Financial Access of SMEs in Thailand: What Are the Roles of the Central Bank?

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The views expressed herein are those of the authors and not necessarily those of the Bank of Thailand.

Abstract

In Thailand, information asymmetry problems between lenders and SMEs are evident. Credit access is found to increase with firms’ ages, assets and sales. Firms’ funding structures lean more towards debt funding rather than equity funding for medium and large size firms as well as those in the manufacturing sector. Information asymmetry is related to inadequate business experience and financial literacy of SMEs, and insufficient risk-based credit assessment and management. As a result, lending practice is still mostly based on collateral. The government initiatives as well as the Bank of Thailand (BOT)’s financial sector master plan have been geared toward lessening the problems. However, remaining financial gaps especially for the small firms still exist. Further roles of the BOT should focus on advocating relationship-based lending, promoting an increase in credit assessment capability of financial institutions, taking into account firms’ sizes, sectors, as well as stages of development when making credit policies, promoting and improving flows of information and financial literacy, and enhancing the evolving development of unofficial micro-finance units.

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1. Introduction

Since the economic crisis in 1997, the formerly overlooked Small and Medium Enterprises (SMEs) have been turned to as one of the main engines for sustainable economic growth. Realizing their importance and potentials, the government has initiated a package of policies, aiming to foster SMEs development by reducing various problems facing SMEs in marketing, human resources and management, technology, infrastructure and regulations, and financing.

Among those problems, this paper will focus on SMEs financial challenges, as they are most relevant to the central bank. The important questions the paper wants address are “What have constrained potential and existing SMEs from access to financial funding?” and “What should be the roles of the central bank in promoting better financial access for SMEs?” To answer these questions, the paper relies on earlier works by Townsend and his colleagues concerning financial constraints in rural and semi-rural Thailand, our analysis about SMEs’ financial access and structure of funding using data from the Bank of Thailand (BOT) survey on demands for financial services, as well as qualitative data related to SMEs credit access problems from both creditors and borrowers’ perspectives.

We provide the analysis concerning the government’s financial funding (including both debt and equity funding) initiatives as well as the BOT’s policies related to SMEs funding particularly through the recently adopted financial sector master plan. The remaining gap of SMEs’ funding is then assessed from the above analysis. In addition, we propose a set of policy recommendations that should further reduce the remaining financing gap of SMEs especially for the start-ups as well as very small firms.

The rest of paper is organized as follows. Section 2 discusses the definition of SMEs and their importance to the Thai economy. Challenges facing SMEs with a focus on financial access problems are presented in section 3. Section 4 provides the national policy for SMEs development and its evaluation. The remaining gap of funding for SMEs, the BOT’s roles, and policy recommendations are shown in section 5. Finally, conclusion and suggestions for further studies are provided in section 6.
2. Characteristics of Thai SMEs

2.1 Definition of Small and Medium Enterprises (SMEs)

Definitions of SMEs vary from country to country and between different sources of the SMEs statistics. For example, the SMEs definition of the European Commission focuses on the need of companies to acquire funding whereas that of Basel II is based on credit risk of lending institutions. The commonly used factors for categorizing the size of firms for different reporting purposes include the choices of employment, fixed assets, sales, balance sheet, and structure of shareholders. In Thailand, an official definition of SMEs, proposed by the Ministry of Industry, covers the number of employees and the value of total fixed assets (excluding land) as shown in table 2.1. The criteria of those two factors differ among the 4 business sectors: manufacturing, service, wholesale, and retail. Any firm is considered a small firm or a medium firm if either one of the above two variables meets the requirement of a smaller class. This is also the definition that the Bank of Thailand (BOT) has adopted.

<table>
<thead>
<tr>
<th>Table 2.1 Definition of SMEs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Employees</strong></td>
</tr>
<tr>
<td>Ministry of Industry*</td>
</tr>
<tr>
<td>Manufacturing Sector</td>
</tr>
<tr>
<td>Service Sector</td>
</tr>
<tr>
<td>Wholesale Sector</td>
</tr>
<tr>
<td>Retail Sector</td>
</tr>
<tr>
<td>Basel III</td>
</tr>
<tr>
<td>European Commission</td>
</tr>
</tbody>
</table>

*Source: Ministry of Industry (issued on the 11th of September 2002)

**excluding land
2.2 Size and Importance of SMEs

It is undeniable that SMEs play a crucial entrepreneurial role in Thailand, as almost all registered firms are SMEs. They also account for more than two-third of total enterprises’ employment. However, the share of SMEs’ employment declined from 76.4% in 1997 to 69.0% in 2002 due to recovery of large corporations from the economic crisis in 1997. In terms of contribution to GDP, a share of SMEs production was 38.9% of the GDP in 2002, slightly increasing from 37.7% in 1997. Similarly, the proportion of SMEs’ products in total exports has been slightly lower than 40%.

Table 2.2 The importance of SMEs to Thailand Economy

<table>
<thead>
<tr>
<th></th>
<th>1997</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>799,033</td>
<td>1,639,427</td>
</tr>
<tr>
<td>(%)</td>
<td>99.5</td>
<td>99.7</td>
</tr>
<tr>
<td>Employment</td>
<td>4,057,595</td>
<td>4,990,217</td>
</tr>
<tr>
<td>(%) in total enterprises</td>
<td>76.4</td>
<td>69.0</td>
</tr>
<tr>
<td>GDP (%)</td>
<td>37.7*</td>
<td>38.9</td>
</tr>
<tr>
<td>Export (%)</td>
<td>38.5**</td>
<td>38.2</td>
</tr>
</tbody>
</table>

* GDP as 1998
** Export as 2000

Source: Reports on the Manufacturing 1997 and reports on Trade and Service Businesses Census 2002 from the National Statistical...
It is evident that the number of firms grew and declined significantly in the retail and manufacturing sectors respectively. The manufacturing sector has been replaced by the retail sector as the sector with the highest number of entity. The highest number of employment was in the manufacturing sector in 2002. However, the rising number of firms in retail, and service sectors renders approximately equal shares of employment among manufacturing, retail, and service sectors in 2002.

Table 2.3 Number of SMEs firms Classified by Sector (%)  

<table>
<thead>
<tr>
<th>Sector</th>
<th>1997</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>36.5</td>
<td>21.8</td>
</tr>
<tr>
<td>Wholesale</td>
<td>3.2</td>
<td>3.0</td>
</tr>
<tr>
<td>Retail</td>
<td>34.8</td>
<td>44.7</td>
</tr>
<tr>
<td>Service</td>
<td>25.6</td>
<td>30.6</td>
</tr>
</tbody>
</table>

Source: Reports on the Manufacturing Census, 1997 and reports on Trade and Service Businesses Census, 2002 from the National Statistical Office.

Table 2.4 Number of SMEs Employment Classified by Sector (%)  

<table>
<thead>
<tr>
<th>Sector</th>
<th>1997</th>
<th>2002</th>
<th>% Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of SMEs Employment</td>
<td>4,057,595</td>
<td>4,990,217</td>
<td>23.0</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>1,852,691</td>
<td>1,668,303</td>
<td>-10.0</td>
</tr>
<tr>
<td>(%)</td>
<td>45.7</td>
<td>33.4</td>
<td></td>
</tr>
<tr>
<td>Wholesale</td>
<td>183,063</td>
<td>256,643</td>
<td>40.2</td>
</tr>
<tr>
<td>(%)</td>
<td>4.5</td>
<td>5.1</td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td>1,033,116</td>
<td>1,563,221</td>
<td>51.3</td>
</tr>
<tr>
<td>(%)</td>
<td>25.5</td>
<td>31.3</td>
<td></td>
</tr>
<tr>
<td>Service</td>
<td>988,725</td>
<td>1,502,050</td>
<td>51.9</td>
</tr>
<tr>
<td>(%)</td>
<td>24.4</td>
<td>30.1</td>
<td></td>
</tr>
</tbody>
</table>

Source: Reports on the Manufacturing Census, 1997 and reports on Trade and Service Businesses Census, 2002 from the National Statistical Office.
Regarding ownership, 93.3% of SMEs in Thailand are in the form of sole proprietorship (family-run or one-man operation). Private and public companies constitute about 4 percent of all SMEs.

