Are Foreign Banks Good Choice for Seeking Financing for the Women Entrepreneurs in Bangladesh?

Abstract

In Bangladesh, women's participation in small businesses is rapidly increasing. Although lack of capital seems to be one of the potential barriers, banks are playing significant roles in disbursing small business financing to women. Unfortunately, the contribution of foreign banks to extend small business financing to women entrepreneurs is still inadequate. Thus, this study aims to determine the level of access to small business loans by women entrepreneurs offered by foreign banks of Bangladesh. The empirical analysis was conducted using data collected from the scheduled banks and 100 small businesses owned by women in Bangladesh. Bank-firm relationship indicators, management of firm and firm-specific variables have been considered for ordinary probit regression models. The findings suggest that women entrepreneurs have less access to financing when the application is made to a foreign bank of Bangladesh. Thus, the contribution of foreign banks in financing small business women owners is very low.

Keywords: *Small Business, Women Entrepreneurs, Access to Financing, Foreign Banks, Bangladesh.*

1. Introduction

Small and Medium Enterprises (SMEs) are a significant part of the industrial sector particularly for the developing and underdeveloped countries. SME sector directly contributes to economic growth through employment generation and income disbursement, as well as indirectly promotes the development of the large industries, thus ultimately contributing to the aggregate output level, savings and investment etc. (Schreyer, 1996; Dixit, and Panday, 2011; Zafar, and Mustafa, 2017). In recent years, the SME sector is also strongly putting its footmarks in economic development in line with the consistent growth of the industrial sector to the country's GDP. Bangladesh Bureau of Statistics Reports on National Aspects and several studies (Acma, 2015; Rahman, and Khondkar, 2020; Begum et. al., 2022) have specified a consistent increase in the contribution of SMEs to GDP growth rate of Bangladesh over the last few years. The contribution of SME sector to the GDP is 21.36 percent in 2017, followed by consistent increase in the growth rate of 21.98 percent in 2018 and 22.86 percent in 2019 respectively. However, the rate fell a bit being 22.40 percent due to the outbreak of COVID-19 pandemic in the financial year of 2020 (Begum et. al., 2022).

Islam (2020) studied the contribution of SMEs to inclusive growth and poverty reduction in Bangladesh. The study suggested that SME sector in Bangladesh represents around 80% of all business units, and thus, it contributes to about 40% of the total employment scenario of the country. Moreover, exports from SME sector also account for a significant portion of the total exports (around 11.3%) while also contributing to 22.5% of gross value-added products (Islam, 2020). The Government of Bangladesh is ceaselessly putting emphasis on the SME sector. The progress has been mandated in the form of establishment of SME Foundation in 2007, institutionalizing the separate policy for SME in 2019, ensuring easy access and cheaper credits to the SME entrepreneurs etc. Banks and other Financial Institutions (FIs) are the prime drives for financing in SMEs.

Women entrepreneurs constitute a significant portion of small business in Bangladesh. But in terms of getting access to the financing facilities from the banks, women have to face a considerable number of challenges. Again, the access to loans gets even more limited, because of the lower participation of the foreign banks operating in Bangladesh in offering SME loans to the women. This study particularly focuses on whether the foreign banks operating in Bangladesh are contributing to ensuring access to SME financing for women entrepreneurs.

Using data from 100 Bangladeshi small businesses owned by women entrepreneurs, this study tests whether the foreign banks operating in Bangladesh are good option for small firms owned by women entrepreneurs for availing credit. The results indicate that small firms owned by women are less successful in obtaining financing when they seek it from a foreign bank. This finding reveals the fact that, women entrepreneurs in Bangladesh are not enjoying easy access to finance from foreign banks even though regulators have continuously instructed banks to ensure easy access of finance for the women entrepreneurs.

To confirm these results, number of robustness tests have been performed. Robustness test was performed by re-estimating the models using the sub-sample of firms based on ability to provide collateral. Also, to check whether the results are biased by Covid-19 impact, models have been re-estimated using subsamples of two groups, one group of small firms which sought financing before and after Covid-19 and another group of small firms which sought financing during Covid-19.

This study makes a number of contributions to the literature on women entrepreneurship and financing for small firms owned by women entrepreneurs. First, in this study, we have considered access to finance from gender point of view. In Bangladesh, the policymakers and regulators are continuously insisting all banks including foreign banks to provide more and easy financing to women entrepreneurs and to small firms. It is essential to find whether small firms owned by women are getting easy financing from foreign banks operating in Bangladesh. But the analysis done in the main part and in the robustness part indicate less access to financing of small firms owned by women when application is made to a foreign bank which indicates that women entrepreneurs are not getting any privileges from foreign banks.

