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A Cross-Country Survey on SME Financial Access and Implications for Thailand

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A Cross-Country Survey on SME Financial Access and Implications for Thailand*

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1. Introduction

It has been well accepted that small and medium size enterprises (SMEs) sector has been, and will continue to be, an important driver of the Thai economy, both in terms of economic growth and employment opportunities. However, SMEs still face a number of challenges, one of which is the lack of adequate financial access. SMEs tend to be financially constrained, making it difficult for them to realise their maximum potential and contribute fully to economic development.

How SMEs manage to obtain financing smoothly is of great interest both within and outside Thailand. Success or failure in obtaining finance exerts a far greater and more direct impact on the fate – i.e. survival or exit – of SMEs, which are primarily dependant on loans from financial institutions, than on the fate of major companies, which have access to diverse forms of financing including the issuance of shares and/or bonds.

The problem of inadequate SME financing is by no means unique to Thailand. In both developed and developing economies, bank financing to SMEs is not perceived to be significant (World Bank 2007). Therefore, there is still much room for enhancing SME financial access. Lack of access to finance is often the critical mechanism behind both persistent economic inequality and slow economic growth. Research indicates that access to finance promotes more firm start-ups; and it is smaller firms that are often the most dynamic and innovative (World Bank 2008). Thus, financial sector reforms that promote broader access to financial services should be at the core of the development agenda.

In formulating Financial Sector Master Plan II (FSMP II), the Bank of Thailand recognises the important role SMEs play in the Thai economic and social development and the problem regarding financial constraints that they are facing. In

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this regard, the Bank has made a commitment to enhancing financial access for SMEs, explicitly integrating it into the FSMP II.

This study has three main objectives. Firstly, it reports the current status of SME financing in Thailand, particularly financing in the banking sector. Secondly, it discusses possible strategy to address the problem of insufficient SME financial access. And finally, the study puts forward policy direction and recommendations to enhance SME financing in Thailand.

The paper is organised into four main sections. Section 2 outlines the overview of SME financial access in Thailand and current gap in SME financing. Section 3 then discusses cross-country experiences and key lessons on SME financing. Policy discussion and recommendations are carried out in section 4. Section 5 presents the conclusions of the study.

2. Overview of SME financial access in Thailand

2.1 SME in Thailand

SMEs make up a large proportion of all business registrations in Thailand, accounting for 99.7% of total number of enterprises in Thailand (OSMEP 2009). In 2008, the numbers of small enterprises (SEs) stood at 2,815,560 and medium enterprises (MEs) at 12,073, while large enterprises accounted for 4,586 firms. The largest portions of SMEs engage in trade and maintenance business (46.7%), followed by service sector (33.8%) and production sector (19.3%), respectively. It is reported that majority of SMEs in Thailand are family-run or one-man owned.

SME sector indeed plays an important role in providing employment for the economy, accounting for 8,863,399 employees, or about 76.7% of total employment in Thailand (OSMEP 2007). Its contribution to GDP is also significant, with 3,446,589.2 million baht, equivalent to 37.9% of GDP in 2008. SEs contribute about 2,295,711.5 million baht and medium enterprises MEs contribute 1,150,877.7 million baht to GDP. Between 2004 and 2008, the shares of SME contribution has remained relatively stable around 39% of GDP, but declining slightly recently. Evidence shows that production sector accounts for the largest part of SME's contribution to GDP in 2008, followed by service and trade and maintenance sectors. Furthermore, SME plays an important role in Thailand's export, accounting for 28.9% of the total export value.

2.2 Challenges in SME Financing

However, SMEs in Thailand face a number of important challenges, covering key areas such as inadequacies in technology; research & development and innovation; management; distributing channels, and access to finance (Chaiyapat and Watsaya 2005). With regard to constraints on financial access, past studies found that the reported main obstacles can be divided into two main groups: barriers perceived by SMEs and barriers restraining financial institutions from lending to SMEs.

From the SMEs' point of view, it has been reported that lack of information and advice from financial institutions, complexity and inconvenience related to loan application process, inadequate qualification of SMEs, expenses/fees and interest rates charged, and lack of collateral are the main obstacle to access to finance.

From the financial institutions' perspective, the main obstacles for lending to SMEs include the following factors: inadequate collateral; lack of business experience; inadequate management; unreliable accounting system; lack of business planning, firm's NPL history; high transaction and operational costs per SME loan application; strict government rules and regulations regarding loan lost provision and credit history in credit bureau. It is also found that the capital market for SMEs is still in the infant stage (Chaiyapat and Watsaya 2005 and; OSMEP 2007), with small number of SME firms listed in the Market for Alternative Investment (MAI) and that only a few SMEs are qualified for listing on the MAI (ADB 2001). This is reflected in small value in the market.

Table 1 Main Challenges to SME financial access

SME perspective	Financial Institutions' perspective
• Lack of information and advice from FIs • Complexity and inconvenience related to loan application process • Inadequate qualification of SMEs • Expenses/fees and interest rate charged • Lack of collateral	• Inadequate collateral • Lack of business experience • Inadequate management • Unreliable SME accounting system • Lack of SME business planning • SME's NPL history • High transaction and operational costs per SME loan application • Strict government rues and regulations

Source: OSMEP 2007

It can be said that there are still considerable gaps between funds provided by financial provider and SMEs' needs. The gap can be said to be a result of information asymmetry and high transaction costs associated with SME financing. Financial institutions consider SMEs as high risk borrowers due to lack of transparency in their accounting practices and failure to develop effective business plan, making it difficult to judge their credit worthiness. With these perceived high risks, commercial banks require high value of collateral, which in turn makes it difficult for SMEs to borrow from banks. At the same time, SMEs find it hard to get access to finance from commercial banks mainly due to lack of information and financial advices and lack of collateral

2.3 Past Policy Recommendations for SME Financial Access

In response to the limitations mentioned above, past policy recommendations have included the following key areas:

2.3.1 Financial Product for SMEs

1. Encourage relationship-based lending for small and start-up firms to address the information asymmetry
2. Encourage financial innovations
3. Encourage usage of credit scoring
4. Improve credit assessment capability of SME loan officer
5. Simplify loan application process
6. Further study on the role of micro enterprises and microfinance, including definition for micro enterprise.
7. Improve risk management of financial institutions
8. Strengthen credit guarantee system to support private sector lending, with attention paid to moral hazard problem
9. Enhance private venture capital for SMEs

2.3.2 Information Infrastructure

10. Improve credit information to address information asymmetry problem
11. Improve availability of information and financial advice for SMEs

2.3.3 SME Capability Enhancement

12. Increase SMEs financial literacy
13. Enhance SME capability through seminars and trainings
14. Encourage entrepreneurship and innovation through business incubation services and risk sharing (such as government support for venture capitalists)

With regard to the first key area of financial product provision for SMEs, it has been suggested that commercial banks should be the main player in SME lending, while government may lend support to commercial banks in enhancing SME financial access through efficient credit guarantee scheme. Government-owned specialised financial institutions (SFIs) should focus on SMEs unable to access finance from commercial banks. It is suggested that while SFIs play an important socio-economic role during market shocks, in the long-run, Thai authorities may consider limiting their financial support to SME financing and relying more on market forces.

In terms of the second key area of information infrastructure, substantial progress has been achieved with the development of credit bureau. However, there remains much work to be done to improve the quality of information available in the system and to establish the legal framework with regard to how the information is accessed and used. Government should support development of credit bureau to assure that corporate and consumer credit information are adequately available.

To address the third key area, the government advisory services for SMEs should be more conveniently accessed and efficiently organized. In relation to this, it has been proposed that One-Stop-Shops (OSS) be introduced to provide widespread access to information for SMEs (ADB 2001). The aim of an OSS is to provide in a single location a coordinating and sign-posting information services for SME. Furthermore, it has been recommended that an SME portal site be developed and maintained on the internet to allow all Thai SMEs equal access to information.

2.4 Current Conditions in SME Financing

Findings from the recent internal studies of the Bank of Thailand (please see Data Management Group of Bank of Thailand 2008; and Norasi and Dhidaporn 2008) confirm that enterprises that face the most severe constraint on financing are small and start-up enterprises as well as SMEs with past NPL record. Detail features of SME target groups will be discussed in the forthcoming OSMEP (2008) study.

3. Cross-Country Experiences and Key Lessons

Cross-country studies show that firms in developing countries, especially SMEs, use formal sources of finance much less than similar firms in industrial countries (Beck, Demirgüç-Kunt, and Maksimovic 2003 cited in de la Torre and Schmukler 2007). Survey data indicate that less than 20 % of small firms use external finance, about half the rate of large firms. Furthermore, it is reported that at least 40% of firms view access and cost of finance is an obstacles to their growth. This section aims to describe some recent cross-country experiences to broaden access to credit, including the role of public sector in financial development.

In order to address the inherent information asymmetry, which often lead to high interest rates and collateral requirements for SME loans, and high transaction costs associated with SME loan applications (Demirgüç-Kunt 2006:15), measures to improve credit access have been centred around 1) applying business model that better suit characteristics of micro enterprises and SMEs 2) enhancing information infrastructure, 3) providing credit guarantee and 4) other public supporting scheme and infrastructure.

Experiences and key lessons from other countries are outlined in this section. Our discussion here is divided into four sub-sections. First, we survey different models for SME lending technologies. We then discuss about information infrastructure and credit guarantee scheme. Some examples of government supporting schemes in various countries are then presented in the last sub-section.

3.1 SME Financing Business Models

SME lending technology can be divided into two main groups: first; SME lending through financial intermediaries and second; direct SME financing such as via capital market, bond market and venture capital.

3.1.1 Lending Technology through Financial Intermediaries

In this study, the focus will be on SME financing through financial intermediaries. In general, lending technology can be further classified into two main approaches, namely; transaction lending and relationship lending (Berger and Udell 2004). [1]

Transaction lending is a lending technology which is mainly based on 'hard' quantitative data in the screening and selecting process for loan extension. Majority of private sector commercial banks use this technology. A number of distinct transaction technologies used by financial institutions include financial statement lending, which is suitable for information transparent borrowers, while other technologies such as small business credit scoring, asset-based lending, factoring and fixed assets leasing can be applied to more information opaque borrowers (reference).

On the other hand, relationship lending is a lending technology which is based on 'soft' qualitative data. Loan officers accumulate information on potential borrowers over the years of interaction. This type of lending technology can help information opaque borrowers, who do not have sufficient formal data on their credit record, accounting practice, etc., to gain access to loans. However, knowledge and information on lenders are less transferable than those in transaction lending. This type of lending technology is common in microfinance institutions (MFIs)

Microfinance is the category of financial services offered to lower-income people, where size of the transaction is usually small, typically lower than the average GDP per capita (101,304 baht in case of Thailand, based on UNDP estimates in HDR 2007). Starting in the 1970s, well-know pioneers, such as Grameen Bank in Bangladesh and ACCION in Latin America, demonstrated that poor people can be credit worthy.

In the past recent years, commercial banks have indeed been playing an increasingly important role in many financial services across the world (CGAP 2005). With rising competition, there are more incentives for commercial banks to enter into new, less tapped, markets[2]. A recent CGAP survey identified 225 commercial banks and other formal financial institutions that are engaged in microfinance (CGAP 2005:1). Some have succeeded in becoming highly profitable, while some have not. Mains reasons for failure are said to be due to bank's lack of adequate understanding of the market or trying to move too quickly.

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[1] Lending technology is a unique combination of 1) primary information source, 2) screening and underwriting policies/procedures, 3) loan contract structure, and 4) monitoring strategies/mechanisms.
[2] Experience in making commercial banks opening up branches in rural areas may not prove to be the most inefficient way to enhance financial access as can be seen from, for example, the experience of the 1:4: rural branch opening policy in Mexico and India.

In what follows, we will outline some innovative business models which combine both lending technologies in order to better provide financial services to micro enterprise and SMEs. While there is no single approach for commercial bank entering the market for microfinance, we can divide the current approaches into two main categories: direct lending and lending via existing providers.

1) Commercial banks providing microfinance directly to clients

Some banks enter microfinance market by expanding their retail operations, creating an internal unit or launching a separate company, such as a service company or a specialised financial institution. Four main types of business models by which commercial banks provide loans to small firms directly are outlined below.