### Table 2.5 Number of SMEs Classified by Legal Registration, 2002

<table>
<thead>
<tr>
<th>Type of Business</th>
<th>Number</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sole proprietorship</td>
<td>1,530,072</td>
<td>93.3</td>
</tr>
<tr>
<td>Private &amp; public company limited</td>
<td>62,704</td>
<td>3.8</td>
</tr>
<tr>
<td>Partnership limited &amp; unlimited</td>
<td>31,243</td>
<td>1.9</td>
</tr>
<tr>
<td>Others</td>
<td>13,254</td>
<td>0.8</td>
</tr>
<tr>
<td>Community cooperation</td>
<td>1,914</td>
<td>0.1</td>
</tr>
<tr>
<td>State Owned enterprises</td>
<td>240</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,639,427</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Source: Reports on Trade and Service Businesses Census, 2002 from the National Statistical Office.*

### 3: Challenges facing SMEs in Thailand

Problems facing SMEs in Thailand are on all fronts whether they are lack of entrepreneurship, outdated technology, insufficient R & D and low standards of production, difficult access to funding, as well as high and increasing competition both in the domestic and global markets. Even with a comprehensive package of government’s measures to promote and support SMEs, challenges abound.

#### 3.1 Overall challenges of SMEs

The last sectoral SMEs survey by the National Economic and Social Development Board shown in table 3.1, aimed to assess the effectiveness of the reinforced measures to help the Thai SMEs, finds that problems in technology, management and finance are major obstacles for SMEs development especially for very small firms.
At the present, the most crucial marketing problem is lack of channels of distribution. As for technology, low R&D and innovation levels are the biggest concern. Besides, the current low labor productivity level in the SME sector also reflects challenges in human resources and management. However, this paper will concentrate on the challenges concerning financial funding of SMEs as they are most relevant to the central bank.

<table>
<thead>
<tr>
<th>Table3.1 Ranking of SMEs Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Production Problems</strong></td>
</tr>
<tr>
<td>Raw material</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Labor</td>
</tr>
<tr>
<td>Finance</td>
</tr>
<tr>
<td>Technology</td>
</tr>
<tr>
<td>Package</td>
</tr>
<tr>
<td><strong>Marketing Problems</strong></td>
</tr>
<tr>
<td>Channel of Distribution</td>
</tr>
<tr>
<td>Marketing Officer</td>
</tr>
<tr>
<td>Export Incapability</td>
</tr>
<tr>
<td>Information</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Problems</th>
<th>Tourism</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hotel</td>
</tr>
<tr>
<td>Government Policy</td>
<td>1</td>
</tr>
<tr>
<td>Marketing</td>
<td>2</td>
</tr>
<tr>
<td>Personel Officer</td>
<td>3</td>
</tr>
<tr>
<td>Finance</td>
<td>4</td>
</tr>
<tr>
<td>Administration</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Summarize from NESDB Survey (September 2004)
3.2 Financial Funding Challenges

The first important question in this section is “Why is financial access to SMEs important for the economy?” It is then followed by “If important, then what have constrained potential and existing SMEs from credit access?” To answer these questions, we will first discuss about the results of important and pioneering studies concerning credit access conducted at the micro-level by Townsend and his colleagues using panel data from rural and semi-urban Thailand\(^1\). The studies have important implications for both households with entrepreneurial potentials and households with existing small businesses. Second, our further investigation concerning financial access of the existing SMEs using the cross sectional BOT survey data in 2002 will be presented. Third, we will provide the credit access problems from the views of SMEs owners in the BOT and NESDB surveys compared with those from the views of financial institutions. This section will end with a summary of the findings about financial constraints facing SMEs at different stages of development in Thailand.

3.2.1 Townsend’s studies about household financial constraints

Gine and Townsend (2001) and Townsend and Ueda (2000) demonstrate that moderate improvement of financial intermediation in Thailand should lead to significantly higher GDP growth. Business investment of households is determined much more by personal wealth than ability and underlying productivity. Hence, if saving can be mobilized to households and corporations with high-yield activities,

growth will leap. More importantly, the benefits would not be uniform in
the Thai population but highly tilted toward those who can start up small
or medium enterprises or expand the existing ones. In particular, the
group with low wealth but high entrepreneurial talent will gain most from
alleviating the problem of imperfect credit market. They discover that
households with higher wealth are more likely to do business and tend to
invest up to the point where the marginal product of capital equates the
interest rate. However, many households with high entrepreneurial
potentials are constrained by limited wealth\(^2\). Mandated lending,
subsidized interest rates, and establishments of new credit institutions,
although can help, may be too blunt and may not be pertinent.
Inaccessibility to credit of constrained households in the poor
northeastern region is still a big problem even with all the above policies
in place.\(^3\)

Paulson and Townsend (2001) find that financial constraints, which
vary with wealth, are crucial in determining the patterns of
entrepreneurship in Thailand. Limited liability is a major concern for the
poor households. On the other hand, limited information and moral
hazard are concerns for wealthier households as, for this group, credit
decreases in wealth.

### 3.2.2 Firms credit access analysis from BOT survey’s data

In this paper, we try to investigate factors influencing SMEs’ credit
access by using data from the BOT’s survey concerning households’ and
businesses’ demand for financial services.\(^4\) With various sizes of firms in
the survey, we attempt to analyze if factors determining their access to

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\(^2\) In these studies good entrepreneurial potential is determined by education and
whether parents the households’ main income earners had had business in

\(^3\) Lending by the Bank for Agricultural and Agricultural Cooperatives (BAAC), which
is highly in the form of relationship-based practice in other regions, is found to be
dictated by households’ collateral in the northeast.

\(^4\) This survey was done in 2002 in preparation for the Financial sector master plan.
credit are different. In addition, the data allow us to look into whether those factors affect their choices of funding which include loan from an informal sector, loan from a formal sector, equity offering, bond issuance, owner’s saving, and retained profit.5

First, we employ Binary Logit Regression to help identify variables indicating access to credit from financial institutions. The binary dependent variable here has the value of 1 if a firm states that either short-term loan, long-term loan, or credit guarantee from financial institutions is important but it cannot gain access to at least one of them. On the other hand, it has the value of 0 if it can gain access to all those deemed important. The explanatory variables available from the data are age, asset, sale, location, nationality of ownership, location, region, and business sector 6. The age of firms should show the level of firm’s specific information that banks have acquired. The older a firm is, the more information about that firm banks have accumulated. Both assets and sales represent the size of firms whereas the former will also allow us to infer about the importance of collateral.

5 This study focuses on analyzing the funding of registered firms. However, the data from the survey in the part of households’ demand for funding can also be further analyzed to see the constraints facing households with an intention to become start-up SMEs. This will be examined in a future extension of this paper.

6 See Appendix 1 for the statistics concerning the characteristics as well as credit access according to firm’s size.
Table 3.2 Factors determining credit access to financial institutions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Base Unit</th>
<th>Marginal Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.28**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign ownership</td>
<td>0.40</td>
<td>Thai ownership</td>
<td>0.10</td>
</tr>
<tr>
<td>Rural</td>
<td>0.38</td>
<td>Urban</td>
<td>0.09</td>
</tr>
<tr>
<td>Log(Age)</td>
<td>-0.28**</td>
<td></td>
<td>-0.07</td>
</tr>
<tr>
<td>Asset between 5-50 million baht</td>
<td>0.05</td>
<td>Asset&lt;5 Million baht</td>
<td>0.01</td>
</tr>
<tr>
<td>Asset between 51-200 million baht</td>
<td>-0.74**</td>
<td>Asset&lt;5 Million baht</td>
<td>-0.18</td>
</tr>
<tr>
<td>Asset above 200 million baht</td>
<td>-1.28**</td>
<td>Asset&lt;5 Million baht</td>
<td>-0.31</td>
</tr>
<tr>
<td>Sale between 5-50 million baht</td>
<td>-0.03</td>
<td>Sales&lt;5 Million baht</td>
<td>-0.01</td>
</tr>
<tr>
<td>Sale between 51-200 million baht</td>
<td>-0.40</td>
<td>Sales&lt;5 Million baht</td>
<td>-0.09</td>
</tr>
<tr>
<td>Sale above 200 million baht</td>
<td>-1.12**</td>
<td>Sales&lt;5 Million baht</td>
<td>-0.27</td>
</tr>
</tbody>
</table>

McFadden R-squared = 0.1

** = significant at 95% confidence interval

* = significant at 90% confidence interval

We find that credit access increases with ages for all sizes of firms, assets for medium and large corporations and sales for large corporations.\(^7\) It is essential to mention that the age provides a statistically significant result only when it enters the regression in a logarithmic form. This should be because an additional increase in age reveals firms’ information a lot more at young ages, than at old ages.\(^8\) Equally important is that an increase in assets does not provide greater access to loans for small firms. Besides, an increase in sales does not help small and medium

\(^7\) This regression analysis still has a noted concern as an endogeneity problem might prevail. The causal relationship between credit access and the variables indicating firm’s size can be both ways. Specifically, an access to credit might be important in explaining the size of firms as it allows for greater asset accumulation and greater potentials for an increase in sales.