Second, to date, most studies on women entrepreneurs financing use data from the mature economies like US, UK, Japan, China etc. In emerging economies, small firms and development of women entrepreneurship are highly important for accelerating economic growth and generating employment. Bangladesh is one of the fastest growing emerging economies where multiple foreign banks are operating and the finding of this study is particularly useful in terms of their implications for policies that promote women entrepreneurs financing in emerging markets like Bangladesh.

Third, in this study, we have employed specific data which were not included in previous studies. In this study, we have considered the effect of Covid-19 pandemic on women entrepreneur's access to finance. This Covid-19 pandemic has certainly caused financial vulnerability and uncertainty for the banks and many small firms owned by women.

Fifth, this research is extremely helpful for policymakers of Bangladesh in formulating future policies as the findings of this research reveal that foreign banks are not following the instruction of the regulator of easy and more lending to small firms and women entrepreneurs. The finding indicate that foreign banks are not actually helpful in promoting women entrepreneurship and developing small enterprises. So, the regulator can introduce strict policy and strengthen monitoring so that foreign banks in Bangladesh will provide easy and more financing to small firms owned by women.

The remainder of the study is organized as follows. Section 2 presents previous literatures and the development of hypotheses. Section 3 presents the data and summary statistics. Section 4 describes the empirical method used and discusses the main empirical results. Section 5 describes the robustness tests and Section 7 presents the conclusion.

2. Review of Literature and Hypothesis Development

In recent years, foreign banks have been playing an increasingly important role in many emerging nations. Foreign banks' involvement in any economy improves the competitiveness, efficiency, and stability of the financial system of that economy. Still, according to some academics, foreign banks may potentially contribute to a slowed-down marginal progress rate in some aspects of the countries. Some critics contend that expanding the presence of foreign banks in developing nations may limit access to credit to some specialized sectors of the economy. It is mostly because these banks usually prioritize offering services to the customers from the stone’s throw away regions of their headquarters or offices. Also, the usual target of most of these banks is not to cover a national-level customer base in a country, rather they tend to serve mostly the large cities or urban parts of a country. The coverage of foreign banks also differs due to cultural differences, language barriers, policy variations, and distinct regulatory requirements. In turn, it is expected that foreign banks, under geographical differences and having high exposures to customer selection, rarely can manage to expand lending to specialized sectors of an economy like small businesses.

Several case studies on various countries imply that foreign banks are reluctant to offer SME credit (Mian, 2006; Gormley, 2010; Sengupta, 2007). The reasons specified by the researchers were typical arms-length lending strategies, and centralized and hierarchical organizational structures of these banks. According to Clarke et al. (2006), international banks in Argentina, Chile, Colombia, and Peru often offered less financing to the SME sectors than the domestic banks. Because FCBs are usually risk-averse, these banks do not tend to expand lending to small and medium-sized businesses. Berger et al. (2001) argued that large-size banks as well as globally operating banks have less interest in financing small businesses due to the unavailability of proper financial data of the firms. According to Gormley (2010), the penetration of international banks into Indian local markets led to a decrease in small enterprises' access to credit.

According to the report prepared on the interview outcomes with quite a large number of foreign bank managers in Central European and Baltic states, large local and international corporate clients were the primary focus of the foreign banks in these regions (Haas and Naaborg, 2006). The results also suggested that this situation was being changed lately due to the competitive adaptability of the FCBs as well as improved their strengthened screening and monitoring capabilities along with better data accessibility on the SMEs. Hamada (2018) found that although foreign banks' entry has a positive impact on the overall credit growth, this exerts an insignificant effect on the extension of credit in the SME sector of the country.

Research findings from various studies suggest that the participation of foreign banks in SME lending is 'challenging' compared to the lending capabilities of the domestic banks of a country (Berger et al., 2005; Berger, Klapper, and Udell, 2001; Stiglitz, 2000). While informational advantage has a progressive impact on the domestic banks for the growth of relationship lending to SME businesses (Léon and Zins, 2020), due to informational asymmetry, foreign banks become risk averse to lend in the SME sector. Distant locations from the local population, foreign banks often find it challenging to closely monitor loans through direct communication with the borrowers (Mian, 2003; Berger et al., 2001). It is also justified in several studies that women entrepreneurs face challenges in access to credit for small businesses from foreign banks (Moudud, 2013; Ghosh et. al., 2018). Foreign banks tend to be less engaged compared to other formal financial service providers to provide loans in the SME businesses owned by women (Singh et. al., 2016).

