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# Analysis on the Credit Accessibility and Growth of Manufacturing Firms in the Cases of Indonesia, Philippines and Vietnam

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#### Introduction

Micro, small, and medium enterprises (MSMEs) contribute to income and employment generation, poverty reduction, and industry growth in the ASEAN region (Mendoza, 2015). Their significant contributions to economies have led countries to emphasize the importance of firm growth, which is influenced by credit accessibility. Majority of existing enterprises in Indonesia, the Philippines, and Vietnam are composed of MSMEs with limited financial resources to foster growth (Paratama, 2019). This hinders the potential of manufacturing MSMEs to have sufficient funding. However, existing literature suggests that credit access significantly provides a positive impact on firm growth only until a certain threshold point (Nizam et al., 2020). The threshold regression analysis results convey the significance of considering the potential existence of credit access thresholds, particularly with regard to firm size. This policy brief aims to provide a suggestive analysis by assessing the applicability of the established relationship and threshold levels to existing economic policies and the formulation of future programs.

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#### **Policy Recommendations**

The financial and regulatory sectors play a critical role in the growth and development of MSMEs through formulating policies that advance financial inclusion by increasing credit access and monitoring any excess.

- 1. Encourage banking institutions and firm owners to determine the optimal credit value. Based on the identified credit accessibility thresholds in the study, it is crucial for banking institutions to control the amount of credit access to the firms. This is because excessive credit will not be optimal for firm growth; thus, it will be detrimental to the firm's performance. Assessing the optimal credit value will promote standardization of loan offerings, processes, and margins among banks. Hence, it is important that these credit levels are identified to support the firm's growth.
- 2. Ease loan restrictions that discourage small and medium firms from accessing loans from banks. Credit constraints exist for small and medium firms because they are required to surrender collateral assets. However, small and medium firms do not have sufficient assets as banks require. This affects the firm's ability to improve asset quality, which is essential in investing innovation of business processes and efficiency of the operations in the business. Thus, it is important to provide favorable loan conditions rather than restrictive measures to financially support small and medium firms to pursue growth-oriented initiatives.
- 3. Strengthen existing policies that promote credit accessibility. Indonesia, the Philippines, and Vietnam were identified to have policies that increase credit accessibility for small and medium enterprises. However, the study determined that the growth of these enterprises over the years is yet to be examined. This is important for small and medium enterprises in Indonesia and the Philippines and small enterprises in Vietnam that were found to have a direct relationship between credit accessibility and firm growth. The policies that should be given importance are the following: People's Business Credit Program and Credit Guarantee Schemes in Indonesia; Microfinance NGOs Act, Shared

Service Facilities, and Anti-Poverty Strategy in the Philippines; and the National Microfinance Development Strategy and Social Socio-Economic Development Plan in Vietnam.

- 4. **Fund MSMEs to maintain financial sustainability in the country.** Governments and financial institutions must fully monitor the financial stability of the country due to central banks' lack of a regulatory framework for small and medium enterprises. This creates risky lending practices, which result in a large volume of non-performing loans (NPLs). Preventing this risk will not only strengthen the market value of these firms but also provide security in lending in the future.
- 5. Provide support to MSMEs that need innovation through research and development (R&D). Policies must focus on boosting technological innovation and R&D to encourage firm growth. R&D is essential in automating the manufacturing process, enhancing equipment efficiency, and increasing property value that will develop MSMEs to grow. Moreover, R&D will also help upgrade business intelligence solutions that will derive data-driven insights to improve business processes and efficiency of tasks. Thus, it will be crucial for MSMEs to integrate R&D to strengthen their positions in the market and build resiliency against possible demand and supply shocks.
- 6. Aid employees in SMEs to encourage productivity and efficient labor outcomes. The study classified small and medium firms in each country based on the number of employees. The study found that it is essential to aid employees as increased credit of manufacturing firms is utilized for increasing assets and other investments for firm growth. Thus, the marginal productivity of additional labor is an important aspect to consider for internal control and risk management of MSMEs.

#### **Estimation Method**

The study uses the cross-section threshold regression model to determine the optimal level of credit accessibility threshold for the manufacturing firm's growth in the selected ASEAN countries. The

study utilizes the World Bank Enterprise Survey (WBES) in 2012 and 2015 to measure the threshold credit access given the size of the firm, credit access, and initial sales in Indonesia, the Philippines, and Vietnam. In identifying the optimal level of credit access for a firm given its size, the data were categorized into small and medium firm sizes. The study hypothesizes that credit access will have a positive impact on a firm's growth until a certain threshold level before it proceeds to have a zero or a negative effect on the firm's growth. On the other hand, the alternative hypothesis exhibits nonlinearity wherein a credit access threshold exists, which affects the firm growth.