1.1) Internal Microfinance Unit

Under this model, the bank provided microfinance services within its existing institutional structure, by forming a specialised unit with the bank. Banks may give further autonomy to the internal unit by creating separate systems, loan procedures, staffing policies and governance.

The Agricultural Bank of Mongolia, which chose an internal unit, has the largest branch network in Mongolia with 379 locations (93% in rural areas). It successfully emerged from state ownership following a turnaround strategy launched in 1999. As of February 2004, micro and small loan portfolio accounted for 39 percent of total loan outstanding. A return on equity stood at 44.2 percent in 2003 and an arrears rate consistently below 2 percent (Dry, Morrow and Yong 2004 cited in CGAP 2005). The Agricultural Bank is considered one of the most profitable banks in Mongolia.

Another example is the state owned Bank Rakyat in Indonesia. The integral part called Unit Desa has been established to replace direct agricultural credits by broad base credit for any kind of rural activities. The unit operates as a separate profit centre, relying on village agents with substantial knowledge and have access to information to monitor loans. Borrowers provide references and loans extended are often uncollaterised. Staff salary structure is designed to ensure that loan officer provide and monitor good loans, payment is also linked to branch's profitability. The Unit Desa is self-sufficient and has become profitable after a few years of initiation.

The internal unit model is seen throughout the world, including Akiba Commercial Bank in Tanzania; Banque du Caire in Egypt; Banco Solidario in Equador; Cooperative Bank in Kenya; and Banco do Nordeste in Brazil.

1.2) Specialised Financial Institutions

Under this model, bank sets up a separate legal entity, a specialised financial institution (SFI), to undertake microfinance activities. This new institution is licensed and regulated by the local banking authorities, usually as a finance company or other non-bank financial institution. It may be wholly-owned or a joint venture with strategic partners and investors. SFI may use parent's infrastructure or be more independent and stand-alone.

An example of the model is Financial Bank in Benin. In 1995, it started microfinance operations by offering retail housing and consumer loans to salaried workers and by wholesaling loans to microfinance institutions (MFIs). In 1998, the Bank expanded its microfinance business by creating an internal unit, and later in 2001 the bank spun off this unit as Finadev, a specialised financial institution. Finadev developed its own procedure for loan review, information services, human resources etc. Finadev reached a return of equity (ROE) of 5.2 percent, while maintaining high portfolio quality with portfolio at risk (PAR)> 30 DAYS of 1.05 percent.

A number of other specialised financial institutions have been created in the past recent years such as Jordan National Bank's AHLI Microfinance Company; Jamaica National Building Society's JN Small Business Loans; Banco del Estado de Chile and Banestado Microempresas; and Teba Bank and Teba Credit in South Africa.

1.3) Microfinance Service Company

In a service company model, the bank forms a non-financial legal entity (a service company) to provide micro loan origination and portfolio management services. A service company usually undertakes more limited operation than above SFI model, and is not regulated by banking authorities. Loans and services offered to services company clients are registered on the books of parent's banks. The service company typically maintains separate corporate identity, in terms of governance, management, staff, and system (although information systems are usually linked directly with those of the bank).

The company may be wholly or partly owned by the bank. Its structure offers the bank ability to involve technical services providers with expertise in delivery of microfinance and other interested investors as equity partners. It may operate in an area within bank branches or in separate offices close to the bank.

An example of this model is the SOGEBANK, one of the largest commercial banks in Haiti, which entered into microfinance market. It was strategically positioned to enter this market because it held a significant share of savings from small savers and had developed capacity to process high transaction volume. To reduce risk, in 2000, SOGEBANK created SOGESOL as a joint venture with strategic partners. SOGESOL did not need its own bank license, thereby avoiding authority's reporting requirements. Besides credit, through similar arrangement, SOGESOL can offer its clients savings, payments, and remittance-related services. Under the SOGEBANK-SOGESOL services agreement, SOGEBANK disburses all loans and maintains the loans on its book. For its loan origination and portfolio management services, a net fee is paid to SOGESOL. After three years of operations, SOGESOL was serving over 6,000 active clients and managing outstanding portfolio valued at cost to US$ 3 million. Average ROE was over 30 percent for those three years.

Other examples of the service company model include Banco del Pichincha's Credife in Equador and Banco ABN-AMRO Real's Real Microcredito Asessoria Financiera in Brazil.

1.4) Correspondent banking

Corresponding banking model refers to an arrangement where commercial bank have an agreement with a non-financial institution such as convenient store, lottery houses, petrol stations or post office in order to use them as outlet, distributing the bank's products. Transaction and payment activities are typically conducted at the corresponding outlets, while credit services have been more restricted, often limiting to loan and credit card applications. Successful example of correspondent banking arrangement in expanding banking outreach is in Brazil (Reserve Bank of India 2005).

2) Work through existing providers

Another option is to work with existing financial service providers, taking advantage of the relationship lending skills of local financial institutions. Three main business models have been identified.

2.1) Outsourcing retail operation

In this model, bank contracts a high-calibre MFI to originate microfinance loans that are registered on the bank's book, to make credit decisions, and to services the loan portfolio in return for a share of interest income fees. The microfinance products, including loans, insurance, and money transfer may be branded by the bank or the MFI, or a joint brand. The bank may restrict the MFI from services other banks. The bank may delegate credit decisions to MFI if it has a good history of maintaining a high quality loan portfolio on its own, or a bank may structure a joint review process.

This model requires that both the bank and MFI share risks and incentives to maintain high portfolio quality. In this regard, bank may ask the MFI to finance a portion of the microfinance loans portfolio or provide a first loss guarantee on a portion. In some cases, non-MFI NGOs may provide training or personal financial education to the bank's clients on the basis of an informal relationship with the bank. For recommendation in Thai case, government may play this role.

ICICI Bank, the second largest bank in India, provides an example of this model. The Bank contracts MFIs to source microfinance loans and continuously monitor and service these loans. Spandana, an MFI based in Guntur, Andhra Pradesh, has acted as a services agent for ICICI Bank since November 2003, and has disbursed nearly US$3 million over 20,000 clients under this arrangement through the end of March 2004. Spandana's field staff help borrowers complete loan applications and promissory notes in the name of ICICI Bank, make disbursements, collect repayments, and monitor the loan over its entire life.

The cost to the borrower on the one-year term loan is a flat 15 percent (or about 30 percent effective p.a. rate). Of this 9.25 is the interest income and fee to ICICI and the remainder is service charge collected by Spandana. To share the credit risk, ICICI Bank requires Spandana to deposit a fixed deposit with the Bank in the amount of 12 percent of the total committed amount. As an alternative, Spandana may take an overdraft from the bank for this amount and pay a 1 percent fee upfront. If losses occur, ICICI will draw from this amount, charging Spandana 19 percent interest rate on the amount drawn. ICICI has gained from a rapidly-growing microfinance portfolio and links to organisations that have strong track records but lack sufficient equity to borrow directly.

MFIs in India manage some client relations for AIG, Aviva, MetLife, ICICI Lombard Royal Sundaram; and transfer companies such as Western Union, Vigo, and MoneyGram, link with MFIs to provide customer support. In Lebanon. Credit Libanais, Jammal Trust Bank, and Lebanese Canadian Bank all outsource their lending operations to the microfinance institution AMEEN.

2.2) Providing commercial loans to MFIs

This is the most common model since it is closest to standard commercial bank lending. In this model, banks provide a term loan or a line of credit to an MFI for working and/or lending capital. The loan may be unsecured, secured by pledging of assets as collateral or a cash deposit, or by a third party guarantee. The bank may stipulate covenants with respect to the provision of periodic financial statements, rights to inspection, as well as other financial covenants.

Several factors that may help indicate whether an MFI are ready for commercial funding can be outlines as follows: readily available financial information; sound governance and capable management with focus on profitability and efficiency; high quality loan portfolio with appropriate provisioning and write-ff policies; information systems that can produce accurate, timely, and relevant reports; and a good prospect for growth. Many commercial banks around the world follow this model.

2.3) Providing infrastructure and services to MFIs

In some cases, the bank provide access to its branch or ATM networks, front office functions (including cashier services), or back-office functions, such as IT services and transactions processing, to a MFIs and/or its clients. In return, the bank receives fees, commissions, and/or rents from MFIs and/or its clients. Transaction processing is the most basic and common form of this link between banks and MFIs, and is generally the lowest risk approach. As variation of the model, MFIs can place their own staff in the bank branch to serve MFI customers or can rely on bank infrastructure(e.g. ATMs and cahiers) for loan disbursements and repayment, domestic and international transfers, and foreign exchange transactions. Clients can have accounts with the bank directly or receive loan disbursements and repay loans to the MFI's account at the bank. Back office functions can be processed by the bank if MIS systems are compatible.

Garanti Bankasi, the third largest bank in Turkey (in terms of assets) started providing services to Maya Enterprise for Microfinance in 2001. Garanti provided branch network banking and electronic banking for all loan disbursements, payments, and reporting to Maya's clients, who receive preferred service by Garanti staff. Maya invests any dormant capital in the bank and processes its payroll through the bank, Maya's loan officer help clients fill out forms to establish checking and savings accounts and ATM cards with Garanti. The business link proved to be mutually advantageous.

This model is prevalent in many parts of the world, including Banamex and Banco Bital serving Compartamos in Mexico, Alto Bank serving FINCA Tomsk in Russia, and Procredit Bank serving Constanta Foundation in Georgia.

In entering into microfinance market, it has been suggested that commercial banks need to view microfinance as a new business line, hence the need for market research, and accordingly development of new products appropriate to the target clientele. To deliver the products effectively, banks usually need to adapt their systems and procedures and provide specialised staff training and incentive on the new clientele and products. Important keys to success factors include commitment from board and management; knowledge of microfinance best practice; infrastructure located conveniently for clients; suitable products, systems and procedures e.g. one that support immediate follow-up; and staff training.

3.1.2 Direct Financing: Credit Enhancements for Securitisation of SME Loans

Although SME direct financing and loan securitization in particular is still not popular in Asia, SME securitization has been used in Europe since the 1990s, especially actively in countries such as Germany and Spain. For Asia, only a few countries have actively used SME loan securitization. Government institutions in Asia have, however, played an important role in providing credit enhancement to SME securitisations. It is very likely that there will be increasing demand for securitisation of SME loans in Asian countries over the next few years, most of which should occur in Japan, Korea and China.

After the financial crisis, securitisations were actively used for corporate financing in Korea. Guarantees are provided by KCGF, KOTEC and the Small Business Corporation (SBC). The first issuance of SME securitization was done by SBC in 2000. The securitization was initiated mainly as a result of the dire need for the government to provide funds to SMEs and to alleviate the tight credit conditions during that time. Since then, SME debt issuance has become more frequent covering increasing range of underlying assets. From 2000 to 2005, SBC issued securities based on SME debts totalling around USD 2 billion to almost 700 SMEs.

Securities backed by loans to SMEs have also been growing quite fast in Japan for the past several years. A large part of these securities being initiated and guaranteed by the government institutions. The Bank of Japan also purchased SME-related securities and asset-backed commercial paper in 2003 and 2004. This policy was intended to ensure the smooth flow of corporate finance to SMEs and improve SMEs' access to credit by accelerating the development of SME loan securitization.

However, SME security issuance was strongly dependent on credit enhancements and most of the time credit ratings of SME behind the issued securities are below acceptable level by many investors. For this reason, , governments in Japan, Korea and Singapore have extended credit enhancements to SME debt securitization. For example, the Korea Development Bank, SBC, the Industrial Bank of Korea and the Japan Bank for International Cooperation have provided guarantees to SME debt securities issued in order to protect investors from the credit risk and help encourage foreign financing to the SME sector. Through credit enhancements, originators can attain a higher credit rating and a lower rate of interest on the related bond issues. Securities backed by SME debt have gained popularity as an asset class globally in recent years.

In Singapore example, the Standards, Productivity and Innovation Board of Singapore (SPRING) is the Singapore Government agency responsible for helping local small-to-medium enterprises (SMEs) enhance their business competitiveness, including obtaining financing to support their growth. One of their initiatives is the Local Enterprise Finance Scheme (LEFS), which is offered through participating local financial institutions. LEFS is a fixed interest rate financing programme designed to encourage and assist local enterprises to upgrade, strengthen, and expand their operations.

