A MODEL OF MICRO, SMALL AND MEDIUM ENTERPRISE FINANCING IN INDONESIA

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ABSTRACT

Micro, small and medium enterprises have been given much attention by analysts and policy makers around the world. For Indonesia, these enterprises have been one of the strongest economic pillars in terms of GDP contribution and employment provision as well as being an economic buffer during crisis periods. Unfortunately, an acknowledgement of their importance is not complemented by their access to adequate financing, which has become one of the biggest handicaps for their growth. In this paper, we discuss first the characteristics of current Indonesian micro, small and medium enterprises (MSME) and their importance to the economy. We observe that the difficulties MSMEs have in getting satisfactory access to finance could be related to factors such as legal status, business feasibility, high interest rates, inadequate understanding and knowledge of loans and lending, risk preference and financing decisions. On the other hand, when they process loan proposals, funding suppliers (banks and other financial institutions) have to deal with regulatory constraints, asymmetric information and limited credit references, high transaction costs, too few bank branches in rural areas and the high cost of funds. Unlike most of the current financing programs, which focus on either MSMEs or the banking industry only, we consider a plausible financing scheme that we hope would mitigate MSME problems and at the same time consider the banking sector's concerns. Improving financing access needs to be done in conjunction with MSME capacity building and supported by stakeholders.

Keywords: *Micro, small and medium enterprises; Financing access; Indonesia*

JEL Classification: E510, G210, G320, M100

I. INTRODUCTION

Micro, small and medium enterprises (MSME) have long been a major supporting pillar of the Indonesian economy. Not only do they provide millions of jobs for urban and rural people but they also keep the economy moving during a crisis when many big firms collapse. During the financial crisis of 1998, proportionately more small businesses kept operating than did their bigger counterparts (Berry, Rodriguez and Sandee, 2002): MSMEs were able to deal better with financial shocks despite their many limitations. Acknowledging their contributions to the economy, however, does not imply an absence of serious systematic and structural problems. Various programs and schemes have been launched by the Government of Indonesia (GoI) but their efficacy needs to be further reviewed. This paper analyses the current MSME profile in the context of the Indonesian banking system and considers their financing needs and practices. In particular, we examine current financing issues and impediments to MSME's access to the Indonesian banking system. Accordingly, we suggest another financing model that will allow the removal of financing problems along with other important problems faced by Indonesian MSMEs.

With regard to their limited scale and the lack of a standard or precise definition, MSMEs have been a pivotal point in the economies of developing and developed countries.[1] In Mexico and Thailand, for instance, using the World Bank's definitions (Kantis, Angelli and Koenig, 2004; Simmons, 2004), about 97 per cent of businesses are micro, small or medium. In the USA, enterprises with fewer than 50 employees make up 96 per cent of the total (US Small Business Administration, 2007). Keeping in mind that many small and micro businesses will not have been registered, it is arguable that the number of MSMEs in practice in most economies is much higher than stated by statistics organisations (Mead and Liedholm, 1998).

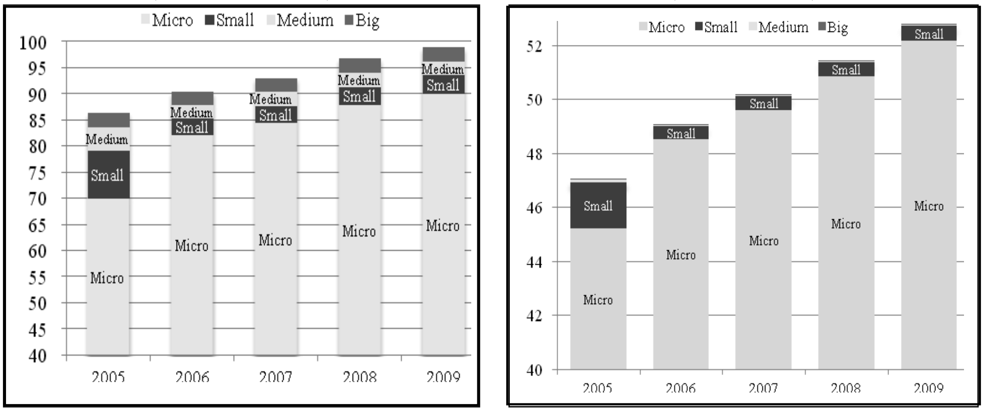
Likewise in Indonesia: the Badan Pusat Statistik (BPS-Statistics Indonesia) has estimated the MSME population to be 22.5 million units (BPS, 2006), but the correct number would be higher.[2] The number of MSMEs was estimated in 2008 to be 51.4 million units, that is, nearly 99.9 per cent of the total number of all businesses. In contrast, the number of big firms was around 4650. In 2009, the MSME population increased to 52.76 million units (98.88 per cent of total businesses) but the number of big enterprises increased to 4677 units only (see Figure 1).

MSMEs have also proved themselves the biggest providers of jobs and economic output in developing and in developed countries. In many countries, MSMEs have also been a vehicle by which entrepreneurs discover and develop innovative goods and services. Mead and Liedholm (1998) noticed that micro and small firms in Botswana, Kenya, Malawi, Swaziland and Zimbabwe provide more than twice the employment than is provided by big companies and public institutions. In Latin America, more than half the jobs are in MSMEs: 58 per cent in Paraguay, 54 per cent in Mexico and 53 per cent in Bolivia (ILO, 2003).

<?>Law 20 of 2008 on MSMEs stipulates that an enterprise can be classified in one of three categories based on assets value and sales volume. Enterprises with assets of Rp50 to Rp500 million and sales of Rp200 million to Rp2.5 billion are classified as small businesses. Enterprises with total assets and sales less or more than these values are classified as micro or medium enterprises respectively. Further, the definition of MSMEs by the World Bank, the European Commission, Singapore, Malaysia, Japan, South Korea and others, for instance, give more weight to quantitative measurements that are based on assets as well as the economic development of the country.

[2]Some factors stimulate the increase in numbers of MSMEs; low barriers to entry, less restrictive regulations, simpler licensing, and low set-up costs. For this reason, the MSME sector becomes very competitive and easily saturated. See Ramli (1993) for a discussion of this issue.