\(^8\) Examining whether firms with ages above a certain threshold get easier loan approvals should be worthwhile for a further analysis.
size firms gain better access to credit. This exemplifies the case for policy assisting small firms to gain easier credit access. This will be particularly crucial for those new enterprises with limited assets whose information available to financial institutions is limited.  

Next, as the data also provide proportions of different sources of funding for each firm, we analyze further if the above set of explanatory variables can also help explain the existing structure of firms’ funding. Two groups of dependent variables are constructed to examine factors influencing different aspects of funding. The first group demonstrates the degree of sophistication in acquiring funding whereas the second group distinguishes debt type from equity type of funding. The dependent variables in the first group are primitive, formal, and advance funding. The dependent variable representing primitive funding here shows the combined percentage of funding in total funding from the most primitive sources of funding: informal sector loan and owners’ private saving. The formal funding represents the proportion of funding raised from formal sector loan, equity offering, and bond issuance in total funding. Focusing on the most advanced form of funding, the last variable in this group includes only the proportion funding raised though equity and bond issuances in total funding. As for the second group, the equity-funding variable includes all funding in the form of equity, owner’s private saving, and retained profit as a percentage of total funding. On the contrary, the debt-funding variable shows the percentage of debt form of funding from formal and informal sector loans in total funding.

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9 It should be noted that this analysis is subject to one important limitation that, among those firms who have credit access problems, the data do not allow us to differentiate those with potential profitability and viability from those who do not deserve credit access.
Table 3.3 Factors influencing choices of funding

<table>
<thead>
<tr>
<th></th>
<th>Primitive</th>
<th>Formal</th>
<th>Advance</th>
<th>Equity fund</th>
<th>Debt funding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Loan from</td>
<td>Loan from</td>
<td>Equity + Bond</td>
<td>Equity+private saving+profit</td>
<td>Loan from formal Sector +Loan from Informal Sector+bond</td>
</tr>
<tr>
<td></td>
<td>Informal Sector+private saving</td>
<td>informal sector</td>
<td>+Equity+bond</td>
<td>+Equity+saving+profit</td>
<td>+Equity+saving+profit</td>
</tr>
<tr>
<td>Age</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Asset between 5-50 million baht</td>
<td>+ *</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Asset between 51-200 million baht</td>
<td>- **</td>
<td>+ **</td>
<td>+</td>
<td>- **</td>
<td>+ **</td>
</tr>
<tr>
<td>Asset above 200 million baht</td>
<td>- **</td>
<td>+ **</td>
<td>+ **</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Sale between 5-50 million baht</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Sale between 51-200 million baht</td>
<td>- **</td>
<td>+ **</td>
<td>+</td>
<td>- **</td>
<td>+ **</td>
</tr>
<tr>
<td>Sale above 200 million baht</td>
<td>- **</td>
<td>+ **</td>
<td>-</td>
<td>- **</td>
<td>+ **</td>
</tr>
<tr>
<td>Manufacturing Sector</td>
<td>- **</td>
<td>+ **</td>
<td>+ **</td>
<td>+ **</td>
<td>+ **</td>
</tr>
<tr>
<td>Service Sector</td>
<td>+ **</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesale Sector</td>
<td></td>
<td>+ **</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail Sector</td>
<td></td>
<td></td>
<td>+ **</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ownership (Thai VS Foreign)</td>
<td>+ **</td>
<td>- **</td>
<td>+ **</td>
<td>+ **</td>
<td>- **</td>
</tr>
<tr>
<td>Location (city VS upcountry)</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.160875</td>
<td>0.091743</td>
<td>0.038972</td>
<td>0.07477</td>
<td>0.07477</td>
</tr>
</tbody>
</table>

+ = positive relationship  
- = negative relationship  
** = significant at 95% confidence interval  
* = significant at 90% confidence interval

We find that firms’ size determines the sources of funding.\textsuperscript{10} Medium and large firms use significantly more funding from the formal sector and less from the informal sector and owners’ saving. Comparing firms in the manufacturing sector with those in the services and trading sectors, the former tends to use higher proportions of loans from the formal sector.\textsuperscript{11} This reflects the collateral based lending practice that

\textsuperscript{10} See the detailed results in appendix 2
\textsuperscript{11} Firms in the non-manufacturing sectors (even though historically having higher profit margins than in the manufacturing sector) tend to have more difficulties getting credit from financial institutions.
allows the manufacturing sector better access to credit compared with other sectors. This should be because manufacturing firms’ values of assets (mostly in the form of factories and machines) are usually greater than other sectors’. The other interesting observation here is that foreign firms tend to use owners’ saving and retained profit in a greater proportion and rely less on debt funding than domestic firms. The advance from of funding (stock and bond issuance) is found to increase in large firms where the asset size is over 200 million baht, foreign owned firms, and firms in the service sector.

Comparing all forms of equity funding against all forms of debt funding, we find that firms’ funding structure leans more towards debt of funding as assets and sales reach the medium size criteria and increases more for the large size firms. On the other hand, small firms’ funding is more in the equity form of funding as owners’ private saving is still the most important source of their funding. However, foreign firms’ funding regardless of the size tends to be more of the equity type due to the use of owners’ saving and retained profit.

3.2.3 Obstructing factors facing creditors and borrowers

Together with the data for the above analysis, the BOT survey also asks those firms with difficulties getting credit access from financial institutions to identify the factors preventing them from gaining the access. We then try to see if the mentioned obstacles differ among firms of different sizes. Surprisingly, we find that the relative importance of different problems is uniform across firm size. The most important reasons regardless of firm’s size are lack of information and advice from financial institutions as well as complexity and inconvenience related to the borrowing process. Compared with large firms, more percentages of SMEs without access mention more about the former than the latter. Not enough qualifications, high related expense, fee and interest rate, and no

---

12 Consistently more than 40 percent of all bank loans go to the manufacturing sector.
collateral are subordinate reasons. These answers coincide with those in the survey conducted by the NESDB in 2004.

**Figure 3.1 Financing problems of Existing SMEs (SMEs’ View)**

Together with the direct observations from the above borrowers’ surveys, we try to see if the problems mentioned from the side of financial institutions will fit with the above side of the token. Not surprisingly, according to the point of view of creditors (collected by the Office of SMEs Promotions) shown in figure 3.2, the reasons constraining them from lending to SMEs differ from the above reasons given by the SMEs. The most important factor limiting loans to SMEs especially for start-up and very small SMEs is inadequacy of collateral, supporting Townsend’s and our findings. Second, full of optimism but lack of business experience is what banks describe a significant proportion of aspiring new entrepreneurs requesting for SME loans. Third, not being able to provide income and cash flow statements is the next important problem preventing loan approvals. Having an accounting
book implies administration cost for firms. In addition, a great number of firms purposely omit formal and correct accounting practice to avoid taxes. The fourth important problem is lack of business plan writing capability. Those with good business ideas and potential entrepreneurial talents need to be equipped with this ability or helped by professionals. The last problem with declining severity is that having NPLs history obstructs some existing SMEs from receiving new loans.

**Figure 3.2 Financing problems of Start-up and Existing SMEs (Financial Institutions’ View)**

To sum up, better access to credit of SMEs especially the start-up SMEs with entrepreneurial talents will be beneficial to economic growth. Overall, the above empirical analyzes have pointed out the following key challenges facing SMEs, as well as financial institutions, and the authorities.