Since SMEs account to about half of employment in Singapore and generate a significant portion of the country's output. In 2006, an innovation transaction was introduced to complement the LEFS scheme by expanding financing alternatives to domestic SMEs. This scheme is a stop towards banking disintermediation for SMEs by providing access to domestic capital markets. With collaborative effort between DBS bank and SPRING, SME loan securitization was created and issued by SME Credit Assist (Singapore) Ltd and is the first SME loan securitization rated in South-East Asia (Standard and Poor, 2006).

3.2 Information facilities

SME sector is characterized by information asymmetries; the creditors' search costs, information acquisition and processing costs often exceed the returns. Hence, there is risk aversion by the banks towards extending credit to small and medium enterprises. It is relatively easy to lend to large corporate where the economies of scale, published financial information, collaterals and creditworthiness parameters favour such types of lending. Without adequate quantity and quality of data of repayment ability and collateral, banks are unsure about lending to SMEs, breaking down the process of financial intermediation for SME borrowers.

Therefore, timely availability of good quality information is crucial for SME financing since it helps reduce information asymmetries between borrowers and lenders (Demirgüç-Kunt 2006:15). The collection, processing and use of borrowing history and other information relevant to household and small business lending—credit registries—have been rapidly growing in both the public and private sectors (see Miller 2003 for overview). Entry of private registries have been said to provide wider and deeper ranger of services. Empirical results show that the volume of bank credit is significantly higher in countries with more information sharing (Jappelli and Pagano 2002; and Djankov, McLeish and Shleifer 2005). Firms also report lower financing obstacles with better credit information (Love and Mylenko 2003).

Recent evidence (World Bank 2008) suggests that information infrastructures matter most in low-income countries, while enforcement of creditor rights is more important in high-income countries. Specific activities include establishing credit registries or issuing individual identification numbers to help establish and track credit histories, reducing costs of registering and repossessing collateral; and introducing specific legislation. Computer technology has also greatly improved the amount of information that can be analysed to assess creditworthiness, such as credit scoring techniques.

A recent work by Djankov, McLiesh, and Shleifer (2007), based on a panel of aggregate data for 129 countries over 25 years, confirms that creditor rights and the

existence of credit registries, whether public or private, are both associated with a higher ratio of private credit depth to GDP, whether measured in levels or in term of change. Furthermore, it is found that creditor rights prove to be particularly important for private credit in more developed countries, which information infrastructure such as credit registries seems to matter more in lower-income developing countries (Djankov et al. 2005 and World Bank 2008: 151). This finding indeed can be very useful in policy prioritisation.

3.2.1 Credit information bureau in Singapore

DP information Group is Singapore's leading credit information bureau introducing an online information portal in 1995, where banks could access and conduct credit checks, all from the convenience of their desktop computers. In addition, QuestNet is an Internet information portal whose open architecture is integrated into the credit control systems of several leading banks through customized integration or via Web Services.

DP Information Group (DP Info) traces their roots to 1978 where DP Info first began as a domestic credit information provider. At present, DP Info is Singapore's trusted credit information bureau for 95 & 75 percent of its capital institutions and legal firms respectively. Credit & marketing professionals in multinational corporations and the small & medium enterprises (SMEs) rely on this comprehensive database to make critical and time-driven decisions. DP Info's business has emerged from a pure data aggregation house to a complete credit information bureau. DP Info partners with global institutions Fair Isaac Corp, offering DP-FICO Score and has also developed DP Credit Ratings, a proprietary corporate credit ratings model based on the global probability of default approach. This offers the local market with advance credit scoring and ratings solutions that drives client acquisition, account management and portfolio marketing that are unique to Singapore.

Furthermore, DP Info's firm is particularly connected to the SME community through a variety of touch-points. These include the annual Singapore SME 500 rankings, the SME Development Survey, and via DP Bureau- an ACRA appointed service bureau that assists SMEs and entrepreneurs fulfil corporate statutory requirements, handle cash management and acquire financing advice, amongst others.

Besides, the DP Info has the SME Bureau and Advisory Services which assists SMEs in regulatory requirements such as filing of annual financial returns, application of licenses and filing for monthly employment CPF etc. the DP Bureau also has a variety of information and market development services and training activities that will help the business owner through the early stages of their business life cycle, right through to mature market development and management. The DP Bureau assists SMEs to identify and maximizes the various government incentive schemes available as well as to develop human and capital resources.

In addition, they have credit management services which will help Singapore's banks and financial institutions make better lending decisions by providing comprehensive information on an applicant's payment history and credit standing.[3]

[3]http://www.dpgroup.com.sg/services/collections.html

Especially, DP Info has taken the first step in a nationwide SME credit ratings initiative to help SMEs, banks, potential financiers and business partners connect by gaining rapid access to a globally recognized credit rating of SMEs. This will help a company with a good credit rating and enable it to secure external funding with greater ease and possibly at a lower cost. Over the last few years, DP Info has privately rated over 10,000 SMEs.[4]

Additionally, the credit risk assessment improves the transparency of companies by disclosing the financial information and track records of their operations. The DP credit rating enables lenders and businesses to better understand the credit history of their customers and make more informed actions.

3.2.2 Credit Bureau in Korea

For Korea, the Korea Enterprise Data (K E D) is a leading corporate Credit Bureau specializing in small and medium-sized enterprises including large enterprises. KED has the largest database on SMEs in Korea which has been collected and updated by KODIT (Korean Credit Guarantee Fund) and KOTEC (Korea Technology Credit Guarantee Fund), founded by the Korean government as a non-profit guarantee institution by providing the credit guarantee to facilitate financing for new technology-based enterprises, and promoting the growth of technologically strong SMEs. In addition, K E D has increased its database by pooling data of other shareholders. K E D is expected to build the most extensive and reliable infrastructure and provide more complete credit data and information domestically and internationally. Other institutions that benefit from the information provided by the K E D are businesses, financial institutions, government institutions, supervisory institutions, and the market.

3.2.3 One -stop information services: Case Study in Singapore

As well as being Singapore's leading credit and business information bureau, DP Info is also a strong supporter of SMEs in starting their business and operating effectively in their initial years.

The DP Information Group has launched the new Dealflow Connection website which provides easier access to funding for entrepreneurs (www.dealflow.org.sg) Dealfow Connection is a common platform where entrepreneurs are matched with suitable funding sources. DP Info – Singapore's leading provider of credit, business information and SME services – has been appointed by the Action Community for Entrepreneurship (ACE) to operate the revamped website and to enhance the range of services and features. Dealflow Connection offers enterprises access to both debt financing through financial institutions and equity financing through investors, as well as government assistance schemes – ensuring entrepreneurs have access to every available type of funding. All an entrepreneur needs to do is to register as a member ($50 for two years) and complete the Dealflow Connection Registration Profile which is used to match them with the various finance sources. Participants in Dealflow Connection includes, for example, financial institutions, venture capitalists, private investors as well as intermediaries who play an important role in helping business draw up their business

[4]http://www.smecreditrating.sg/

plans and structure deals. Dealflow Connection was one of the first initiatives to provide SMEs greater access to financing. ACE had introduced this platform for SMEs to post their business proposals online and for financial intermediaries to track down lucrative deals for investors.

The new Dealflow Connection website will feature a range of new features including enhanced registration, segmentation of entrepreneurs, business plan template, automated financing matrix, business health checks, DP credit ration, SME hot line, and face to face assistance.[5]

[5] http://www.dpgroup.com.sg/news/press/2007/190707.html

Table 2: Summary of Key Features of Information Infrastructure in Thailand and Other Countries

	Year			
	2000			
Information Access	**Korea**	**Taiwan**	**Singapore**	**Thailand**
Is there a single point where people can go for advice and referrals on where to get information about government regulations etc?	**Yes**	**Yes**	**Yes**: the DP Info Group; ➢ Assists SMEs and entrepreneurs in starting their business and operating ➢ Information services (corporate/individual information & litigation searches, industry research & survey management, Singapore 1000 & SME 500, Singapore International 100 Rankings & Fastest Growing 50 Certification, Marketing Lists & Campaign Management, Credit, Legal & Market Monitoring) ➢ One-stop service for SME bureau & advisory center (Registration & Filing of Local & Foreign companies/Business, SME Regulatory / Application / Business Services, SME Advisory Services, MOF Appointed Bureau for Government Supplier Registration Services, Corporate Secretarial Services) ➢ Credit management services (Corporate Credit Rating & Consumer Scoring, Consumer & Corporate Credit Bureau, Debt Recovery & Account Receivables Management, Survey Management & Analysis) ➢ SME Credit rating (Details refer to the information facility part)	**No**

	Year			
	2000			
Information Access	**Korea**	**Taiwan**	**Singapore**	**Thailand**
Is there any govt support for providing firms (including SMEs) with access to intelligence and information of a non govt nature (e.g market research, technical information etc)	**Yes**	**Yes**	**Yes**: the DP Info Group (as mentioned above)	**No**
Credit bureau for SMEs	**Yes**: Korea Enterprise Data (KED); ➢ SMEs data and services ➢ Standard business information credit report ➢ Corporate credit rating ➢ Monitoring services ➢ Korea business group report (Details refer to the information facility part).		**Yes**: the DP Info Group (as mentioned above)	**No**

	Year			
	2000			
Information Access	**Korea**	**Taiwan**	**Singapore**	**Thailand**
Credit bureau that cover financial institutions in formal, semi-formal, and/or informal sectors	**Yes**: National Information and Credit Evaluation (NICE); ➢ Credit information sharing, credit report service ➢ Underwriting (credit risk score, collection score, bankruptcy score, and credit recovery score) ➢ Asset management (decision making support, credit watch, CB score viewer, fraud detecting service) ➢ Early warning service ➢ solutions tailored	**Yes**: Joint Credit Information Centre (JCIC); see in Attachment I. ➢ Loan related information ➢ Financial information ➢ Affiliated entities information ➢ Comprehensive credit report ➢ Consumer & corporate loan profile		**No:** National Credit Bureau (NCB) only covers financial institutions in formal sector.

3.2.4 Strengthening SME Information Capability: Case study of Singapore

There are about 100,000 SMEs in Singapore and they contribute one quarter of the total value-added generated. SMEs are important to Singapore's economy in terms of employment creation and generation of wealth, as in many other APEC economies. In Singapore, SMEs make up 99% of all enterprises, and contribute to 56% of employment and 42% of value-added. Singapore therefore encourages the formation and growth of enterprising start-ups and SMEs, with the objective of building a competitive base of dynamic and innovative enterprises.

Singapore launched its first one-stop portal for the country's small and medium-sized enterprises (SMEs). MarketInfo.sg, a strategic collaboration by the public and private sectors, was launched by Minister-in-charge of Entrepreneurship. For the first time, entrepreneurs can access a one-stop shop portal for market intelligence, and by accessing the market information portal, SMEs can get relevant and up-to-date market intelligence information in order to make critical decisions. Besides buying market intelligence reports, SMEs can also approach the research firms in this intelligence portal for customized research services.

3.2.5 On-line Information Infrastructure for Reversed Factoring[6] in Mexico

An example of electronic information infrastructure provided by the public sector to reduce information asymmetry and operational costs for financial intermediaries is the **on-line market for factoring services developed by the Mexican Development Bank, NAFIN.** A program developed by NAFIN, a government development bank, allows many small suppliers to use their receivables from large credit-worthy buyer to receive working capital financing (Klapper 2006 cite in Demirgüç-Kunt 2006). This type of trade finance is called reverse factoring and effectively allows small firms to borrow based on the creditworthiness of their buyers, allowing then to borrow more at cheaper rates.

NAFIN, a Mexican development bank, created an on-line system called Cadenas Productivas (*Productive Chains*), to provide reverse factoring services to SMEs. This programme works by creating chains between "big buyers" and their suppliers. The buyers, large credit-worthy firms that participate in this programme must invite their suppliers to join their chain. Once a supplier delivers goods to the buyer and issues an invoice, the buyers post an online "negotiable document" equal to the amount that they are willing to factor this particular receivable and post their interest rate quotes for this transaction. Finally, the supplier can access this information and choose the best quotes. Once the factor is chosen, the discounted amount is transferred to the supplier's bank account. The factor is paid directly by the buyer when the invoice is due. Reverse factoring reduces information problems, as the factor only needs to assess the credit worthiness of a specific group of large firms.