Panel A. Employment (million workers) | Panel B. Number of enterprises (million units)



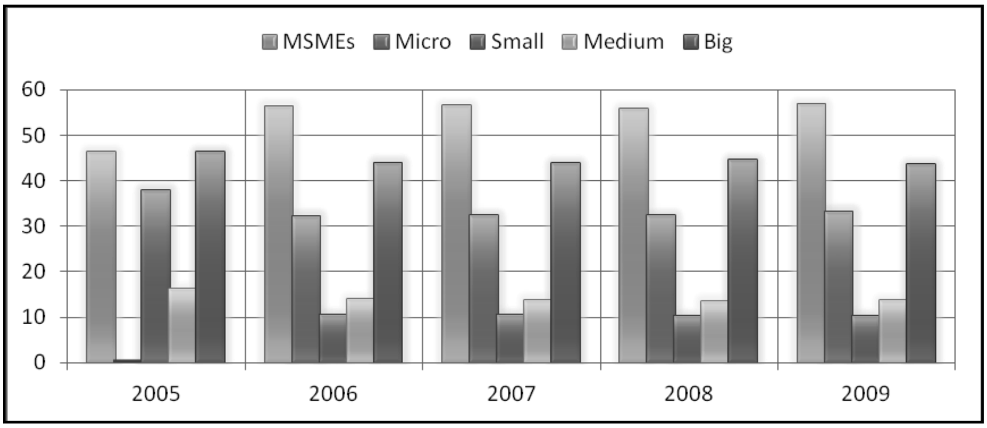
Source: Departemen Koperasi, 2010

Figure 1. Profile of Indonesian MSMEs and big enterprises

As shown in Figure 1, MSMEs in 2009 provided more than 96.2 million jobs, that is, 97.3 per cent of total employment compared to big enterprises, which provided 2.7 million jobs. BPS-Statistics Indonesia also noted that there were at least thirty million employees who worked in unregistered manufacturing businesses in the period 1996 to 2004, a figure that was subsequently confirmed by the World Bank (2012). This suggests that most economic activity in developing economies, particularly by MSMEs, takes place in the informal sector.[3] In 2010, the number of jobs in MSMEs decreased slightly to 90.9 million, but they maintained 97.3 per cent of total employment. Those numbers imply a significant contribution by MSMEs to several economic indicators. Daniels (1999), IDB (1998) and Gamser (2003) reveal MSME's significant contribution to the GDP in the Republic of Dominica (31 per cent), Kenya (40 per cent) and Pakistan (11 per cent). A higher contribution can be observed in Indonesia; in particular, for the year 2008 (55.67 per cent), 2009 (58.17 per cent) and 2010 (55.6 per cent). At the same time, Indonesian MSMEs also boosted foreign exchange reserves with export transactions, and in 2009 contributed 17.02 per cent of total export values, an amount of more than Rp162.2 trillion. In 2010, these figures increased to 20.2 per cent of the total value, equivalent to Rp183.8 trillion.

As the role of MSMEs becomes more significant, it is reasonable that their performance should be improved. Hence, various parties, such as the GoI (particularly the Ministry of Cooperatives and SMEs), NGOs, banks, academics, private and state-owned companies, the World Bank and the

[3] *Doing business 2012* (World Bank, 2012) suggests that firms might be prevented from entering the formal sector by non-transparent or excessive bureaucracy and regulations. We discuss this issue in a later section of this paper.



Source: Departemen Koperasi, 2010.
Figure 2. Contribution (per cent) to GDP by all enterprises

Asian Development Bank, have been paying more attention and supporting a large number programs to boost the growth of MSMEs. MSMEs have been a popular topic for many interested parties and for much discussion. Nevertheless, MSMEs have to deal with many internal and external obstacles. The internal factors are low human resource and managerial capability, low entrepreneurial skills, limited sources of funds, poor motivation and attitude, inadequate technical skills, and inadequate operational methods and equipment. The external factors are very limited access to finance, lack of marketing information, dependence on few suppliers or buyers, tight competition, and sub-optimal yet overlapping regulations and assistance. Nichter and Goldmark (2009) argue that the problems and constraints faced by MSMEs can be attributed to the personality, skills and capability of the entrepreneur, to the characteristics and style of the firm, to relational factors (such as commercial and social networks), and to the business environment.

The performance of each MSME, present and future, correlates highly with the set of abilities and skills that entrepreneurs bring with them. The first member of the set is education (Burki and Terrell, 1998; Tan and Batra, 1995) followed by work experience (Kantis, Angelli and Koenig, 2004) and gender (Downing and Daniels, 1992). Businesses with educated managers, for example, are likely to be more efficient (Burki and Terrell, 1998; Tan and Batra, 1995). Intuitively, one might expect more years of formal education to spur medium and small enterprise (MSE) growth by improving the firm's capabilities (Nichter and Goldmark, 2009). More precisely, formal education might provide entrepreneurs with a greater capacity to learn about new production processes and product designs, to gain other specific technical knowledge conducive to business expansion, and to increase the owner's flexibility.

In developing countries, MSE owners and workers often have little education. One reason is that, despite recent advances, primary education completion rates remain at 60 per cent in Sub-Saharan Africa, 80 per cent in South Asia and 90 per cent in the Middle East and North Africa (World Bank, 2009). In addition, MSEs tend to have less-educated owners and workers than do larger firms (Orlando and Pollack, 2000; Söderbom and Teal, 2001). Similarly, an economics census in Indonesia (BPS, 2006) reveals that, in terms of the highest education degree, of all SME owners or managers, 31.3 per cent finished their elementary-school (primary) education only; 22.1 per cent completed junior high school and 26.87 senior high school.

Next, MSMEs have characteristics that are rarely important in big firms, that is, age, formality or legal status and difficulties in accessing finance. In addition, the growth of any one MSME is affected by other factors, such as technology, location and the economic sector they operate in. Young or start-up businesses, aged between three and five years, will probably achieve dramatic expansion (Kantis et al., 2004) but this rapid rate of growth will diminish with time (Burki and Terell, 1998).[4] It can be argued that their growths depend on the formal or legal status of the business. Being small scale allows firms to avoid some tax obligations as well as some regulations, but by staying small there are costs from forgoing optimal investment; missing profitable contracts that require an enterprise to have a legal status, that is, to be registered as a business; low banking accessibility and other opportunity costs. How MSMEs might best access the financial and legal systems is a continuing but unresolved problem. It is not surprising because the number of MSMEs with a business licence is but a small proportion of the total.[5] This matter of legality becomes a problem when an MSME seeks funding from either a formal financial institution such as a commercial, local or community bank, or from other financial institutions, such as cooperatives. When they need immediate funding, MSMEs have to use their own funds or rely on informal sources of funds, which require very high interest rates but minimal documentation.

II. PROBLEMS ACCESSING FINANCE AND CURRENT PRACTICES

It is widely accepted that access to finance is very important for the growth of firms. Efficient MSMEs should have financial plans that allow them to achieve an optimal financing mix or to ensure that the price they pay for funds is low and, at the same time, they must maintain a cash buffer to anticipate

4 An explanation for this phenomenon is from learning process theory that suggests that firms grow fastest during the beginning period of their life cycle and after reaching some point, which is close to their optimal size, they will grow slowly (Jovanovic, 1982).

