# THE DEBATE OF IMPACT FROM GOVERNMENT CREDIT GUARANTEE ON BUSINESS DEVELOPMENT AND NON-PERFORMING LOAN OF MICRO AND SMALL ENTERPRISES (MSES): A LITERATURE SURVEY

**Febriandi Prima Putra, Universitas Diponegoro-Universitas Andalas**
**Purbayu Budi S, Universitas Diponegoro**
**Wahyu Widodo, Universitas Diponegoro**
**Firmansyah, Universitas Diponegoro**

## ABSTRACT

*The purpose of this study is to explain the debate about the existence of a credit guarantee policy that is needed to overcome the limited access of Micro and Small Enterprises (MSEs) to financing resources. Although in its implementation, the credit guarantee policy, in the end, turned out to create other asymmetrical information. This study used a systematic review approach that links and compares findings from various sources and synthesizes data by summarizing available information, combining and reviewing from several previous studies related to credit guarantee schemes, loan guarantees, guarantee schemes, micro-small business loans and asymmetric information. There is no agreement, but there are objections and doubts about the effectiveness of the role and impact of credit guarantee in reducing credit barriers among micro-small businesses. However, this paper shows that credit guarantees are one of the tools widely used by governments and other institutions to increase the access of micro-small enterprises to formal credit.*

**Keywords:** Credit Guarantees, Asymmetric Information, Non-Performing Loan, Micro-Small Enterprises, Financial Access.

## INTRODUCTION

Small micro-enterprises have an important role in the economy in many developing countries. Small micro-businesses with all their characteristics are faced with the constraints caused by the presence of asymmetric information on credit markets resulting in limited access to appropriate sources of financing for business growth and development (Green, 2003; Beck & Demirguc-Kunt, 2006). Among the various efforts to improve access to appropriate sources of financing, one of them is a credit guarantee scheme for micro- small enterprises.

However, in its implementation, several credit guarantees scheme have an impact or excess on the emergence of other asymmetric information such as adverse selection and moral hazard which causes high problem loans in micro-small businesses. This caused debate and doubts about the effectiveness of the role and impact of the credit guarantee policy for the development of micro-small enterprises.

This paper explains briefly why micro-small enterprises need external financing, why small micro enterprises face constraints such as limited access to financing sources, market

failures due to asymmetric information, the existence of credit guarantee schemes and the emergence of other asymmetric information due to credit guarantee that are responsible for high non-performing loan on micro- small enterprises.

## LITERATURE REVIEW

The presence of asymmetric information on the loan or credit market has led to prospective lenders having difficulty predicting loan repayment opportunities. This is because on the one hand, the characteristics of micro-small businesses are considered to have vague information or informationally opaque (Berger & Udell, 1992) and do not have a consistent record of accounting, marketing or production and not used to making business plans. Conversely, on the other hand, micro-small enterprises are unable to obtain information about appropriate financial institutions as needed for financing sources (Green, 2003; Beck et al., 2010; Tunahan & Dizkirici, 2012).

The existence of asymmetric information results adverse selection and moral hazard. Adverse Selection in credit market causes the interest rate and demand for the provision of collateral imposed on micro-small enterprises to be high so that micro-small enterprises of good quality and low risk do not borrow and will be out of the market. Demand on credit and borrower markets received is a micro-small enterprise with low-quality and high-risk that is likely to fail in repayment of loans and cause market failure (Akerlof, 1970; Nicholson & Snyder, 2008). In economic theory, this moral hazard is a one-party situation having a tendency to take risks of action outside the agreement contained in the contract to the detriment of the other (Nicholson & Snyder, 2008). The term moral hazard is mostly derived from the literature on insurance. Some economists define moral hazard is less efforts to be cautious (Rowell & Connelly, 2012).

Some actions considered to be moral hazards are the actions of borrowers or companies seeking to risk projects with high rates of return to cover the lender's rate of interest determined by the lender. In the event of a failure of payment, the lender also finds it difficult to prove whether the report of the business failure is happening or not. But in reality, sometimes this moral hazard action or behavior is also done by the lender in this case is the banking (Panyanukul et al., 2014; Cowan et al., 2015).