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[6] Factoring is the type of financing in which firms sell their accounts receivable at a discount (equal to interest plus service fees) to a financial firm (called the factor) and receive immediate cash. Factoring is more an asset sale than a loan. There is no debt repayment and no additional liabilities on the supplier's balance sheet. An alternative to ordinary factoring is reverse factoring, where the factor only purchase account receivables issued by certain buyers.

A significant advantage of factoring, especially in developing countries, is that it does not require good collateral laws, just the legal ability to sell, or assign, account receivables.

NAFIN was responsible for the development, production, and marketing costs related to the electronic platform. It operates the system and also handles all the legal work, NAFIN requires all participating financial institutions to use its second-tier funding to provide credit through the system. NAFIN does not charge a fee for the factoring services, but rather covers its costs with the interest it charges on its loans. NAFIN's factoring program has been very successful, extending over nine billion US dollars in financing since its inception in September 2001, and brokering more than 1.2 million transactions, 98 percent by SMEs. NAFIN has entered into agreements with development banks in several Latin American countries, including Colombia, El Salvador, and Venezuela, to implement similar programs and development banks in other countries in the region are considering replicating this program.

3.3 Credit guarantee

Practitioners note that the longer the history of SMEs, the lower their cost of borrowing. However, firm age is not the only factor affecting the financing environment. In reality the provision of collateral and guarantors would make it easier to obtain loans. Collateral and credit guarantees are important particularly for SMEs, whose credit risks are difficult to assess.

Credit guarantees take the form of either guarantees provided by public institutions or commercial guarantees extended by private companies.

Although the objectives, features and types of different Credit Guarantee Schemes (CGS) vary, their objective remains the same: guarantee schemes are programs that insure the repayment of a loan, in part or in full, in order to motivate lenders to lend to groups which would not have access to credit under normal circumstances.

3.3.1 Rationale for credit guarantee schemes

There are several reasons why credit guarantees should be provided especially for SME. First, the target group does not have access to credit due to lack of collateral. Therefore, the guarantee fund would provide guarantees to the extent that the loan would be secure.

Second, due to their characteristics, SMEs are perceived as a high-risk group. SMEs are frequently family businesses, which means that no distinction is made between the family's and the business's cash flow and that the business's accounting system is basic, if any. Without appropriate accounting systems, lenders do not have evidence on how the SME is doing, which makes giving credit to them risky.

Third, lenders are not prepared to deal with large volumes of small credits because of several reasons. First, profit margins in small credits are reduced, thus reducing the incentives for lenders. Second, most lenders do not have the ability to

process applications for small loans, because their evaluation and scoring technologies have been designed for different target groups.

Fourth, Guarantors can address this problem by gathering information and generating an adequate level of information, which can be presented to lenders in a format that meets their standards. CGS advocates claim that guarantee schemes are acceptable especially for first time borrowers, who, due to the lack of a financial record, are turned down by lenders. Finally, CGS are said to produce additionality. Additionality is the extra lending that occurs to the target group, but would not have been possible without the guarantee.

Nonetheless, there are a number of arguments against credit guarantee schemes First, although the number of CGS programme in industrialized countries is growing, lenders in developing countries are simply not interested in offering micro loans. Second, CGS programs are costly and not sustainable over time, as they tend to consume their capital quickly. Most Guarantee Funds failed to generate a large operational base able to cover their costs. Guarantors face a trade off between charging a premium that would allow the fund to cover its costs and having attractive prices for borrowers. This means that if guarantees are priced at a low level, the fund assumes the risk of losing capital because their price does not allow the fund to cover its costs. Therefore, establishing financial institutions specialized in the target group is considered to be a more efficient and sustainable solution.

Third, lenders are better evaluating risk than CGS. The guarantors are unlikely to have more experienced credit analysts than lenders; hence, they have to base their decisions on fewer criteria. In other words, if they used the same criteria applied by lenders, they would also reject the applicant.

Fourth, Moral hazard and adverse selection are often associated with CGS. If borrowers have a guarantor backing their debts, they do not have incentives to repay the loan. Similarly, since lenders have the loan insured, they will approve loans with high risk of defaulting and will not take the necessary measures to assure the repayment of the loan. Last, there is no reason to believe that lenders want a third party guarantee. They could simply raise their interest rates to cover their risk. Also, it has been argued that SME do not need guarantees but need the development of new lending technologies.

It is also argued that the excessively relying on the availability of collateral and credit guarantee in making loan decisions undermined the utilization of invisible information obtained through relationships with respective borrowing companies. It is often argued that lending based on collateral and credit guarantees is inefficient and thus should be replaced by relational banking once an appropriate lender-borrower relationship is established

3.3.2 Experiences of Credit guarantee in Asia

In Asia, with the exception of China where many private companies supply the largest proportion of credit guarantees, government institutions have largely provided

a significant amount of credit guarantees to SMEs which is considered to be an important sector in all Asian countries.[7]

For Thailand, the government is the main source of financing for the credit guarantee corporation. The guarantee corporation in Thailand is the Small Industry Credit Guarantee Corporation (SICGC) and is a state-owned enterprise, established in 1991. The Ministry of Finance holds a 93% share.

For other Asian countries, government institutions have supplied a sizeable amount of credit guarantees for corporate debts, such as SME loans. Business enterprises often lack the collateral for loans. As a result, credit guarantee institutions have been established to help enterprises obtain funds from banks by guaranteeing payment of loans, thereby seeking to contribute to a more balanced development of the national economy.

Korea has two corporate credit guarantee institutions: Korea Credit Guarantee Fund (KCGF) and Korea Technology Credit Guarantee Fund (KOTEC). Both are non-profit financial institutions whose paid-in capital comes from contributions by the government and banks. KCGF provides guarantees mostly for SME loans, while KOTEC covers mainly technology-oriented SMEs.

As will be discussed later, Japan has a distinct two-tier credit supplementation system. The country has fifty-two independent Credit Guarantee Corporations (CGCs), established in each prefecture and five cities, assess the creditworthiness of local SMEs and guarantee bank loans to them. Japan Finance Corporation for Small and Medium Enterprise (JASME), established in 1953, supports the CGCs by reinsuring about 70–80% of their risks and by extending low interest loans to CGCs. JASME also supports SME debt securitisation. The central government supplies all of JASME's capital.

Indonesia also has two credit guarantee institutions for SMEs and credit cooperatives: Perum Sarana Pengembangan Usaha (Perum Sarana) and PT Asuransi Kredit Indonesia (Askrindo). Perum Sarana was established in 2000, and is 100% government-owned. Askrindo was established in 1971 and is owned by Bank Indonesia (55%) and the Ministry of Finance (45%).

In Malaysia, Credit Guarantee Corporation Malaysia Berhad (CGCMB) was incorporated in 1972, and the current shareholders are Bank Negara Malaysia (BNM) (79%) and commercial banks and finance companies (21%). The government makes loans to CGCMB through BNM at favourable rates for financial assistance. Taiwan's Small and Medium Business Credit Guarantee Fund (SMEG) was established in 1974 as a non-profit legal entity. The central and local governments hold an 81% share in the entity.

Among the countries discussed above, the total guarantee exposure is relatively high for Japan and Korea, at over 5% of GDP, but relatively low for Indonesia and Thailand, below 1%. While the ratio has been decreasing over the past five years for Japan, Korea and Malaysia, it has increased steadily over the same period in Indonesia, Taiwan and Thailand (Shim, 2006).

[7] SMEs account for over 99% of all businesses in Japan, Korea and Thailand.

3.3.3 Japanese model: The role of credit guarantee

Studies of SME financing in Japan find important and positive role of collateral and credit guarantee in obtaining loans. In Today's Japan, the provision of collateral and personal guarantees is complementary, not substitute to monitoring by banks and relationship lending.

Japan's credit guarantee systems have a very long history with the total outstanding amount guaranteed around 30 trillion yen. The system grabbed public attention with the introduction of the government-sponsored "special credit guarantee program", a scheme designed to alleviate a credit crunch faced by SMEs, from October 1998-March 2001. At the time, the Japanese economy was on the verge of slipping into a deflationary spiral and SMEs were seriously affected by the then pervasive credit crunch. Under the scheme, the government provided repayment guarantees worth 30 trillion yen, which would cover roughly 10% of SME loans then outstanding nationwide.

Credit Guarantee Corporation (CGC) in Japan is public institutions established under the Credit Guarantee Corporation Law. They are 52 CGCs in Japan, one in each of Japan's 47 prefectures and five in major cities. They were established to make it easier for SME to raise funds from financial institutions by providing guarantees on business loans. Each of CGCs has been independently engaged in business activities to support local SMEs, responding to the specific needs of its own region as well as promoting a standardized guarantee system.

The credit guarantee system in Japan is characterized by two functions:

(1) A "Credit Guarantee" function that enables CGC to guarantee financial institution against risks associated with loans to SMEs, and (2) a "Credit Insurance" function in which Japan Finance Corporation for Small and Medium Enterprise (JASME) funded by public money reinsures these credit guarantees. The combination of these two functions is known as the "Credit Supplementation System".

1) Credit Guarantee System Flow of Operations is as follows:

1.1 There are two ways for SMEs to apply to CGCs for credit guarantees. One is to apply through financial institutions and the other is to apply directly.

1.2 Upon receipt of an application, CGC carries out credit checks on the enterprise.

1.3 If CGC approves the application based on the credit checks, it issues a credit guarantee certificate to the financial institution. In the case where CGC receives an application for a credit guarantee directly from a SME, CGC arranges for a financial institution to extend a loan to the company. After obtaining loan approval from the financial institution, CGC issues a credit guarantee certificate.

1.4 The financial institution extends a loan to the enterprise based on the credit guarantee certificate. The enterprise pays a guarantee fee to CGC.

1.5 SME makes loan repayments to the financial institution in accordance with the terms and conditions of the loan.

1.6 In the event that SME is not able to make all or part of the repayments within the term, the financial institution requests CGC for payment under guarantee (it is called subrogation).

1.7 CGC makes repayments on the loan to the financial institution on behalf of the enterprise.

1.8 Because payment has been subrogated, CGC obtains a right of indemnity against the enterprise.

1.9 CGC recovers the right of indemnity from the enterprise, while assisting SME to rebound.

(2) Credit Insurance System

When CGC approves a credit guarantee and a loan is extended by a financial institution based on that approval, the loan is automatically insured by JASME. For this insurance, CGC pays a credit insurance premium to JASME. If CGC makes payments under guarantee to the financial institution, the CGC claims 70%–90% of the subrogated amount from JASME. If CGC subsequently collects the subrogated payments from SME, CGC is required to pay part (70%–90%) of the money collected to JASME. This insurance system plays a key role in protecting the solvency of CGCs and strengthening their creditworthiness.

As for the eligible SMEs, CGCs define the scope of SME eligible to receive credit guarantees as follows. SMEs which either meet the requirements in terms of number of regular employees or paid-up capital as given in the table below are eligible for credit guarantees

In terms of credit guarantee Fee, a variable fee rate system based on credit risk of SMEs has been introduced since April 2006, as one of the new measures of system reform. The guarantee fee rate, which is owed by a SME, is basically decided in 9 criteria from 0.5% to 2.2% based on the credit score of applicant SME calculated by Credit Risk Database (CRD) system (Credit Guarantee Corporation, 2007).

3.3.4 Credit guarantee companies in China

Chinese authorities have been pursuing credit enhance facilities for SME finance including credit guarantee schemes. Particularly, credit guarantee schemes (CGs) for SMEs take three forms in China – government-sponsored credit guarantee agency (CGA), member-SME-funded mutual guarantee fund (MGF) and private-sector invested commercial guarantee company (CGC). CGA can be further classified into provincial credit re-guarantee agency and municipal credit guarantee agency. According to the government strategy on CGS, CGAs are in tended to be the main component of China's credit guarantee system, while MGFs and CGCs serve as complements to government-sponsored CGAs. China has approximately 3,000 local credit guarantee companies. China's first professional guarantee organisation was established in 1993. Since then, the SME credit guarantee industry has developed rapidly, especially following the measures introduced in August 2000 to encourage the further development of the credit guarantee system.

