ATTENDANTS OF FINANCIAL ACCESSIBILITY OF FIRMS IN VIETNAM

To Trung Thanh, National Economics University
Nguyen Thi Hong Nham, University of Economics Ho Chi Minh City
Le Thanh Hà, National Economics University
Nguyen Thi Thanh Huyen, National Economics University
Tran Anh Ngoc, National Economics University

ABSTRACT

The research used the Logit model to evaluate factors affecting the financial accessibility of enterprises, using the Enterprise Survey Data 2017 of General Statistics Office of Vietnam and the survey sample from 695 enterprises implemented in December 2017. The research points out that beside factors related to institution and business environment, factors from financial markets or financial intermediaries, factors related to internal problems of enterprises such as characteristics of enterprises, characteristics of enterprise owners, production and business results, geographical location, the role of networks, etc. or incurred official and unofficial expenses are barriers impacting on the financial accessibility of enterprises. From that point, some solutions are proposed to improve financial accessibility for enterprises in Vietnam in the present stage.

Keywords: Barriers to Financial Access, Enterprises, Financial Accessibility, Logit Model.

INTRODUCTION

Vietnamese enterprises are the economic sector that plays the most crucial role in the economic growth scale and rate of the country. According to average statistics for the 2010-2017 period, the number of enterprises actually operating in Vietnam increased by 10.5% per year, the number of labors attracted to work in the enterprise sector increased by 5.9% per year, production and business capital increased by 15.4% per year, revenue increased by 15.6% per year and profits increased by 13.7% per year. Correspondingly, the enterprise sector has been increasingly asserting its s. For enterprises, particularly private enterprises, capital access is currently one of the major barriers to enterprise development. Certain results from enterprise surveys also indicate that financial access is a major barrier for enterprises. As stated in the Enterprise Survey 2015 of the World Bank, "Financial Access" is considered to be the biggest obstacle to business (with 22% of Vietnamese enterprises choosing this factor, compared to 11.3% of enterprises in East Asia -Pacific region). Besides, results of the sixth Small and medium-sized enterprises (SME) survey in 2015 presented that although the credit access indicator has improved significantly, enterprises still believe that capital shortage and difficulty in financial access are still the biggest obstacles. Meanwhile larger enterprises are more likely to access credit, all groups of other scales have lower credit access ratio than that in 2013. Due to

difficult accessibility to bank capital, enterprises (mostly private ones) will have to access informal channels such as relatives, friends, family, or loans at high intereste rate. Interest rates from these loan sources can be significantly exorbitant, from 20-25% per year and even up to 36% per year for large enterprises (Vietnam Chamber of Commerce and Industry.

Besides, the difficulty that enterprises encounter is high financial costs. According to the report of Provincial competitiveness index (PCI) in 2015, the fact that enterprises have to pay for informal costs such as "gratuity" for bank officials is still common with 64% of microenterprises, 56% of small enterprises and 49% of medium enterprises admitting to paying this cost. On the contrary, this ratio of large enterprises is only 30%.

With these actual issues, the research will focus on evaluating factors simultaneously impacting both formal financing sources (mainly from commercial banks) and informal ones (family/friends/relatives, etc., loans at heavy interest rate) for enterprises in Vietnam. From that point, some solutions will be offered to improve the accessibility to this financial resource for enterprises in general and private enterprises in particular.

In addition to the general introduction and references, the research consists of 4 different sections. Section 2 presents the research overview. Section 3 assesses the current state of enterprises' financial accessibility. Section 4 shows research methods and designates an empirical model. Section 5 points out certain research results. Section 6 contains the main conclusions and recommendations.

LITERATURE REVIEW

The research overview shows a number of crucial factors affecting the enterprises' accessibility to sources of loans, such as institution and business environment, factors from financial markets or financial intermediaries or those related to internal problems of enterprises such as characteristics of enterprises, characteristics of enterprise owners, production and business results, geographical location, the role of networks, etc.