The presence of asymmetric information on the credit market leads to the accessibility of the poor or micro-small enterprises to formal financial resources inhibited. The assumption of low credit returns and high transaction costs, causing them to be almost underserved and not considered bankable (Green, 2003; Viphindrartin, 2012). Limited access to finance is hindering the ability of small micro-enterprises to optimize business growth and harm their survival. The financing barriers to small businesses cause in almost twice as much as annual growth when compared to the financing constraints on large enterprises (Beck & Demirguc-Kunt, 2006). Unavailability of credit reduces the desire of small businesses using new technologies that will increase the average income (Ghosh et al., 2000).

The low access of micro enterprises to formal credit institutions causes them to rely on financing their business from their own capital or other sources such as family, relatives, intermediary traders, and even loan sharks. The study of the manufacturing industry in Indonesia suggests that micro enterprises are harder to obtain bank credit than small businesses and assert that the greater the scale of business the easier it is to get access to finance to banking sources (Tambunan, 2012).

The study of Baas & Schrooten (2006) show that the limited valid information that can be afforded and the high cost of obtaining it leads banks to set high interest rates and large collateral

for micro-small enterprises. Hernández-Cánovas & Martínez-Solano (2010), which analysed the trust, concentration and length of the relationship between banks and firms on loan availability and debt costs, found that bank confidence in micro-small enterprises would increase access to loans, reduce debt costs but increase collateral. Trust-based relationships are a better strategy for improving micro-small business access to loans.

The key features that differentiate the credit market with other markets such as the goods market as well as the financial asset market are that the interest rates set by banks on borrowing contracts against borrowers of different types. The calculation through the estimated return on the realization of the loan granted is proportional to the yield of the contract interest rate and the borrower's opportunity actually repay the loan (Agenor, 2008). This situation makes the prospective lender unwilling to increase the interest rate to cover the excess demand thereby limiting the amount of credit offered or credit rationing and requires collateral. Collateral is a tool used by lenders to increase the low commitment of borrowers who tend to choose to default. Collateral can act as sorting, though Bester (1985) argues that the emergence of collateral in the credit market can eliminate credit rationing while Besanko & Thakor argue otherwise (Besanko & Thakor 1987; Coco, 2000).

The imperfections of credit markets that limit the availability of financing and generate credit rationing for small businesses have been the concern of many researchers in their studies (Smith & Stutzer, 1989; Gelos & Werner, 2002; Laeven & Laeven, 2003; Love, 2003). In some studies, in normal circumstances there is no refusal of loans for small companies (Levenson & Willard, 2000; Shen, 2002; Robb & Fairlie, 2007; Fraser, 2009) but the refusal that occurs because the company is declared bankrupt, is a new venture (Metzger, 2007) or make delinquency on previous loans (Fraser, 2009).

Several results of studies on the implementation of credit guarantee schemes in various countries such as the existence of credit guarantees in Italy (CONFIDI) led to improvements in financial conditions and increased corporate lending and reduced interest rates on loans (D'Ignazio & Menon, 2013). The emergence of asymmetric information and there is a positive relationship between credit risk and the risk of credit failure in the implementation of the micro, small and medium business credit guarantee scheme in Japan (Saito & Tsuruta, 2014a; 2014b, 2014c).

Credit guarantee schemes are one of the most preferred and important policy tools in many countries to reduce the financial constraints of small micro-enterprises (Green, 2003; Beck, Demirguc-kunt & Martinez Peria, 2008; Beck, Klapper & Mendoza, 2010). This policy is the best option to demonstrate the imperfections of the credit market, although empirical evidence is scarce, inconsistent and inconclusive (Gurmessa & Ndinda, 2014). Nevertheless the economic reason for these public interventions is that these policies can improve efficiency by providing additional funding for small micro businesses that are actually feasible but do not get loans because of the information gap between lender and borrower (Saito & Tsuruta 2014c). Government intervention in the form of public financing or lending and subsidies to private companies is based on positive thinking which justifies that this policy is in response to the failure of the private credit market and normative thinking to support the general benefits of labor absorption, economic diversification and technological growth (Mensah, 1996). Although all credit guarantees aim at improving access of micro-small enterprises to formal credit, much of the diversity of forms, such as eligibility criteria, risk sharing arrangements, payoffs, and claims procedures differentiate it (Panyanukul et al., 2014).