First, small firms’ access to loans from financial institution is constrained for young firms and those without high enough levels of assets. As their information is limited to creditors, those new firms need to be able to demonstrate convincing and realistic business plans showing potential future returns and viability. This can be a daunting task
particularly for novices. It is also important to be able to show a consistent income stream with an up-to-standard accounting book and understand the borrowing process.

Second, lending practice of financial institutions is still largely based on the asset back lending model. Augmenting credit assessment capability of financial institution’s credit models is vital for young firms with a good business plan (most likely with limited collateral) to gain credit access. Relationship-based lending where credit officers are geographically in the proximity of borrowers and can monitor their business conditions closely will reduce information asymmetry between banks and the borrowers. This kind of lending model will provide a more appropriate interest charge according to risk and return profiles that are closer to the true levels. Credit guarantee, which is already in place, should still be important going forward as long as most of lending is still collateral based. However, a moral hazard problem associated with credit guarantee should be attentively monitored. These practices related to bank lending will be discussed further in the section about the BOT’s role.

The financing problems facing SMEs at different stages of development can be summarized in figure 3.3, whereas the summary of the main findings about financial access problems facing SMEs is shown in table 3.4 below.
<table>
<thead>
<tr>
<th>Studies</th>
<th>Source of Data</th>
<th>Samples</th>
<th>Main Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Townsend’s studies</td>
<td>Panel data from Townsend’s household survey (2001)</td>
<td>Households in provinces in each of the 2 geographical regions in Thailand (Central and Northeast regions)</td>
<td>- Moderate improvement of financial access in Thailand should lead to significantly higher GDP growth</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Many households with high potential entrepreneurship are constrained by limited wealth</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Households with higher wealth are more likely to do business</td>
</tr>
<tr>
<td>Analysis about firm’s credit access and structure of sources of funding</td>
<td>BOT’s survey on demands for financial services (2003)</td>
<td>1,195 firms</td>
<td>- Firms’ credit access increases with age, asset and sale.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Firms’ funding structure leans more towards debt of funding as assets and sales increase.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Firms in the manufacturing use greater proportions of debt funding than other sectors.</td>
</tr>
<tr>
<td>Studies</td>
<td>Source of Data</td>
<td>Samples</td>
<td>Main Findings</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-----------------------------------------------------</td>
<td>------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Reasons for SMEs credit access problems</td>
<td><strong>Firms’ side</strong></td>
<td></td>
<td>- Lack of information and advice from financial institutions as well as complexity and inconvenience regarding the borrowing process are major obstacles.</td>
</tr>
<tr>
<td></td>
<td>- BOT’s survey on demands for financial services (2003)</td>
<td>1,195 firms</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- NESDB survey (2004)</td>
<td>224 firms</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Financial institution side</strong></td>
<td>Qualitative</td>
<td>- Inadequacy of collateral, lack of business experience and plans, and below-standard accounting are major obstacles.</td>
</tr>
<tr>
<td></td>
<td>- the office of SMEs promotion</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 3.3 Financing Problems of SMEs at different stages of development.

<table>
<thead>
<tr>
<th>Potential SMEs</th>
<th>Existing SMEs</th>
<th>Strong SMEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Households or firms) no/little financial access due to</td>
<td>Existing problems of small firms</td>
<td>Some still facing problems due to</td>
</tr>
<tr>
<td>- Low wealth and lack of capital.</td>
<td>- Low wealth</td>
<td>- Low wealth</td>
</tr>
<tr>
<td>- Lack of business experience</td>
<td>- NPLs history</td>
<td></td>
</tr>
<tr>
<td>- No record of income statement</td>
<td>- No clear business plan</td>
<td></td>
</tr>
<tr>
<td>- No clear business plan</td>
<td>- Lack of understanding about the borrowing practice.</td>
<td></td>
</tr>
<tr>
<td>- Lack of understanding about the borrowing practice.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Potential SMEs**
  - No financial access due to:
    - Low wealth and lack of capital.
    - Lack of business experience.
    - No record of income statement.
    - No clear business plan.
    - Lack of understanding about the borrowing practice.

- **Existing SMEs**
  - Existing problems of small firms:
    - Low wealth.
    - NPLs history.
    - No clear business plan.
    - Lack of understanding about the borrowing practice.

- **Strong SMEs**
  - Some still facing problems due to:
    - Low wealth.
4. National policy of SMEs and its evaluation

As a result of the economic crisis in 1997, most of large companies in Thailand were overwhelmed with huge foreign debts and as well as high NPLs. With quagmire of problems in large corporations, the Thai government has turned to SMEs as an alternative engine for economic recovery and sustainable growth. This section will discuss the national policy in promoting SMEs, covering development and financing aspects as well as qualitative policy evaluation.

4.1 National Policy in SMEs Promotion

In 2000, the Thai parliament enacted the Small and Medium Enterprises Promotion Act, aiming to promote SMEs, which prompted an establishment of the Office of Small and Medium Enterprises Promotion in the later year. This office is an independent governmental agency, acting as a central planning office, coordinating the strategic plans and works of all relevant agencies related to SMEs development. The national plan for small and medium enterprises promotion (2002-2006) was launched in 2002 after nationwide brainstorming efforts between related agencies and the private sector. In addition, The SMEs Bank was established in December of 2002, as a specialized financial institution, providing financial support to SMEs and promoting new SMEs.

At the present, there are three committees in charge of SMEs promotion: the Competitiveness Development Committee of the National Economic and Social Development Board, the One Tambon One Product (OTOP) Committee and the SMEs Promotion Committee of the Office of SMEs Promotion. The above committees draw funding from the same SMEs promotion fund. However, as they have different origins and objectives, coordination is vital in setting and implementing policies in line among one another. This study chose to focus on the functions of the SMEs Promotion Office as this organization has the biggest promotional role.
**Figure 4.1 SMEs Development**

**1999-2000**
- Enacting Small and Medium Enterprises Promotion Act 2000
- Establishing the Board of SMEs Promotion
- Establishing the Market for Alternative Investment (MAI) to create new fund-raising opportunities for SMEs
- Establishing SMEs Venture Capital Fund
- Recapitalizing the Small Industry Credit Guarantee Corporation

**2001-2002**
- Brainstorming strategies for SMEs development
- Establishing the Office of Small and Medium Enterprises Promotion (the central planning office)
- Setting and implementing the national plans of SMEs Promotion (2002-2006)
- Establishing the SMEs Bank
- Creating entrepreneur society

**2003-2004**
- Establishing the Assets Capitalization Bureau
- Establishing more Venture Capital Funds
- Solving existing problems and expanding roles of several government agencies

**After 2004**
- Focusing on medium-long term plans, promoting sustainable development.
- Gradually changing in government roles to assume a role of a supporter rather than a leading developer.
- Emphasizing on coordination between businesses and clustering systems especially for the strategic sectors.
Box 4.1: The Promotion Plan of Small and Medium Enterprises of Thailand (2002-2006)

In line with the five-year National Economic and Social Development Plan, the Promotion Plan of Small and Medium Enterprises of Thailand (2002-2006) was proposed to emphasize the importance of SMEs development. The goal of this plan is “to make Thai SMEs the engine for the economy as a whole, functioning environmentally friendly yet fully-competitively at international levels, while maintaining high standards of quality and doing so with sustainability, to the benefit of the entire population.”

**Goals of the Plan**

- Increase contribution to the nation’s gross domestic product (GDP) by SMEs to 50 percent by the year 2006.
- Increase employment in the SMEs sector by 181,700 people a year.
- Reach a minimum growth of 6 percent in export value in SMEs, or 436.5 billion baht by the year 2006.
- Increase the number of SMEs businesses by 50,000 a year.
- Reach a minimum increase of 10 percent per year of professional groups with entrepreneurial capability, and have 6,300 business clusters by 2006.
- Encourage target groups of capability enhancement and promotion To achieve the above goals, the strategies aiming to solve temporary as well as medium and long term problems are proposed.
- **Urgent Measures** are drawn to solve financial and marketing problems following the economic crisis. These problems include NPLs, difficulties in borrowing, liquidity shortfalls and difficulties in adapting to changes in the market environment.
- **Medium to Long Term Measures** are employed to lessen structural problems and increase the number of SMEs potentials by improving infrastructure conducive to sustainable growth, promoting research and development, and eliminating obstructing regulations in selected businesses.
- Measures to encourage coordinating efforts among SMEs in local communities and regions in the form of clusters are emphasized to improve their efficiency and to attain to export standards.