Regarding the institution and business environment (Fatoki & Smit, 2011) considered that the legal environment is an important factor affecting the financial accessibility of enterprises. Pearson's correlation research and assessment between the business environment and the loan value that enterprises borrow commercial banks and credit institutions. In the same view, Olomi et al. (2008) also identified underdeveloped business culture; the transaction environment between lenders and borrowers is one of three factors challenging enterprises' accessibility to financial resources. Additionally, research conducted by different authors such as Le (2012), used PCI index to assess influences of the institution and business environment on enterprises' accessibility to bank credit source. All of these researchers conclude that the institution and business environment, especially the judicial quality and transparency of local governments, have impacts on enterprises' accessibility to this capital.

The more developed the financial system is, the easier it is for enterprises to access external capital sources. Researchers often divide enterprises into two groups: those with no financial constraints (easy to access external capital) and those with financial constraints (difficult to access external capital) (Baum et al., 2009). Financially constrained enterprises often have characteristics such as small scale, difficulties in collecting their information (Information Asymmetry) and low dividend payout ratio (Udichibarna et al., 2015). Research conducted by

(Tran and To, 2018; Nguyen & Ha, 2018) measured effects of financial market development on enterprises' accessibility to financial sources from banks and credit institutions through the fact that whether or not they are listed on the stock market. Thereby, it is shown that the participation of enterprises listed on the stock market has a positive impact on the financial accessibility of such enterprises (Nguyet, 2014).

In terms of lending procedures, according to the SME survey 2015 of The Central Institute for Economic Management (CIEM), for enterprises explaining why they do not borrow money, difficulty in administrative procedures with bank officials is the biggest cause, accounting for up to 30% of the total enterprise meeting difficulties in accessing loans. Sharing the same view, the PCI survey in 2015 also indicated that 43-64% of the SMEs surveyed face difficulties in loan borrowing procedures meanwhile this ratio in large enterprises is only 30-32%. Moreover, Tran and To (2018) assessed that complicated and time-consuming borrowing procedures will reduce the probability of accessing loans from commercial banks by around 11 percentage points (Junxiong, 2007).

Another barrier when enterprises access loans from banks and credit institutions is they have to pay both formal and informal costs. The report on business environment characteristics assessed a large ratio of enterprises that do not need loans (54%) or do not want to be in debt (23%). The interest rate may be one of the causes for an explanation for why enterprises don't want loans. At the same time, the interest rate of the biggest loan within the year also affects the profitability of enterprises (Nguyen et al., 2015). Besides, according to the research conducted by Tran and To (2018), Nguyen & To (2019), the probability that enterprises can access a loan from credit institutions increases when enterprises pay informal costs such as costs for undercover payments, gifts, etc. (Kira, 2012).

Hence, it can be seen that almost all of the research focus on the assessment of factors affecting enterprises' accessibility to formal financial sources (from bank and credit institutions). Research evaluating impacts of factors on simultaneous accessibility to both two financial sources, formal and informal ones, are significantly limited. Regarding research methods, domestic research also uses quantitative techniques but at a simple level and issues related to endogenous variables have not been thoroughly solved.

Actual Situation of Enterprises's Financial Accessibility

Most enterprises need capital for their business development. Nonetheless, not all of them obtain or can obtain loans. Among those with demand for credit, the number of enterprises applying for bank loans accounts for about 58.4% in the whole sample, of which the disbursement rate for SMEs with loan application accounts for only 47.3% and only around 58% of enterprises have ever obtained loans. This ratio also increased according to enterprise size. While only 50% of SMEs applied for loans, the percentage for large-sized enterprises was 70%. This ratio also varies greatly in the enterprise ownership form, in which state-owned and private enterprises have the loan application rate of 68% and 60% respectively whereas this ratio for foreign-invested ones is only 48% (Table 1). In the meantime, according to the Report on Vietnam Business Environment in 2015, 25% of enterprises applying for formal loans and 15% of enterprises had difficulties in obtaining loans.

This is partly because enterprises are not brave enough in capital mobilization. The rest reasons are that each capital source has certain barriers to enterprises with a large number of business constraints such as SMEs.