Clarke et al. (2005) demonstrate that in case of loan disbursement to all businesses, the roles of foreign banks are comparatively insignificant. Another evidence by Gianetti and Ongena (2012) also provides the same outcome with a logical argument that foreign banks tend to maintain relationship with the neighboring depositors and the safest borrowers for the banks. DeGryse et al. (2012) suggested that in the Polish market lending to small businesses by the foreign banks was limited mainly due to the ownership structure, whereby the foreign banks entered the market through the acquisition of local banks. On the contrary, Claeys and Hainz (2014) argued that foreign banks should have a good grasp of the small borrowers when the banks acquire the domestic banks, this is because the foreign banks should possess the soft and hard information of the small businesses as well. These findings were similar to the outcomes of the study by Lubis and Riyanti (2015) whereby they justified the lower proportion of loan disbursement to the small businesses by foreign banks is the possible result of information asymmetry from the both demand (small businesses) and supply side (foreign banks).

In the context of Bangladesh, Although a few studies have been conducted on the sources of SME financing mentioning the foreign banks' contribution in brief (Alam and Ullah, 2006; Hasan and Islam 2008; Rahman et. al., 2016), the access to foreign banks' financing by the small businesses owned by women is still an unexplored context. Thus, the study aims to determine the access to SME financing by women entrepreneurs from foreign banks operating in Bangladesh.

Based on the related literature and justification, the following hypothesis has been developed.

H1: Small businesses in Bangladesh owned by women entrepreneurs have less access to financing when the financing application is made to a foreign bank.

3. Data and summary statistics

3.1 Sample and data

As foreign banks in Bangladesh don't have any branches outside the metropolitan area and most of the branches are located in the capital (Dhaka) so small businesses included in the sample were randomly drawn from Dhaka city only. Convenience sampling (Tahedoost, H, 2016) was applied to gather respondents for survey questionnaire. While non-probability sampling limits the ability to draw generalizations about the target population (Saunders et al., 2019), it was pragmatic choice in this context due to the lack of a sampling frame of the target population, making probability sampling difficult. Thus, the required sample size was determined using the Cochran's sample size formula: n = Z2pq/d2, where n refers to the desired sample size, Z is the standard normal deviation (commonly set at 1.96, which reflects to 95% confidence interval level), p is the proportion in the target population estimated to have a similar characteristic (here p is estimated as 50%), q = 1–p (proportion in the target population not having the similar characteristics) and d is the degree of accuracy required (usually set at the 0.10 level). Therefore, the size of the desired sample size was 97 considering all these factors. We rounded the number and surveyed 100 small businesses owned by women. The specific industry sectors considered in this research are jute, leather, clothing business, handcrafted products, homemade food and beauty parlor services.

3.2 Variables

Table 1 describes the variables used in this study. The dependent variable of the study is access to bank financing. This variable takes the value of 1 if the small business owned by woman entrepreneur successfully obtained financing from its most recent financing application to a scheduled bank of Bangladesh, and the value of 0 if the small business owned by woman entrepreneur did not obtain financing from its most recent financing application.

The main independent variable employed in the study is foreign bank.

FRGNBNK: Value = 1 if small business owned by woman entrepreneur sought financing from any branch of a foreign bank operating in Bangladesh (e.g., HSBC, Standard Chartered Bank); otherwise, 0.

For the regression analyses, some variables representing firm characteristics (monthly average sales and profit, firm age, industry in which the small business operates, firm size), Bank-business relationship characteristics (number of years the firm has a relationship with the bank to which it applied for financing), small business manager characteristics (number of years of work experience).

Table 1 Variable definitions

Variable Name	Symbols	Definition
1. Dependent Variable		
Access to bank financing	AccBnkFin	=1 if small business owned by woman entrepreneur obtained financing from a foreign bank operating in Bangladesh
2. Independent Variable		
Foreign bank	FRGNBNK	=1 if small business owned by woman entrepreneur sought financing from a foreign-owned bank operating in Bangladesh
3. Control Variables		
Log of age	log_age	Log of number of years the business has been in operation
Log of profit	log_profit	Log of monthly average profit of the business (measured in USD)
Log of sales	log_sales	Log of monthly average sales of the business (measured in USD)
Industry	INDUSTRY	=1 if the small business owned by woman entrepreneur is in manufacturing industry, 0 if in service industry

Log of Size	log_size	Log of total number of employees working in the business
Log of Experience	log_experience	Log of number of years working experience of the business manager
Manager's education	EDUCATION	=1 if the small firm manager is a graduate
Relationship	RELATIONSHIP	Number of years of relationship between the business and lending bank

This table describes the variables used in this study, including the dependent variable, independent variables, and control variables. In this study we employed one dependent variable, one independent variables, and eight control variables.

