Chapter 4

SMEs Access to Finance in Cambodia

Luyna Ung

Supreme National Economic Council (SNEC)

Sovuthea Hay

Supreme National Economic Council (SNEC)

September 2011

This chapter should be cited as

Ung, L. and S. Hay (2011), 'SMEs Access to Finance in Cambodia', in Harvie, C., S. Oum, and D. Narjoko (eds.), *Small and Medium Enterprises (SMEs) Access to Finance in Selected East Asian Economies*. ERIA Research Project Report 2010-14, Jakarta: ERIA. pp.83-116.

CHAPTER 4

SMEs Access to Finance in Cambodia¹

LUYNA UNG SOVUTHEA HAY

Supreme National Economic Council (SNEC)

In terms of number of establishments, the private sector in Cambodia is dominated by micro-size firms. This paper argues that SMEs would be important for Cambodia's economy, especially for building up a strong economic foundation. They create large value-added and have higher employment per establishment. Growth in the number of SMEs could help the economy to grow, create more jobs, facilitate FDI and enlarge the base for tax collection. Naturally, many micro firms would grow to become SMEs, but this growth might not be fast enough if there were too many constraints, which the market failed to address. Among them, SMEs are facing challenges in accessing finance, including restrictions on the size of loans, high interest rates and short repayment periods. The paper argues that the under-developed financial market results in biased provision of credit to micro-size firms and SMEs, and that this would limit the expansion of business. From the survey results, the paper finds that firms that have high sales volume, high profit margins and are in the garment manufacturing sector are highly likely to obtain finance, but notes that collateral is predominantly required. This finding infers that credit is rationed by the market, and that intervention is needed to widen access to finance.

83

¹ This study is funded by ERIA, and does not necessary reflect the ideas of the Supreme National Economic Council (SNEC) of Cambodia.

1. Introduction

The number of enterprises in Cambodia has been increasing gradually, tracking the expansion of the economy, especially during the period of high positive growth from 1999 to 2008. In 1999, the number of small and medium enterprises (SMEs) was estimated at about 25,000, and reached 36,000 in 2009. The growth in the number of establishments was therefore about 44% in 10 years. During this period, employment in the industrial sector was observed to expand, and labor productivity in the sector increased significantly (Figure 1).

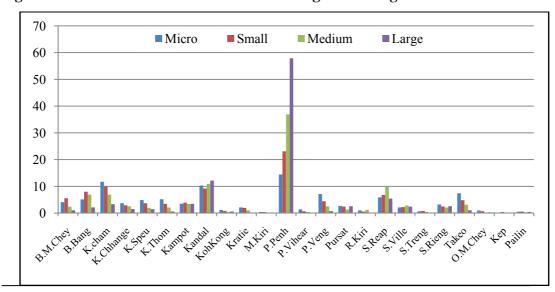


Figure 1. Distribution of Establishment Listing across Region

Source: Nation-Wide Establishment Listing (NIS, 2009).

Despite a rapid growth in SMEs, Cambodia's structure of establishment is still dominated by micro and large enterprises, in terms of number of firms and employment, a structure characterized as "the missing middle" (Tanaka and Hatsukano, 2010) observed in other developing countries. In South Africa, micro enterprises employed 55% of the labor force and generated 22% of GDP, whereas the big firms accounted for 64% of GDP in 2003 (Kauffmann, 2005). In Cambodia, micro enterprises provided 59% of jobs, but generated only 5.7% of total value added in 2000 (NIS, 2003).

Discussion of the investment climate usually focuses on foreign direct investment (FDI). Little attention has been given to promoting and facilitating investment in domestic firms, especially for the growth of SMEs in term of numbers, employment and value-added. Moreover, studies of SMEs have not been comprehensive enough due to lack of datasets and biased samples. The Provincial Business Environment Scorecard (PBES) was constructed in Cambodia in 2006 and 2009. Improvement in the PBES index was observed in some provinces, but declines were seen in others, especially in informal charges and dispute resolution. The PBES index has a positive relationship to the probability of expansion, and a negative one to the probability of consolidation or closure (International Finance Corporation, 2010 and Asia Foundation, 2009).

Although improving the governance climate could facilitate expansion, or encourage firms to upgrade from micro- to SME- size, there are other factors that would affect such development, including the cost of doing business, market size, technology, cost of capital, and availability of raw materials (Sleuwaegen and Goedhuys 1996). In Cambodia's case, the "missing middle" is caused by lack of connections between large enterprises and SMEs. FDI firms are usually established largely for export purposes, while micro-size firms and SMEs mostly engage in the domestic market. Foreign establishments use modern technology and imported raw materials, which have a weak connection with domestic and micro enterprises. As a result, although FDI firms utilize SMEs extensively, they are usually based abroad, while domestic micro enterprises are locked in their small scale, using inefficient technology, and growing only slowly. Moreover, the regulatory burden discourages firms from upgrading.

The very small number of SMEs in Cambodia's economy could scale up. Three types of constraints have been identified, namely; (1) weak regulatory and legal frameworks generate high cost and uncertainty, and provide no support for SME activities, (2) competition is hampered by a fragmented market, poor infrastructure, low availability of information, and corruption, and (3) limited access to financing due to limited acceptable collateral, low capacity of banks, an underdeveloped financial system and gaps in the financial infrastructure (SME Secretariat 2005).

This paper explore the financing constraints facing by SMEs, particular in the context that SMEs are family based and do not have modern management styles, market analytical skills and planning skills, nor bookkeeping and accounting systems. The

paper is organized by first arguing the importance of SMEs development in Cambodia in terms of job creation, value-added generation, FDI facilitation and expansion of the base for tax collection. Secondly, the paper examines financial development and its constraints for SMEs. Thirdly, based on a survey of 180 firms, the paper will statistically examine the characteristics that enable firms to access finance, using a Probit model. Finally, conclusions are drawn.

2. Arguments for SMEs Development

This paper places different emphasis on micro-, SME- and large-size enterprises, and believes that micro-size firms will naturally grow to small, medium and large enterprises following market selection through competition. In this respect, the size distribution of firms does not follow the law of proportionate effect, and an individual firm is expected to grow independently from its present size (Ijiri and Simon 1964). Growth in size and assets is determined by economic efficiency, resulting from market fragmentation, size and technology. The growth of an economy therefore represents the growth of firms in terms of sales volume, size and assets.

Cambodia's economy experienced rapid growth during the last decade. Besides agriculture, the industrial and service sectors have been playing important roles in overall growth. The garment sector is one of the new industries recently established. It employs around 300,000 workers and accounts for the lion's share of Cambodia's exports. In addition, the tourism sector has generated many economic activities, including accommodation, restaurants, transportation and handicrafts. The two sectors have played key roles in driving growth, in addition to agriculture. The high growth rate has translated into poverty reduction, and into improvement of social indicators both in education and health.