*Source: Annual report of the office of SMEs promotion in 2002*
The national master plan, coordinated by the office of SMEs promotion, has led to several reinforcing strategies for SMEs development and financial measures as follows. (See figure 4.2 for the chart of strategic planning structure of SMEs promotion policy)

4.1.1 Development

As prior to the economic crisis, the grass root level of entrepreneur development was not a focal point of attention, there exist needs for systematic development measures focusing on marketing, human resources and management, technology, and infrastructure and regulations.

- Marketing

As marketing obstacles are one of the most urgent problems, measures to help tackle problems and expand market opportunities for SMEs are highly needed. These include measures to search for new domestic and foreign markets, expand existing market, reduce obstacles for SMEs in their marketing, improve product distribution, promote the use of local products and services, improve product designs, and promote free and fair trading practices.

- Human Resource and Management

Improving competitiveness of SMEs through human resource development is essential for sustainable economic growth. Several measures have been proposed and implemented for skill development in technology, management and accounting. These include measures to incubate new SMEs and develop their capabilities, create an entrepreneurial climate in the universities and through the medias, and provide appropriate knowledge and trainings for the existing SMEs.
Figure 4.2 Strategic Planning Structure of SMEs Promotion Policy

The SMEs Promotion Act 2000

Cabinet

The Board of SMEs Promotion

The Office of SMEs Promotion

Village Fund

Action Units

SMEs Fund

SMEs

Generate policies and action plans

The National Plan for SMEs Promotion

Coordinate Action Units

Loans

SFI / Commercial Banks, Finance Companies / Leasing Companies

Credit Guarantee and Collateral

The Small Industry Credit Guarantee Corporation, Asset Capitalization Bureau

Venture Capital Fund

The Office of SMEs Promotion / the SMEs Bank, One Asset Management Ltd.

Capital Market

MAI: Market for Alternative Investment

Financing

Development

Marketing

Ministry of Commerce / Ministry of Foreign Affairs / Ministry of Industry / OTOP / Tourism Authority of Thailand

Resource and Management

Ministry of Commerce / Ministry of Industry / SMEs Bank / Universities

Technology

Ministry of Industry / National Science and Technology Development Agency / National Innovation Agency / Universities

Infrastructures and Regulations

Ministry of Finance / Office of Board of Investment / Other Organizations
• **Technology**

In the long-term, it is essential to enable SMEs to apply updated know-how for competition in the international market. The proposed measures include knowledge and technology sharing platforms between research institutions and SMEs, support funding for research related to SMEs products, and promotion of the use of information and communication technologies (ICT). The main goal is to increase productivity by fully utilizing existing technologies and encouraging knowledge sharing for technology development.

• **Infrastructure and Regulations**

In order to increase competitiveness in the SMEs sector, government roles to provide infrastructure conductive to production, marketing and management capacity enhancement for SMEs are important. The relevant measures involve tackling problems and reducing impediments due to government rules and regulations. The current government measures in this category include reduction and exemption of tariff duties on raw materials, corporate income tax rate cut for small enterprises, expansion of income bracket for small enterprises exempted from the value-added tax 13, and enlargement of investment promotion for SMEs from the Office of Board of Investment (BOI).

SMEs promotion strategy going forward will emphasize on coordination between businesses and clustering systems especially for the strategic sectors chosen by the government including food, automobile, fashion (textile, shoes and leather, and jewelry), electrical appliances and electronics.

**4.1.2. Financing**

The following urgent as well as medium to long-term financial funding measures related the banking sector and the capital market have been initiated, following the Promotion Plan of Small and Medium

13 See appendix 1 for the list of tax incentives.
Enterprises. They include both debt and equity aspects of funding. As for the debt side, the measures focus on both loans and collaterals as follows.

- **Loans**

  One of the urgent measures in the national plan is to solve credit access problems of SMEs. The Thai government has taken a major role in bestowing financial assistance to SMEs by setting target loans provided through the Specialized Financial Institutions (SFIs) and promoting loans provided by commercial banks. These measures intend to allow faster release of financial credit to SMEs and solve NPL problems.

  Besides, measures in the national master plan, the government has launched the Village Fund Project aiming to alleviate poverty problems particularly in rural areas and to boost economic recovery. This project provides working capital for people and small home industry in villages by an amount of one million baht per village.\textsuperscript{14}

- **Credit Guarantee and Collateral**

  The Small-Industry Credit Guarantee Corporation, a state-owned specialized financial institution, founded in 1991, has continuously provided credit insurance and extended more cooperation with commercial banks. Its 4,000 million baht recapitalization in 2000 has allowed guaranteed credit lines for a greater number of SMEs.

  The new and innovative strategy to lessen loan collateral problems is the establishment of the Assets Capitalization Bureau in 2003. The objective of this strategy is to increase more funding opportunities for firms especially retail businesses and small enterprises, by allowing

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\textsuperscript{14} By the end of 2004, the total of 224,000 million baht was allocated to the villagers throughout the country. The proportions of allocated funds are 67% for agriculture, 17% for trading, 6 for emergency, 4% for industry and 4% for service.
potential assets occupied by household and firms to be used as collateral for loans.\textsuperscript{15}

As for equity funding, two main initiatives are the establishments of venture capital funds and the stock exchange for SMEs called “Market for Alternative Investment (MAI)”. In principle, not only will they help raising funds through equity offering, but they will also help improving firms’ Debt/Equity ratios.

- **Venture Capital Fund**

The government has founded 3 venture capital funds and also tried to promote this type of funding with tax incentives\textsuperscript{16}. The goals of this initiative are to look for investors who will invest in shares of potential SMEs due to long-term objectives and help the invested SMEs improve their business capability and efficiency.

- **Capital Market**

The MAI has started its operation since 1999 with the objectives to provide an alternative funding channel for SMEs as well as offer a greater range of investment alternatives for investors. This funding channel should allow for lower funding costs compared with bank borrowing. At the present, with the existing tax incentives, there are 27 listed firms in the market.\textsuperscript{17}

Other than those two initiatives, corporate income tax reduction for the small firms as well as the allowance for special depreciation rates for SMEs’ durable assets should also help provide them greater funding from increasing retained profits.

\textsuperscript{15} These assets include land and property, leasing and hire-purchasing contracts, permits to utilize public lands and other licenses or permits, intellectual property, and machines.

\textsuperscript{16} See Appendix 1 for the list of tax incentives.

\textsuperscript{17} See Appendix 1 for the list of tax incentives.
4.2 Evaluation of National Policy

We can say that the orchestrated government measures have touched on almost all challenges that we have discussed about. However, the extent to which those measures are germane to the problems varies. This leads to varying degrees of success as well as remaining problems as mentioned in the earlier section about challenges facing SMEs.

On the development side, the government’s roles in promoting human resource development and management, and technology need further studies about the effectiveness of those policies. Tangible policies regarding national human capital development will be most crucial in the long term. However, in the short and medium terms, the government efforts to coordinate knowledge and management expertise sharing and training should still be emphasized and promoted.

On the financial side, the government initiatives are more successful on the debt-funding side rather than the equity-funding side. In 2003, bank loans to SMEs from the SFIs and state owned banks stood at 152 billion baht, exceeding the target by approximately 40 percent. The expansion of credit guarantee has helped more SMEs acquiring loans from banks especially after the recapitalization of the Small-Industry Credit Guarantee Corporation in 2000. Moreover, Assets Capitalization has played an increasing role in alleviating collateral problems. In 2004, as many as 220,000 borrowers benefited from this scheme. However, there remain a great number of small firms without access to bank credit due to insufficient collateral. There exist needs to foster entrepreneurial capability especially in demonstrating their good business plans and viability to creditors. New credit institutions such as the village funds need further evaluation if they have allocated the funds to the most productive households and whether appropriate repayment incentives are in place. There is only one available assessment in this area by Kaboski and Townsend (2004). They find that, although the village funds help alleviating constraints in existing rural business and agriculture, they are not found to facilitate business investment.
Concerning equity-funding policies, venture capital funds as well as the MAI have fared much less satisfactorily. The venture capital fund scheme has very little progress since its start in 1999. Currently, the total value of the three existing funds is far below the government’s original targets. So far, less than one hundred SMEs have found their counterpart investors. Factors preventing this scheme from taking–off range from inadequate promotion, not enough information and understanding among SMEs, as well as not conducive regulations (originally providing tax incentives only for SMEs with clear demonstration of innovation). Moreover, embedded risk in the venture fund setting makes it less attractive to most investors with no prior experience.