Guarantee organisations in China, unlike many countries, does not have a centralized government institution but operate at either the provincial level or the city level. About two thirds of them are privately owned and while the others are either fully or partly owned by local governments. The amount of SME loans guaranteed by the credit guarantee companies has increased rapidly since 2000. The amount of guarantees outstanding reached 2.0% and 2.6% of GDP in 2004 and 2005, respectively.

There are a number of lessons learned about credit guarantee system in China. First, a successful CGS needs government support, but not intervention. CGSs should operate under market terms. Second, lack of sound prudential supervision and regulation such as risk-sharing between partner-banks and CGS has been major obstacles. Although China has formulated many laws and regulations on CGS, most focus on how to use CGSs to promote SME's access to finance and few on addressing the supervision and regulation of CGSs. These concerns have led to suggestion to strengthen the supervision and regulation on CGSs by the central government and to establish a national reinsurance program (Mu, 2002). Consequently, the National Development and Reform Commission in China has proposed establishing a National Fund for Development of Credit Guarantees for Private Enterprises (NCG) to support credit guarantee companies through equity investment, loans, co-guarantees and re-guarantees.

3.3.5 Bid for Public Guarantee Scheme in Chile

As discussed earlier, credit guarantee systems are mechanisms in which a third party, the guarantor, pledges to guarantee loans to a particular group of borrowers. Credit guarantee systems reduce the lender expected credit losses-even if the probability of default remains unchanged—acting as a form of insurance against default. Public credit guarantee systems are, therefore, widespread. Survey by Graham Bannock and Partners in 1995 found that at least 85 countries had some types of government credit guarantee program (de la Torre and Schmukler 2006: 32). The largest and more established schemes are mostly in developed countries, including Canada, Japan, the U.S. and several European countries. The general experience with credit guarantee systems, especially in developing countries has been poor to mixed, at best: most systems have depleted their reserves due to high credit losses and bad investment decisions and in many cases they have been designed to channel funds to certain sectors without due regard to loss rates. An open question remains whether public credit guarantee systems can be designed in a market-oriented, minimising unintended consequence and moral hazard problems.

FOGAPE (Fondo de Garantia para Pequenos Empresarios), a state fund designed to provide partial credit guarantee to loans issued by commercial banks to small firms in Chile, has been considered a success story in terms of fostering market activity while minimising the problems that characterized previous guarantee scheme (de la Torre and Schmukler 2006: 33).[8]

FOGAPE was created in 1980 but remained relatively inactive until 1999, when the Chilean government decided to reformulate the programme. The fund is administered by Banco Estado, a public commercial bank, which charges a fee for its

[8] Also cited by Benevente, Galetovic and Sanhueza 2006 and Bennett, Billington and Doran 2005

services. FOGAPE share risk of default on eligible loans and charge a guarantee premium. The commercial relationship is between FOGAPE and the banks. Banks select the loans that they wish guaranteed and FOGAPE only check whether they meet eligibility criteria, which are related to borrower and loan size. Total exposure of the guarantee fund to each borrower through loans from all banks is limited to 120,000 US dollars. Several key features of FOGAPE have been cited to reduce moral hazard problem.

First, commercial banks share part of risk of default, as guarantees only cover between 70-80 percent of credit losses. Second, the Banco Estado conducts auctions four to six times per year among participating banks. Each bank has to submit a bid indicating the amount of guarantee it wants to receive and the maximum coverage rate as a percentage of lending. The bids are selected by the lowest coverage required until the total amount auctioned has been assigned; therefore the bidding process determines how the risks are shared among FOGAPE and financial intermediaries. Banks with high default rates on previously guaranteed loans can be permanently or temporary excluded from participating in the bidding process (this has already happened in one case).This helps to reduce moral hazard, as banks that reduce screening and monitoring today lose profitable opportunities in the future. Also the use of bidding process increases competition among financial institutions. The risk share taken by commercial banks has increased from 21 percent in 2001 to 29 percent in 2003 (Bennet, Billington and Doran 2005). Third, the amount of FOGAPE guarantees each bank can obtain is limited: no bank can be warded more than two thirds of the total rights auctioned. Following the bidding process, banks have three months to grant the corresponding loans.

FOGAPE used to charge a fixed commission of 1 percent of the credit guaranteed, but since June 2004 has increased to a range between 1 and 2 percent, depending on the claims performance of each bank. Default rates on loans guaranteed by FOGAPE have been relatively low standing at 1.05 percent in the second half of 2005, while the default rates for the banking system as a whole stood at 1.01 percent. This implies that the screening and monitoring process of the guaranteed loans have not been compromised. FOGAPE is designed to be a sustainable fund, with fees charged covering guarantee paid and operating expenses, and the government support is restricted to the provision of start-up capital. It is, however, still an open question whether FOGAPE can be sustainable in the long-term, as there has been little evidence that credit guarantee systems can achieve sustainability, even in developed countries.

3.4 Other Public Supporting Schemes and Infrastructure

Since expanding access remains an important challenge even in developed economies, it may not be enough to leave it completely to the market forces. Market failure related to information gaps, public good nature of financial access, and the need for coordination on collective action mean that government have an important role to play in building inclusive financial systems (de la Torre; Gozzi and Schmukler 2006). However, in designing and prioritising access policy, it is important to recognise the limitations and to be aware that not all would-be borrowers are creditworthy. There are numerous examples of overly relaxed credit policies that have reduced national welfare (World Bank 2008: 144).

A sustainable solution therefore requires that we take a more holistic view of SME problem, instead of looking at the issue of financing to the SMEs in isolation. A large number of players have to be involved in contributing to the success of the SMEs. There are numbers of different stakeholders from both public and private sector who have to work together in a coordinated and cohesive manner to ensure that these market failures in case of SME credit market are removed and the process of financial intermediation takes place.

This section outlines three main issues for government supporting roles, covering (i) strengthening the role of different stakeholders and microfinance institutions in semi-formal and informal sectors; (ii) enhancing SME capability and (iii) regulatory framework.

3.4.1 Strengthening the role of different stakeholders and microfinance institutions in semi-formal and informal sectors

1) Pakistan example

In Pakistan, SME's contribution to GDP is only 15%, yet they the establishment of SMEDA (Small and Medium Enterprise Development Authority) and the SME bank are the initiatives from the government to facilitate identification of a viable business project to be undertaken and availing required finance. However, there exists the problem of lack of sound collateral and guidance to prepare a suitable business plan. In the same way as Thailand, commercial banks do not feel comfortable to finance small industrial units because of their high risk profile as a result of the lack of business experience.

The Government of Pakistan (GoP) has accelerated its efforts to establish strong foundations of microfinance in the banking sector along with extending support to non-government organizations (NGOs) that are not supervised by the State Bank of Pakistan (SBP). The Khushhali Bank (KB) was established as the first specialized microfinance bank (MFB) in 2000. Less than a year later, a holly separate regulatory framework for State Bank-licensed microfinance institutions (MFIs) was promulgated – the Microfinance Institutions Ordinance, 2001. Since then, six MFBs have started operations. In addition, the Pakistan Poverty Alleviation Fund (PPAF) was established in 1999 as a distributor/wholesaler of credit to non SBP-regulated microfinance providers (MFPs).

The GoP sees microfinance as a sustainable commercial activity run by the private sector along with the government, providing enabling policy support under the supervisory framework of the central bank. The GoP also allowed a separate framework under the PPAF to support the role of civil society institutions engaging with the microfinance sector in the country. These measures created a conducive environment and attracted private sector investment. As a result, there was substantial growth in all fronts such as the increase in the number of microfinance players (MFPs), the entry of Greenfield microfinance banks, the entry of commercial banks into microfinance, the diversification of products and a tenfold increase in the number of borrowers to a million.

Microfinance sector in Pakistan is growing at 40% annually and is expected to continue at this pace over the next few years. At this pace Pakistan stands in the top quartile of a growing microfinance industry globally (Pakistan Microfinance Review, 2006).

There are a number of stakeholders who work together in a coordinated manner to ensure that market failures in case of SME credit market are removed and the process of financial intermediation takes place. These include the government and the regulatory agencies such as the Small and Medium Enterprise Development Authority (SMEDA) and SBP, provincial and local government, SME bank and other commercial banks engaged in SME financing.

2) Mexico Case

An example of government assistance designed to help reduce costs of providing financial services in unbanked areas for private financial intermediaries is the Mexican development bank BANSEFI (Banco de Ahorro Nacional y Servicios Financieros, *National Savings and Financial Services Bank*). **BANSEFI has the mandate of spearheading the development of semi-formal and informal financial institutions** (called popular savings and credit institutions), including variety of credit unions, savings and credit associations, cooperatives, and NGOS that serve regions where the presence of commercial banks is minimal or non-existent, To this end, BANSEFI performs two main tasks.

First, **it administers a one-off government investment** subsidy to help popular savings and credit institutions meet criteria of sustainability, prudent risk taking, and adequate risk pricing necessary to become formal regulated financial intermediaries. BENSIFI provides these institutions with technical assistance and training to upgrade their governance, transparency, and management capacity to standards required for licensing.

Second, BANSIFI **provide centralised back-office services** like electronic transfer, liquidity management, clearing house services, debit and credit card services, and foreign exchange and derivat8ves transactions to popular savings and credit institutions to allow them to capture economies of scale and scope that they may not be able to achieve individually. These centralised services are offered at fee and can be voluntarily contracted by individuals.

Furthermore, BANSIFI also created a commercial alliance among several popular savings and credit institutions to share (L@Red de la Gente) to share branches and facilitate distribution of financial products, using common technological platform in order to reduce distribution and marketing costs. The network is also used to distribute several government programs and operate with traditional money transfer companies that use its network to distribute remittances. This increases the revenues of member institutions through distribution fee and helps attract new customers and bring them into the financial system.

The BANSEFI-led program has made substantial progress in meeting its objectives, albeit some delays in the process if upgrading and converting popular savings and credit institutions into regulated entities. BANSEFI was established with a clear sunset clause, which states that it will be, at least partially, sold to popular

savings and credit institutions once these institutions become formal regulated entities. The result of this sale will be a clear evaluation indicator of program.

3.4.2 Enhancing SMEs Capability: Case Study of Singapore

Singapore government has been very active in promoting SMEs. The government recognizes that SMEs promotions are necessary not just to overcome the present limitation of a small domestic market but rather to build up world-class local entrepreneurs for the 21st century.

SMEs promotion policies assist SMEs to keep pace with the new economy and to co-exist with large local enterprises and foreign MNCs to sustain Singapore's economic growth. SME 21 and Technopreneurship 21; for instance; are two such important SME promotion policies to strengthen SME sector in Singapore. In addition, the government has adopted three key thrusts. These are: creating a pro-business environment, building capabilities and facilitating business linkages.

Singapore also launched the Enterprise One Portal earlier this year to facilitate online search for information on government procedures and programmes as well as application of licences. Information vital for trade and investment such as trade statistics and market intelligence can also be accessed via this portal. The integrated information and E-services system saves time and cost for businesses as they no longer need to go from one government agency to another.

Currently, DP Bureau a one-stop SME service and advisory centre, has launched a new Concierge Service for SMEs and start-up companies which is a free service. The new Concierge Service is a fast and efficient way for SMEs to find the services they need. Simply call the DP Bureau Concierge Service, explain what is required and the experienced service team will locate a suitable supplier. Furthermore, the Concierge Service ensures SMEs get the right services at a competitive price. SMEs operate with a lean structure and typically do not have a PA or Secretary to take care of the business permanent needs. It greatly benefits SMEs to tap existing network and expertise for their business needs.