Table 1 RATIO OF ENTERPRISES APPLYING FOR BANK LOANS								
Do Enterprises	ses Enterprise Size Enterprise Ownership Form To							
Apply for Bank	Small and	Large	Enterprises in	Enterprises	Enterprises in			
Loans?	Medium-sized	enterprises	agricultural	in FDI sector	private sector			
	enterprises		sector					
Yes	50.25%	30.23%	32.00%	51.58%	39.70%	41.58%		
No	49.75%	69.77%	68.00%	48.42%	60.30%	58.42%		
Total						695		

Source: Survey data on 695 enterprises.

For enterprises that do not take bank loans, the situation is based on questions in the questionnaire about the level of consent to barriers and obstacles after enterprises have access to bank loans and credit institutions which is assessed from 1-5 level (in which total agreements on the barrier or difficulty level is the most serious). It can be seen through statistics from barriers that excluding not having demand and not wanting to be indebted, basic reasons for not accessing bank loans are high-interest rates, complicated borrowing procedures, and insufficient collaterals.

Regarding difficulties in accessing bank credit, the most serious assessed difficulty is in too high-interest rates (with the average score for this barrier of 3.13); and then the difficulty in the bank's requirement on enterprises' specific business plans (with the average score for this barrier of 3.11). In addition, enterprises also encounter various other difficulties when accessing bank credit such as: administrative procedures; banks' favor on foreign enterprises, state-owned enterprises; non-diversity of credit services, lack of appropriate credit products; improper loan term; no loan guarantee service; insufficient collaterals of enterprises; additional non-interest and informal costs; difficulties for enterprises in registration of asset ownership, etc. (Le & Nguyen, 2009) (Table 2).

Table 2 ENTERPRISES' DIFFICULTIES WHEN ACCESSING BANK CAPITAL							
Reason	Assessment point for enterprises' difficulty level						
Too high interest rate	3.13						
Specific business plans required	3.11						
Complicated and time-consuming administrative procedures for accessing credit preferential policies	2.9						
Banks' favor on foreign enterprises, state-owned enterprises	2.78						
Non-diversity of credit services, lack of appropriate credit products	2.67						
No loan guarantee term	2.65						
Insufficient collaterals of enterprises	2.52						
Additional non-interest and informal costs required	2.36						
Difficulties for enterprises in registration of asset ownership	2.46						

Source: Survey data on 695 enterprises.

In the surveyed sample, 37.54% of enterprises use informal loans, of which 14.4% are private loans, 25.5% are from loans through personal relationships, the rest is other informal sources. The survey results also show that SMEs have a higher proportion of informal loans than large enterprises (41.90% compared to 31.41%). The private sector is also the main sector generating unofficial demand for loans when the ratio in this area is 43.44% compared to 15.63% and 13.68% of the other two areas (Table 3).

Table 3 RATIO OF ENTERPRISES USING INFORMAL LOANS									
Have	Have Enterprise Size Enterprise Ownership Form Total								
enterprises used	Small and	Large	Enterprises in	Small and	Large	Enterprises in			
informal loans	Medium-	enterprises	agricultural	Medium-	enterprises	agricultural			
within the 3	sized	_	sector	sized	_	sector			
latest months?	enterprises			enterprises					
No	58.10%	68.59%	84.38%	86.32%	56.56%	62.46%			
Yes	41.90%	31.41%	15.63%	13.68%	43.44%	37.54%			
Total						695			

Source: Survey data on 695 enterprises.

Reasons for accessing informal loans: It can be noticed that the most common reason is that informal loans do not have strict regulations like loans from a bank. 56% of enterprises choose informal capital sources because "Easier methods", in which 51% of reasons is "More flexible time"; 46% of reasons is "No collateral required". Nevertheless, this fact shows huge potential risks behind this fairly common capital.

RESEARCH METHODOLOGY

Data and Description of Data

The research used the General Enterprise Survey data of General Statistics Office of Vietnam in 2017 and the survey sample from 699 enterprises conducted in December 2017 in 3 places which are Hanoi, Da Nang, and Dong Nai. After processing and sorting out the duplicate observations, the number of remaining samples is 695 observations.