Since the future of the garment sector is uncertain, due to changes in the trade regime and increasing competition, diversification of production is important for sustained growth. It is impossible to create a competitive production base without SMEs, since this is the place where experience is gained and applied in different scales.

Given the competitive nature of SMEs, they have to be innovative because firms emerging from the micro level have to develop distinct features in term of technology, management, value creation and business networking that allow them to differentiate and qualify for graduation. This process provides a strong foundation for economic diversification and competitiveness. For Cambodia, creating an environment that could facilitate the faster growth of micro-size enterprises to the SME level and then into large enterprises, could help to sustain growth through diversification, and to create the solid economic foundation the country needs.

In the SME Development Framework (SMEDF) 2005, Small and Medium Enterprises are defined based on either the number of their employees or the size of their assets. The definition includes micro enterprises with fewer than 10 employees or assets worth less than \$50,000. Small and Medium enterprises are defined as having between 11 and 100 employees or assets valued between US\$50,000 to 500,000. Large enterprises are those with either over 100 employees or assets greater than \$500,000. In practice, the number of employees has been widely used for classification due to the absence of asset valuation, self-assessment, and fluctuating values of asset (Table 1).

Table 1. Classification of SME

	Number of Employees	Size of Asset
Micro	less than 10 employees	less than USD 50,000
Small	between 11-50 employees	between USD 50,000-250,000
Medium	between 51-100 employees	between USD 250,000-500,000
Large	over 100 employees	over USD 500,000

Source: SME Development Framework, 2005.

2.1. Value-added and Job Creation

The Establishment Listing (2009), produced by the National Institute of Statistics (NIS), Ministry of Planning, found that the industrial structure in Cambodia is at an early stage of development. Based on definition by employment size, micro-enterprises made up 97.12% of total establishments. Small and medium enterprises were about 2.7% and less than 0.18% was considered as large enterprises. However, among 1.5 million people employed, 60% are working in micro, 25% in large and 13% in small and medium enterprises (Table 3). This is the "missing middle" phenomenon in terms of

employment. In term of number, the industrial structure is dominated by microenterprises, while there is a small number of large enterprises.

Table 3. Establishment by Sector and its Employment

Sector	Number	Percent	Employment	Percent
Mining and quarrying	280	0.07	2,734	0.18
Manufacturing	84,639	22.46	527,925	35.92
Utilities	8,620	2.29	27,917	1.90
Construction	204	0.05	2,825	0.19
Wholesale and retail trade	198,111	52.58	431,860	29.38
Transport and storage	2,042	0.54	11,759	0.80
Accommodation and Food services	29,230	7.76	113,092	7.69
Financial, Insurance and Real estate	5,940	1.58	25,286	1.72
Professional and admin. support	5,722	1.52	22,019	1.50
Education	9,099	2.42	123,325	8.39
Human Health and social work	4,135	1.1	24,616	1.67
Others	28,739	7.63	156,354	10.64
Total	376,761	100	1,469,712	100

Source: Nation-Wide Establishment Listing (NIS, 2009).

A better structured establishment would see large enterprises supported by SMEs which were in turn supported by micro enterprises. In Cambodia, large enterprises have mainly been established by foreign direct investment, and rely on imports of almost all raw materials and intermediate goods. For example, the garment industry utilizes only labor as an input for production. The absence of SMEs capable of supplying a certain type of raw material discourages connections between those large enterprises and local enterprises. It has resulted in loss of jobs and value-added. Estimation of gross value added (GVA) in 2000 found that GVA per micro enterprise was around 45 million Riels (US\$1,125) per year, whereas larger enterprise generated 4,306 million Riels (US\$1 million) per year, almost a hundred times more. This illustrates why allowing micro enterprises to upgrade to SMEs and then to large establishment would create a significant value-added for the economy.

Moreover, average employment per establishment in micro enterprises is 2; the comparable figures are 20 for small; 70 for medium and 556 for large enterprises (Table 3). Therefore, an increase in the number of establishments in the larger size category would create more jobs. However, in terms of productivity, an establishment with number of employees fewer than or equal to ten has higher labor productivity than a

firm with more than 10 employees. A worker in a micro firm can generate a GVA of 13 million Riels per annum (US\$3,300) compared with 9.8 million Riels (US\$2,500) in the larger size firms (NIS 2003). The different of productivity is not largely different from small to larger, but in terms of value-added and employment, it is hugely different.

2.2. Creation of Manufacturing Base and Facilitation of FDI

Cambodia's production base remains weak. The manufacturing sector is dominated by food processing, garments and furniture. According to the establishment listing, wholesale and retail trade accounted for more than 50% of all establishments, while only slightly more than 20% are in the manufacturing sector. Hotels and restaurants comprise around 8% of total establishments. However, in term of employment, manufacturing provides around 35% of total employment, while wholesale and retail trade activities account for 30%. Hotels and restaurants and education institutions each generate 8% of employment. More than half of Cambodia's micro enterprises are involved in wholesale and retail trade, and only 20% are engaged in manufacturing. More than half the large enterprises are in manufacturing (Table 4).

Table 4. Distribution of Establishments by Type and Sector

Sector	Micro	Small	Medium	Large	Total
Mining and quarrying	0.06	0.63	0.75	0.15	0.07
Manufacturing	22.7	11.84	14.5	52.48	22.46
Utilities	2.31	1.5	2.84	1.95	2.29
Construction	0.04	0.39	0.6	0.3	0.05
Wholesale and retail trade	53.93	7.77	2.24	1.5	52.58
Transport and storage	0.52	1.13	1.05	2.26	0.54
Accommodation and Food services	7.64	12.33	11.21	5.86	7.76
Financial, Insurance and Real estate	1.5	4.06	6.43	1.95	1.58
Professional and admin. support	1.52	1.49	2.84	1.8	1.52
Education	1.61	30.42	33.18	14.59	2.42
Human Health and social work	1.03	3.35	5.23	3.31	1.1
Others	7.14	25.08	19.13	13.83	7.63

Source: Nation-Wide Establishment Listing (NIS 2009).

The numbers suggest that moving micro-enterprises up to SMEs and then to large enterprises would increase engagement on manufacturing, which is an important sector for employment creation and GVA generation. At the same time, the sector is a key area for strengthening skills, management, technologies and supply chains. This sector's

development is necessary if Cambodia is to prepare itself to move up the regional and global value chains. Because it is a competitive environment, the emerging SMEs will be sources of innovation, which will improve the competitiveness of the country. Therefore, through creating an environment that would facilitate growth of microenterprises to SMEs Cambodia could increase competition among existing firms and force them to increase in scale, innovation and diversification.