After 2000 replications and 15% trimming from the LM bootstrap method, the results reveal that SMEs in Indonesia and the Philippines and small enterprises in Vietnam demonstrate a weaker presence of a threshold establishing a linear relationship between credit accessibility and firm growth. Meanwhile, medium enterprises in Vietnam were found to have a significant presence of the threshold levels yielding 25.3284% in Vietnam Dong and 15.3188% in US Dollars as percentages of the total loans. These results show that credit access threshold levels were found to significantly contribute to firm growth, whereas exceeding the threshold level will result in a loss for the firm. In terms of initial sales, a negative correlation was evident, which implies that firms with lower sales levels in 2012 exhibited higher firm growth.

#### **Implication of the Results**

The factors included in the study are beneficial to policymakers, creditors, and MSME stakeholders as they would allow them to gauge the impact of insufficient or surplus loan levels on the growth of these enterprises. With this, any adjustment to existing policies or regulations may be made accordingly to mitigate risk and manage adversity.

For Indonesia, the results conveyed a positive linear relationship of credit access to firm growth for manufacturing SMEs, which implies that increasing Indonesia's financing to manufacturing MSMEs and decreasing restrictive policies would be the most optimal to promote growth. Thus, firm size is a determinant of growth in existing and future loan policies, such as the country's Credit Guarantee Scheme. Although increasing access to loans is essential, existing literature emphasizes

the alarming issue of high non-performing loan (NPL) ratios (Asian Development Bank Institute, 2019). Integrating the findings to corporate financial policies and credit regulatory frameworks at a firm size level will aid MSMEs in controlling their degree of leverage and monitoring default risk.

For the Philippines, the results evidenced a positive linear relationship of credit access to firm growth for manufacturing SMEs as well. These findings support the rationale behind the Philippine government's current efforts to achieve credit inclusivity among MSMEs. Through the Microfinance NGO s Act (Securities and Exchange Commission, 2017) and anti-poverty strategy (Asian Development Bank, 2020), MSMEs with sufficient requirements and resources may boost their firm growth through conscientious loans. On the other hand, MSMEs without sufficient collateral and cash flows should first be redirected toward the Department of Trade and Industry's (DTI, 2021) Shared Service Facilities Project to provide them with the machinery needed to enhance their productivity, which ultimately increases their cash flows. To further develop the policies that foster financial inclusion, it is recommended for the government to allocate more R&D funding to the manufacturing MSMEs, which were found to have the highest value-adding attribute among MSMEs.

For Vietnam, the effect of firm growth on small enterprises is dependent on credit accessibility. Small enterprises in Vietnam must then consider strategies to expand and increase their capital mobility (Archer et al., 2020). Otherwise, financial deficiencies could limit firm performance, which would not be attractive to investors, and limit credit access. Thus, aiding MSMEs to be financially sustainable could cause better resilience against demand and supply shocks in the future (Nizam et al., 2020). On the other hand, medium enterprises in Vietnam that showed that a credit access threshold level is evident would need careful consideration by banks and firm owners. This would mean that it is crucial for banks and firm owners to control the amount of credit access to firms because excessive access will be detrimental to the growth of firms.

With these, it is important that policies support MSMEs to invest in activities that contribute to growth. Moreover, loans need to be properly utilized to reap the benefits of increased credit access.

This includes the improvement of asset quality, innovation of business processes, and efficiency in operations. More attention must also be given to support other sectors, such as the agricultural sector. Thus, financial support for MSMEs is essential to boost growth-oriented activities to improve the firm competitiveness, but more importantly, to increase credit access. Finally, financial sectors shall recognize that promoting stability is as important as ensuring inclusivity.

#### **Conclusion**

The major findings emphasize the significance of considering the potential existence of credit access thresholds, particularly with regard to firm size. Manufacturing SMEs in Indonesia and the Philippines and small enterprises in Vietnam showed that there is a linear relationship between firm growth and credit access. Thus, banking institutions must deepen their efforts to increase credit accessibility to foster favorable effects on growth. Medium manufacturing enterprises in Vietnam demonstrate a clear presence of a threshold where the relationship is akin to findings of past literature. Hence, medium enterprises and banking institutions would need to consider the limit of the distribution of credit access within the optimal level. Overall, it is important to evaluate how the level of credit will affect the spending for improving asset quality which can impact growth and firm performance in general.

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