**Table 4.1 Value of Investment in the three Venture Capital Funds**

<table>
<thead>
<tr>
<th>Funds</th>
<th>Establishment</th>
<th>Target (Million baht)</th>
<th>Value of Investment (Million baht)</th>
<th>Number of SMEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Office of SMEs Promotion Fund</td>
<td>2004</td>
<td>5,000</td>
<td>145</td>
<td>15</td>
</tr>
<tr>
<td>The SME Bank Fund</td>
<td>2003</td>
<td>N.A.</td>
<td>534</td>
<td>28</td>
</tr>
<tr>
<td>The One Asset Fund</td>
<td>1999</td>
<td>1,000</td>
<td>492</td>
<td>54</td>
</tr>
</tbody>
</table>

*Source: Manager Magazine Online, September 2004.*

As for the MAI, even though the goal was set at having 500 listed companies in the market, there are currently only 27 firms with listed stocks in this stock exchange. The most important factor limiting the number of firms entering this market is their obligations to reveal financial information to the public. It is costly for SMEs outside the MAI to upgrade their accounting practice to meet the required standard. In addition, with a small market size, it does not attract enough investment institutional investors and, at times, exhibits excessive price volatility.

Several problems need to be rectified. The above evaluation suggests that better designed mechanisms and incentives for both debt and equity funding need to be further explored. As Thailand will still be a
bank-based economy for many years to go, risk-based lending with proper allocations of funding according to firm’s productivity and potentials should be the first priority of policy. However, being an alternative with a risk-sharing property, equity funding should still be further promoted.

5. Bank of Thailand’s Role in promoting SMEs

Although, the government initiatives have helped lessening financial constraints of SMEs, several SMEs still face with credit access problems. This section will start with discussion about the remaining gap of financial access of SMEs. Then, existing BOT’s policies related to financing of SMEs will be described. The section will end with suggestions for the BOT’s policies that should help reducing the gap.

5.1 Remaining Gap: the small enterprises and low-income households

Our analyzes about financial challenges discussed in section 3 and the government policies in section 4 have pointed out that there remain problems preventing SMEs’ demand for funding from being met by credit supply from financial institutions and investors. In the BOT survey, 30 percent of the firms indicating needs for loans from financial institutions in the observations have credit access problems. However, among them, as high as 42 percent of small firms encounter this problem, compared with 23 and 13 percent for the cases of medium and large firms respectively\(^\text{18}\). The remaining gaps of funding especially for the cases of small firms are a result of a combination of factors related the SMEs themselves as well as the creditors and investors mainly due to information asymmetry. Those main reasons from our earlier analyzes can be summarized as follows.

1.) Collateral-based lending is traditional for Thailand’s financial institutions.

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\(^{18}\) See Appendix 1 for details.
2.) Risk-based credit assessment and management of financial institutions have not been fully adopted to differentiate different risk profiles among SMEs.

3.) Inadequate business experience and financial literacy problems have led to an information revelation problem on the part of SMEs.

It should be noted that parts of the gap have been partially reduced by the establishment of several evolving unofficial micro-finance units by local community members in various parts of Thailand. These organizations, which include credit unions, production-oriented saving groups, trust groups and village banks, are a good example of relationship-based financial services institutions.19

However, they still have some limitations as follows. There exist too few networks across groups, rendering low diversification and frequent insufficient loans for the members. Moreover, lacks of successive leadership as well as lack of a good accounting system are prevalent as they are organized by non-professionals on a voluntary basis.

5.2 The Roles of the Bank of Thailand.

The current roles of the BOT in promoting SMEs are on restructuring the Thai financial institutions to allow for better financial access in the medium and long terms and providing direct financial assistance to them via financial institutions.

5.2.1 Financial sector master plan

This plan is currently taking a major role in reducing the remaining gap. Two main measures of the plan, measures to broaden general access to financial services and measures to increase efficiency of the financial sector, will both directly and indirectly help increase SMEs’

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19 These unofficial organizations are in the form of voluntary gathering of people in the same communities with the main objectives in promoting saving of members, serving small-scale credits to member, and encouraging moral supports among themselves.
access to credit. The former includes measures to promote grass-root financial services, transform the Bank for Agriculture and Agricultural Cooperatives (BAAC) into a rural development bank, and encourage existing financial institutions to increase the level of financial services to low-income households. On the other hand, the latter includes three measures directly related to SMEs: lower capital requirement for qualified retail banks with a focus of lending on retail customers and SMEs, lower risk weights for retails and SMEs (consistent with Basel II) in the loan portfolios of commercial and retail banks, and disentanglement of the Credit Bureau’s problems. In addition, measures to streamline rules and regulations, remove impeding regulations, strengthen financial institutions will also enhance the funding channels of loans to SMEs.

**Box 5.1 The Financial sector master plan**

To develop and strengthen the country’s financial system, the Financial sector master plan was launched in 2002. This plan is a guiding principle for the development of the financial sector over the next 5-10 years, with a focus on increasing efficiency of financial institutions and promoting the roles of the capital market. The main objectives of the plan are to provide:

1. Comprehensive financial services for all potential users, with no significant difference in the level and quality of services between urban and rural areas.
2. Efficient, stable, and competitive financial sector, with a balanced composition of available sources of financing, namely: financial institutions, debt instruments, and equity market.
3. Fairness and protection for consumers.

*See the details of the Financial sector master plan in the BOT website: www.bot.or.th*
The above measures should help reduce the remaining gap to a certain extent, as they will help lessening the three main problems in section 5.1 The corresponding measures for each of the factors obstructing credit access to SMEs are shown in table 5.1 below.

**Table 5.1** Factors Obstructing Credit Access and Corresponding Helping Measures in the financial sector master plan

<table>
<thead>
<tr>
<th>Problem</th>
<th>Measures</th>
</tr>
</thead>
</table>
| **1. Traditional Collateral-based Lending**  | • Transforming the Bank for Agriculture and Agricultural Operatives (BAAC) into a rural development bank (providing relationship lending to the larger public)  
• Promoting grass-root financial services (micro-finance units) through capacity building and a set up of better framework for the long-term |
| **2. Inadequate Credit Risk Management**     | • Giving more incentives for lending to retail customers and SMEs (consistent with Basel II’s criteria)  
• Lowering capital requirement for qualified retail banks with a focus of lending on retail customers and SMEs.  
• Encouraging existing financial institutions to increase the level of financial services to low-income household.  
• Improving credit bureau functioning. |
| **Low Experience and Financial Literacy**   | • Increasing efficiency of the banking sector by rationalizing the structure and roles of financial institutions to better meet customer demand.  
Encouraging existing financial institutions to increase of financial services to low-income household. |
5.2.2 Financial Assistance Program for SMEs.

The BOT has a financial assistance program for the SMEs sector, started in 2000. This program extends working capital to SMEs by providing low interest rate loans through commercial banks and the SFIs. This assistance is not the main focus of BOT’s policy; however, the amount of loans through this channel increased quite significantly in 2004, following the increasing trend of SMEs loans in the whole banking system.

The summary of channels of government and BOT’s policies related to SMEs’ financial access assistance at different stages of development is shown in figure 5.1.

5.3 Policy recommendation for the BOT

We have shown that several measures in the financial sector master plan should play a significant role in promoting credit access for Thai SMEs. However, together with the above measures, we suggest that the BOT emphasize the following principles and policies so that funding will be directed further toward talented and productive SMEs.

Firstly, relationship based lending, in which credit officers have very good understanding about the borrowers’ prospects and closely monitor their business conditions, should be highlighted and further promoted especially for very small and start-up firms. Even with possible higher operational costs, this lending practice should allow the creditors to obtain better information about the SMEs and reduce the importance of collateral in loan approval.