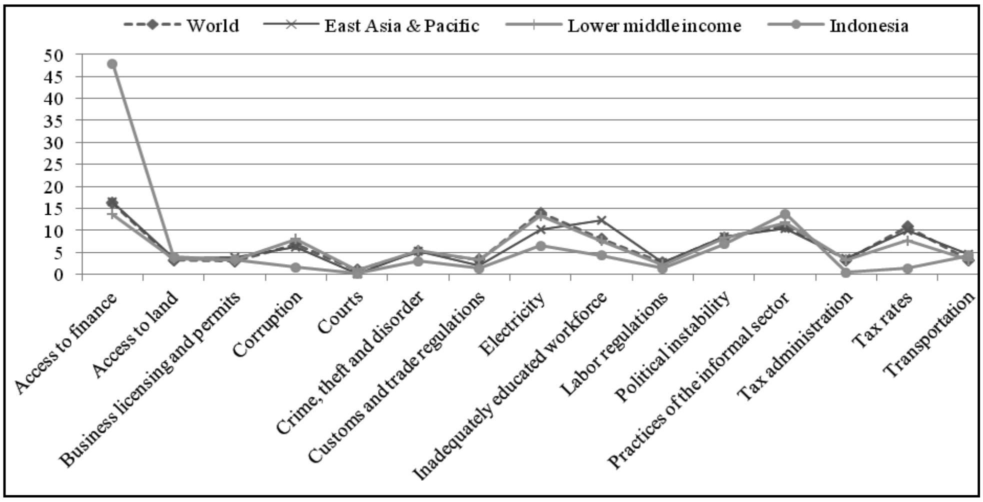
5 An economic census in 2006 recorded an annual average number of micro and small businesses of sixteen million units over the period 1996 to 2004 (BPS, 2006).

any need for immediate funding. With this in mind, we have to acknowledge that MSMEs have a different business environment *vis-à-vis* big enterprises; the latter having much easier access to finance, managerial expertise and skills, and other business requirements. This is discussed in the following sections.

2.1 MSME perspectives

For firms with formal legal status and good financial reports, demand for funds might be met by making arrangement with banks and other financial institutions, or by issuing bonds or stocks. This ability to access funding when needed, however, is not often the case for many MSMEs where raising funds often becomes a persisting problem. *Investment climate survey* (World Bank, 2003) and *Enterprise surveys* (2010) by World Bank through its affiliate, the International Finance Corporation, for instance, reveal that an inability to access finance has been the main obstacle for MSMEs and economies in developing countries. Similarly, a study by the IFC of 10,000 firms in eighty countries found that the finance problem has frequently been cited as the main growth constraint for many small businesses (Schiffer and Weder, 2001).

The survey reveals that some obstacles were faced by MSMEs in various countries. In particular, Indonesian MSMEs considered that the primary constraint on businesses to be the difficulty of accessing finance (47.87 per cent). This was followed by poor business practices in the informal sector (13.74 per cent), political instability (6.91 per cent), and electricity supply and reliability (6.46 per cent) (see Figure 3). Furthermore, difficulties in finding adequate sources of finance have become a big problem to many businesses in East Asia and the



Source: The World Bank, 2010

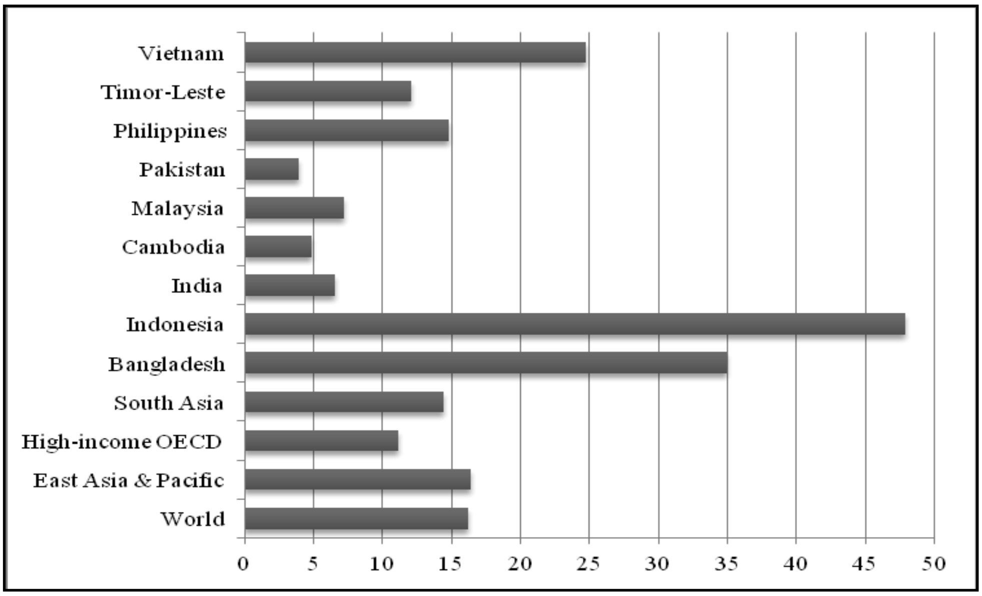
Figure 3. Ten main business constraints in Indonesia (percent firms)

Pacific region as well as in other low and medium-income countries.

Those surveys by World Bank group support what was revealed in an economics census by BPS-Statistics Indonesia (BPS, 2006). It found that the lack of readily available capital is among the biggest business constraints for 35.7 per cent of respondents, followed by marketing, raw materials, energy and fuel and so on as shown in Figure 3. Again, this fact suggests that financial access has been the issue above all others and, more than that, this constraint affects more businesses, in particular MSMEs, in Indonesia compared with those in other countries (see Figure 4).

Theoretically, MSMEs seek for funds from internal or external sources. Once they have used all internal sources of funding, they might seek external sources. The financial constraint occurs when a firm that needs more funds to finance investment finds that it is not possible for it to acquire funding from external sources, formal or informal while all available internal finance sources have been utilised.

The World Bank (2008) classifies businesses that do not access external sources of finance into two groups: firms that voluntarily do not access funding, and firms that are not able to do so. Businesses in the first group believe they do not need an external source of financing, or that this is not in line with their customs or beliefs. The second group of businesses are those that need external financing but cannot get it for some reason, such as their risk-return profiles,



Source: The World Bank, 2010.

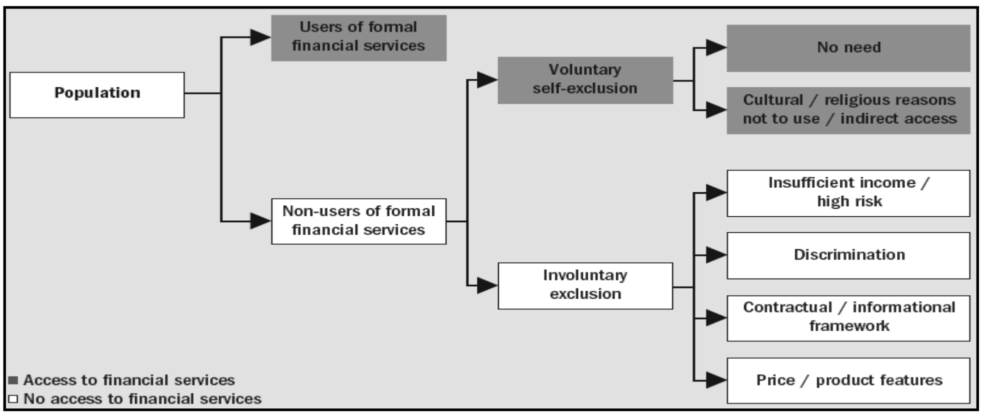
Figure 4. Financing access as an obstacle in some countries (percent firms)

discrimination, unfulfilled contracts or unmatched financing schemes. In most developing countries, including Indonesia, the second group is the more common and members of that group submit fewer financing proposals, receive smaller bank loans and rely more on informal sources of finance (Bigsten et al 2003).