Creation of a manufacturing base could lead to acceleration of Foreign Direct Investment (FDI). Since FDIs could quickly expand economic activities that already exist so as to take advantage of raw material supply chains, labor relations and output supply chains. They would not expect to establish a whole industry, but exploiting production line that they have advantage, particularly when domestic firms may lack capital, technology, scale and other factors that could improve efficiency. Without a firm background of domestic SMEs, FDIs also have constraints in investment.

2.3. Enlarge Tax Base

Cambodia has established two tax regimes. These are based on self-assessment and estimation, and are applied differently across enterprises. Sales volume with respect to economic activity is used to categorize the regime. In 2008, there were 12,089 enterprises classified under the self-assessment regime, which generated 85% of revenues collected by the tax administration. There were 48,510 enterprises classified under the estimated regime. Usually this includes micro enterprises, which are around 80% of total establishments (Hang, 2010). Government collects only around 12% of GDP as tax, which is very low compared to countries that have the same growth, and are shifting emphasis from trade tariffs to domestic taxes. Further tax mobilization could be generated from the growth of micro enterprises into SMEs and then into large enterprises. The majority of establishments in Cambodia have not been registered. In fact only 2.40% are registered. The percentage of registration increases with size of company; only 1.83% of micro enterprises are registered compared with 64 % of large firms (Table 6). The registered enterprises usually pay tax following the self-assessment regime, and non-registered firms are paying under the estimated regime. Under a poor governance system, firms taxed under the estimated regime pay significantly less than

the true taxable amount, based on mutual agreements between the tax auditors and firms.

Registration is also strongly associated with type of owner. Individual ownership accounts for 95% of total establishments. Complex ownerships are usually registered and firms with proper accounting. Only 30% of large enterprises, 35% of medium and 41% of small enterprises are individually owned. For large enterprises, a third of establishments are either limited partnerships or private limited companies (Table 7). Therefore, the upgrading of micro enterprises to SMEs would encourage registration (and the employment of proper accounting practices, if they involved complex ownership). These conditions would expand the tax base and government tax revenues.

Table 7. Type of Business

Business Description	Frequency	Percent
Garment and Textiles	40	22.22
Foods	41	22.78
Construction Materials	41	22.78
Furniture, Household utensils	29	16.11
Ice and water	12	6.67
Rice Milled	17	9.44
Total	180	100.00

Source: ERIA Survey, 2010.

2.4. Good Distribution across Regions

One advantage of facilitating the growth of micro enterprises is that they are well distributed across provinces. In Phnom Penh, micro enterprises comprise only 14% of the total, and in Kandal and Kampong Cham the share is also around 10% of total establishments. Almost 60% of the large enterprises, 40% of the medium and over 20% of the small enterprises are found in Phnom Penh (Figure 1). Kandal, the province surrounding Penh Penh, has the next highest number of firms. Well-connected infrastructure, a high density of people and the availability of utilities in Phnom Penh and Kandal explains this distribution. Kampong Cham, Battambang and Siem Reap are also economically active.

Since micro enterprises have widespread distribution, helping them to grow could lead to inclusive growth in the medium to longer run. Moreover, it would help to promote economic activities across the country, taking advantage of indigenous technology and know-how. Micro enterprises becoming SMEs could play roles in raw material supplies and related business activities, exploring all potential resources at a different scale. The result of such development would bring poverty reduction at a faster rate and reduce inequality, particularly across the provinces of Cambodia.

Upgrading SMEs could generate more employment, especially in the manufacturing sector. Though labor productivity is higher for smaller enterprises, the total GVA generated in the economy would be significantly higher. This means that economic growth and job creation could be assured from upgrading enterprises. Furthermore, Cambodia is small economy, and the expansion of production will rely on export markets that require proper standards and a reliable supply chain, for which scale is important. The growth of SMEs could further enhance the production base for manufacturing, and production is a key to FDI attraction. As a result, the national tax base would rise. Moreover, by allowing micro firms to grow, there would be inclusive benefit, since it spread across provinces and geographical areas in Cambodia.

3. Financial Constraints to SMEs

This section argues that financial constraints facing micro enterprises and SMEs (MSMEs) are due to an underdeveloped financial system. As a result, MSMEs rely on savings and informal sources for starting up and for providing working capital. Micro-Financial Institutions (MFIs) have played important roles in financing MSMEs, but the issues remain high interest rates, small loans and short repayment times. This section also explores the concept of financial constraint, and provides results bases on a survey of 180 enterprises in Cambodia.

3.1. Overviews of Financial Structure

Cambodia experienced life without a financial system from 1975 to 1979, when the Khmer Rouge put Cambodia through an extreme economic reform, following communism model of an economy. After 1979, the National Bank of Cambodia (NBC) was established as the only bank operating across the country through its provincial

branches, under a centrally planned economy. There was no private commercial bank; such a banking system is commonly known as a mono-banking system. The economic reform in 1989 toward a market economy changed the landscape of the financial sector and set up a two-tier banking system, in which private commercial banks were allowed. In 1990 the first commercial bank was established and created a new channel of financial access for farmers and entrepreneurs with small and medium-sized businesses.

As a result, commercial banks have become widespread and confident, although the banking system remains weak. This prompted the NBC to strengthen the banking system through a reform in 1999 aimed at enhancing the credibility of financial institutions and confidence in the banking system. The Law on Banking and Financial Institutions was adopted, and serves as a foundation for new development of the sector. Its requirements include minimum capital and reserve requirements with the central bank. Moreover, commercial banks have to ensure a certain threshold of solvency, liquidity and fixed asset/equity capital ratio, and are regularly supervise by the NBC. Moreover, commercial banks need to comply with large exposure and loan loss provision restrictions imposed by the central bank.

The development of the banking system has gradually been improved. As of 2010, there are 29 commercial banks, of which 6 are branches of foreign banks, 6 specialized banks, 23 licensed microfinance institutions (MFIs), 26 registered MFIs, 28 NGOs involved in financial activity are registered, but 60 are not registered, and there are 3,937 registered money changers. The banking system is concentrated in Phnom Penh, since banks have few branches across the country.

The government attempted to modernize the financial sector to better serve Cambodia's economic development in the Financial Sector Blueprint 2001-2010. Among financial services, financial leasing began development after the Law on Financial Leases was enacted in 1999. The Cambodian securities market is also under development. The insurance industry is also in development, however the market remains small.

Banking System

The banking sector dominates Cambodia's financial system. It contains many small banks, and activities are limited to urban areas and large business transactions,

especially servicing the international trade sector. Many banks have few branches in different provinces due to limited activities in the provinces. The current banking system plays a less significant function in intermediate saving and investment, and progress in the banking sector remains at early stage.

According to the Law on Banking and Financial Institutions (1999), commercial banks are those operations carrying out three activities: (1) credit operations for valuable consideration, including leasing and guarantees; (2) collecting deposits from the public; and (3) the provision of means of payment. A specialized bank is defined as one that operates in at least one of those three financial services. Commercial banks dominate the financial system. As of 2009, commercial banks account for 99% of total assets, 99% of loan balances and 100% of deposits for the total banking system.