3.3 Descriptive statistics

Table 2 presents a summary of the descriptive statistics of all variables used in this study. For the sake of brevity, age, profit, sales, size of the small firm, and experience of the manager of the firm are presented in the natural logarithm form of the original value. Around only 5% of the sample firms have received financing from the foreign banks. The average age of the sample firm is around 13 years; around 24% of the firms operate in a manufacturing industry.

Table 2 Descriptive statistics of sample firms

Variable	Mean	Std. Dev.	Min	Max
AccBnkFin	0.68	0.47	0	1
FRGNBNK	0.05	0.22	0	1
log_age (Mean shown is for age, not log of age)	13.03	5.78	2	33
log_profit (Mean shown is for profit, not log of profit)	5870	0.83	5.13	9.92
log_sales (Mean shown is for sales, not log of sales)	24673	0.72	6.84	12.14
INDUSTRY	0.24	0.43	0	1
log_size	0.03	0.12	1	8
log_experience (Mean shown is for experience, not log of experience)	13.35	5.48	1	30
EDUCATION	.13	.35	0	1
RELATIONSHIP	2.05	4.07	0	4.35

This table presents the descriptive statistics of the sample firms. AccBnkFin is the dependent variable, set as a dummy variable. FRGNBNK is the independent variable also set as dummy variables to test the hypotheses of this study. RELATIONSHIP, INDUSTRY, Log_age, Log_profit, Log_sales, Log_size, Log_experience, EDUCATION are control variables; dummy variables are used for INDUSTRY and EDUCATION.

4 Empirical analysis and results

4.1 Empirical analysis method

To test the hypotheses and investigate the impact of other factors mentioned above, following regression models have been used-

$$AccBnkFin = \alpha + \beta\ bank_{ij} + \gamma_1 log\_age + \gamma_2 log\_profit + \gamma_3 log\_sales + \gamma_4 INDUSTRY + \gamma_5 log\_size + \mu_i \quad (1)$$

$$AccBnkFin = \alpha + \beta\ bank_{ij} + \gamma_1 log\_age + \gamma_2 log\_profit + \gamma_3 log\_sales + \gamma_4 INDUSTRY + \gamma_5 log\_size + \gamma_6 log\_experience + \gamma_7 EDUCATION + \mu_i \quad (2)$$

$$AccBnkFin = \alpha + \beta\ bank_{ij} + \gamma_1 log\_age + \gamma_2 log\_profit + \gamma_3 log\_sales + \gamma_4 INDUSTRY + \gamma_5 log\_size + \gamma_6 log\_experience + \gamma_7 EDUCATION + \gamma_8 RELATIONSHIP + \mu_i \quad (3)$$

Where, for each model run, y the outcome variable represents access to bank financing (whether a loan application of a small firm owned by women entrepreneur is approved or not),

Here, i indicates firms $i = 1,2,3, \dots 100$ and $bank_{ij}$ denotes the foreign bank dummy variable. A set of control variables have been employed in the models which represent characteristics of the firm, the SME-bank relationship, and the manager. In model 1, we have considered the variables representing characteristics of the firm only. Then we have considered the variables representing both characteristics of the firm and the characteristics of the small firm manager in model 2. Finally, we have considered relationship between firm and bank in model 3 along with characteristics of the firm and the characteristics of the small firm manager.

To test the hypothesis, Parameters have been estimated using a probit model. Moreover, average marginal effect analysis has been used to find the average change in the probability of an outcome due to a change in the explanatory variables. Also, heteroskedasticity have been checked using R software and found no serious heteroskedasticity problem.

4.2 Foreign banks and access to financing of small firms owned by women entrepreneurs

In this section, the results regarding Foreign banks and access to financing of small firms owned by women entrepreneurs are analyzed. Ordinary probit regression models have been run and after that we have looked at the average marginal effects. Table 3 presents the results based on the probit models. The first column shows the results of model 1, which include the firm characteristics variables only. The second column shows the results of model 2, where both firm characteristics variables and manager characteristics variables have been added. The third column shows the results of model 3, which adds variables of firm characteristics, small firm manager characteristics and relationship variable.