What about Indonesian MSMEs? What are the issues? Most (84.4 per cent) micro and small businesses, for instance, depend heavily on internal financing and only 15.6 per cent seek funds from others (for example, friends or rent-seeking individuals) (BPS, 2006). This phenomenon can also be observed in other countries where small business owners use their own funds or savings to start the business (Mason, 1998; Hernández-Trillo, Pagán and Paxton, 2005). Following from the discussion above, the sections below review some points and seek some identifiable factors to tackle this problem.

Legal status (business licence)

Before commercial banks and other financial institutions approve applications for finance they must ensure that the business is licensed, that is, that it is a legal entity and they must follow procedures for prudential banking practice stipulated by Indonesian law 10 of 1998. Institutions such as Kredit Usaha Rakyat (KUR) (Peoples Business Credit), which was established to enable credit for micro and small businesses, require that borrowers have a business licence and other legal documents. Unfortunately, to have these documents is not a priority for most MSMEs; they give their attention to serving the needs of their market and to repaying their debts. On the other hand, a poorer quality of manager education in MSMEs compared with large firms, reported by Orlando and Pollack (2000), becomes another problem when they have to learn how a licence is to be acquired. A study by Bank Indonesia (2007) reveals that there is



Source: World Bank, 2008

Figure 5. Finance access and users

inadequate access to information about business licences not only because of internal inadequacies by MSMEs, but also because of poor public facilities to disseminate such information quickly, promptly, and cheaply. This study records that approximately 73 per cent of MSMEs do not have any business licence and this, in turn, disallows them from a broader range of financing choices and higher growth rates than otherwise. Hence, this phenomenon leads to the so-called vicious circle of business growth and education.

Poor marketing and financial planning

A good business commonly has financial plans for what investments it will make and how they will be financed. In the literature, financial management is sometimes termed a supporting activity for business marketing programs. Unfortunately, MSMEs often do not make adequate efforts to deal with financial or marketing matters. They are frequently not aware of bigger potential markets they could serve or, in the other cases, they are more than capable of producing goods of a specified quantity and quality but find difficulties in selling them. These problems stem from the failure to identify and estimate the demand for their product, which then contributes to their poor marketing plan. From the financial perspective, the situation leads to an inability to prepare realistic financing plans, for example, for the next one to five years. It is not surprising that 47.7 per cent of Indonesian MSMEs never make any investment or financing plans (BPS, 2006). From the banks or potential creditors view, therefore, MSME business feasibility plans are hard to evaluate and not convincing.

High loan interest rates because of the high cost of capital for banks

Another big obstacle to increased financing for most MSMEs in Indonesia is the high interest rates that they have to pay to banks and other financial institutions. Albeit in 2010, the government of Indonesia (GoI) decreased ceiling interest rates (from 24 to 22 per cent) on some financing schemes, for example, KUR loans to micro businesses; and from 16 to 14 cent for retail and small businesses, but most MSMEs see these rates as still too high and this contention has been confirmed by some analysts. Similarly, using data from around the world, Beck, Demirguc-Kunt and Martinez-Peria. (2008) find that banks are likely to charge higher interest rates for MSMEs than for big firms, and that average interest rates for loans for MSMEs are commonly higher in developing countries than in developed countries. If an MSME needs funds immediately but the banks require complete documentation including a business licence, then the choice for an MSME is between delaying the investment or the contract and making informal financing arrangements. If we consider the fact (see point 1 above) that information regarding licensing is very limited, it is reasonable that most MSMEs will finance their expansion with what they have at hand. Accordingly, their growth rate will be constrained and the opportunity costs will spike.

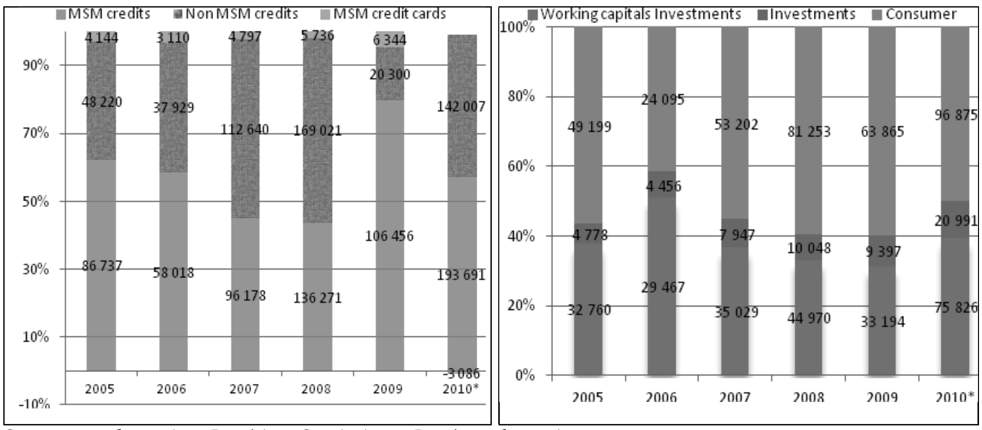
Risk preference and mental attitudes

To access and get the most benefits from finance sources, banks in particular, MSMEs need courage, resourcefulness and thorough projections of their cash flow and their ability to pay back the principal and interest. Once a loan proposal has been approved and executed, MSMEs have to commit and to be prepared to shift their attitude from one of doing business as usual to one that makes the object of their investment their top priority. When they need to deal with a financial difficulty, they might need to go to an external source of finance and should see this as a support for growth rather than a burden. That 47.7 per cent of small and medium firms (BPS, 2006) do not make any business plans for expansion, for establishing branches or for training might indicate that most of them have not been well prepared with competitive strategies for future years and it highlights the lack of professional business attitudes. Furthermore, most MSMEs have not distinguished managerial functions such as operations, marketing and financial management. Many others mix their personal funds with their business funds and recognise their family members as costless employees (Mudrajad, 2008).

2.2 Bank perspectives

Panel A of Figure 6 presents the evolution of credits or loans expansion for the period from 2005 to 2010. Overall, credits (in Indonesian rupiah) to MSMEs steadily increased up to Rp193.7 trillion at December 2010 and total credit from the banking system was at about Rp332 trillion. The

Panel A. MSMEs and non-MSMEs (%) Panel B. Based on utilisation (%)



Source: Indonesian Banking Statistics - Bank Indonesia.
* estimated as of December 2010. Value labels are in Rp billions.

Figure 6. MSME credits or loans outstanding

economic crisis in 2008 slowed slightly the expansion rate of this lending in 2009 with loans to MSMEs contributing 80 per cent of the total. With the notion that most big firms reduced their investment and loan requests, MSMEs as a class proved able to survive the economic downturn that year. In other words, they have become a supporting pillar, at least in maintaining demand for bank loans when other sectors are in deep financial distress.

