z audytu. Nie znaleźliśmy żadnych istotnych dowodów na to, że innowacyjne firmy stanowią ograniczenia finansowe niż te nieinnowacyjne.

Słowa kluczowe: ograniczenia kredytowe, pożyczkobiorcy, MŚP, kraje wyszehradzkie

中小企业贷款市场中的女性借款人和信贷约束:来自远景国家的分析

摘要:企业融资中存在一个持续存在的问题，即由于贷款市场中的性别歧视，女性借款人比男性借款人面临更多的融资困难。考虑到这一事实，本文的目的是分析维谢格拉德国家背景下女性借款人的信贷约束。具体而言，我们想揭示中小企业贷款市场中的性别歧视现象在这些国家中是否也有用。为了了解女性公司的融资困难，本文利用了欧洲复兴开发银行(EBRD)在2012-
2014年间进行的BEEPS(商业环境和企业绩效调查)调查提供的数据。通过对这四个国家的1296家中小型企业进行抽样调查，我们发现，女性借款人拥有的中小型企业并没有受到银行或外部贷方的歧视。我们发现，男性和女性借款人对融资困难都有相似的认识，并且在申请银行贷款时获得了相似的优先级。因此，它表明，在维谢格拉德国家，性别歧视不是一个案例。但是，我们发现，借款人的经验可以对获得银行贷款产生积

极影响，这意味着具有较高经验的借款人可以促进获得外部贷款。我们还表明，拥有审计报告的公司比没有审计报告的公司更容易获得外部贷款。我们没有发现任何重要证据表明创新企业比非创新企业在财务上受到限制

关键字：信贷约束，女性借款人，中小企业，维谢格拉德国家