From the results presented in Table 3, it is found that, the coefficient of the variable FRGNBNK is negative for all three models at it is statistically significant at 5% level of significance which indicates that small businesses in Bangladesh owned by women entrepreneurs are less likely to receive financing when they have applied for financing from a foreign bank in Bangladesh. The average marginal effect of estimates of the variable FRGNBNK is -0.52 in the final model, which implies that small firms owned by women entrepreneurs seeking financing from a foreign bank in Bangladesh are 52% less likely to receive financing than if they apply for financing to a non-foreign bank.

Table 3 Foreign banks and small firm's owned by women entrepreneur's access to financing

Variables	Model 1	AME	Model 2	AME	Model 3	AME
FRGNBNK	-1.47**	-.49	-1.63**	-.54	-1.08**	-.52
	(.67)		(.69)		(1.03)	
log_age	.22	.07	.30	.10	.47	.07
	(.28)		(.31)		(.44)	
log_profit	.17*	.06	.20*	.07	.03**	.01
	(.24)		(.25)		(.42)	
log_sales	.16*	.05	.17*	.06	.46*	.07
	(.24)		(.25)		(.39	

INDUSTRY	.10	.03	.09	.03	.40	.06
	(.32)		(.33)		(.48)	
log_size	-.08	-.03	-.08	-.03	-.01	-.01
	(.31)		(.32)		(.45)	
log_experience			.04*	.01	.19**	.18
			(.35)		(.51)	
EDUCATION			.33	.11	.89**	.14
			(.29)		(.46)	
RELATIONSHIP					.78***	.12
					(.16)	
N	100		100		100	
Pseudo.R-Square	.29		.33		.41	

This table shows the results of the probit models for the models of small firm's access to financing and financing application made to foreign bank. The FRGNBNK variable is significant at the 5% level in all three models. Standard errors in parentheses. Significance levels: ***p<0.01, **p<0.05, *p<0.1

There are numerous reasons behind this finding. Foreign banks have differences in cultural, language, internal rules and supervision. So, it is very costly for the foreign banks to collect and process information on small firms. As a result, problem of information asymmetry is created and they maintain conservative lending while it comes to finance the small firms. Also, foreign banks of Bangladesh do not have wide number of branches. In the capital city, their branches are mostly concentrated in commercial areas. Whereas, small firms owned by women entrepreneurs are scattered throughout the city. Therefore, it is very difficult for the foreign banks of Bangladesh to engage in relationship lending to small firms. Moreover, foreign banks are usually risk averse (Clarke, Cull and Peria, 2006) which instigates them to avoid financing the small firms owned by women entrepreneurs as small firms owned by women entrepreneurs in Bangladesh are considered as less profitable and vulnerable. Also, foreign banks of Bangladesh have lack of SME-focused manpower and SME-friendly products which creates disadvantages in gathering and processing soft information leading to information asymmetry problem and strict credit rationing. Furthermore, it is common that, foreign banks in Bangladesh do not always obey the instructions of the government and regulator. As a result, even though the government and regulator are continuously asking to ensure easy access to financing to women entrepreneurs, the foreign banks are not obeying this instruction.

The control variables log_profit, log_sales, log_experience, EDUCATION are significant, indicating that foreign banks in Bangladesh consider these variables to make lending decisions to small firms owned by women entrepreneurs. The RELATIONSHIP variable is highly significant as it is highlighted in numerous literatures that financing small businesses requires special relationship building which helps the lending banks to better know more soft and private information of a firm (Berger et al., 2004; Berger and Udell, 2002).

5. Robustness tests

5.1 Re-estimating models with sub-sample of firms based on ability to provide Collateral

Pledging collateral is a widespread way in securing loan and it's a crucial factor of the credit acquisition process (Beltrame *et al.* 2019; Hanley and Girma 2006; Berger and Udell 1990; Leeth and Scott 1989). Entrepreneur's ability to provide collateral while receiving financing from banks is an indication of entrepreneur's willingness to repay the loan, commitment and confidence. (Duarte, Gama and Esperanca, 2017; Wang, 2016; Brick and Palia 2007; Jimenez and Saurina 2006; Berger and Udell 1998; Binks and Ennew 1996). In the banking industry of Bangladesh, banks often ask for collateral while extending credit to business firms. However, small businesses owned by women entrepreneurs can also avail credit without collateral. The credit decision of banks might be influenced based on the ability of the entrepreneur to provide collateral as banks want to secure their loans. The sample of this study contains both small businesses who have the ability to provide collateral while requesting financing to a bank and who have not the ability to provide any collateral while requesting financing to a bank. In this step, the models have been run for two sub-groups: small businesses that have the ability to provide collateral (N=37) and small businesses that don't have the ability to provide collateral (N=63). From the results presented in the table 4, it can be found that the results do not differ significantly from our previous results but it is notable that, the significance level for the sub-group 2 (small businesses without collateral) becomes 1% from 5% of previous results indicating that foreign banks in Bangladesh are more conservative in extending credit to small businesses owned by women without collateral.