It is worth examining how the loans have been utilised by MSMEs. Ideally, we would expect that a higher proportion of loans would be for long-term investment (more than one year) or for working capital (less than one year) rather than consumption. During the period 2005 to 2010, however, of every new loan, MSMEs used 8 per cent only for investment, 38 per cent for working capital and the rest, 54 per cent, for consumption (see panel A of Figure 6). This means that only a small percentage has been spent on value-increasing activities, implying that banks disburse more loans for activities that do not give any returns from which to repay outstanding loans. For the banks, this, of course, might not be a big issue as long as the repayments are on time, but one should remember that a business should use external financing to support its growth. Those figures show that investments were not prioritised ahead of working capital and consumption. One possible explanation is that most MSMEs write their proposals for loans in terms of consumption because of their inability to meet the terms that investment loans require, for instance, feasible business plans. In other cases, MSME owners frequently use loans to buy assets (for example, a motorcycle or a car), which are then used for investment and for consumption. The terms, including processing time, are usually more favourable for consumption loans and because the interest differences are not so big between those types of loans, borrowers arguably will be likely to apply for a loan for consumption rather than for investment. The next biggest category, loans for working capital, suggests a financing need that has to be met immediately. Again, this confirms the previous discussion that most MSMEs do not have good financial plans and, for this reason, they apply for loans when a situation demands it, that is, they will only apply for a loan when they feel it is highly needed and they have been prepared for all the consequences.

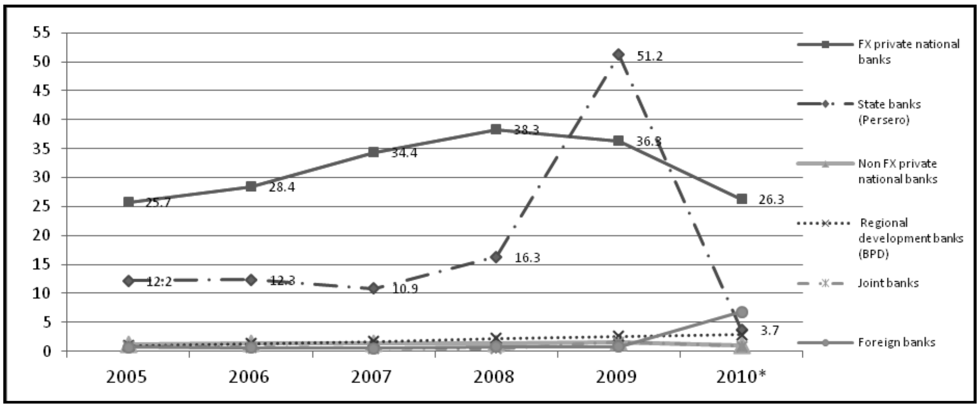
On the other side of the ledger, banks deal with the fact that budgeted loans cannot be fully absorbed by MSMEs. Figures 7 shows undisbursed loans, which is a financing facility that has been provided by banks to the borrowers but the funds have not yet been withdrawn.[6] The average of

[6] There are two types of undisbursed loans: *committed*, which banks may not cancel once it has committed to the borrower; and *uncommitted*, which a bank has the right to cancel at anytime when the outstanding loan has deteriorated to substandard, doubtful or even loss. Bank Indonesia usually acknowledges the first type as part of the real undisbursed loans. The adoption of Statements of Financial Accounting Standards (PSAK) no. 50/55 by banks will eventually determine the reported level of undisbursed loans. Because this new standard started on 1 January 2010 but will not be fully effective until 2012,

MSMEs undisbursed loans over the period 2005 to 2010 range from Rp42 trillion to Rp94 trillion with the biggest proportion (60 per cent) contributed by big national banks and followed by publicly listed government banks (state banks), foreign banks, regional development banks (bank perbangunan daerah [BPD]) and other small private banks. This statistic shows that the first two types of banks distribute the largest amount of loans (in rupiah) and record the highest amounts of undisbursed loans. State banks get involved in various MSME financing programs and have a huge potential to disburse the loans, yet the disbursement is still far from optimal.

The above discussion leads us to ask why there is such a big gap between credit supply by banks and the amount used by Indonesian MSMEs. We might argue that the gap occurs because of some plausible factors, such as the high cost of borrowing, undelivered credit because of informational or geographical obstacles, the inability of MSMEs to comply with the required terms and conditions, banks' reluctance to serve the MSME segment, or worsening MSME loan performance. Clearly, if the last factor is true as suggested by some analysts, we can expect that an increase in non-performing loans, particularly by MSMEs, will become evident.

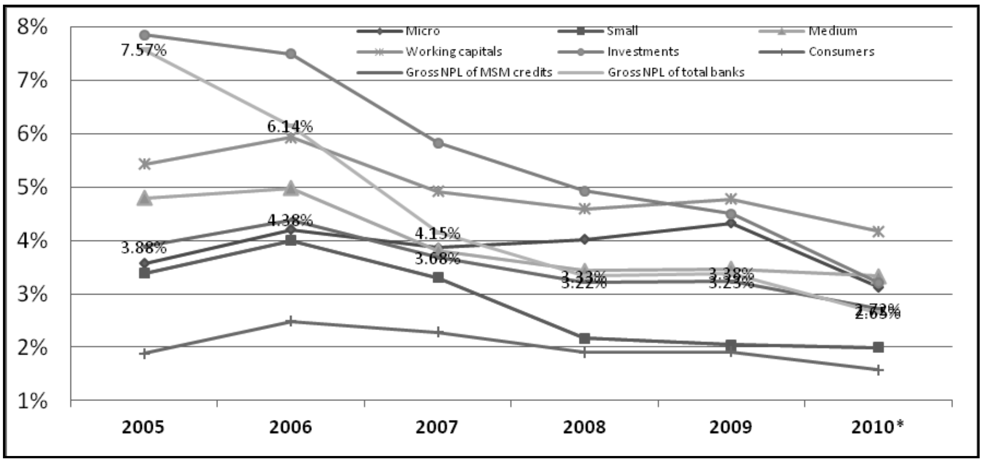
Figure 7. Undisbursed loans of MSMEs based on bank types (Rp trillions)



Source: Indonesian Banking Statistics-Bank Indonesia.

*estimated as of December 2010.

the author does not discuss the effects on undisbursed loans in more detail. Besides, it is not the main interest of this paper.