Examples of products and services offered through the DP Bureau Concierge Services include finding affordable office space, opening bank accounts and accessing micro-loans, office IT and network setup, direct marketing services, printing of business cards, stamps and stationery, language translation services, logistics, warehousing and movers, credit management and debt recovery, faxes copiers, scanners, and printers, and eCommerce. As part of the Concierge Service, DP Bureau has negotiated a range of deals and special offers from suppliers to help SMEs keep their costs under control. These savings range from 10% to 50% off the normal price of the goods and services offered by other external vendors. [9]

3.4.3 Special prudential regulations for SME

Financial regulations can also prevent the emergence of institutions better suited to the needs of lower income households or smaller firms. Rigid chartering rules, high capital adequacy requirements, very strict accounting requirement may

[9] http://www.dpgroup.com.sg/news/press/2007/070611.html

reduce the ability of institutions to serve the poorer segments of the society. For example in South Africa, extension of bank regulation and supervision to microfinance institutions reduced their capacity to offer their services profitable (Glaessner et al. 2004 in Demirgüç-Kunt 2006:32)

There is the need to **formulate a separate set of regulations for SMEs**. With the enforcement of special prudential regulations for SME, a number of constraints in SME financing can be removed and the banks could be in a better position to disburse loan to SMEs without fear of violating the prudential norms.

A conducive macro-prudential environment for SME lending will encourage banks to increase the flow of credit. The government should, however, also endeavour that a guarantee scheme is established to share the credit risk of the financing banks. [10]

It has also been suggested that establishment of consumer protection mechanism, promotion of financial education and enhancement of market competition could be more effective that **imposition of interest rate ceilings** (CGAP 2004a and 2004b).

Government can improve access by **increasing competition** in the financial sector. As financial institutions find their traditional business coming under competition, they seek out new lines of profitable opportunities, including to the SMEs and the poor. Given the right incentives, private sector can develop and make use of new technologies—like credit scoring—to reach the underserved segments. Foreign banks' role in improving competition environment and enhancing access has been documented (Clarke et al 2001 and 2003, Demirgüç-Kunt 2006). Reducing bank concentration is not a worth goal in itself, rather the policy focus should be on improving contestability such though lower entry barriers, fewer restrictions on bank activities and freedoms. Improving competition in this way, coupled with institutional reforms, should increase availability and lower cost of credit to enterprises with good growth opportunities. Technological advances facilitated by greater competition and entry of foreign know-how, can lead to promising innovation in the areas of deposit, payments, credit and risk management, making available basic financial services available to poor households and small firms.

4. Policy Analysis and Recommendations

Policy target groups can be identified as follows: 1) micro and small enterprises; 2) start up SMEs; and SMEs with past NPL records. Policies to address the problem of inadequate financing for micro enterprises and SMEs can be divided into two main parallel and interrelated directions. First, **business models** that are better suited for micro enterprises and SMEs should be encouraged. Second, **public and private sector supports** to address problems of information asymmetry, improve risk management and enhance capability of SMEs as well as human resource of financial institutions are put forward.

[10] A separate set of SME regulations have been in force in Pakistan since January 2004. The new prudential regulations for SMEs do not make it mandatory for banks to require collateral but allow them to take into consideration asset conversion cycle. A separate SME department has also been established in the SBP and is tasked with creating prudential environment that will increase SME lending.

4.1 Business Models

Two types of business models are proposed in this study: first, business models that aim to serve micro enterprises and SMEs via existing MFIs; and second, business models where commercial bank provide financial services to SMEs directly.

4.1.1 Business Model for Micro and Small Enterprises in provincial areas that lack financial access from formal sector

The first type of business models aims to serve micro enterprises[11] and SMEs in the provincial areas and/or those belong to owners from lower income target groups who are only able to gain financial access from MFIs in semi-formal and informal sectors.[12] In Thailand, financial institutions can be classified as MFIs include cooperatives, credit unions, village financial institutions and village funds that provide financial services including micro credit to low income household and/or micro enterprises. Majority of MFIs in Thailand are in the semi-formal and informal sector.

1) Commercial bank provide micro credits through MFIs

Under this model, commercial banks lend to MFI and MFI then uses this funding to finance its micro enterprise clients. While commercial bank treats MFI as one of its clients, there is an agreement between commercial banks and MFI that commercial bank has a right to periodic financial statements and inspections.

This model is a relatively simple to apply as it is similar to commercial bank's usual lending procedure. This arrangement is able to take advantage of commercial bank's ample fund, while optimising MFI's relationship lending technology and local knowledge. Furthermore, this is one of the ways to indirectly bring MFIs into formal sector. The relationship between commercial bank and MFI can also be nurtured into future partnership.

However, there exist some limitations in present context, namely, lack of incentive for existing commercial banks to enter into this market; lack of standardised benchmark and legal status for some MFIs; and lack of centralised information of MFIs.

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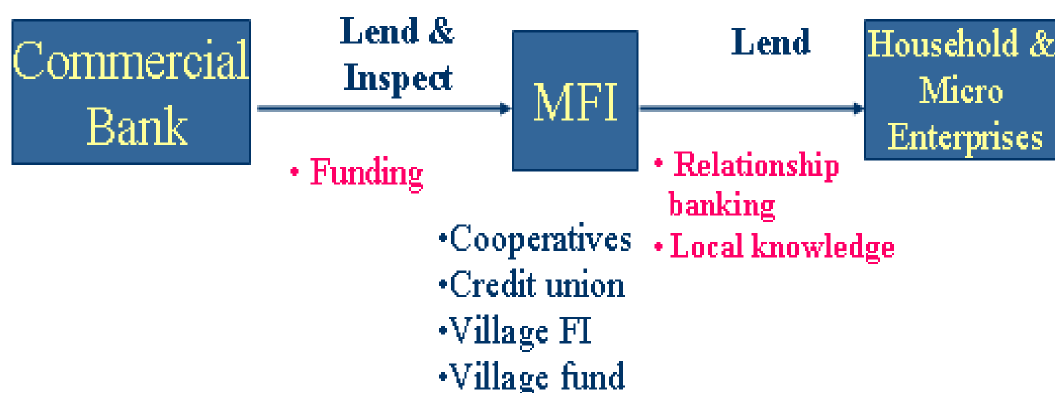
[11] Currently, there is no single formal definition for micro enterprise in Thailand. However, the common criteria for defining micro enterprise include size of employees, normally specified to be less than 10 or less than 5 people, revenue and/or asset size.

[12] One useful way to categorize financial institutions is to examine their legal status and/or supervisory framework (World Bank 2005b:4). For the purpose of our study, formal financial institutions or formal sector refers to financial institution with clear legal status and is supervised or examined by the Bank of Thailand, namely commercial banks, specialized financial institutions (SFIs), finance companies, credit fonciers, credit card and personal loan companies. Semi-formal financial institutions or semi-formal sector refers to financial institutions that have legal status, but is not supervised or examined by the Bank of Thailand, namely, cooperatives, credit unions, and village funds. Informal financial institution or informal sector refers to financial institutions that have no legal status and are not overseen by authorities, namely savings groups, money lenders, as well as other unspecified financial providers such as pawn shops.

Among the ways to overcome these limitations require strengthening of MFIs, establishing legal status of MFIs and creating centralised information on MFIs including credit rating for MFIs.

Figure 1



In this regard, government support may include efforts to (i) establish formal procedure for MFIs to obtain standardised legal status; (ii) create comprehensive MFI information centre including data on MFIs' general profile, performance records, credit history, as well as credit rating; (iii) enhance training for staff of MFIs that are not yet able to acquire legal status; and (iv) encourage microfinance training for commercial bank staff. This last government support can be tied in with recommendation regarding human resource of the banking sector.

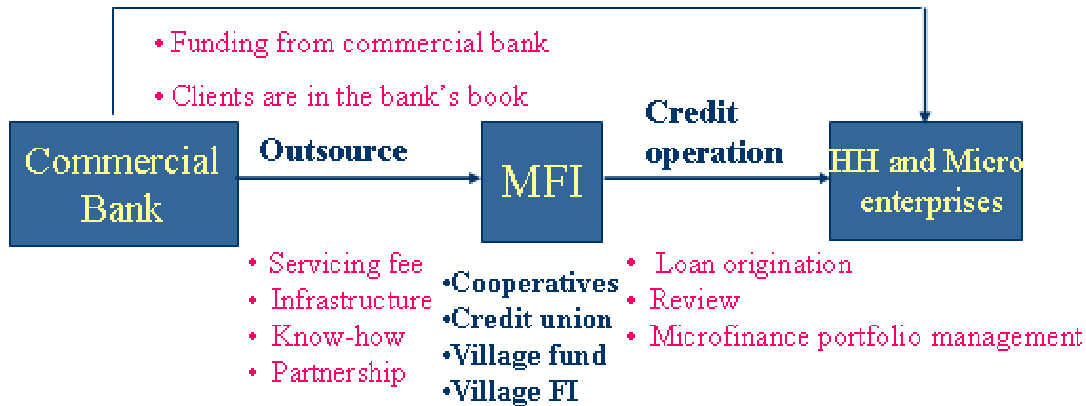
2) Commercial bank outsource retail operation to MFIs in the semi formal and informal sectors

Under this model, commercial bank outsources retail operation to MFI. Commercial banks establish partnership with selected MFI. In return for fees from commercial banks and/or interest rate differential MFIs (i) originate and disburse micro credit loans which will be registered on the bank's book; (ii) make credit review which could either be a joint decision or solely by bank, depending on MFI past records; and (iii) manage micro credit portfolio including loan monitoring and collection.

This model may represent one of the ways to strengthen many MFIs that already exist in Thailand, especially in rural areas as well as to indirectly bring semi-formal and informal sector into formal sector. Credit data in the system may be improved following the expansion if commercial bank's client records covering those previously using financial services from semi-formal and informal sectors. This arrangement benefits from commercial infrastructure and ample funding, while taking advantage from MFI's in-depth knowledge of clients (soft qualitative data) and know-how of local microfinance market

However, difficulties involved in implementing this model may include those mentioned in the first model as a few additional difficulties. These include additional complexity to structure and operation of the MFIs and the difficulties in drawing up effective and fair agreement between commercial bank and MFI.

Figure 2



Necessary conditions for this model to work well may include sufficiently strong MFIs with formal legal status. Centralised information on MFIs including MFI credit history and credit rating is crucial.

In order to support this arrangement, government may choose to follow the suggestions made for model 1 and add a number of supporting schemes as follows.

- Establish **formal documentation and procedure for MFIs** that meet a certain minimum agreed standard
- **Information and match-making facilities**: dissemination of profiles of commercial banks and MFIs with formal documents approved by government mentioned above
- **Training centre for those MFIs that are not able to obtain documentation**, to help them upgrade themselves to a minimum agreed standard required
- **Financial education centre for commercial bank-MFI clients**, so that they are more equipped to make use of financial services in commercial banks and make informed financial decisions.

4.1.2 Business Model for Micro and Small Enterprises for young SME and SME with past NPL record

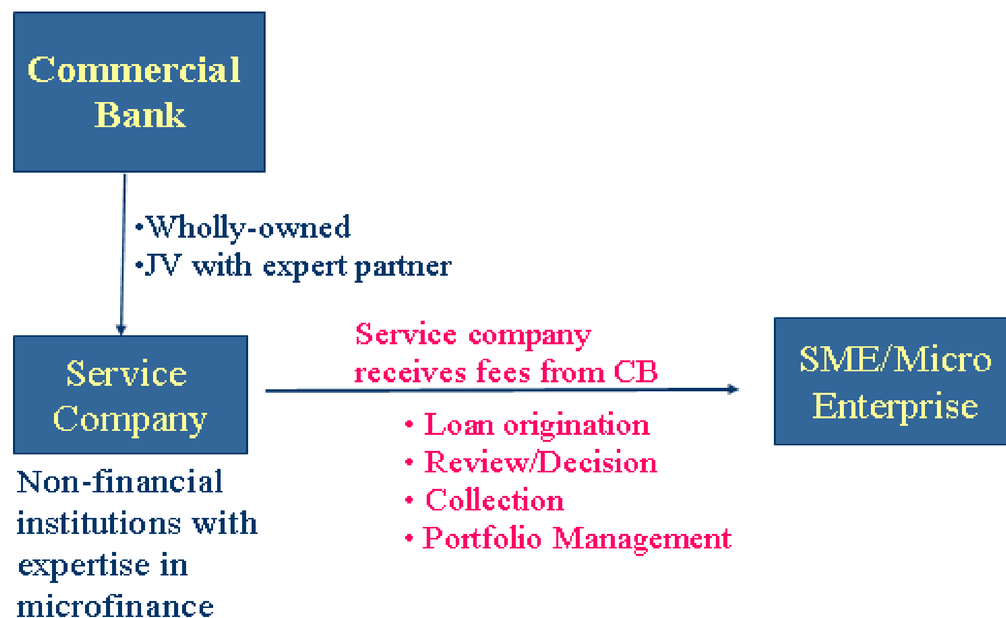
The second group of business models aim to serve young and start-up SMEs and SMEs with past NPL records or those faced with high collateral requirement. The models may be able to provide financing to those SMEs already with access to formal financial institutions as well as those at the margin of access.