Though at early stage, the banking system has been growing very fast since 2006 due to improvement of banking regulations. Bank deposits increased from \$914 million in 2005 to \$1,301 million in 2006. The amount jumped to \$3,192 million in 2009 and \$4,030 million in 2010. Among those deposits a majority are in US dollars. The dollarization of the banking sector facilitates development, while the local currency remains very weak. Private sector credit has also been growing at the same pace, from \$584 million in 2005 to \$883 million in 2006. During the crisis period, credit to the private sector reached \$2,542 million in 2009 and to \$3,280 million in 2010. The increases in banking activities resulted from an inflow of foreign investment that also increased from around \$375 in 2005, to reach \$866 million in 2007 and \$553 million in 2010. Such fast growth created pressure on the supervision of banking activity, and vulnerability in the financial system, because growing assets did not reflect any expansion of the banking system.

Total assets in the banking system grew from about \$1.18 million in 2004 to \$5.21 million in 2009, an average growth of 36% per annum. However, the development of the sector was concentrated in the four largest banks, namely Cambodia Public Bank, ACLEDA Bank, Canadia Bank, and ANZ Royal Bank. They accounted for 62.4% of total assets of the banking sector in 2009, up from 55% in 2006. Currently, there is only one state-owned bank, whose total assets is only 0.7% of the whole industry and provided only 1% of total loans in 2009.

Three of the specialized banks, namely Anco Specialized Bank, Peng Heng SME Banks Ltd., and First Investment Specialized Bank, are targeting their lending to SMEs or rural borrowers. Those banks do not collect deposits. Their lending is only 0.62 % of total lending. As a whole, the recent institutional developments in banking have not facilitated or channeled finance to SMEs. Although there is no information on loans provided to SMEs, banking activities remain concentrated on big business transaction.

Micro-financial Institutions

The development of MFIs became more visible at the end of the 1990s as a substitution for the informal financial system with its usury rates of interest. In 2000, the NBC started to formalize the MFIs by registration and licensing according to their scope of operations. The institutions are now regulated and supervised by the NBC. Micro-Finance is defined as "the delivery of financial services such as loans and deposittaking, to poor and low-income households, and to micro-enterprises" and Micro-Finance Institutions are those operating under Article 2 of the 1999 Law. In 2002, the National Bank of Cambodia issued a compulsory license for micro-finance institutions that engaged in credit and savings mobilization of more than 100 million Riel (US\$25,000) or involving of more than 10,000 borrower or depositors.

Two types of MFIs are distinguished- licensed MFIs and registered NGOs. The registered NGOs operate freely with no requirement to be regulated and supervised, while licensed MFIs are under regulation, and need to send reports to the NBC. Since 2002, some NGOs have been licensed and some others have been registered. By the end of 2006, there were 17 licensed MFIs and 26 registered as rural credit operators. Among those institutions, the majority were transformed from NGOs, while others were local private companies. As of December 2009, there were 20 licensed MFIs and 26 registered rural credit operators.

MFIs are the first-hand experience of a banking system for rural people. They have extensive branch networks throughout the country. The number of district branches increased from 745 in 2007 to 1130 in 2009. Total assets increased remarkably from 247 billion Riels (US\$60 million) in 2005 to 1,526 billion Riels (US\$365 million) in 2009. MFIs do not rely on deposits for lending, though deposits also increased from 8.7 billion Riels (US\$ 2.2 million) in 2004 to 39.6 billion Riels (US\$9.5 million) in 2009. Total

loans provided in 2005 were 204.6 billion Riels (US\$49.6 million) and reached 1,245 billion Riels (US\$ 297.8 million) in 2009. MFIs' loans are concentrated, with more than 40% in Agriculture and a third in trade and commercial activities. MFIs usually borrow from abroad for their lending, since interest rates are very high. In 2008, loans in Cambodian Riels were charging an interest rate of 3.02 % per month, while 2.43% per month was charged for loans in US dollars. At commercial banks, loans in Cambodian Riels are on average charged at 22.36 % per annum, while 15.76% per annum is charged for US dollar loans. In 2009, 73.7% of the paid-up capital of MFIs was owned by foreigners. As a result, the performance of MFIs was vulnerable to the external shocks experienced during 2008 and 2009.

Though MFIs offer credit with a very high interest rate, the credit is accessible by micro, small and medium enterprises. The number of people obtaining credit from MFIs increased substantially from 471,026 in 2006 to 904,298 in 2009, while depositors increased from 113,277 in 2006 to 171,190 in 2009. Although the coverage of financial services remains very low, MFIs have extensively opened up finance services to the Cambodian people, particularly in rural area.

3.2. SMEs and access to Finance

SMEs are usually innovative firms that could be sources of competitiveness, in addition to creation of value-added. They have been proved resilient to market friction, due to their low transaction costs and less asymmetric information. In this regard the growth of SMEs is important for industrial development. In our survey the firms that could access finance were found to have higher growth rates than those that reported obstacles. The constraints on SMEs in accessing finance have been observed around the world, especially in developing countries. A cross-country study found that size, age and ownership significantly impacted on access to finance (Beck, T. and Demirguc-Kunt, A. 2006). SMEs are usually small, young and single proprietorship that would face discrimination from banks. Moreover, sources of start-up and working capital are mostly from personal savings or borrowing from informal sources, including friends.

The difficulty of SMEs' access to finance could manifest in two distinctive ways. First, a high transaction cost due to the size of loan required, short-maturity, lack of accounting practices and asymmetric information available make it costly for banks to

offer loans. The difficulty is also seen in the high interest rates face by SMEs, and the need to provide support by collateral. With the interest rate about the equilibrium rate, demand for loans is less than the amount that banks want to lend; the more so if there is a guarantee available. In this regard, there would seem to be an excess supply of loans, but it is difficult for SMEs to access them. Secondly, from the banks' perspective, putting too high an interest rate on a loan could lead to lower expected repayments (Williamson 1987, Beck 2007), therefore banks set interest rates lower than the market clearance rate. At that rate, banks ration the amount of credit advanced by loading conditions with other forms of collateral, loan size, document requirements and other forms of guarantee. This is the situation of excess demand for loans.

In either case, MSMEs are discriminated against in the offering of loans. In developing countries, constrained access may be associated with regulatory and institutional issues, perhaps where property rights are not clearly defined. To the bank, it is very risky to take those uncertainties into account, and this adds to the cost of credit. For example, the majority of SMEs in Cambodia are not registered, which makes it difficult for banks to provide credit.