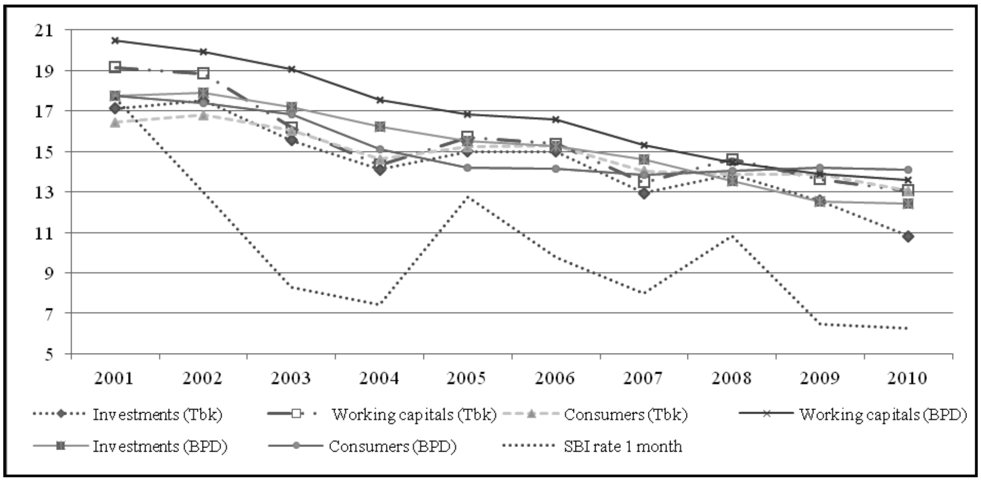
Source: Indonesian Banking Statistics - Bank Indonesia.
* Estimated as of December 2010

Figure 8. Non-performing loans of MSMEs and total banking system

Non-performing loans (NPL) comprise all outstanding credit that has problems, is doubtful, or is in default (see Figure 8). Overall, the Indonesian banking system has shown an improvement, indicated by a decrease in NPLs from 7.57 per cent in 2005 to 2.65 per cent in 2010, with an annual average of 4.54 per cent. In the MSME sector, the NPL rate has decreased from 3.88 per cent (2005) to 2.72 per cent (2010), with an average of 3.52 per cent. To be classified as healthy, a bank must ensure that its rate of non-performing loans does not exceed 5 per cent; if greater than 5 per cent the bank is subject to tight regulatory supervision and to mandatory corrective action (see Bank Indonesia regulation (PBI) 6/10/PBI of 2004 on the rating system for commercial banks). These data show that, on average, MSMEs have better repayment records than that of big businesses. Furthermore, MSMEs also show more resilience in periods of economic downturn compared with their larger counterparts. Berry et al. (2002) observed that, during the Asian economic crisis, many small-scale firms in Indonesia fared better than larger ones. Similarly, Patten, Rosengard and Johnston, (2001) find that micro-enterprises were of all businesses the most likely to repay their loans to Bank Rakyat Indonesia. Based on this information, the assumption that MSMEs are more likely to have repayment problems becomes questionable.

We can further examine NPLs for MSMEs based on the loan's stated purpose. Figure 8 shows that investment and working capital loans account for most NPLs, with averages of 5.63 per cent and 4.97 per cent respectively, followed by loans for consumption. This is interesting because on one side we note that MSMEs have a better record of repayment for loans for consumption, the type that also shows the highest outstanding balance as well as net expansion levels (see Figure 6), but on the other side MSMEs exhibit a notable problem repaying investment and working capital loans and there is an NPL rate of more than 5 per cent, above which the loans come under a tight regulatory supervision. It is arguable that further examination needs to be made of this phenomenon. One can argue that information asymmetry might be more pronounced during investment loan assessing than in other types of loan. In other words, bank officers might not be able to capture accurately all relevant information from potential borrowers, or because of information superiority these borrowers take advantage of bank officers' lack of knowledge on the proposed investment.

The smaller proportion of MSME investment loans compared with other types of loans raises a question of the MSME's ability to manage investment and financial decisions. On this matter, banks should carefully consider the increasing risk that must be taken into account when setting the interest rates for loans. Theoretically, the interest rate will be estimated from base interest rates, administrative costs and risk premiums related to the business' characteristics and prospects. If banks perceive more risk with MSMEs, they will set an interest rate for the loan that is higher than the prime lending rate. Figure 9 presents decreasing trends from 2001 to 2010 on interest rates, in particular, risk-free rate of return (proxied by Sertifikat Bank Indonesia-SBI rate), loan interest rates from publicly listed state-owned banks as well as from regional development banks (BPD). For 2010, it is noticeable that interest rates have varied widely from 11 to 15 per cent.



Source: Indonesian Banking Statistics - Bank Indonesia, 2011

Figure 9. Average loan interest rates at publicly listed state-owned banks (Tbk) and regional development banks based on utilisation (per cent)

2.3 Other issues

The reputations of MSMEs regarding their capability and financial behaviour greatly affects the estimation of the cost of a loan charged by banks. Practically, banks should consider a variety of factors when evaluating loan proposals; factors such as capital, capacity, character, conditions and collateral, known as the 5C, that eventually make the estimated interest rate become too high. A bank, however, should bear in mind that charging higher interest rates might not always be the best decision for the bank itself because this could lead to adverse selection problems. If a bank increases the interest charge, a potential borrower with a good credit rating will not borrow funds from this bank because they can find another bank that offers a better rate in keeping with the borrower's good credit record. The first bank, therefore, would lose potentially good borrowers simply because it had increased the interest rate. Those customers remaining, as a group of potential borrowers, would be those with limited or poor capacity for loan repayment, that is, those at a greater risk of defaulting. This group of course always tries to convince a bank to lend by promising high returns on high-risk investments. Overall then, increasing interest rates could result in adverse client selection, that is, the potentially reliable borrowers will leave the bank but the high-risk borrower might deceive the bank thus increasing the risk for the bank (see Stiglitz and Weiss, 1981; Dell'Ariccia, Friedman and Marquez, 1999; Marquez, 2002 for more discussion).

In other cases, problems occur when loans have been approved and the funds withdrawn by the borrower, but the borrower has personal interests that lead to the loan being misused, that is, to serve purposes other than those stated on the loan proposals. The moral hazard problem could lead to the misuse of the loans where the principal and interest repayments will no longer be of concern to a borrower. This is mainly the case with financial linking programs by which the GoI distributes credit through state and rural banks. Some MSMEs falsely assume that such a financing scheme is a sort of grant with no obligation to repay (SMEDC, 2002). Unfortunately, the amount of the loan is commonly very small; for example, the average micro or small business loan through the KUR was about Rp7.15 million in 2009, and this means that banks must bear a high cost to settle should a loan become bad. For this reason, some banks might be reluctant to lend to small businesses. This suggests that banks should pay more attention to monitoring loans and intensifying lending relations to ensure regular and prompt repayments rather than rely on post-default actions, such as debt restructuring or recovery action.

We also have to consider some aspects of MSME–bank relations:

1) Many MSMEs are without proper financial management, including the 47.7 per cent that never pre-

pare financial plans (BPS, 2006), making it difficult for banks to evaluate an MSME's financial position and business feasibility. The gap of information (information asymmetry) between banks and potential MSME borrowers is so high that banks might simply increase the lending interest rate to compensate for the higher uncertainty of an MSME's financial position and standing. As consequence, banks use a one-size-fits-all formula to calculate the lending rate and for this reason, many reliable MSMEs will pay interest rates higher than they expected. Ideally, the presence of a reference agency, such as a credit bureau or other credit rating agency, could facilitate banks to get information more efficiently about potential borrowers. The current reference agencies should elaborate the benefits of membership of MSME centres, which can help potential borrowers who need to provide soft or supporting information in addition to quantitative and accounting information. The MSMEs centre is the association of MSMEs owners by which they commonly can get benefit from sharing knowledge and skill as well as market information from each other. This association also frequently involve in credit programs launched GoI and other business loan transactions so that they hold important information on their members. This effort can mitigate problems from information asymmetry and at the same time result in less cost for the banks. Also, the GoI, in particular, the Ministry of Cooperatives and SMEs, needs to urge MSMEs to get their business licensed because this could ease the loan application process by making the historical credit data on any MSME readily available.