Secondly, an interest rate ceiling policy is not desirable for SMEs, particularly those who have potentials but are considered having higher risk. This is because the interest rate ceiling prevents potential SMEs from getting loans from willing formal sector creditors who know how to assign appropriate prices of funding to higher risk borrowers.

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20 See Appendix 2 BOT’s financial assistance to SMEs
Thirdly, augmenting credit assessment capability of financial institution’s credit models (in pricing risk) should be supported, as it will help small and young firms with good business plans (most likely with limited collateral) to gain easier credit access. For example, a Credit Scoring System should be encouraged since it should assist low risk SMEs formerly without credit access to enter the formal credit market. Credit risk management of financial institutions should be stressed and monitored closely by the supervisor. Moreover, the SFIs (currently being monitored but not supervised by the BOT) should be encouraged to enhance their credit risk management.

Fourthly, policies related to financial access should pay attention to firms’ size, sector, as well as their stages of development and should be differentiated along those dimensions. This follows from our analysis, which finds that firms with different characteristics possess different credit access problems. Additionally, the definition of micro size firms should be provided so that those firms can be distinguished from relative larger firms in the small size group and, therefore, can be targeted by a different set of policy tools.

Fifthly, the borrowing process should be made easier to understand and less cumbersome for firms especially the new SMEs. Creditors and the authorities should have a joint role in providing information and improving financial literacy of SMEs.

Sixth, the soft loan should be directed more towards to small and young firms by the set-up of age and size criteria. Currently, the soft loans to the medium size firms, who constitute only 9 percent of the total firms acquiring the soft loans, account for 42 percent of total soft loans.

Lastly, the functions of unofficial micro-finance units in the financial system should be further studied and promoted because these organizations have a good potential to notably help reduce the funding gap of SMEs. More networks across those micro finance groups should be increased for better risk diversification and greater availability of loans. Nevertheless, more professional training regarding management and accounting is necessary for their expansion.
Figure 5.1  Channels of Government and BOT’s Financial Access Assistance for SMEs at Different Stages of Development.

Start Up

Potential SMEs
- Private Commercial Banks
- Finance Companies
- Leasing companies
- State-owned Commercial Banks
- Specialized Financial Institutions
- Village Fund

Existing SMEs
- Private Commercial Banks
- Finance Companies
- Leasing companies
- State-owned Commercial Banks
- Specialized Financial Institutions
- Village Fund
- Venture Capital Funds

Strong SMEs
- Private Commercial Banks
- Finance Companies
- Leasing companies
- State-owned Commercial Banks
- Specialized Financial Institutions
- Venture Capital Funds
- Capital Market (MAI)

Develop and Expand

Government

BOT

Government

BOT

Government

BOT
6. Conclusion and Suggestions

SMEs have a crucial role in the Thai economy as they constitute over 99 percent of registered firms and also account for more than two-thirds of employment in all enterprises. In addition, their contribution in GDP has been gradually growing since the economic crisis and currently equals to 38 percent of total GDP.

Among several problems facing SMEs, the focus of this paper is on financial access problems. Our analysis relies on earlier works and our analysis using data from various sources. First, based on the studies by Townsend and his colleagues, moderate improvement of financial intermediation in Thailand should lead to significantly higher GDP growth. This is because many households with potentially high entrepreneurship are constrained from credit access by limited wealth.

Second, we find that credit access increases with firms’ ages, assets and sales. Asymmetric information facing banks is an important factor limiting credit access for young firms whose information and potentials are not known to banks. Increasing credit access of firms with higher levels of assets reflects the collateral based lending practice of banks. The structure of sources of funding varies with size and sectors of firms. Medium and large firms and those in the manufacturing sector are found to use significantly more funding from the formal sector and less from the informal sector and owners’ saving. Firms’ funding structure also leans more toward debt funding (rather than equity funding) as assets and sales reach the medium size criteria and increases even more for the large size firms.

Third, we discover that the reported reasons for credit access problems of SMEs differ between borrowers and lenders. According to the point of view of the borrowers, the most important reasons regardless of firm’s size are lack of information and advice from financial institutions as well as complexity and inconvenience regarding the borrowing process. On the contrary, from the point of view of the creditors, the most essential factors limiting loans to SMEs are
inadequacy of collateral, lack of business experience and plans, and below standard accounting practice.

To cope with the above funding problems, the government has initiated policies related to both debt funding and equity funding. Policies on the debt side are a target for SMEs loans provided through the SFIs and commercial banks, working capital for the rural areas through the Village Fund Project, and Assets Capitalization. On the equity-funding side, the two main initiatives are the establishments of venture capital funds and the stock exchange for SMEs called “Market for Alternative Investment (MAI)”.

So far, the government initiatives are more successful on the debt-funding side than the equity-funding side. Bank loans to SMEs have increased. However, there remain a number of small firms without access to bank credit due to insufficient collateral and lack of ability to demonstrate feasible and viable business plans. Until now, most firms still do not possess enough information and qualifications to participate in those sophisticated schemes of equity funding.

The remaining gaps of funding are a result of a combination of factors around the SMEs themselves as well as the creditors and investors mainly due to information asymmetry. Hence, the remedial principle for easier funding access for SMEs is to enhance information exchange between the SMEs and the creditors/investors. Several of the BOT’s measures have been geared toward rearrangement for a better structure and more appropriate incentives for the financial institutions. The 2002 Financial Master Plan, which attempts to increase efficiency of banks, promote information flows through improvement of the credit bureau, and reduce overlapping roles of certain financial institutions, will broaden financial access to meet the needs of households and firms. Furthermore, an expansion of the BAAC’s role to become more like a rural development bank will help extending relationship based loans to the rural area. The adoption of Basel II criteria will lower risk weights for
loans to retail customers and SMEs, and therefore increase incentives for commercial banks to provide retail and SMEs loans.

Together with the above measures, we suggest that the BOT emphasize the following policies so that funding will be directed further toward talented and productive SMEs. First, **relationship based lending**, where credit officers are close to borrowers, should be highlighted and further promoted. Second, an **interest rate ceiling policy** is not desirable for SMEs who have potentials but are considered having higher risk. Third, augmenting credit assessment capability of financial institution’s credit models (in pricing risk) should be supported as it will help small and young firms with good business plans (most likely with limited collateral) to gain easier credit access. The SFIs should be encouraged to enhance their credit risk management. Fourth, credit policy should pay attention to firms’ sizes and sectors, as well as their stages of development and be differentiated along those dimensions. The definition micro (very small) firms’ should be provided as they need a different set of policy tools. Fifth, the borrowing process should be made easier to understand and less cumbersome for firms especially the new SMEs. Creditors and the authorities should have a joint role in providing information and improving financial literacy of SMEs. Sixth, the soft loan should be directed more towards to small and young firms by the set-up of age and size criteria. Lastly, the functions of unofficial micro-finance units in the financial system should be further studied and promoted.

Suggestions for further studies are as follows. First, data concerning productivity and innovation of SMEs should be further explored and incorporated into the assessment about their long-term contribution to the economy. Second, conducting a survey concerning bank’s SMEs lending behavior will certainly help us understand the degrees of the problems from various factors better. Finally, the investigation into household credit constraint problems from the BOT survey in the next stage should allow us to analyze this problem more thoroughly especially for the case of potential SMEs.
Reference


Office of Small and Medium Enterprise Promotion (2003), Annual Report 2002


Assets Capitalization Bureau website http://www.plangsinsap.or.th/

Bank of Thailand website http://www.bot.or.th/

Department of Industrial Promotion website http://www.siegc.or.th/

Market for Alternative Investment website http://www.mai.or.th/

Office of SMEs Promotion website http://www.siegc.or.th/

Small Industry Credit Guarantee Corporation website http://www.siegc.or.th/

SMEs Bank website website http://www.siegc.or.th/

Revenue Department website http://www.rd.go.th/
### Characteristics for Firms with Different Sizes