From the demand side, 25.56% of the surveyed firms said that current financing was not sufficient to fund future business expansion. In parallel, the IFC (2010) study found that 81% of entrepreneurs said that if banks would accept movable assets to secure financing, they would be interested in seeking loans to upgrade and/ or expand their business. It seems therefore that SMEs are lacking access to financial services. However, from the supply side, commercial banks are willing to provide loans only if collateral, such as hard title to property, is provided and, in combination good cash flow. Microfinance is more flexible, and can provide tailored services to clients, but at a higher cost of borrowing. Informal finance, traditionally the main source of finance for SMEs, in particular micro enterprise, appears to give loans at competitive rates compared with microfinance institutions, though is the rates are still high. From this angle, it seems that financial access does not seem to be a barrier to firm expansion.

All the firms complaining about the difficulty of access to finance are micro and small firms (WB, 2009). Constrained access to finance was due to; an inadequate legal framework to protect property rights; inexperience of banks in assessment of risks related to SMEs; geographical concentration of financial institutions; the

underdeveloped banking system; and lack of a policy framework to motivate banks to lend to SMEs (Harner S., 2003). From the demand side, among the 504 firms surveyed, only 59% prepared a simple profit and loss statement, and 57% did not have a bank account (IFC 2010). Therefore, SMEs did not actively seek finance from formal sources, but relied on informal financing, personal savings or retained earnings. The high interest rates charged and the collateral required could be unacceptable or impossible conditions, ensuring that many SMEs do not seek formal financing. In this regard, disengagement among both lenders and borrowers limited the ability of banks to give loans, and create sufficient demand.

3.3. Financing Issues through the Survey

The purpose of this survey is to understand the status of SMEs and their access to credit, where a financing gap is commonly observed to be a major impediment to SME growth. The survey was carried out at 180 randomly selected firms, of which 156 were micro and 24 were small enterprises. This sample could be used to understand the situation of micro enterprises, and their transition to SMEs, by focusing on their financial constraints. The owners of the firms had an average age of 44, 67% were male, their average experience was 13.5 years and 7% were able to speak English or French. Only three firms invested in R&D.

The sampled firms operated in six industries: garment and textiles, food industry, construction materials, furniture and household utensils, ice making and drinking water, and rice milling. Among the 180 surveyed firm around 20% were in each of the garment, food and construction materials industries, and 16% were in furniture and household utensils (Table 9). In term of net worth, 60% of the firms in the survey had sales of less than US\$25,000 and 35% were between US\$25,000 and \$500,000. Only 9 firms had sales of more than US\$500,000 (Table 10).

Table 9. Source of Finance use to Keep Business in Operation

	Operation
Commercial or personal loans and lines of credit from financial institution	46.67%
Credit from government lending agencies or government grants	0.56%
Retained earnings	81.67%
Trade credit owing to suppliers	43.89%
Leasing	10.56%
Loans from employees	3.33%
Personal savings of business owner(s)	88.33%
Loans from individuals unrelated to the firm or its owner ("angels")	4.44%
Micro-credit	23.89%
Other sources of financing	1.67%

Source: ERIA Survey, 2010.

Table 10. Business Intend for Loan

Business Intend	Percentage
Land and buildings	5.5%
Vehicles/ rolling stock	9.1%
Computer hardware and software	1.8%
Other Machinery and equipment	30.0%
Working capital/ operating capital, such as inventory or paying suppliers	74.5%
Research and development	6.4%
Debt consolidations	19.1%
Intangibles (such as training, customer list, goodwill)	1.8%
Purchase a business	0.9%
To grow the business	29.1%
Others	5.5%

Source: ERIA Survey, 2010.

Breaking the sample down employment, 30% of firms employed more than 5 and fewer less than 50 people and 70% employed fewer than 5. Almost all the firms surveyed were domestic; only three firms produced for export, with the rest focused on domestic consumption. In term of networks of production, 76% of firms produced final products, 10% supplied first tier customers and 15% produced intermediate goods. This pattern reflects the rudimentary nature of production networks in Cambodia, due to capacity constraints, the need for upgrades and other internal constraints (Chheang *et al.*, 2009). Only 3 firms met an international standard, 5 firms had introduced ICT and 6 firms had established new divisions or new plants during the past three years (Figure 3). However, upgrading is a strong current concern among the surveyed firms. 60% had

moved into either a new market or new technology in the past three years, which was also a period of high economic growth in Cambodia (Figure 4).

■ Number ■ Percent 7 6 6 5 5 4 3.33 3 2.78 3 1.67 2 1 0 Met an Introduced ICT Established new international and reorganized divisions or new standard business plants processes

Figure 3. Effort to Improve Business Processes

Source: ERIA Survey, 2010.

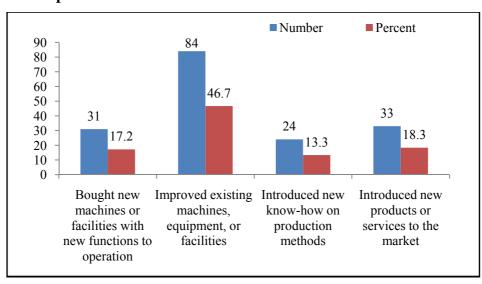


Figure 4. Adoption of New Production Method in the Past Three Years

Source: ERIA Survey, 2010.

Against the backdrop of financial crisis, 53% of firms intended to expand their business in the next two years and 13 firms or 7% intended to sell, transfer or close business in next five years. By type, 70% of micro enterprises had the intention to

expand, but only 50% of small firms. Only 6.4% of firms intended to close down in the next five year, but for small firms the figure was 12.50%. In this regard, the small firms have a better chance of growth, but their risks of closure are also high compared to micro enterprises. In contrast, the crowed micro firms environment is highly competitive, and this tends to make expansion uncertain, with firms focused on survival (10 % of micro firms don't know about future circumstances), but successful firms may grow into small enterprise in the future.

Expanding a business requires a financing mechanism. 25.56% of surveyed firms viewed current financing as insufficient to fund their expansion plans. Of these, 3 firms intended to seek an equity input and 104 firms intended to make a loan request for financing. This picture is very similar among both micro and small enterprises. Among constraints on expansion, both micro and small enterprise worried about increasing competition due to relatively easy entry into their markets. They also had concerns about rising costs, but this concern was reported more by the micro firms, probably due to the competitiveness of their market segments. Instability of consumer demand is the third largest worry for the surveyed firms, especially. However, 80% of firms raising the issue of demand were micro firms.

More than half the expanding firms were in the slow growth stage of their life-cycle, and about 35% were in the declining stage. This pattern is similar for both micro and small enterprises. It means that expansion is sought after the stagnation and decline stages, and that firms hope that they could become more competitive. From a bank perspective, expansion of business in this stage of slow growth and decline is very risky, which makes it difficult for them to offer loans. Expansion during the maturity stage, when a firm has stable revenue, is preferable.