2) Banks need adequate references from their internal credit assessors or from external credit agencies before making credit decisions. In fact, MSMEs so far are not subject to thorough surveillance by credit rating agencies for some reason. Theoretically, those agencies would not only provide additional information on borrowers' risk profiles but also allow the banks to make more accurate credit risk assessments regarding rating positions, historical or industry performance, and the MSME's business prospects. The *Sistem Informasi Debitur* (SID), the debtor information system that has become widely known as Bank Indonesia checking, was introduced in 2007; previously banks could not access such credit information from other banks that had been nominated as referees. The integration of SID is proceeding but only a small proportion of the 60 million MSMEs has been integrated. On the other side, a large number of rural banks and non-bank financial institutions

(NBFI) are still continuing this integration, hence raising concerns about how much longer it will take to improve the access to finance by MSMEs. Excepting MSMEs from SID checking, for example, for loans of up to Rp20 million, is a temporary remedy because the MSMEs have to pay a high interest rate instead (22 per cent for KUR in 2010). A study by the International Finance Corporation (IFC, 2009) suggesting the benefits of credit reference agencies to reduce MSME obstacles to external financing highlights the importance of SID integration for MSME development.

3) Most MSMEs are in rural or suburban areas; big firms are likely to be centred in the larger towns. This geographic dispersion of MSMEs increases the costs of marketing and other operations for banks; it increases the time needed to process loan applications and requires more staff, in particular, dedicated loans officers. This is a more serious problem in remote areas where road and transport infrastructures are far from adequate.

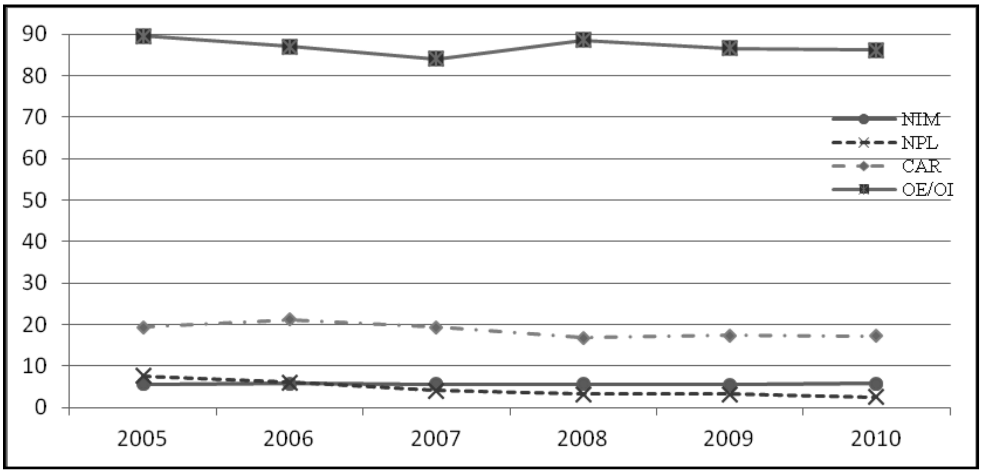
4) The average values of loans proposed by MSMEs are usually very small and so, too, are the ceiling or maximum amounts they may borrow. This means that the banks have to bear higher unit costs on MSME loans than they do on loans to big firms. Hence, banks need to take into account additional charges when calculating interest rates for loans. The interest charge in 2010 for a micro-business loan through the KUR was an effective annual rate of 22 per cent if the amount was equal to or less than Rp5 million, but the interest charged was 14 per cent if the value of the loan was more than Rp5 million (see Figure 9).

5) The fact that many Indonesian banks and non-bank financial institutions (NBFI) set such high interest rates on loans should be carefully examined. Banks and NBFIs receive funds from depositors who want a high rate of return. If a bank reduces the interest rates, *ceteris paribus*, depositors would withdraw their money from this bank and put it in another bank that offers a better rate of return. Therefore, the bank should maintain the interest rate high enough to keep their current customers and attract more new depositors. This popular strategy, however, commonly leads to higher cost of funds for borrowers and eventually forces the bank to allocate loan funds to high return projects including MSME loans. Indonesian banks have to ensure that they are not deemed inefficient. The two measures of efficiency are the ratio of commercial banks' operating expenses to operational income (OE to OI) and the net interest margin (NIM), which in 2009, for example, were

86.14 per cent and 5.56 per cent respectively. These numbers are much higher than those of Singapore, Malaysia, Thailand and the Philippines where the ratios of OE to OI range from 32.7 per cent to 73.1 per cent and NIM ranges from 2.3 per cent to 4.5 per cent.

Figure 10 shows the inefficiency prevailing in the Indonesian banking system as described by OE to OI ratios that range from 84 per cent to 89.50 per cent during the period 2005 to 2010. Experts suggest that inefficiency in banks might be related to overstaffed offices, high administrative and overhead costs, or other expenses that are beyond the scope of this paper. Greater NIM ratios, with an average of 5.68 per cent, confirm that our banks are still far from competitive and are charging high interest rates to MSME borrowers.

6) Currently, the involvement of NBFIs, such as cooperatives and other informal financing institutions, becomes imperative because the wide geographical dispersion of MSMEs is not always matched by the presence of bank branches in their regions. In most cases, financing schemes by the GoI and its agencies inevitably have to be undertaken using distribution methods in which banks and cooperatives take an intermediary role in passing the funds from the GoI and its agencies to MSMEs. (See decree of the Minister of Cooperatives and SMEs 03/Per/M. KUKM/III/2009 concerning guidelines for linking programs between commercial banks and cooperatives.) In executing linking programs, if banks have already



Source: Indonesian Banking Statistics - Bank Indonesia, 2011

Figure 10. Net interest margins and operating expenses to operating income ratios of Indonesian commercial banks

set high interest rates, cooperatives and other intermediaries that serve as direct lenders to MSMEs have no choice but to pass on the higher interest rate charges to MSMEs. In programs where cooperatives serve as channels for distributing loans, MSMEs will be charged additional fees that have been a modest way to cover operating costs of the cooperatives because they do not have many sources of revenue. This practice has made the loan interest rates hardly affordable and is one of the main obstacles to improving MSME's access to finance.

During the period 2005 to 2010, Indonesian banking showed a growing interest in supporting the development of MSMEs as shown by the expansion rate and outstanding balances in this sector. Yet a high level of undisbursed loans, suggesting a wide gap between supply and demand of financing, calls for more effort by all stakeholders. The relatively small number of NPLs by MSMEs is evidence that lending to MSMEs is low risk. However, the two parties to lending transactions, banks and MSMEs, need good strategies that will enable MSMEs to overcome their financing obstacles and as well to increase the opportunities for banks to serve small businesses and earn risk-adjusted returns. These strategies should be comprehensive, sustainable and supported by all stakeholders.