## RESEARCH METHODOLOGY

This paper used a systematic review approach by reviewing some of the earlier studies related to credit guarantee schemes, loan guarantees, guarantee schemes, micro-small business loans and asymmetric information. Data syntheses employed qualitative descriptive by linking and comparing findings from multiple sources and incorporating and summarizing from available information. This paper contains explanations and conclusions at the end of the paper prepared only by theme and reporting on the results of previous studies. Despite trying to summarize from the various literatures that have existed but did not intend to claim that all literature related to the study question is highly identified and reviewed.

## RESULTS AND DISCUSSION

Riding (1998) argues that the purpose of credit guarantees is to help small companies and not to subsidize risky companies. To distinguish it according to the quality of the borrower is the task of the credit market (Fraser, 2009), so the purpose of the loan guarantee is only to facilitate the formation of capital for small firms. Therefore, a loan offer by a potential lending bank is performed after the feasibility test is performed according to conventional lending criteria (Cowling, 2012). This is supported by (Green, 2003; Graham, 2004).

In addition to credit guarantees, the government can also increase access to financing through direct loans, interest-rate subsidies, government-funded enterprises and subsidies (such as tax-free credits and reduced requirements) (Tunahan & Dizkirici, 2012; Saldana, 2000). However, the credit guarantee scheme has become a popular policy instrument for addressing financing gaps in many countries where since credit guarantees have reduced public burdens relative to direct government financing that disrupt free market mechanisms (Direct borrowing of government support and credit subsidies has been widely evidenced by target errors, rent seekers and financing unsustainability (Khwaja & Mian, 2005; Zia, 2008; Tunahan & Dizkirici, 2012; Zecchini & Ventura, 2009; Kuo et al., 2011; Beck et al., 2010).

Proponents of this policy argue that credit guarantees reduces the need for collateral, improves access to financing for businesses with small assets with limited credit but has a lucrative and is expected in the future with its entry into the credit market can borrow without any guarantee. Opponents, claiming that profitable companies will drive competitive interest rates and blame that credit guarantees will reduce market discipline, facilitate credit access to low-quality, high-risk firms and create adverse selection and moral hazard issues (Gropp et al., 2014; Saito & Tsuruta, 2014a). Another criticism is that credit guarantee will incur high costs. The study of the benefits of the existence of credit guarantee in an economy among others is done by (Riding & Haines, 2001, Riding et al., 2007; Cowling, 2010; Uesugi et al., 2010) but still not much to examine in terms of costs incurred due to the implementation of credit guarantee policy that is the emergence of adverse selection and moral hazard (Saito & Tsuruta, 2014a).

The existence of government guarantees has two sides due to the opposite. On the one hand, it can reduce market discipline because creditors or banks have anticipated that their loans have been secured by the government and thus encourage banks to reduce risk monitoring or demand a higher premium. On the other hand, government guarantees affect risk-taking in bank profits, protected banks through guarantees tend to benefit from low repayment costs. Implicitly, the government subsidizes banks through future value by reducing the risk taking of banks (Gropp et al., 2014). Benefits and costs incurred as a result of the existence of credit guarantee

program can be measured through additionality of both credit amount as well as economic impact and incentive misalignment of the parties involved. Additional credit is an additional loan that may be made due to the existence of the guarantee schemes. Other forms in different dimensions are the lower interest rate, the extension of the loan due date and the lower collateral demand. In addition, there is also said to be an additional economic that considered which is the contribution of the existence of credit guarantee to the used of labor and GDP, productivity and economic growth (Panyanukul et al., 2014). Assessment of additional measures incurred by the existence of credit guarantee is still very limited. Some of which are the Levitsky (1997); Larrain & Quiroz (2006); d'Ignazio & Menon (2013).

Credit guarantee mechanisms if not well established, are likely to cause moral hazard at least in two dimensions. First, the borrower is likely to have a high incentive to fail, because the loss as a result of failure and the need for collateral is covered and filled by credit guarantee, which is not the property of the client. Secondly, the lending institution may lack the impetus to maintain a strong credit rating, to oversee the quality of the secured borrower's credit and to collect the debt repayments due to the failure of the loan to be replaced (Panyanukul et al., 2014).The existence of the credit guarantee creates a boost for lenders to grant high risk borrower applications because credit guarantee companies cannot tell which borrowers are more at risk. Higher credit guarantees result in greater losses for defaulting and weaker impetus for screening of micro- small loan applications due to the high coverage (Saito & Tsuruta 2014a).