	Table 4 SUMMARIZATION OF RESEARCH SAMPLE INFORMATION							
Ord.		State-owned enterprises	Non-state enterprises	Total				
1	Survey sample	43	652	695				
	SMEs	10	384	394				
	Large enterprises	33	268	301				
2	The number of enterprises applying for loans	28	378	406				
	SMEs	3	193	196				
	Large enterprises	25	185	210				
3	The number of enterprises whose documents are disbursed (formal loans)	28	363	391				
	SMEs	3	182	185				
	Large enterprises	25	181	206				

4	The number of enterprises obtaining informal loans	54	311	365
	SMEs	43	208	251
	Large enterprises	11	103	114
5	The number of enterprises obtaining both formal and	9	185	194
	informal loans			
	SMEs	7	149	158
	Large enterprises	2	34	36
6	The number of enterprise's operational years (on average)	24.3	9.9	10.8
	SMEs	20	8.97	9.25
	Large enterprises	25.6	11.23	12.81
7	The number of enterprises with available collaterals	24	381	405
	SMEs	3	221	224
	Large enterprises	21	160	181

Source: Calculated from survey data.

Table 4 shows that most of the enterprises in the survey sample are non-state enterprises (accounting for 98.3%), of which SMEs account for 56.69% of the total enterprises in the survey sample. The number of enterprises applying for bank loans takes up about 58.4% in the whole sample, of which the disbursement rate for SMEs with loan applications takes up only 47.3%. The average number of enterprises' operational years in the market up to the time of the survey is 10.8 years. In particular, the number of SMEs with less than 5 operational years is about 31.2% and those with less than 10 years account for about 66.5%. This is also a disadvantage, especially for newly established enterprises when obtaining loans.

Designation of the Research Models

To analyze factors affecting the financial access demands of enterprises, the research used the Logit model. As stated by Baltagi, (2008) the log it model is known as the regression model where dependent variables are discrete and only two possible values, 0 and 1, are taken. In the Logit model, the probability for a dependent variable to receive a value 1 is described as a nonlinear function of a set of regression variables X that can be given as follows:

$$p_i = P(Y = 1/X_i) = \Phi(X_i \beta) = \frac{e^{X_i \beta}}{1 + e^{X_i \beta}}$$

Where: $P(Y = 1/X_i)$ is the probability for dependent variables to receive value 1;

X_i is the set of selected explanatory variables;

 $\Phi(X'_i\beta)$ is the cumulative distribution function of logistic distribution.

Hence, the Logit model does not study the direct effets of dependent variables X_k on Y but consider the effects of X_k on the probability that Y can receive value 1 or Y's expected values. The marginal effect at the mean is calculated based on (Cameron & Trivedi, 2010) in equation (2) and used to explain the extent to which independent variables affect p_i . The marginal effect at the mean of X_k on p_i is calculated as follows:

$$\frac{\partial}{\partial X_k} p_i = \frac{\exp(X_i \hat{\beta})}{\left[1 + \exp(X_i \hat{\beta})\right]^2} \beta_k = p_i (1 - p_i) \beta_k$$

Simultaneously based on the survey data and the overview of empirical research, the research identifies variables and expectations as presented in (Table 5).