Major sources of SME financing can be summarized into 3 types: formal sources (the main external source of finance being from commercial banks or other financial institutions, including microfinance institutions), informal sources and finally the most important source of funding for between 75% to 90% of entrepreneurs, that of internally-generated funds. However, all businesses have recently made requests for financing, of which 99 firms or 55% had requested finance in the last 12 months, and 90% of them had requested finance from one source. Only 10 firms had been refused. Among the firms obtaining credit, only 7.2% had been given a partial amount. This

finding is similar to another survey of 289 firms, which found that only 5% of firm had tried to borrow but failed to obtain credit from banks and other financial institutions (JICA, 2010).

From this survey it is very hard to argue that micro and small enterprises are generally facing a financing gap. However, looking at sources of financing, it shows a varied structure of financing. 80% of small firms go to a bank for credit, while only a third of micro firms do so. Almost 50% of micro firms obtained credit form MFIs. The reason cited is that the institution selected offered the best credit terms and conditions. The financial products from banks and micro institutions were tailor-made for their target customers, given the different operational costs of those financial institutions.

Different sources of financing entail different sizes of loan, different interest rates and varied lengths of borrowing. In the sample, bank loans had an average size of about US\$28,000, compared to about US\$3,200 from MFIs. The banks could provide larger loans, cheaper interest rates and longer durations. Interest rates from MFIs were around 2% per month, with an average duration of 1.8 years, compared to an average of 1.7% and 2.35 years from the banks.

To protect against risk, banks have to adopt credit rationing measures so as to minimize problems from adverse selection and moral hazard. Additionally they have to deal with the problem of opaqueness, meaning that is difficult to ascertain if firms have the capacity to pay (have viable projects), and/ or the willingness to pay due to moral hazard. The majority of lending was secured with collateral, required a co-signature, and required a formal application for financing and other documents, regardless of the source of finance.

Cambodia's micro and small firms are constrained by limited financial products and an under-developed financial system. Financial leasing is not common, although two firms in the survey had leased equipment. 11 firms had requested trade credit from a supplier, of which 9 had been successful, with an average amount of US\$2,311 (Table 11). The majority of firms relied on retained earnings or personal savings to keep their business in operation. In expansion, the financial need is for working capital, plus further capital for buying machinery and equipment. (Table 12) No government finance program is in place that surveyed firms could use.

Table 11. Percentage of Loans that Need Collateral

	No Collateral	With Collateral	Total
D 1	1	37	38
Bank	2.63	97.37	100
M: C	2	40	42
Microfinance	4.76	95.24	100
Others	14	5	19
	73.68	26.32	100
Total	17	82	99
Total	17.17	82.83	100

Source: ERIA Survey, 2010.

Table 12. Characteristics of Surveyed SMEs in Cambodia

	Non-requesting						Requesting			
Variable	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max
Age (year)	76	14	9	3	32	98	16	10	3	32
Size	76	5	4	1	20	98	5	4	1	20
Management experience	76	13	8	2	32	98	14	9	2	31
Sale Volume										
2008	76	122633	326364	2280	2325000	98	231254	491610	1290	2480000
2009	76	122290	342663	2280	2500000	98	233249	525697	1070	2790000
Sale Growth (%)										
2008	76	-2	23	-60	35	98	-2	20	-65	40
2009	76	-3	17	-50	34	98	-3	17	-50	29
Profit (%)							0		_	
2008	76	21	10	4	51	98	23	12	1	51
2009	76	19	10	4	51	98	20	11	1	45
Cost Structure 2009 (%)										
Labor	76	10	7	0	40	98	9	9	0	70
Raw Materials	76	60	18	0	90	98	58	16	4	88
Utilities	76	8	12	0	69	98	7	11	0	57
Interest	76	1	5	0	40	98	5	5	0	27
Other costs	76	2	3	0	13	98	1	2	0	15
Sale Patterns										
Domestics	76	100	3	70	100	98	100	1	90	100
Export	76	0	3	0	30	98	0	1	0	10
Distance to market	76	11	6	0	30	98	11	11	0	80

Source: ERIA – SMEs Survey 2010 for Cambodia.

4. Access to Finance: Firm Characteristics

The objective of this paper is to understand the constraints and obstacles to accessing credit in the formal financial sectors. In this regard, the concept of financial constraints could be inferred from the characteristics of those firms that had obtained credit, together with other requirement of the banks.

The decision by the financial institutions to provide credit to an SME is determined by how they perceive the firm's ability to pay after carefully scrutinizing the SME's proposal for funding. There are a number of characteristics that determine a good quality firms in terms of access to credit. This section of the paper uses a probit model to assess the key characteristics of firms that successfully obtain credit.

The statistical model in general form is $CAi = \gamma 0 + \Gamma'Xi + \epsilon i$ where CAi is credit approval, Xi is set of explanatory variables that captures characteristics of firms, Γ is matrix of coefficients and ϵi is an error term. The dependent variable (CAi) is a binary variable and identifies whether or not a credit proposal is approved, or the issue of the financial gap is addressed. In this context, a financial gap is defined as a credit proposal filed by an SME being rejected or only partially approved. The value of CAi is set to 1 if firms applied for credit and had their application approved and zero otherwise.

In the deficient financial institution context, collateral is a prerequisite for accessing a loan. In the sample, only three firms were able to get credit without collateral (table 11). It is common practice that banks use collateral to guarantee loans. In this model, we choose to exclude collateral as a firm characteristic, since it almost perfectly predicts credit approval. From the banks' point of view, larger sales volumes, high rates of profit, and low interest payment as a share of total costs in previous years are key determinants of firms which will obtain loan approval.

Age, size and type are among the key criteria for banks' "credit rationing". The younger firm is more risky and at an early stage of development. The older the firms are, the more well-established they are in the industry where they operate. Size of firms can be measured by number of employees, and larger numbers could connote the firm's ability to pay, as could larger turnover. The larger the size of a firm is, the higher the probability that it can obtain a loan. The size of firm is not a clear-cut indicator, as

smaller size represents potential for growth (and instability), while larger size represents stability and maturity, but less growth potential or even being in the decline stage. Moreover, the bank could be biased in providing credit to a specific type of firm which has been very dynamic. In this particular study, enterprises are classified into 4 industries following the survey (1) Garment and Textiles, (2) Parts, Components, and Automotive (including motorbikes), (3) electrical, electronic, parts and machinery and (4) other.

There are other factors that may influence the decisions of banks to provide loans. Managerial capability and experience is considered to be a significant factor for creditors granting loans to SMEs. Other firm characteristics, of lesser influence, include gender of owner, distance to market, whether the firm is run by a man or women, firm life-cycle, owner's net worth and so on. Dummies of business capability are included to trace the impact of efforts made by SMEs to improve business processes, adopt new production methods, and develop new products.

Data Descriptions and Primary Analysis

Comparing firms that requested loans and those that did not allows us to see their different behavior and characteristics in business process. It is plausible that firms that request credit have higher sales growth, higher profit, better management, good connections, and are more active in expansion etc. It is, however, probably the old firm that holds a strategic market share and is efficient in term of cost optimization.