Table 4 Re-estimating models by split up the sample based on collateral

Variables	Model 1 Coef.	Model 2 Coef.	Model 3 Coef.
Panel A *Small businesses with collateral*			
FRGNBNK	-3.17** (.18)	-3.22** (.17)	-3.36** (.21)
Controls	YES	YES	YES
Observations	37	37	37
Panel B *Small businesses without collateral*			
FRGNBNK	-2.18*** (.23)	-2.09*** (.25)	-2.22*** (.25)
Controls	YES	YES	YES
Observations	63	63	63

This table presents the results of the models for two sub-groups: small businesses with collateral and small businesses without collateral. For the sub-group 1 (small firms with collateral), the FRGNBNK variable is significant at the 5% level in all the models. For the sub-group 2 (small firms without collateral) the FRGNBNK variable is significant at the 1% level in all the models. Standard errors in parentheses. Significance levels: ***p<0.01, **p<0.05, *p<0.1

5.2 Re-estimating models by split up the sample based on financing application time

Finally, in this section to further check the stability of the previous results analysis, we extended our analysis by split up the sample based on the financing application time. COVID-19 has been considered in this section because some of the sample firms apply for credit during pandemic time and some firms apply for credit before and after pandemic time. The COVID-19 created significant uncertainty and financial vulnerability for both borrower and lender. It is mentionable that, the government of Bangladesh raised special fund to finance small businesses during pandemic period and instructed banks to ensure easy access to finance to small businesses. We split up the sample into two groups. One group is consisted of small firms owned by women entrepreneurs who requested financing before and after Covid-19 phenomenon (N=59) and another group is consisted of SMEs those requested financing during the period of Covid-19 (N= 41). We considered March 2020 to March 2022 as pandemic period. From the results presented in the table 5, it can be found that, the STATEBNK variable turned to insignificant from 10% level for the sub-group of SMEs that requested financing during Covid-19 period. From the results presented in the table 5, it can be found that the results do not differ significantly from our previous results but it is notable that, the significance level for the sub-group 2 (small businesses requested financing during pandemic period) becomes 1% from 5% of previous results indicating that foreign banks in Bangladesh were more conservative in extending credit to small businesses owned by women during the COVID-19 period. This change in the significance level indicates that, foreign banks in Bangladesh did not follow the instruction of the government regarding easy access to financing to small firms during pandemic period.

Table 5 Re-estimating models by split up the sample based on financing application time

Variables	Model 1 Coefficient	Model 2 Coefficient	Model 3 Coefficient
Panel A *Small businesses requested financing before and after Covid-19*			
FRGNBNK	-3.40** (.31)	-3.42** (.31)	-3.37** (.32)
Controls	YES	YES	YES
Observations	59	59	59
Panel B *Small businesses requested financing during Covid-19*			
FRGNBNK	-3.81*** (.22)	-3.82*** (.21)	-3.79*** (.24)
Controls	YES	YES	YES
Observations	41	41	41

This table presents the results of the models for two sub-groups: small businesses requested financing before and after COVID-19 and small businesses requested financing during COVID-19. For the sub-group 1 (small businesses requested financing before and after COVID-19), the FRGNBNK variable is significant at the 5% level in all the models. For the sub-group 2 (small businesses requested financing during COVID-19), the FRGNBNK variable is significant at the 1% level in all the models. Standard errors in parentheses. Significance levels: ***p<0.01, **p<0.05, *p<0.1

6. Concluding Remarks

The policymakers of Bangladesh are highly concerned about the difficulty of women entrepreneurs in obtaining financing from formal financial institutions and this issue has attracted extreme attention from both policymakers and academics. Development of women entrepreneurship and development of small firms have significant implications for the economic growth of Bangladesh. However, until now there has been no comprehensive study on the role of foreign banks in Bangladesh in promoting women entrepreneurship through ensuring easy and more access to financing. The finding of this study indicates that, small businesses owned by women have lower access to finance if they seek financing to a foreign bank operating in Bangladesh. The findings of this study have noteworthy implications for policies aimed at supporting women entrepreneurs, small businesses and promoting economic prosperity in emerging economies like Bangladesh. The findings of this study are beneficial in taking effective measures by regulators and policymakers so that the foreign banks in Bangladesh come forward for financing small businesses owned by women. Regulators and government should establish a sound and healthy institutional environment and ensure stronger monitoring and law enforcement. The finding of this study is also helpful for achieving SDG 5 (gender equality) and SDG 8 (decent work and economic growth).