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Small firm</th>
<th>Medium firm</th>
<th>Large firm</th>
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<tr>
<td>Number</td>
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<td>555</td>
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<td>Age</td>
<td>15.8</td>
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<td>Asset *</td>
<td>2.6</td>
<td>1.5</td>
<td>2.9</td>
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<td>Sales **</td>
<td>2.6</td>
<td>1.6</td>
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<td>4.4</td>
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<tr>
<td>Number of firms with foreign partnership</td>
<td>153</td>
<td>24</td>
<td>77</td>
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<td>Number of firms outside cities</td>
<td>1,072</td>
<td>510</td>
<td>392</td>
<td>170</td>
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#### Classifications of Assets and Sales

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<th>Amount of Assets*</th>
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<td>Assets below 5 million baht</td>
<td>Sales below 5 million baht</td>
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<td>Assets between 5-50 million baht</td>
<td>Sales between 5-50 million baht</td>
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<td>Assets between 51-100 million baht</td>
<td>Sales between 51-100 million baht</td>
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<td>Assets between 101-200 million baht</td>
<td>Sales between 101-200 million baht</td>
<td>4</td>
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<tr>
<td>Assets above 200 million baht</td>
<td>Sales above 200 million baht</td>
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### Credit Access According to Firm’s Size

<table>
<thead>
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<th>Total</th>
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<th>Medium firm</th>
<th>Large firm</th>
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<tr>
<td>Number of firms</td>
<td>1,195</td>
<td>555</td>
<td>440</td>
<td>200</td>
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<tr>
<td>Number of firms who need loans from formal sector</td>
<td>899</td>
<td>381</td>
<td>348</td>
<td>170</td>
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<tr>
<td>Number of firms who have difficulties getting loans from formal sector</td>
<td>266</td>
<td>163</td>
<td>81</td>
<td>22</td>
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<tr>
<td>Percent of firms encountering credit access problems</td>
<td>29.59</td>
<td>42.78</td>
<td>23.28</td>
<td>12.94</td>
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</table>
### Appendix 2 Regression Results Concerning Factors Influencing Choices of Funding

Number of Observation = 1195

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<tr>
<th>Explanatory Variable</th>
<th>Primitive funding</th>
<th>Formal Sector Funding</th>
<th>Advance Funding</th>
<th>Equity fund</th>
<th>Debt funding</th>
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<td></td>
<td>Coefficient</td>
<td>t-Statistics</td>
<td>Coefficient</td>
<td>t-Statistics</td>
<td>Coefficient</td>
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<tr>
<td>Constant</td>
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<td>14.71</td>
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<td>Dummy for Foreign ownership</td>
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<td>Dummy for Rural Area</td>
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<td>Log(age)</td>
<td>-2.00</td>
<td>-1.70</td>
<td>0.90</td>
<td>0.76</td>
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<tr>
<td>Dummy for Asset between 5-50 million baht</td>
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<td>1.52</td>
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<td>Dummy for Asset between 51-200 million baht</td>
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<tr>
<td>Dummy for Asset above 200 million baht</td>
<td>-18.87</td>
<td>-3.55</td>
<td>16.30</td>
<td>2.96</td>
<td>5.24</td>
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<tr>
<td>Dummy for Sale between 5-50 million baht</td>
<td>-3.79</td>
<td>-1.13</td>
<td>2.68</td>
<td>0.79</td>
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<tr>
<td>Dummy for Sale between 51-200 million baht</td>
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<td>-3.69</td>
<td>12.82</td>
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<tr>
<td>Dummy for Sale above 200 million baht</td>
<td>-28.46</td>
<td>-5.80</td>
<td>20.30</td>
<td>4.06</td>
<td>-0.49</td>
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<tr>
<td>Dummy for Manufacturing Sector</td>
<td>-7.51</td>
<td>-2.44</td>
<td>7.63</td>
<td>2.08</td>
<td>12.29</td>
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<td>Dummy for Services Sector</td>
<td>-3.10</td>
<td>-1.03</td>
<td>1.41</td>
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<tr>
<td>Dummy for Wholesale Sector</td>
<td>-2.65</td>
<td>-0.73</td>
<td>0.05</td>
<td>9.01</td>
<td>2.43</td>
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<tr>
<td>Adjusted R-squared</td>
<td>0.16</td>
<td>0.09</td>
<td>0.04</td>
<td>0.07</td>
<td>0.07</td>
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<tr>
<td>S.E. of regression</td>
<td>37.87</td>
<td>38.07</td>
<td>10.45</td>
<td>38.40</td>
<td>38.40</td>
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<tr>
<td>Durbin-Watson stat</td>
<td>1.85</td>
<td>1.88</td>
<td>1.83</td>
<td>1.89</td>
<td>1.89</td>
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</tbody>
</table>
## APPENDIX 3: Tax Benefits for Small and Medium Enterprises in Thailand

<table>
<thead>
<tr>
<th>Tax benefits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reduce corporate income tax rate for Thai company with paid-up capital of 5 million Baht and below. These companies are subject to a Corporate Income Tax (CIT) rate of 20% on net profit of up to 1 million Baht (in the process of lowering to 15%) and 25% on net profit over 1 million Baht up to 3 million Baht. Profit exceeding 3 million Baht is subject to CIT ordinary rate of 30%.</td>
</tr>
</tbody>
</table>
| 2 | Thai company with durable assets (excluding land) less than 200 million Baht and hiring employee less than 200 people grant an initial allowance on assets as follows:  
  - Computer hardware and peripheral can depreciate on the acquisition date at 30% of its total cost. The remaining will be depreciated at a regular rate for at least 3 accounting periods.  
  - Durable building and plant can depreciate on the acquisition date at 25% of its total cost. The remaining will be depreciated at a regular rate not exceeding 5% of the total cost per annum.  
  - Machinery and equipment can depreciate on the acquisition date at 30% of its total cost. The remaining will be depreciated at a regular rate not exceeding 25% of the total cost per annum. |
| 3 | Full corporate income tax exemption for qualified venture capital (VC) company on dividend income and capital gain from sale of stock receiving from investing in Thai company with durable assets (excluding land) less than 200 million Baht and hiring employee less than 200 people.  
  A qualified VC company must be as the following:  
  - A company incorporate in Thailand which doing venture capital business as prescribed in Ministerial Notification with capital not less than 200 million Baht and paid-up capital at least of 50% in the first year. The remaining capital will be paid up within 3 years starting from the date of registration.  
  - VC company must be registered with the office of Securities and Exchange Commission (SEC) within 3 years from 31st January B.E.2545.  
  - VC company must have share of paid up capital in SMEs not less than 20% for the first year, 30% for the second year, 70% for the third year and 80% for the forth year.  
  - VC company must hold SMEs stock for at least 7 consecutive years or at least 5 years if that SMEs can register in Stock Exchange of Thailand.  
  - A manager of VC company must hold a securities business license in a type of joint investment management which is approved by the offices of the securities and exchange commission (SEC). |
| 4 | Income tax exemption on dividend or income from sales of securities receiving from the VC's exempt income. |
| 5 | Extend income base for small enterprises that have not to register in value-added tax system form 1.2 to 1.8 million Baht. |

Source: Revenue Department of Thailand
# APPENDIX 4: BOT’s Financial Assistance to SMEs

<table>
<thead>
<tr>
<th>Financial Assistance Scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Objective</strong></td>
</tr>
<tr>
<td><strong>2. Procedures</strong></td>
</tr>
<tr>
<td><strong>3. Eligible Enterprises</strong></td>
</tr>
<tr>
<td><strong>4. Size of SMEs and Amount of Refinancing</strong></td>
</tr>
<tr>
<td><strong>5. Amount of Refinancing</strong></td>
</tr>
<tr>
<td><strong>6. Minimum Value of P/N</strong></td>
</tr>
<tr>
<td><strong>7. Maturity of P/N</strong></td>
</tr>
</tbody>
</table>
| **8. Interest Rate** | • BOT : 1% p.a. for the amount purchased which is 60% of the amount of the promissory notes.  
• Commercial banks : not more than each bank's MLR minus 2.75% p.a..  
• Special Financial Institutions (SFI) : not more than each SFI's Prime Rate minus 2.75% p.a..  
• Other financial institutions: not more than the average MLR of the 4 largest banks minus 2.75% p.a.. |
| **9. Duration of financial assistance** | Not more than 5 years. |
| **10. Penalty** | 5.0% p.a. with respect to amount and duration involved. |