The argument about the existence of government loan guarantee that will solve the problem of market failure is confused with the amount of subsidy and the high rate of loan failure. Subsidy value and loss rate due to loan failure becomes important to see if the policy is rational implemented (Rhyne, 1988; Wynant et al., 1991; Mensah, 1996). In the study of Saito & Tsuruta (2014b), found that the emergence of the asymmetric information of adverse selection and moral hazard to the high level of subrogation on guaranteed micro-small business loans. Gropp et al. (2014) found that the existence of credit guarantee was related to moral hazard so that the policy of abolishing government guarantee in 2001 by German Bank, reducing bank risk taking, average size of loan as well as total loan volume. Based on experience in the credit guarantee program in France, (Lelarge et al., 2010), the existence of credit guarantee institutions allows entrepreneurs to get lower interest rates but high non-performing loan risks.

Many factors are identified as major determinants of loan failure, such as poor oversight, loan type, loan term; loan interest rate; bad credit history; income and transaction fees paid by the borrower on loan (Okorie, 1986). Amador et al. (2013) found that abnormal lending growth over a continuous period triggered a reduction the ratio of bank capital and the increasing ratio of non-performing loan loans to total loans and shows that continuous abnormal loan growth is one of the most significant variables in explaining the difference in observations in the bank failure process during the financial crisis of Colombia in the late 1990s.

A study about commercial banks in Guyana shows that non-performing loans and asset-lending ratios are positively related with the implication that banks with large risk taking tend to have non-performing loan is greater (Khemraj & Pasha, 2009). A review of several Gulf Cooperative Council (GCC) banks found that high credit growth in the previous period may encourage future non-performing loan increases. The paper also notes that there is a strong but brief feedback effect from non-performing loans on economic growth (Espinoza & Prasad, 2010). Research on the behaviour of banks and non-performing loans in China found that excessive credit distribution to local business entities will lead to increased opportunities for

non-performing loans (Lu et al., 2001). Some of the results of studies relating to the impact of credit guarantee, both positive and negative impacts can be seen in Table 1.

**Table 1**
**SOME RESULTS OF THE STUDY OF THE IMPACT OF CREDIT GUARANTEE**

| Positive | | Negative | |
|---|---|---|---|
| **Author** | **Findings** | **Author** | **Findings** |
| Levitsky (1997) | Credit guarantee policies can be accepted if at least 60% creates additional credit. | Mensah (1996) | Bad loans reach 41% of guaranteed loans. |
| Deelen & Molenaar (2004) | Credit guarantee will be successful if micro-small enterprises are feasible to be funded by professional banking supervision | Lelarge et al. (2010) | Higher credit guarantees incur greater losses for loan failures and lead to weak screening of micro-small credit applications |
| Doran & Billington (2005) | Many macro and micro factors that influence the success of credit guarantee schemes for micro-small businesses are related to the banking environment, monetary environment, business environment, politics and law along with the scheme design and technical implementation | Panyanukul et al. (2014) | Credit guarantees cause a lack of desire to repay loans as well as weak supervision of the credit quality of lenders |
| Larrain & Quirez (2006) | Credit guarantees can lead to additional credit and economic improvement in micro-small enterprises; 14% increase in credit volume, 6% additional loans and 6% increase in business turnover. | Groop, Gruendl & Guethler (2014) | Credit guarantees are related to moral hazard so the elimination of government guarantees will reduce bank risk but reduce the volume of loans. |
| D'Ignazio & Menon (2013) | Credit guarantees lead to improved financial conditions and increased corporate loans and reduced loan interest rates charged | Cowan, Drexler & Yanez (2015) | The existence of the 2003-2006 credit guarantee shows an increase in the aggregate amount of credit for micro-small businesses but has a higher level of negligence in loan repayments. |

Saito & Tsuruta (2014a), (2014c) found a positive and significant correlation between the level of credit risk risk (subrogation rate) and the risk of failure on a 100% guaranteed but insignificant positive loan on a loan of only 80% guaranteed. This signifies a 20% risk of self-employment as an effective mechanism to reduce the problem but not enough to eliminate it. Cowan et al. (2015) study, found that the existence of credit guarantees showed an increase in the aggregate amount of loans for micro-small enterprises. The guaranteed companies have higher payment negligence rate than the same company but do not get a guarantee program even if they do not cause the loan default in the long term. This indicates that the high level of corporate failure in the guarantee program is a consequence of adverse selection. In different studies Saito & Tsuruta (2014b) investigated the existence of adverse selection and moral hazard from high levels of micro-small subrogation in the credit guarantee market. Failure of micro-small business loans to banks with collateral, higher than unguaranteed and consistent with the existence of adverse selection and moral hazard.