For practitioners, the findings of this research indicate that women entrepreneurs should carefully choose the bank for financing application as finding of this study indicates that foreign banks are not a good source for getting SME financing. A limitation of this study is that the data used were only for small firms owned by women entrepreneurs, and medium and large firms owned by women were excluded. So, inclusion of medium and large firms owned by women is a promising topic for future research on this topic.

References

Acma, M. Q. (2015). Productivity and performance evaluation of SME sector in Bangladesh: Evidence from the historical data. *Journal of Islamic Finance and Business Research*, *3*(1), 14-22.

Alam, M. S., & Ullah, M. A. (2006). SMEs in Bangladesh and their financing: An analysis and some recommendations. *The Cost and Management*, *34*(3), 57-72.

Bangladesh Bureau of Statistics (2013). *Economic Census 2013*, National Report

Bangladesh Bureau of Statistics (2019). *Survey of Manufacturing Industries (SMI)*

Begum, M. L. A., Talukdar, M. S., Rahman, M. M., Das, R. C., Bhattacharjee, P., Miah, M. N. (2022). Estimating the contribution of SMEs output on GDP growth in Bangladesh: A VECM Approach. Special Research Work-SP 2022-02, Bangladesh Bank.

Beltrame, F., Floreani, J., Grassetti, L., Mason, M.C., & Miani, S. (2019). Collateral, mutual guarantees and the entrepreneurial orientation of SMEs. *Management Decision*, 57, 168-192.

Berger, A. N., & Udell, G. F. (1990). Collateral, loan quality and bank risk. *Journal of Monetary Economics*, 25, 21–42.

Berger, A. N., & Udell, G. F. (2002). Small business credit availability and relationship lending: The importance of bank organisational structure. *The Economic Journal*, 112, 32–53.

Berger, A.N., & Udell, G.F. (1998). The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle. *Journal of Banking & Finance*, 22, 613–673.

Berger, A.N., Bonime, S.D., Goldberg, L.G., & White, L.J. (2004). The dynamics of market entry: The effects of mergers and acquisitions on entry in the banking industry. *Journal of Business*, 77, 797–834.

Berger, A.N., Klapper, L.F., & Udell, G.F. (2001). The ability of banks to lend to informationally opaque small businesses. *Journal of Banking & Finance*, 25, 2127-2167.

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, 237–269.

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, 237–269.

Binks, M.R., & Ennew, C.T. (1996). Growing firms and credit constraints. *Small Business Economics,* 8, 17-25.

Brick, I. E., & Palia, D. (2007). Evidence of jointness in the terms of relationship lending. *Journal of Financial Intermediation,* 16, 452–476.

Claeys, Sophie., Christa Hainz (2014). Modes of bank entry and effects on lending rates: Theory and Evidence. *Journal of Comparative Economics. 42*, 160-177

Clarke, G., Cull, R., & Martinez Peria, M.S. (2006). Foreign bank participation and access to credit across firms in developing countries. *Journal of Comparative Economics*, 34,774–795.

Clarke, G., Cull, R., & Martinez Peria, M.S. (2006). Foreign bank participation and access to credit across firms in developing countries. *Journal of Comparative Economics*, 34,774–795.

Clarke, G., Cull, R., Martinez Peria, M., &Sanchez, S. (2005). Bank Lending to small business in Latin America: Does bank origin matters? *Journal of Banking & Finance 25*(5), 891–911.

Clarke, G., Cull, R., Peria, M. S. M., & Sánchez, S. M. (2005). Bank lending to small businesses in Latin America: Does bank origin matter? *Journal of Money, Credit and Banking*, 83-118.

De Haas, R., & Naaborg, I. (2006). Foreign banks in transition countries: To whom do they lend and how are they financed? *Financial Markets, Institutions & Instruments,* 15, 159–99.

Degryse, H., Havrylchyk, O., Jurzyk, E., Kozak, S. (2012). Foreign bank entry, credit allocation and lending rates in emerging markets: Empirical evidence from Poland. *Journal of Banking and Finance 36*(12), 2949-2959.