From the sample survey, the requesting firms tend to be older firms with average size and level of managerial experience. The sales volumes of firms that seek external financing is double that of non-requesting firms. Both groups of firms had seen reductions in sales during the economic crisis period, but requesting firms appears to have slightly higher profit margins.

Both finance seeking and non-seeking firms share very similar cost structures in terms of spending on labor service, raw materials, and utilities. On interest rates, however non-seeking firms recorded only 1% of total cost spent on interest payments. In contrast, finance seeking firms recorded as much as 5% of total cost on interest payments (Table 12).

In this survey, firms did not really engage in exports. In fact 99% were serving domestic market demands. There was one firm exporting 30% of its output, and two firms exporting 10% of their production. Operations of firms were largely confined to their local areas only; 96% of firms sold their product to markets situated within a range of 20km, while another 3% extended their sales to a range of 30km. Firms in the garment and textiles industry made up 27% of the sample, the rest being categorized in other categories including rice milling, ice production, food and beverages and construction materials. The proportion of firms run by woman was higher in the group of firms asking for finance, which can be explained partly by the fact that promotion of microfinance is more targeted to women (Table 13).

Table 13. Other Characteristics (in %) of SMEs Non-requesting and Requesting for Credit

Items	Obs	Mean	Std. Dev.	Obs	Mean	Std. Dev.
	Non-requesti		ting		Requesting	
Size	76	0.882	0.3252529	98	0.87755	0.329489
Туре						
(1) Garment & Textile	76	14%	35%	98	27%	44%
(4) Others	76	86%	35%	98	73%	44%
Firm life-cycle						
Start-up	76	0%	0%	98	1%	10%
Fast Growth	76	4%	20%	98	6%	24%
Slow Growth	76	61%	49%	98	57%	50%
Maturity	76	14%	35%	98	12%	33%
Decline	76	22%	42%	98	23%	43%
Owner's net worth						
Less than \$25,000	76	55%	50%	98	61%	49%
\$25,000-\$100,000	76	30%	46%	98	17%	38%
\$100,000-\$500,000	76	12%	33%	98	14%	35%
\$500,000-\$1,000,000	76	3%	16%	98	7%	26%
Gender						
Male	76	71%	46%	98	63%	48%
Female	76	29%	46%	98	37%	48%

Source: ERIA - SMEs Survey 2010 for Cambodia

Both requesting and non-requesting firms share similar proportions of stages of life cycle, with around 60% of firms reported to be in slow growth. There is, however, a high possibility of misperception of the questions being asked. While the survey was carried out in 2009, the hardest period of the economic crisis, slow growth in just one or two years, given the whole national economy in recession, by no means meant that a firm was in its slow grow stage. Firms in the maturity stage are perceived to be good in term of providing credit, since sales volume and profits are stable.

Firms making requests for external funds are diverse in terms of net worth. Categories with net worth under US\$25000, and between US\$500,000 to US\$1,000,000 provided 61% and 7% of total observations respectively. Clearly, personal saving is the primary source of finance, on which 94% of non-requesting and 86% of requesting firms relied when entrepreneurs started up their firms. In retrospect, firms who started up using external credit are more likely to solicit for another round of credit for expansion. Sources of finance included loans from individuals, micro-credit and other sources of financing. Moreover, in a well-rooted business network, where the majority of firms are running their business on trade credit, there is far less need for credit from financial institutions. While the leasing industry in Cambodia is still in its infancy, with only 10% among others firms leasing facilities during their start-up period (Table 14).

From the point of view of current business operations, it is clearly seen that 73% of firms who operated their business with commercial or personal loans and lines of credit from financial institutions made request for another package of credit in 2009. However, requesting firms also kept a very large proportion of retained earnings in addition to their external loans. Indeed, retained earnings are the primary source of financing for both requesting and non-requesting firms.

However, the Rural Development Bank is a provider of wholesale credits to microfinance institutions who then lend directly to borrowers. The government has also introduced a Government Guarantee Scheme against loans from commercial banks to SMEs. There was no credit from government lending agencies was found in the survey. The requesting firms also actively use personal savings and micro-credit for their business operation (Table 15).

Table 14. Source of Finance (in %) SMEs Non-requesting and Requesting for Credit

TA		Non-requ	esting	Requesting		
Items	Obs	Mean	Std. Dev.	Obs	Mean	Std. Dev.
Start-UP cost						
Commercial or personal loans and lines of credit from financial institution including credit card	52	15%	36%	64	38%	49%
Credit from government lending agencies or government grant	52	0%	0%	64	0%	0%
Retained earning	52	48%	50%	64	27%	45%
Trade credit owing to suppliers	52	71%	46%	64	33%	47%
Leasing	52	12%	32%	64	9%	29%
Personal savings of business owner(s)	52	94%	24%	64	86%	35%
Loans from friends or relatives of business owners(s)	52	35%	48%	64	19%	39%
Loans from individuals unrelated to the firm or its owner ("angel")	52	0%	0%	64	3%	18%
Micro-credit	52	2%	14%	64	14%	35%
Other source of financing	52	0%	0%	64	3%	18%
Business Operation						
Commercial or personal loans and lines of credit from financial institution including credit card	76	13%	34%	98	73%	44%
Credit from government lending agencies or government grant	76	0%	0%	98	1%	10%
Retained earning	76	86%	35%	98	78%	42%
Trade credit owing to suppliers	76	61%	49%	98	33%	47%
Leasing	76	13%	34%	98	8%	28%
Loans from employees	76	1%	11%	98	5%	22%
Personal savings of business owner(s)	76	87%	34%	98	89%	32%
Loans from individuals unrelated to the firm or its owner ("angel")	76	4%	20%	98	5%	22%
Micro-credit	76	5%	22%	98	39%	49%
Other source of financing	76	0%	0%	98	3%	17%

Source: ERIA – SMEs Survey 2010 for Cambodia.

Table 15. Innovation Effort (in %) of SMEs Non-requesting and Requesting Firms

T4		Non-requ	Req	Requesting	
Items	Obs	Mean	Std. Dev.	Obs	Mean
Improving business process					
Met an international standard	76	0%	0%	98	2%
Introduced ICT	76	1%	11%	98	2%
Established new divisions or plants	76	0%	0%	98	5%
New production methods					
Bought new machines	76	7%	25%	98	23%
Improved existing machines	76	42%	50%	98	50%
Introduced new know-how	76	4%	20%	98	19%
New product					
Launch of new product	76	11%	31%	98	22%
For new market	8	63%	52%	21	62%
By new technologies	8	63%	52%	21	62%
Increase in sales of new products	7	14%	38%	20	0%

Source: ERIA Survey, 2010.