Table 5 SYMBOLS, EXPLANATIONS, CALCULATION/MEASURE METHODS AND EXPECTATIONS FOR DIMENSIONAL EFFECTS OF VARIABLES IN THE MODEL								
Ord. Syr	mbol	Explanation	Calculation/Measurement method	Expected effects				
1 2			External factors	•				
Quality of institution and business environment								
PCI		Provincial		(+) Nguyen & Ha (2018)				
		competitiveness index		, ,				
			Barriers from financial markets					
Listed		Listed on the stock market	Listed =1 if the company is listed on the	(+) Tran and To (2018)				
			stock market, vice versa, it is 0					
		Ba	rriers from financial intermediaries					
Procedur	e	Procedures for accessing	Procedure =1 If the enterprise says that	(-) Tran and To (2018)				
		credit from banks	procedure for applying for a bank loan is					
			complicated and time consuming, vice					
			versa, it is 0					
			ormal and informal financial costs					
Cost		Costs for undercover	Cost = 1 if the enterprise has undercover	(+) Tran and To (2018);				
		payments, gifts	payments and gifts to receive a loan from	Nguyen & Ha (2018);				
			the bank	Nguyen &To (2019)				
Int rate		Interest rates on loans that	Int rate=1 If the enterprise says it is	Nguyen et al. (2015)				
		the enterprise has to pay is	currently paying high interest, vice versa, it					
		high	is 0					
		Produc	tion and business results of enterprises					
ROA			After-tax Return on total Assets	(+) Udichibarna et al. (2015)				
Log_asse	et		Total assets as of the end of the year	(+) Tran and To (2018)				
			(in log)					
			Internal factors of the enterprise					
			eographical location of enterprise					
Distance	e	Space distance from the	Distance = 1 If the enterprise says that the	(-) Cole et al. (2004); Berger				
		enterprise to bank	bank is too far away from the enterprise,	et al. (2005)				
			vice versa, it is 0					
			Credit reliability of the enterprise	() 2				
Credit		Loan history of the	Credit=1 if the enterprise has completely	(+) Cole et al. (2004);				
		enterprise	settled bad debt, overdue debt, vice versa, it	Berger et al. (2005);				
			is 0	Hakkala & Kokko (2007)				
P 1 2		D12 1 2	Roles of the network	() D. 10 F. (2005)				
Relation	1	Relations between the	Relation =1 if the enterprise indicates that it	(+) Rand & Tarp (2007);				
		enterprise and the bank	has a close relationship with the bank, vice	Cole et al. (2004); Hakkala				
			versa, it is 0	and Kokko (2007); Le and				
				Nguyen (2009); Tran and				
				To (2018); Nguyen and To (2019)				

Characteristics of th	ne enterprise owner		
Gender	Gender of the enterprise owner	Gender=1 if the enterprise owner is male, vice versa, it is 0	(+/-) Nguyen et al. (2015); Cole et al. (2004); Irwin & Scott (2010)
Director	Whether or not the company have a financial director	Director =1 if the Enterprise has a financial director, vice versa, it is 0	(+) Tran and To (2018)
Education	Educational level of the financial director	Education =1 if the enterprise has a financial director at university and higher level, majoring in finance, vice versa, it is 0	(+) Bates (1990); Rand & Tarp (2007)
Characteristics of th	ne enterprise		
Debt_ratio		The debt ratio/total capital as of the end of the year	(-) Le (2012)
SME	Small and Medium-sized Enterprise	SME =1 if the number of employees under 200, capital amount is under 100 billion dongs and revenue is under 300 billion dongs, vice versa, it is 0	(-) Bernanke et al. (2004); Nguyen et al. (2015)
State	State-owned enterprises	State =1 if the enterprise has the State capital greater than 50%, vice versa, it is 0	(+) Beck & Demirguc-Kunt, (2006); Demirguc-Kunt and Levine (2008)
Age	Age of the enterprise	The age of an enterprise is calculated from the time the enterprise officially registers its business operation.	(+) Beck and Demirguc- Kunt (2006); Hanedar et al. (2014)
Interaction variable	S		
SME*Log_asset			(+)
SME*Cost			(+)

ESTIMATED RESULT

Certain research has indicated that dependent variable ROA can affect financial accessibility and vice versa (Udichibarna et al., 2015). For firmer confirmation, the research used the verification of endogenous variables in models with the hypothesis: H₀: A model has no endogenous factors, obtaining p_value<0.05. Thus, rejecting the H₀ hypothesis means that the model has endogenous factors.

Hence, to overcome endogenous problems in the model (1), the research used (2SLS) Two-Stage Least Squares regression method. Stage 1: Regressing ROA according to remaining independent variables, ROA_exponent is obtained. Stage 2: Regressing dependent variables according to independent variables, ROA_exponent. The model in stage 2 overcomes endogenous problems with results shown in Table 6.