Dixit, A., & Kumar Pandey, A. (2011). SMEs and economic growth in India: Cointegration analysis. *IUP Journal of Financial Economics, 9*(2).

Duarte, F.D., Gama, A.P., & Esperanca, J.P. (2017). Collateral-based in SME lending: the role of business collateral and personal collateral in less-developed countries. *Research in International Business and Finance,* 39, 406-422.

Ghosh, P. K., Ghosh, S. K., & Chowdhury, S. (2018). Factors hindering women entrepreneurs' access to institutional finance-an empirical study. *Journal of Small Business & Entrepreneurship, 30*(4), 279-291.

Gianetti, M., Ongena, S., (2012). Lending by example: Direct and indirect effects of foreign banks in Emerging markets. *Journal of International Economics 86* (1), 167–180.

Gormley, T.A. (2010). The impact of foreign bank entry in emerging markets: evidence from India. *Journal of Financial Intermediation*, 19, 26–51.

Hamada, M. (2018). Impact of foreign bank entry on SME credit in the Indonesian banking sector. *Journal of Southeast Asian Economies*, *35*(1), 50-78.

Hanley, A., & Girma, S. (2006). New ventures and their credit terms. *Small Business Economics*, 26, 351-364.

Hasan, R. A., & Islam, K. Z. (2008). Bridging the Gap between Microfinance and SME Financing in Bangladesh: unlocking the potentials. Daffodil International University *Journal of Business and Economic, 3*(1).

Islam, M. M. (2020). SME Development, Inclusive growth, and poverty alleviation in Bangladesh. *The Bangladesh Development Studies*, *43*(1/2), 109-126.

Jimenez, G., Salas, V., & Saurina, J. (2006). Determinants of collateral. *Journal of Financial Economics*, 81, 255-281.

Leeth, J. D., & Scott, J. A. (1989). The incidence of secured debt: evidence from the small business community. *Journal of. Financial Quanitative Analysis*, 24, 379–394.

Léon, F. and Zins, A. (2020). Regional foreign banks and financial inclusion: evidence from Africa. *Economic Modelling*, *84*, 102-116.

Lubis, A. W., Bustaman, Y., & Riyanti, R. S. (2015). Foreign bank entry and credit allocation to SMEs: evidence from ASEAN countries. *Procedia-Social and Behavioral Sciences*, *211*, 1049-1056.
Lubis, A. W., Bustaman, Y., & Riyanti, R. S. (2015). Foreign bank entry and credit allocation to SMEs: evidence from ASEAN countries. *Procedia-Social and Behavioral Sciences*, *211*, 1049-1056.
Mian, A. (2003). Foreign, private domestic, and government banks: New evidence from emerging markets. *University of Chicago, Mimeo.*

Mian, A. (2006). Distance constraints: the limits of foreign lending in poor economies. *Journal of Finance*, 61, 1465– 1505.

Moudud, U. S. (2013). Women entrepreneurship development in Bangladesh: Challenges and prospects. *International Journal of Innovative Research and Development*, 41-48.

Rahman, M. M., and Khondkar, M. (2020). Small and Medium Enterprises (SME) development and economic growth of Bangladesh: A Narrative of the glorious 50 years. *Barishal University Journal of Business Studies*, *7*(1).

Schreyer, P. (1996). SMEs and employment creation: Overview of selected quantitative studies in OECD member countries.

Sengupta, R. (2007). Foreign entry and bank competition. *Journal of Financial Economics,* 84,502–528.

Shen, C. H., Chu, H., & Wang, Y. C. (2012). Who furls the umbrella on rainy days? The role of bank ownership type and bank size in SME lending. *Emerging Markets Finance and Trade*, *48*(sup2), 184-199.

Singh, S., Asrani, R., & Ramaswamy, A. (2016). Study on mapping the market potential and accelerating finance for women entrepreneurs in Bangladesh.

Stiglitz, J.E. (2000). Two principles for the next round or, how to bring developing countries in from the cold. *World Economy,* 23, 437–454.

Taherdoost, H. (2016). Sampling methods in research methodology; how to choose a sampling technique for research. How to choose a sampling technique for research (April 10, 2016).

Wang, Y. (2016). What are the biggest obstacles to growth of SMEs in developing countries? - an empirical evidence from an enterprise survey. *Borsa Istanbul Review,* 16, 167-176.

Zafar, A. and Mustafa, S. (2017). SMEs and Its Role in Economic and Socio-Economic Development of Pakistan. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, *6*(4).