## CONCLUSION

This paper attempts to summarize some previous studies that see what the role and impact of credit guarantee schemes in reducing credit constraints on small micro-enterprises. This paper also discusses some basic concepts related to asymmetric information on the credit market and occurrence of credit rationing. This paper shows that credit guarantee is one of the tools widely used by both government and other institutions to improve access of micro-small enterprises to formal credit.

There is no agreement, but criticism has emerged in the form of objections and doubts about the effectiveness of the role and impact of credit guarantee in the reduction credit constraints among micro-small enterprises. The credit guarantee schemes are not a tool for solving problems of incongruous business or poorly performing banks that makes poor investments feasible. There is no credit guarantee scheme model that can specifically work effectively under various conditions but must adapt to existing circumstances and environment.

Bennett et al. (2005) study found several factors that support the success of credit guarantee schemes such as macro and micro factors related to banking environment, monetary and regulatory environment, political and legal framework, business environment, approach to scheme design, loan technology and technical assistance. The credit guarantee schemes are likely to be successful when micro-small enterprises are well prepared with good projects and well-performing banks handled by professional employees in the process (Deelen & Molenaar, 2004). If all of the previously mentioned factors and conditions work well, that the possibility of adverse selection and moral hazard (asymmetric information) that causes the high non-performing loan in the presence of credit guarantee will be minimized and the effectiveness and impact on access to credit and economy will be achieved better.

## REFERENCES

Agenor, P.R., & Montiel, P.J. (2008). *Development macroeconomics* (Third Editon). Princeton University Press.

Akerlof, G. (1970). The market for lemons: Qualitative uncertainty and the market mechanism. *Quarterly Journal of Economics*, *84*(3).

Amador, J.S., Gómez-González, J.E., & Pabón, A.M. (2013). Loan growth and bank risk: New evidence. *Financial Markets and Portfolio Management*, *27*(4), 365-379

Baas, T., & Schrooten, M. (2006). Relationship banking and SMEs: A theoretical analysis. *Small Business Economics*, *27*(2-3), 127-137.

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.

Beck, T., Demirguc-Kunt, A., & Martinez Peria, M.S. (2008). *Bank financing for SMEs around the world: Drivers, obstacles, business models, and lending practices*. The World Bank.

Beck, T., Klapper, L.F., & Mendoza, J.C. (2010). The typology of partial credit guarantee funds around the world. *Journal of Financial Stability*, *6*(1), 10-25.

Bennett, F., Doran, A., & Billington, H. (2005). Do credit guarantees lead to improved access to financial services? Recent evidence from Chile, Egypt, India and Poland. *Policy Division Working Paper, Department for International Development, London*.

Berger, A.N., & Udell, G.F. (1992). Some evidence on the empirical significance of credit rationing. *Journal of Political Economy*, *100*(5), 1047-1077.

Besanko, D., & Thakor, A.V. (1987). Competitive equilibrium in the credit market under asymmetric information. *Journal of Economic Theory*, *42*(1), 167-182.

Bester, H. (1985). Screening vs. rationing in credit markets with imperfect information. *The American Economic Review*, *75*(4), 850-855.

Coco, G. (2000). On the use of collateral. *Journal of Economic Surveys*, *14*(2), 191-214.

Cowan, K., Drexler, A., & Yañez, Á. (2015). The effect of credit guarantees on credit availability and delinquency rates. *Journal of Banking & Finance*, *59*, 98-110

Cowling, M. (1999). The determination of bank-small business loan premia in the UK. *Applied Economics Letters*, *6*(4), 251-253.

Cowling, M. (2010). The role of loan guarantee schemes in alleviating credit rationing in the UK. *Journal of Financial Stability*, *6*(1), 36-44.