Table 6 ESTIMATED RESULTS									
Easter	Variable Model 1 Model 2 Model 3 Model 4								
Factor		Coef.	AME	Coef.	AME	Coef.	AME	Coef.	AME
Institution and business environment	PCI	0.387***	0.1471***	0.393***	0.1498***	0.395***	0.1555***	0.535***	0.1663***
Financial market	Listed	1.989**	0.381**	2.143*	0.0797*	2.508*	0.218*	0.850**	0.1442**
Financial	Procedure	-1.746*	-0.0595*	-2.094***	-0.091***	-2.879*	-0.140*	-3.331	-0.586

intermediates									
Formal and	Cost	0.825***	0.140***	1.352*	0.182*	0.749***	0.1202***	0.207	0.197
informal costs	Int rate	-0.761*	-0.1741*	-0.968**	-0.1336**	-0.1642**	-0.069*	-0.1212*	-0.0919*
Production	ROA	1.005***	0.3618***	0.931*	0.264*	0.624**	0.349**	0.997*	0.229*
and business results	Log_asset	0.889***	0.1630***	0.931*	0.195**	1.095***	0.224***	1.724***	0.1570***
Geographical location of the enterprise	Distance	-0.733	-0.189	-0.859	-0.1601	-1.003	-0.645	-2.013	-0.771
Credit reliability level	Credit	1.049***	0.1470***	0.995*	0.2794*	0.719**	0.2457**	0.721*	0.113*
Roles of the network	Relation	2.267*	0.055*	2.440	0.00802	2.838	0.854	2.506	0.0926
Characteristics of the	Gender			-0.413***	0.1196***			-0.211	-0.224
enterprise	Director			0.111*	0.1467*			1.039***	0.054***
owner	Education			1.443***	0.0424***			0.554*	0.0543*
	Debt_ratio					-0.310*	-0.0188*	-0.268**	-0.0275**
Characteristics of the	SME					-0.388***	0.1435***	-0.859*	-0.1765*
enterprise	State					1.301*	0.0121*	1.010*	0.0421*
	Age					0.0734***	0.0650***	0.0150	0.0179
Interaction	SME*Log_asset							1.693***	0.236***
variables	SME*Cost							0.986*	0.144*
Constant			1.190***		4.503***		6.347***		3.461***
Dummy variables for provinces		ces	No	N	lo	Y	es	Y	es
Dummy variables for industries		ies	No	N	lo	Y	es	Y	es es
Observations			610	6	10	6	10	6	10
R ² for calibration			0.4416	0.4712		0.5341		0.5568	
P	rob>Chi2		0.0000	0.0000		0.0000		0.0000	

Note: *** p<0.01, ** p<0.05, * p<0.1

Since the explanation for the magnitude of estimated coefficients in the Logit model is not the same as that in the linear regression or the Ordinary least squares (OLS) regression model, impacts of factors on the probability that enterprises can access loans will be explained by impacts of average marginal effect (AME) estimations of independent variables.

Institutions and business environment play an important role in the financial accessibility of enterprises. The coefficient of general PCI variable - representing institutional quality - is positive and its statistical significance level is considerably high (1%). This implies that the improvement in the quality of the business environment has positive impacts on loan accessibility of enterprises. In particular, when the general PCI increased by 1 unit provided that there is no change in other factors, the probability of enterprises accessing both these capital sources at the same time increased to about 14.71 - 16.63 percentage points. These results are similar to those stated in the research conducted; which argues that when the business environment is improved and good institutions are implemented, the transaction costs on the market will be lower. Accordingly, enterprises can feel secure to expand their business and actively invest, which increases the financial accessibility from commercial banks.

The estimated coefficient of the listed variable, representing the development of the capital market, is positive and statistically significant. When the listed variable increases by 1%

provided that other factors remain unchanged, the probability that enterprises can simultaneously access these two sources of capital reaches 38.1 percentage points to the maximum. This result is similar to that indicated by Tran and To (2018) & Nguyen & Ha (2018). This implies that the development of the capital market forces enterprises to make their finances transparent, which makes it more convenient for enterprises to access capital from financial institutions (Malesky & Taussig, 2005)

The variable reflecting procedures of accessing loans from commercial banks (procedure) has negative impacts and statistical significance. Specifically, when the difficulty level of procedures for accessing commercial bank loans increases by 1%, the probability of accessing finance for enterprises with demand for loans will be decreased by about 14 percentage points to the maximum provided that other factors have not changed. Agreeing with this view, Tran and To (2018) also assessed that enterprises now think that procedures to access bank loans are still complicated and considerably time-consuming.