1) <u>Commercial Bank has Non-financial Subsidiary, a Service Company</u>

Under this model, commercial bank creates a non-financial service company, with its own governance, management, and staff. The service company provides loan origination and credit administration services for bank, including promoting, evaluating, approving, tracking and collecting loans, and in return the service company receives fees from commercial bank. Loans are registered on the books of

the commercial bank. Therefore, there is no need to issue banking license for the service company. This subsidiary can be wholly-owned by the bank or joint-venture with strategic partners such as foreign players who have experience and expertise in microfinance.

Figure 3



The main advantage of this model can be summarised as follows: It does not require separate banking license, and thus is not under supervision of authorities. It does not require a large equity start up, compared to with the private SFI model, making it much easier and less costly to launch. Under this model, commercial bank can focus on providing infrastructure, while service company concentrate on improving credit methodology. With lean structure, service company may be able to provide fast loan approval.

However, lack of appropriate incentive system and skills may continue to be main obstacle. In this regard, government support may involve human resource training for service company officers. This may be tied in with policy recommendation regarding the revival of Banking Academy.

2) <u>Specialised Financial Institution (SFI)</u>

Another proposition is to enhance the existing retail bank licence, with similar features to private SFI as previously discussed, to act as a niche player in a market that specialises in micro enterprise and SME financing.

Currently, there are two retail banks in Thailand. The main consumer target groups of retail banks are supposed to be retail consumers including low income households and SMEs. However, the retail banks' contribution in microfinance and SME financing has not been significant since their establishment in 2004 following Financial Sector Master Plan I. Therefore, Thai financial sector development may benefit from enhancement of the role of retail banks.

Figure 4

In this regard, promotion of retail banks' contribution to the financial sector could be carried out by giving more flexibility to existing players and/or allowing new players with appropriate experience and expertise to enter microfinance and SME financing.

Private SFI under the retail bank license may be established in five different ways.

(i) ***New retail bank as a financial subsidiary of an existing commercial bank***: This allows internal retail and SME units already exist in the bank to have their own corporate culture as well as autonomy in management and recruitment process. This also demonstrates a commitment to micro enterprise and SME financing. The incentive system may involve to privilege of waiving One Presence Policy for commercial bank wishing to enter micro enterprise and SME financing.

The new retail bank can be wholly-owned by the existing commercial bank or jointly-own with new strategic partner with expertise in microfinance and SME financing.

(ii) ***Existing retail bank find new strategic partner with expertise in microfinance and SME financial:*** This may allow existing retail banks to better perform as specialised financial institutions, provided that the new strategic partner is appropriately chosen.

(iii) ***New player take over existing retail bank:*** This may be one of the ways to allow weak financial institution to be taken over by new player who has clear commitment and experience in microfinance and SME financing

(iv) ***Merger of small financial institutions:*** This could be one of the ways to consolidate the banking sector, allowing the non-core banks to merge

become a niche player in the market. However, difficulties may include lack of appropriate skills and incentive for merger.
Therefore, it may be necessary for government to provide appropriate incentive system as well as facilitate merger process.

(v) ***New player as retail bank:*** This is one of the ways in which new player can be selected entirely based on their expertise and commitment to microfinance and SME financing. When a new player is selected on this basis, it is important to have clear criteria as well as monitoring and disciplinary framework in order to ensure that the new player remains committed to its proposed goal in an efficient and sustainable manner.

Table 3 Analysis of Business Models

Business Model	Advantages	Difficulties	Necessary Conditions	Government Support
1. CB lends to MFI *Target group: Micro enterprise and SMEs who are in provincial areas and/or from lower income group with access to semi-formal and informal sector only. (credit unions, agricultural cooperatives, village funds).*	▪ take advantage of funding from CB and relationship banking/local knowledge from MFI ▪ One way to strengthen many MFIs that already exist in Thailand ▪ One way to indirectly bring MFI under guidance and care of regulator through CB ▪ Relative simple to launch compared with model 2 (CB outsourcing to MFI) ▪ CB might be more familiar with this approach, as its similar to corporate lending ▪ Many countries around the world have already use this approach (more case studies) ▪ Could be the first step towards outsourcing	▪ Lack of incentive for existing CB to enter this market ▪ Lack of standardized benchmark/ formal legal status of some MFIs ▪ Lack of centralized information on MFIs	▪ Sufficiently strong and able MFIs (however, may not be as strict as what is required for model 1) ▪ Formal legal status ▪ Centralized information (include profile, performance and credit history) on MFIs ▪ Criteria/Rating for MFIs	▪ Establish formal & legal procedure for MFIs ▪ Comprehensive MFIs (crediting history and rating) Information Centre ▪ Training centre for those MFIs that are not able to obtain legal status ▪ Support training for CB loan officers (tied in with Banking Academy of loop8)

Business Model	Advantages	Difficulties	Necessary Conditions	Government Support
2.CB outsource to MFI *Target group: Same as above*	▪ take advantage of infrastructure and funding from CB and relationship banking/local knowledge from MFI => reduce information asymmetry and transaction costs for CB ▪ One way to strengthen many MFIs that already exist in Thailand ▪ Improve credit data, expanding coverage to clients from semi-formal and informal sector	▪ Lack of incentive for existing CB to enter this market ▪ Add complexity to structure and management of MFIs ▪ Difficult to draw up efficient and fair contract between CB and MFIs ▪ Need to design suitable incentive system to ensure that MFI find and maintain good clients and profitable loan portfolio ▪ Lack of standardized benchmark/ formal legal status of some MFIs ▪ Lack of centralized information on MFIs	▪ Sufficiently strong and able MFIs - need clear indicator (contact village funds) ▪ Formal legal status ▪ Centralized information on MFIs ▪ Criteria/Rating for MFIs	▪ Procedure to establish legal status for MFIs ▪ Information and match-making facilities ▪ Training centre for those MFIs that are not yet able to obtain legal status o Financial education centre for commercial bank-MFI clients o
3. CB's Service Company *Target groups: SME already with CB Small and start-up SMEs*	▪ Comparative advantages optimised: CB focusing on providing infrastructure, while service company focusing on improving credit methodology ▪ Not require separate banking license ▪ Not separately supervised by authorities ▪ Not require large equity base ▪ Easier and less costly to launch	▪ Lack of incentive for existing CB to enter this market ▪ Incentive to find and maintain good clients and portfolios ▪ Lack appropriate skills		▪ HR training for loan officer, tied in with Banking Academy in loop 8 ▪ Create appropriate incentive to address high start-up and transaction costs

Business Model	Advantages	Difficulties	Necessary Conditions	Government Support
	and operate than model 4 ▪ Lean structure-> fast approval process ▪ Can implement without a change in licensing scheme			
4. CB's Private SFI (under Retail Bank License) *Target groups:* *SME already with CB* *Small and start-up SMEs*	▪ Niche player with autonomy from CB ▪ Separate risk from CB risk ▪ Flexibility in operation, management, and recruitment to better suite SME financing ▪ Commitment to SME financing ▪ Not subject to strict CB regulation requirements	▪ Lack of incentive for existing CB to enter this market ▪ Not allowed under One Presence Policy ▪ Duplication of resources ▪ Require large capital start up ▪ Require FI license and under supervision ▪ Possible regulatory arbitrage?	▪ Clear scope of business ▪ Clear licensing scheme ▪ Regulatory standard	▪ HR training for loan officer, tied in with Banking Academy in loop 8 ▪ Create appropriate incentive to address high start-up and transaction costs ▪ Appropriate regulation

Note: Suggested stage of development: CB lends to MFI=> CB outsource to MFI

Table 4 Options for Players Entering the Micro Credit /SME Financing Market

Establishment Procedure	Advantages	Additional Difficulties	Additional Necessary Conditions	Additional Government role
1. Existing CB alone	▪ Can implement immediately	▪ Lack of experience and skills ▪ Regulatory barrier for model 4 (deposit-taking SFI): one presence policy		▪ Pilot project
2. New Player partnering or JV with existing CB	▪ Can select new partner with expertise and commitment to doing microfinance with MFIs and SME financing ▪ Relatively flexible/simple to launch ▪ Knowledge and technology transfer	▪ Selection process and criteria of new partner ▪ Monitoring framework to ensure that new player are conduct micro/SME financing business as committed ▪ Fair agreement between partners	▪ Clear new entry criteria for this purpose ▪ Monitoring and disciplinary framework to ensure commitment is not compromised ▪ Clear policy direction regarding foreign participation	▪ Relaxation of foreign ownership/participatio n in system ▪ Establish conditions, monitoring framework and discipline (exit strategy/penalties) for the new player
3 New player take over with CB and do micro enterprise and SME financing	▪ Can select new player with expertise and commitment to doing microfinance with MFIs ▪ One of the exit strategy for weak FIs in the system	▪ Resistance from CB ▪ Selection process and criteria of new player ▪ Identification of scope of business of new player ▪ Monitoring framework for the new player	▪ Clear new entry criteria for this purpose—to close access gap ▪ Monitoring and disciplinary framework	▪ Relaxation of foreign ownership/participation ▪ Establishing conditions, monitoring framework and discipline (exit strategy/penalties) for the new player

Establishment Procedure	Advantages	Additional Difficulties	Additional Necessary Conditions	Additional Government role
		▪ Difficult to control competition level->increase competition in traditional market		
4. Merger of small banks	▪ One of the ways to consolidate banking system, allowing non-core banks to merge and become niche player	▪ M&A process ▪ Adjustment of infrastructure and human resource ▪ Lack of appropriate skill and expertise		▪ Facilitation in M&A process ▪ HR training—tied in with loop 8
5. New player as subsidiary or full branch	▪ Can select new player with expertise and commitment to doing microfinance with MFIs	▪ Selection process and criteria of new player ▪ Identification of scope of business of new player ▪ Monitoring framework for the new player ▪ Lack of knowledge in local market	▪ Clear new entry criteria for this purpose ▪ Monitoring and disciplinary framework	▪ Relaxation of foreign ownership/participation ▪ Establishing conditions, monitoring framework and discipline (exit strategy/penalties) for the new player

4.2 Information Infrastructure

Policy suggestions regarding information infrastructure can be divided into two main dimensions. On the one hand, there is a need to **enhance credit information of micro enterprise and SMEs in order to reduce information asymmetry** in the loan review process of the financial institutions. On the other hand, there is a need to **improve financial literacy and information** regarding financial services and management for micro enterprise and SMEs

4.2.1 Enhancement of Credit Information in Credit Bureau

It is suggested that the role of credit bureau should be enhanced. Credit information should also include (1) financial institutions from semi-formal and informal sectors and (2) data on guarantors.

By including credit history information from semi-formal and informal sectors, financial institutions will be able to evaluate their clients and expand their cliental more effectively. Financial institutions in the formal sector will have exposure of information on credit-worthy SMEs in the semi-formal and informal sectors.

4.2.2 One-Stop-Service for SME: Enhancement of OSMEP Role

In order to improve SME financial literacy, operational capability as well as opportunity to find appropriate financing, One-Stop-Service centre for SME, similar to Singapore case, is proposed.

It is important to assist development of SME in all the important dimensions, including SME financing. In way to provide this support is to develop a one-stop-service centre for SME that i) provide support such as financial advice and office equipments for SMEs, particularly SME start-up and ii) facilitate partnership between potential investors and/or financial service provider and SMEs by disseminating relevant information about SMEs, making it easier for investors and financial service provider to review and make decision regarding partnership and financing with SMEs.