Cowling, M. (2012). Credit rationing, equity gaps', and policy solutions for financing entrepreneurial business in Europe: Theory, tests, evidence and the design and effectiveness of policy instruments. *Report to the European Commission, Directorate-General Regional Policy*.

Deelen, L., & Molenaar, K. (2004). Guarantee Funds for Small Enterprises: A manual for guarantee fund managers.

d'Ignazio, A., & Menon, C. (2013). The causal effect of credit guarantees for SMEs: Evidence from Italy.

Espinoza, R.A., & Prasad, A. (2010). *Nonperforming loans in the GCC banking system and their macroeconomic effects* (No. 10-224). International Monetary Fund.

Fraser, S. (2009). Is there ethnic discrimination in the UK market for small business credit? *International Small Business Journal*, *27*(5), 583-607.

Gelos, R.G., & Werner, A.M. (2002). Financial liberalization, credit constraints, and collateral: investment in the Mexican manufacturing sector. *Journal of Development Economics*, *67*(1), 1-27.

Ghosh, P., Mookherjee, D., & Ray, D. (2000). Credit rationing in developing countries: an overview of the theory. *Readings in the Theory of Economic Development*, 383-401.

Graham, T. (2004). Graham review of the small-firms loan guarantee-Final report. *HM Treasury.* London.

Green, A. (2003). Credit Guarantee Schemes for Small Enterprises: An Effective Instrument to Promote Private Sector-Led Growth? SME Technical Working Paper No. 10, UNIDO, Vienna, Austria.

Gropp, R., Gruendl, C., & Guettler, A. (2013). The impact of public guarantees on bank risk-taking: Evidence from a natural experiment. *Review of Finance*, *18*(2), 457-488.

Gurmessa, N.E., & Ndinda, C. (2014). The role of loan guarantees in alleviating credit constraints: Lessons for smallholder farmers cooperatives. *International Journal of Business and Social Science*, *5*(5).

Hernández-Cánovas, G., & Martínez-Solano, P. (2010). Relationship lending and SME financing in the continental European bank-based system. *Small Business Economics*, *34*(4), 465-482.

Khemraj, T., & Pasha, S. (2009). The determinants of non-performing loans: an econometric case study of Guyana.

Khwaja, A.I., & Mian, A. (2005). Do lenders favor politically connected firms? Rent provision in an emerging financial market. *The Quarterly Journal of Economics*, *120*(4), 1371-1411.

Kuo, C.J., Chen, C.M., & Sung, C.H. (2011). Evaluating guarantee fees for loans to small and medium-sized enterprises. *Small Business Economics*, *37*(2), 205-218.

Laeven, L. (2003). Does financial liberalization reduce financing constraints?. *Financial Management*, 5-34.

Larraín, C., & Quiroz, J. (2006). Study for the Guarantee Fund of Small Businesses. *State Bank*.

Lelarge, C., Sraer, D., & Thesmar, D. (2010). *Entrepreneurship and credit constraints: Evidence from a French loan guarantee program.* International Differences in Entrepreneurship, University of Chicago Press. pp. 243-273.

Levenson, A.R., & Willard, K.L. (2000). Do firms get the financing they want? Measuring credit rationing experienced by small businesses in the US. *Small Business Economics, 14*(2), 83-94.

Levitsky, J. (1997). Credit guarantee schemes for SMEs–an international review. *Small Enterprise Development, 8*(2), 4-17.

Love, I. (2003). Financial development and financing constraints: International evidence from the structural investment model. *The Review of Financial Studies*, *16*(3), 765-791.

Lu, D., Thangavelu, S.M., & Hu, Q. (2001). The link between bank behavior and non-performing loans in China. *National University of Singapore, Department of Economics Working Paper*, (0108).

Mensah, S. (1996). The valuation of government loan guarantees: A theoretical and empirical perspective. *Public Finance Quarterly*, *24*(2), 263-281.

Metzger, G. (2007). On the Role of Entrepreneurial Experience for Start-up Financing-An Empirical Investigation for Germany.

Nicholson, W., & Snyder, C. (2011). *Microeconomic theory: Basic principles and extensions*. Nelson Education.