For the variable reflecting the informal cost for accessing loans such as the cost for undercover payments, gifts, etc. (Cost): Estimated results from the model showed expected (positive) sign. When this variable increases by 1% provided that other factors remain unchanged, the probability that enterprises can access these two sources of capital at the same time is 18.2 percentage points to the maximum. Similar results were found in some research of (Berger et al., 2005; Tran & To, 2018).

In terms of the variable reflecting formal costs when enterprises access loans from commercial banks (int rate), it can be seen from estimated results that: this probability decreases to the highest level of around 17.41 percentage points. Nguyen et al. (2015) pointed out when the average interest rate that enterprises have to pay for their loans is low, positive effects will be created for enterprises when they want to access loans.

Concerning production and business results of enterprises: for banks, this is the factor that helps them to assess the payment capacity of enterprises and decide whether to lend money to enterprises or not. ROA or Return on assets of an enterprise indicates the effectiveness of using enterprises' assets in creating profits. The high ratio shows that enterprises have appropriately invested in their assets, which is a good signal for the bank to lend money. According to the research of (Cole et al., 2004), etc., the amount of used capital from banks, the amount of bank capital used has a positive relationship with the ROA of enterprises. Similar to Estimated results in the model, when the ROA increases by 1 unit, the demand for loan access will increase by 22.9 - 36.18 percentage points provided that other factors remain unchanged.

Estimated results of interaction coefficients among SME, log_asset variables (representing collaterals) and whether enterprises have costs for undercover payments Cost (representing informal costs) are positive and statistically significant, which indicates the discrimination between SMEs and large enterprises in terms of the availability of collaterals and informal costs. The estimated interaction coefficients imply the expected probability of receiving loans from financial institutions to SMEs when these enterprises spend more on undercover payments than large ones with similar characteristics for about 14.4 percentage points. Similarly, among enterprises with collaterals, the expected probability of accessing formal finance is 23.6 percentage points, higher than that for large enterprises with similar characteristics.

CONCLUSION

Our paper shows that institution and business environment, listed enterprises, administrative procedures, interest rates or informal costs, production and business results are all factors playing an important part in accessing external loans; barriers related to intrinsic problems of enterprises are still mainly due to the failure to meet requirements of collaterals (Log_asset), especially for SMEs which often have to rent factories and machines; efficiency level in asset use and management also affect loan demands. Since then, the research proposes some recommendations to improve the capital accessibility of enterprises, especially private ones and SMEs:

In terms of the Government, it is necessary to create an equal business environment among economic sectors: Firstly, for the development of SMEs, it is required that macroeconomic policies should be developed uniformly to facilitate harmonious development among sectors in economy; overlapping regulations need to be removed. In particular: It is appropriate to continue drastically implementing tasks and solutions to improve the business environment, improve the national competitiveness in accordance. Secondly, the Government needs to continue promoting administrative procedure reform, particularly for procedures related to licensing the establishment and business registration, land lease procedures, credit granting procedures, etc. Thirdly, this is a need to direct concerned ministries and branches to synchronously deploy provisions of the Law on SME Support its guiding documents, especially credit guarantee policies for SMEs to obtain loans from credit institutions.

ACKNOWLEDGMENT

This research is funded by the National Economics University, Hanoi, Vietnam.

REFERENCES

- Baltagi, B.H. (2008). Econometric analysis of panel data. Chichester: John Wiley & Sons.
- Bates, T. (1990). Entrepreneur human capital inputs and small business longevity. *The review of Economics and Statistics*, 551-559.
- Baum, C.F., Schäfer, D., & Talavera, O. (2009). The impact of financial structure on firms' financial constraints: A cross-country analysis.
- Beck, T., & Demirguc-Kunt, A. (2006). Small and medium-size enterprises: Access to finance as a growth constraint. *Journal of Banking & Finance*, 30(11), 2931-2943.
- Berger, A.N., Miller, N.H., Petersen, M.A., Rajan, R.G., & Stein, J.C. (2005). Does function follow organizational form? Evidence from the lending practices of large and small banks. *Journal of Financial Economics*, 76(2), 237-269.
- Bernanke, B., Reinhart, V., & Sack, B. (2004). Monetary policy alternatives at the zero bound: An empirical assessment. *Brookings papers on Economic Activity*, 4(2), 1-100.
- Cameron, A.C., & Trivedi, P.K. (2010). Microeconometrics using stata College Station. TX: Stata press.
- Cole, R.A., Goldberg, L.G., & White, L.J. (2004). Cookie cutter vs. character: The micro structure of small business lending by large and small banks. *Journal of Financial and Quantitative Analysis*, 39(2), 227-251.
- Demirguc-Kunt, A. (2008). Finance, financial sector policies and long-run growth.
- Fatoki, O.O., & Smit, A.V.A. (2011). Constraints to credit access by new SMEs in South Africa: A supply-side analysis. *African Journal of Business Management*, 5(4), 1413-1425.
- Hakkala, K., & Kokko, A. (2007). The state and the private sector in Vietnam. *Stockholm: The European Institute of Japanese Studies*, 236, 1-9.