III. PROPOSED FINANCING MODEL WITH CAPACITY BUILDING

In the theory of principal–agency relations, banks and NBFIs are agents that receive funds from depositors and allocate them for feasible investments in the best interest of depositors. If banks perceive more risks, they might set higher interest rates on MSMEs because it will be in line with stakeholders' interests and prudential banking regulations. The feasibility of an MSME's businesses plans often does not ensure financing from banks. For that purpose, a plausible financing scheme, such as is described in Figure 11, is expected to remove obstacles to financing, to mitigate emerging risks and also to improve the capacity building of MSMEs.

The following sections highlight some essential points that need to be addressed to achieve a better access to finance:

1) The preparatory phase includes those activities that need to be done before a loan is granted. In addition to financial reports, banks should obtain information from the debtor information system (*Sistem Informasi Debitur*, SID), MSME centres and from historical records in the bank itself (if the potential borrower is a bank customer) regarding the MSME's performance. This data gathering should allow loan officers to get information on credit risks, including the probability of default,

that is as accurate as possible so the interest rate matches the risks. Most banks currently utilise SID data, but they do not fully utilise other information sources. MSME centres or cooperative are the best known sources for soft information on their members; information that is unique and might need to be taken into account, such as personality, reputation, consumption behaviour, relations with the centre or cooperative, and other pertinent information about their lives.

2) The post-lending phase focuses on monitoring the credits or loans and on risk mitigation starting at the point when the loans are granted. This phase should be to ensure that MSMEs maintain their capacity to service their debts and so minimise the risk of default. During this phase, however, a turbulent business environment could change the feasibility of projects causing the banks to consider rescheduling or other corrective action. Because the average value of loans to MSMEs is quite small and because of their geographical dispersion, a large number of banks regard frequent on-site monitoring as an expensive procedure. Banks then rely on credit insurance to mitigate credit risks. In this regard, there is another issue: because the information on any one MSME is not readily available to insurance companies, they are likely to set a higher and a flat-rate premium for most MSMEs to cover their lack of pertinent knowledge and uncertainty. Accordingly, high quality borrowers have to pay more than expected (are over-charged) for insurance premiums than is warranted by their credit risk; low quality borrowers need

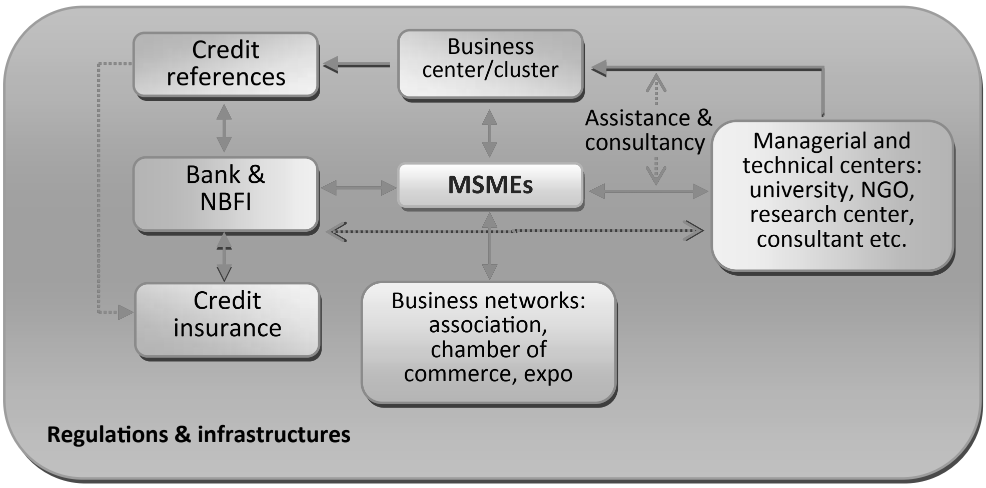


Figure 11. A holistic financing model

only to pay lower premiums (undercharged).

3) Business networks are needed for all businesses including MSMEs. In fact, many MSMEs are more than capable of making various products but many have problems marketing. Again, there is information asymmetry between MSMEs and the market from which intermediaries or middlemen make profits. This situation precludes MSMEs from direct information about their markets with the consequence that their marketing plans are unreliable and their profit margins small. MSMEs should be directly involved in their own development rather than being the objects. Market information should be available not only to the small number of businesses that take part in an exhibition but also to the those who are members of an MSME centre, a business association or a chamber of commerce. Hence, all new and relevant market information from business networks and associations, government bodies or market surveys should be prompty made available to the relevant MSMEs. For this purpose, the Ministry of Cooperatives and SMEs should take the lead in shaping an integrated system with active involvement by all parties as depicted in Figure 11. A continuously updated system should give knowledge and ideas on how the market behaves and hence reduce the asymmetry of market information.

4) It is clear that SID and other reference agencies will affect the accuracy and sensitivity of credit risk measurement as well as the consequent interest rates to be charged. However, we need to push Indonesian banks to be more efficient, to lower their net interest margins (NIM) or improve their ratios of operating expenses to operational income (OE to OI) and to remove unnecessary perquisites or luxury expenditures. This should be in the minds of bank managers, business associations and regulatory bodies.

5) To prevent the vicious circle as aforementioned (in section 2.1), improving financial access should be accompanied with capacity building efforts to improve skills, to acquire new knowledge and methods and to adapt to business environment changes and challenges. Such efforts ask for more contributions from MSME centres, academics, researchers and other non-government institutions, especially to address specific or technical problems faced by MSMEs, as suggested by Nichter and Goldmark (2009). Big firms also provide MSMEs with benchmarking information from their best practices. Those parties might provide expertise in areas such as financial or marketing management, operational and technical processes, contract

preparation, business licensing and other legal matters, and even language skills.

Continuous assistance and consultancy programs are expected to solve current problems overtime and to improve the decision-making of MSMEs. From the financing view, these programs should improve business' legal status, managerial skills and planning, which in turn will increase their ease of access to financial help.

IV. CONCLUSION

The role of MSMEs in the Indonesian economy is very important, in particular, to provide jobs, to increase national income and to be an economic buffer. In fact, their prospects, potential and contribution have not been accompanied by good access to financial support. We find that the obstacles stem from internal factors (legal status, managerial skills, weak bargaining power and personality) or from external factors (banking practices and regulations, business environment and the behaviour of other stakeholders.

Albeit various programs to help and encourage MSMEs have been launched, it is generally known that most of those programs were applied inconsistently and failed to pay attention to a broader perspective. We find that the Indonesian banking industry has shown a willingness to provide loans to MSMEs, but the regulatory environment and standards of efficiency have been notably burdensome. On the other hand, MSMEs also have their own burdens; one is that it is almost impossible for them to get the full benefit from available undisbursed loans. With the improving performance of the Indonesian economy, it is now time to rethink and revise the current programs to boost MSME's access to and use of finance. Most important, this paper argues that a promising financing model should be able to meet the interests of MSMEs and banks, which will lead to win-win solutions rather than a zero-sum game. This model also considers participation from related parties that are the important complementary subsystems, such as big firms, academia, and business networks. Hence, a more comprehensive financing model, along with capacity building and supported by a broader range of stakeholders, becomes imperative for the development of MSMEs in Indonesia.

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