By combining all the services in one unit, we would be able to better avoid coordination failure among policy makers and stakeholders and reduce transaction costs in finding out information.

4.3 Credit Guarantee Scheme

There is an ongoing debate about the effectiveness of CGS in developing financial systems. While some argue that developing institutions specialized in micro lending is a more efficient way to reach the target groups, others consider that the benefits associated with having CGS surpass the costs.

In particular, the argument is that CGS can be a good complement to having only specialized microfinance institutions to support SME financing. The form of credit guarantees can be arranged in many ways. This paper suggests a number of credit guarantee models that are commonly used and maybe applicable to the case of Thailand:

4.3.1 Open and targeted schemes

Credit guarantee can be organized to serve a particular target group or to SME in general. If there is no special requirement for the target group, the scheme is said to be open. Usually CGS for SME is mostly open scheme. However, if the scheme is introduced to support a particular target group, it is said to be closed or targeted schemes.

4.3.2 Funded and unfunded schemes

The funded schemes can take various forms. First, the central bank/ government are the only financier of the guarantee fund. Second, banking institutions participate to finance the CGS together with the central bank/government. Third, both banking and non-banking institutions participate in the fund to share risk with central bank/government. For unfunded schemes, commercial banks administrate the fund and decide if a loan is to be guaranteed or not. However, banks have to share part of the risk, usually up to 25%, and have to take all precautions, since the government has the right to reject claims.

4.3.3 Ex-ante and ex-post schemes

This type of classification distinguish credit guarantee scheme according to whether the guarantee is issued before or after the loan is approved from financial institutions. For ex-ante scheme, the borrowers present their projects and financial proposals to the guarantor. If the guarantor agrees to guarantee this project, it will issue a letter of guarantee favouring the borrower. The borrower then presents this document to the lender. For the ex-post scheme, CGS is applied to the borrowers after the loan is approved.

4.3.4 Individual and portfolio models

For individual model, individual borrowers are approved by the guarantor. For portfolio model, the guarantor does not approve single loans, but set the criteria for portfolio of loans that it will be guaranteeing. These criteria may vary depending on target group. For example if the target group is small and medium size enterprise, the criteria for guaranteeing these loans could be the level of assets, the size of the loan, etc.

4.3.5 Direct and Indirect guarantees

Direct guarantee involves the donor agency establishing a guarantee fund and acts as the guarantor and in case of default repays up to a percentage agreed. The advantages of this system are that it is easy to establish. As for indirect guarantees, the difference is that a third party administers the fund established by the donor agency. These guarantees also guarantee the loan up to a certain percentage without direct involvement of the donor agency, to which only progress reports are given. The Central Bank or the Government can sponsor these guarantee systems.

4.3.6 Intermediary model

This is a model of CGS whereby a guarantee is issued from banks to non-bank micro finance institutions. After receiving the guarantee, the micro lenders then use the funds to loan or finance SME.

Within all these models, important issues relate to the need for guarantee programmes to be structured in a way that mitigates problems of moral hazard and that provides incentives for borrowers to graduate to guarantee-free financing over time. Therefore, it is important for policymakers to encourage the development of a private corporate credit guarantee industry, market-based provision of credit guarantee by having commercial banks and/or MFI sharing the risks with the government/central bank. In this regard, role of SICGC could be further supported by involving private sector partnership and/or introducing more market-based guarantee programme such as a public guarantee programme where commercial banks need to bid for a guarantee, similar to the guarantee scheme in Chile.

4.4 Public and private sectors' partnership

There is the need for closer coordination between the government and the private sectors. First of all, the government and the Bank of Thailand need to provide a conducive and enabling environment for SMEs to operate. This requires that the macro economic policies are sound, the regulatory regime is supportive and the legal system is able to enforce contracts and property rights. There should be a level playing field for both the small and large entrepreneur and there is no preference treatment for any particular class of businesses.

The second player in this process is the provincial and local governments. They should allocate and earmark land for setting up industrial estates and deliver the infrastructure facilities in these estates. Experiences learned is that if clusters of same industries are relocated in the same vicinity the suppliers of raw materials and components, and providers of services and marketing of output also move to the same areas. The logistics management and reduction in transportation cost reduce the cost of production and distribution for a single enterprise. In many countries, zones and clusters have worked well and helped SME to strengthen their competitiveness and increase their chances of obtaining financing from financial institutions.

Third, OSMEP should play a critical role in the business development support, advisory services and managerial trainings of SME. OSMEP can design simplified standardized book keeping, inventory management and ledger forms which can aid in the preparation of financial documents.

Fourth, the SME bank is another important player in encouraging SME financial access. However, it alone cannot cater to the needs of the entire sector but it could develop a prototype programme lending, credit appraisal and delivery methodology, standardized documentation, monitoring mechanisms, which can be replicated and followed by other commercial banks.

Fifth, the commercial banks have to develop dedicated groups for servicing the SMEs. They should establish their presence and branches at the clusters and places which have untapped potential. This is because if the SME branches of the banks remain limited to a few big cities, banks will not be able to make a profitable business out of the SME sector.

5. Conclusions

In Thailand, both the government and the Bank of Thailand have recognized the importance of SME to the economy. SME, however, are gradually losing their

edges in the competition to larger enterprises and the restraints on SMEs have become more and more evident, among which the difficulty to access financing is regarded as the biggest obstacle.

Despite the existence of SME bank, retail banks and the Small Industry Credit Guarantee Corporation (SICGC) in Thailand, 30% of firms have credit access problems (BOT survey 2002) and among them 42% of small firms encounter problem of inadequate financing from financial institutions. For this reason, the problem of SME financial access remains and it is therefore essential that the form and amount of the financing be designed to enable development of SME to earn enough profits and cash flow to sustain itself without repeated injections of money from outside the company.

This paper surveys experiences in various countries and suggest that it is necessary for both the public sector (government and central bank) and the private sector to work together in enhancing SME financial access opportunities. These suggestions include business models that aim to serve micro enterprises and SMEs via existing MFIs, business models where commercial banks provide financial services to SMEs directly, enhancing SME information facilities via expanding the coverage of credit bureau, encouraging one-stop service of online information, encouraging the establishment of private-sector commercial guarantee company and/or market-friendly credit guarantee scheme.

The SME bank in this regard may choose to take a lead in developing innovative lending technologies and programme lending tools where standardized credit scoring methodology may be used for each sub-sector rather than always relying on the conventional credit methodology currently used by commercial banks.

SMEs will continue to play a very important and vital role in the Thai economy. The issues that have been recognized as the most important challenges for helping SME access to finance are designing appropriate business models and supporting scheme in order to reduce asymmetric information and transaction cost problems associated with SME financing. Well designed government intervention, with clear policy target and appropriate incentive system, remains indispensable provided that such support do not displace the role of private sector.

Further work is needed in terms of providing analysis on specific arrangement and business models, including those of public and private sector partnership. In this regard, participation from all stakeholders, e.g. Ministry of Finance, Bank of Thailand, SICGC, OSMEP, commercial banks and SFI (particularly SME bank) may be necessary. This may involve market survey and policy focus group discussion to find out practical business models and the corresponding supporting infrastructure that may be most appropriate for Thailand.

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Appendix

Joint Credit Information Center (Taiwan)

Introduction

With the approval of the Ministry of Finance (MOF), the JCIC was reorganized from the Joint Credit Information Center of the Taipei Bankers Association into the Joint Credit Information Center on May 20, 1992. The JCIC is dedicated to creating a nationwide credit information databank while providing comprehensive credit information for inquiries and utilization, so as to promote the sound development of Taiwan's credit system. In order to enhance service quality, the JCIC has been strongly committed to expanding credit information and enriching credit information products, continuing to develop new value-added credit information products for the purpose of strengthening the services provided to its members.

Objectives

1. To establish a nationwide credit information database and to provide credit records as well as operational financial information of economic entities to member institutions.
2. To improve the credit investigation function of the financial sector and to promote the development of credit investigation techniques.
3. To ensure the safety of credit transactions and to promote the sound development of the national credit system.
4. To provide information needed by the competent authority for financial supervision.

History

Joint Credit Information Center (JCIC) was established in 1975 under the Bankers Association of Taipei, and responsible for collecting, processing, and exchange of credit data among financial institutions. In 17 years of operation, JCIC kept on expanding its business. As a result, the Bankers Association of Taipei decided in 1992 to donate all the operating surplus of JCIC to establish the non-profit "Foundation of Joint Credit Information Center". The new JCIC continues to serve member institutions by providing accurate and quality credit information on a user pay basis.

Currently JCIC is the only credit reporting agency that collects credit data from financial institutions in Taiwan, and also the first in Asia that collects both positive and negative credit data on individuals and corporations. In the 2004 "Credit Reporting System Project" by the World Bank Group, JCIC was ranked No. 1 in "public credit registry" among 68 countries (based on the rules on collection of information, the scope of information distribution, the access to information, and the quality of information).

Members

A Total of 421 Members as of January 17, 2008 consist of Domestic Banks, Taiwan Branches of Foreign Banks, Bill Finance Companies, Trust and Investment Companies, Securities Finance Companies, Credit Cooperative Associations, Credit Departments of Fishermen's' Associations, Credit Departments of Farmers' Associations, Life Insurance Companies, Property Insurance Companies, Credit Card Issuers, Credit Guarantee Fund, and Other Institutions Approved By The Competent Authorities.

Services

The Standard Credit Information Products have Eight Categories

1. Basic profiles：

Information such as name, date of birth, and permanent registered address are provided for the Public, and for corporations there are registration information, list of directors, supervisors and management, scope of business, and factory registration.

2. Loan related information：

Information includes loan outstanding balance, past-due loan, debt-collection, and bad debt amount, payment status, guarantee information, and collateral of individual or corporate borrowers.

3. Financial information：

Financial reports, financial ratios, and CPA's opinion of corporation, and comparisons of financial information by industries, and with other corporations in the same industry.

4. Affiliated(conglomerate and the same party) entities information：

Long-term equity investment, short-term investment, transactions with affiliated parties, change of shareholding by insiders, and corporation investments in Mainland China.

5. Comprehensive credit report：

Consolidated loan and credit card information of the Public and corporations, with credit score for individual.

6. Credit card holders and merchants information：

Basic profiles card holding record and payment status of credit card holders, and merchant basic profiles and contract cancellation information.

7. Public information：

Basic profiles of business entities and financial information of public companies.

8. Other credit related information：

Import, export, and chattel mortgage information of companies, fraud and forgery (alteration) of documents reported, and statistics of credit information inquiries by member institutions.

In addition, there is a Customized Credit Information Products which in support of member institutions' needs for automated credit check; JCIC provides customized credit information products for member institutions. Those customized products have the following features: Flexible design – member institutions can select the data units they desire, and the data are presented in report form or as pure data. In case of pure data, member institutions can read and process the data directly in an automated process. This service makes it easier for member institutions to promote automatic services such as online credit card and loan approvals.

Aside from customized inquiries that are tailored to member institutions' credit card and loan approvals, JCIC also provides the consumer finance business of member institutions in relation to customer accounts review services.

According to their service, they provide services to various groups of people such as services to member institutions, and services to the public.

Services to Member Institutions

1. To maintain a nationwide credit information databank and provide online and offline credit inquiry services.
2. To accept supplements, corrections or deletions of credit information.
3. To conduct financial analysis and credit rating of enterprises.
4. To conduct credit and finance-related research.
5. To handle legal matters relating to credit information.
6. To publish and distribute books and publications relating to credit investigation, credit, information and Review of Financial Risk Management.
7. To publish and distribute books and publications relating to financial ratios of different industries.
8. To publish and distribute the "Overview of Financial Institutions."
9. To hold lectures, workshops, and seminars relating to credit information for personnel of member institutions.
10. To handle fraud reporting by member institutions.
11. To transfer inquiries regarding owner-occupied properties.
12. To handle other matters relating to credit information.

Services to the Public

1. Accepting inquiries from subjects of credit reports.
2. Adding supplements and making corrections to credit reports.
3. Accepting inquiries about credit-related matters from subjects of credit reports.
4. Accepting note service applications from subjects of credit reports.

Source: http://www.jcic.org.tw/history_eng.htm