1544-0044-25-S7-007

- Hanedar, E.Y., Altunbas, Y., & Bazzana, F. (2014). Why do SMEs use informal credit? A comparison between countries. *Journal of Financial Management*, 2(1), 65-86.
- Irwin, D., & Scott, J.M. (2010). Barriers faced by SMEs in raising bank finance. *International Journal of Entrepreneurial Behavior & Research*.
- Junxiong, F. (2007). Ownership, institutional environment and capital allocation. *Economic Research Journal*, 12, 82-92.
- Kira, A.R., & He, Z. (2012). The impact of firm characteristics in access of financing by small and medium-sized enterprises in Tanzania. *International Journal of Business and management*, 7(24), 108.
- Le, N.T., & Nguyen, T.V. (2009). The impact of networking on bank financing: the case of small and medium–sized enterprises in Vietnam. *Entrepreneurship Theory and Practice*, 33(4), 867-887.
- Le, P.M. (2012). What determines the access to credit by SME: A case study in Vietnam. *Journal of Management Research*, 4(4) 90-115.
- Malesky, E.J., & Taussig, M. (2005). Where is credit due? Companies, banks, and locally differentiated investment growth in Vietnam. In *International Conference of Asian Scholars Shanghai China*, 19-23.
- Ministry of Planning and Investment. (2019). The white book on Vietnamese businesses 2019. *Statistics Publishing House*.
- Nguyen, N., Gan, C., & Hu, B. (2015). An empirical analysis of credit accessibility of small and medium sized enterprises in Vietnam.
- Nguyen, T.H.T., & To, T.T. (2019). Determinants of the accessibility of Vietnamese enterprises to capital from banks and credit institutions. *Journal of Economics and Development*, 21, 81-95.
- Nguyen, V.H., & Ha, Q.H. (2018). Factors affecting the accessibility to bank loans of SMEs in Vietnam. *Proceeding of Summary Record of National Scientific Conference Vietnamese Economy in 2017 and prospects in 2018: Removing barriers to the development of enterprises.* National Educations University.
- Nguyet, C.T.K. (2014). Why do small and medium enterprises need to access informal credit? The case of Vietnam. *International Finance and Banking*, *1*(2), 1-17.
- Olomi, D., Mori, N., Mduma, E., & Urassa, G. (2008). Constraints to access to capital by Tanzanian SMEs. *Dares Salaam: REPOA*.
- Rand, J., & Tarp, F. (2007). Characteristics of the Vietnamese business environment: evidence from a SME survey.
- Tran, T.D., & To, T.T. (2018). Annual report on Vietnamese economy 2017: Removing barriers to the development of enterprises. *National Economics University Publishing House*.
- Udichibarna, B., Ronald, M., & Serafeim, T. (2015). Policy initiatives and firms' access to external finance: Evidence from a panel of emerging Asian economies. *Journal of Corporate Finance*, 29(2), 34-56.

Received: 10-Jan-2022, Manuscript No. JLERI-22-10823; Editor assigned: 12-Jan-2022, PreQC No. JLERI-22-10823(PQ); Reviewed: 24-Jan-2022, QC No. JLERI-22-10823; Revised: 23-May-2022, Manuscript No. JLERI-22-10823(R); Published: 30-May-2022