Okorie, A. (1986). Major determinants of agricultural smallholder loan repayment in a developing economy: Empirical Evidence from Ondo State, Nigeria. *Savings and Development*, 89-99.

Panyanukul, S., Promboon, W., & Vorranikulkij, W. (2014). Role of government in improving SME access to financing: Credit guarantee schemes and the way forward. Paper Presented at BOT Symposium 2014.

Retrieved from www.bot.or.th/Thai/MonetaryPolicy?ArticleAndResearch/SymposiumDocument?Paper3 SME2557.pdf

Posey, R.L., & Reichert, A.K. (2011). Terms of lending for small business lines of credit: The role of loan guarantees. *The International Journal of Business and Finance Research, The Institute for Business and Finance Research, 5*(1), 91-102.

Rhyne, E. (1988). *Small business, banks, and SBA loan guarantees*. Quorum Books.

Riding, A., Madill, J., & Haines, G. (2007). Incrementality of SME loan guarantees. *Small Business Economics*, *29*(1-2), 47-61.

Riding, A.L. (1997). On the care and nurture of loan guarantee programs. *Financing Growth in Canada*, 637-672.

Riding, A.L., & Haines, G. (2001). Loan guarantees: Costs of default and benefits to small firms. *Journal of Business Venturing*, *16*(6), 595-612.

Robb, A.M., & Fairlie, R.W. (2007). Access to financial capital among US businesses: The case of African American firms. *The Annals of the American Academy of Political and Social Science*, *613*(1), 47-72.

Rowell, D., & Connelly, L.B. (2012). A history of the term "moral hazard". *Journal of Risk and Insurance*, *79*(4), 1051-1075.

Saito, K., & Tsuruta, D. (2014a). Adverse selection and moral hazard in the Japanese public credit guarantee schemes for SMEs. *VOX CEPR Policy Portal.* Retrieved from http://www.voxeu. org/article/adverse-selection-and-moral-hazard-japanese-credit-guarantees.

Saito, K., & Tsuruta, D. (2014b). Cost of Asymmetric Information in an SME Credit Guarantee System.

Saito, K., & Tsuruta, D. (2014c). Information Asymmetry in SME credit guarantee schemes: evidence from Japan. *Discussion Paper 14-E-042*.

Saldana, C.G. (2000). Assessing the economic value of credit guarantees. *Journal of Philippine Development*, *27*(1), 27-48.

Shen, C.H. (2002). Credit rationing for bad companies in bad years: Evidence from bank loan transaction data. *International Journal of Finance & Economics, 7*(3), 261-278.

Smith, B.D., & Stutzer, M.J. (1989). Credit rationing and government loan programs: A welfare analysis. *Real Estate Economics*, *17*(2), 177-193.

Tambunan, T. (2012). *Micro, Small and Medium Enterprises: Important Issues/Usaha Mikro, Kecil dan Menengah: Isu-Isu Penting*. Jakarta: LP3ES.

Tunahan, H., & Dizkirici, A.S. (2012). Evaluating the Credit Guarantee Fund (Kgf) of Turkey as a Partial Guarantee Program in the Light of International Practicesst. *International Journal of Business and Social Science*, *3*(10).

Uesugi, I., Sakai, K., & Yamashiro, G.M. (2010). The effectiveness of public credit guarantees in the Japanese loan market. *Journal of the Japanese and International Economies*, *24*(4), 457-480.

Viphindrartin, S. (2012). Social Capital Approaching Model of the Lending Group for Repayment Rate Optimization on NGO-Microfinance Institution/Model Pendekatan Modal Sosial Kelompok Peminjam Untuk Optimalisasi Repayment Rate Pada Lembaga Keuangan Mikro-Swadaya Masyarakat. *Prosiding Seminas, 1*(2).

Wynant, L., Hatch, J., Shadbolt, J., & Thibeault, A. (1991). *Banks and Small Business Borrowers: A 1990 Research Study*. University of Western Ontario, Western Business School.

Zecchini, S., & Ventura, M. (2009). The impact of public guarantees on credit to SMEs. *Small Business Economics*, *32*(2), 191-206.

Zia, B.H. (2008). Export incentives, financial constraints, and the (mis) allocation of credit: Micro-level evidence from subsidized export loans. *Journal of Financial Economics*, *87*(2), 498-527.