Firms who seek loans tend to be more innovative in spotting opportunities, even amidst economic crisis. In the survey data on innovation effort, clearly shows that requesting firms are more active in improving standards, establishing new branches and employing ICT. This argument becomes more solid. With new production methods being taken into account, the percentage of requesting firms purchasing new machines and introducing new know-how far exceeds the proportion of non-requesting firms. Although both kinds of firm had made a similar degree of effort to improve or upgrade existing production facilities, firms who seek external credit are more dynamic and innovative in developing new products. This reflects dynamism, and room for potential growth and competition.

Results and interpretation

The probit regression result is shown in Table 16 and is self-explanatory.

Table 16. Characteristics of Firms as Determinants of Loan Approval

Variables	(Coefficient)
Ln (Age)	0.7968983
Lii (Age)	(1.381127)
Ln (Size)	0.7772998
Lii (Size)	(0.9824575)
Garment Sector	5.128155***
Garment Sector	(1.943646)
Owner Experience	-0.196355
Owner Experience	(0.1413192)
Sale Volumes in 2008	0.0000718***
Sale Volumes in 2008	(0.0000275)
Drafit Marain in 2009	0.1348384***
Profit Margin in 2008	(0.0590052)
Interest payment of total cost in 2009	0.0230171
Interest payment of total cost in 2008	(0.1372763)
Sale Volume in 2009	-0.0000132
Sale volume in 2009	(0.0000105)
Interest neumant of total cost in 2000	-0.0012819
Interest payment of total cost in 2009	(0.1445616)
Distance to Market	-0.0126145
Distance to Market	(0.0366874)
Life cycle (mature)	-2.528167
Life cycle (mature)	(1.737418)
Net-worth (< USD25000)	-0.3583462
Net-worth (> USD23000)	(1.826074)
Net-worth (< USD100000)	1.14721
Net-worth (> 05D100000)	(2.045726)
Say (Mala)	0.9057545
Sex (Male)	(0.981152)
Constant	-4.985709
Constall	(3.320016)
Observation	95

Standard Error in parentheses

Firms engaged in the garment-textiles industry are more likely to receive external finance, compared to others. From the bank's perspective, this would seem to be a good client. Moreover, the likelihood of credit approval is significantly explained by sales volume and profit margins in previous years. Sales volume is presumably reflecting a scale of business that is considered as possessing a higher ability to repay debt. Furthermore profit margin, which is a key indicator of business performance of SMEs, is the very criteria for credit approval.

^{***} p<0.01

The analysis revealed that neither the age nor the size of firms is significant when it comes to receiving credit. The experience of the owner did not explain the likelihood of seeking credit. Net worth, gender of owner and state of development also do not impact on finance-seeking. Other variables, most of them dummies such as firm life-cycle stage, owner's net worth and innovation efforts, were tried in an effort to learn their effect on the credit decisions of financial institutions. Nevertheless some variables were to be omitted due to insignificancy.

Without a credit guarantee scheme or mechanism, almost all loans require collateral and only properties with hard title are accepted. Potential collateral such as accounts receivable is accepted at to very minimal extent, while movable assets such as equipment, vehicles, inventory and not-yet-harvested crops are not accepted.

This finding confirms that banks are taking collateral as a means of credit rationing. Moreover, banks are biased to sectors that they are comfortable with, for example the garment and textile industry. Sales volume and profit margins determine the likelihood of firms obtaining credit. This explains the market behavior of bank lending; the banks play their intermediate role so as to maximize their profit and minimize their perceived risks.

5. Conclusions and Policy Recommendations

Cambodia's industrial structure is dominated by micro-size firm. In terms of employment, it suffers from the "missing middle" phenomenon, where employment concentrates in micro-size firms and large firms. From the point of view of micro-firm dynamics, growth to SME scale is important in creating a diversified, competitive and solid foundation for economic growth. SMEs could generate higher value-added for economic growth, create jobs, broaden the manufacturing base, encourage FDI and enlarge the national tax base. The broad geographic distribution of micro-firms, if upgraded to SMEs, would result in a good income distribution across the country. In a sense, SME development is very critical for industrial development, sustaining growth and creating inclusive growth for Cambodia.

SMEs are facing many challenges, one of which is access to finance. In the context of Cambodia, the challenge is a result of the early stage of development of the financial sector. The banking sector is profit-oriented, and banks focus on big business transactions to maximize their profit. The MFIs that tailor-make credit for micro-sized firms usually set small loan sizes, charge high interest rates and allow only short maturity. Moreover, all credit from the formal sector must come with *collateral*. There is good evidence that banks perceive a high risk of non-repayment of loans to MSMEs and are setting terms and conditions of lending that seem suitable for them. According to the survey, firms that are seeking finance are more active in terms of improving standards, creating new branches and employing ICT. In the survey, 81 out of 95 firms had their proposed loans approved. From the Probit model, firms in the garment and textiles sector, firms with a big sales volume and firms with high profit margins are more likely to receive a loan from financial institutions. This finding shows marketoriented provision of credit, where market bias assesses SMEs at very high risk. However, non-performing loans are lower for financial institutions that provides to micro-size and SMEs than commercial banks.

While arguments that financial access limitation is a main obstacle to SME growth are pervasive, there should be further research to develop an understanding of why and when SMEs need external fund. This research should analyze firm life-cycles, opportunity and risk of expansion, willingness to register, linkages to multinational corporation, and the possibility of upgrading from micro to small firms, from small to medium and from medium to large.

Undeniably, the policy environment in Cambodia is inadequate. Although there are some mechanisms in place, such government documents as the Small and Medium Enterprise Development Framework, policy implementation still has a long way to go. Once again, outcomes from future research related to SME development in Cambodia will provide indispensable input for formulation of specific government policy to support SMEs, such as policy on technology upgrading or financing for SMEs.

Development of SMEs in Cambodia may require an active role for the state to connect micro-size firms to SMEs and to large enterprises through coordination, and incentives to work together. The linkages between the three levels will facilitate the upgrade and expansion of micro enterprises, whose growth currently relies on the

domestic market, outdated technology and personal savings. Foreign firms find it hard to work with micro enterprises due to incompatible technology, insufficient scale, lack of reliability of supply capacity and differences in working attitudes.

Finally a few policy recommendations could be drawn in respect of the development of SMEs as a whole, and improving access to finance among SMEs, given the current early-stage development of financial institutions in particular.

- The "missing middle" phenomenon suggests that government must play an active role in connecting SMEs to export sector. Fixing the missing middle could a way forward for economic diversification, and could create a strong foundation for growth. Industrial development therefore has to take into account the course of SME development, to ensure competitiveness, inclusive growth and sustainable development. Under a framework of SMEs, industrial development is practical and realistic, building on the existing production base. There are some specific policies, such as providing incentives to export firms to find local partners; benchmarking certain standards or priority areas for export growth; providing market, management and technical consultancy; and enhancing awareness of local SMEs to supplies requires by the existing export-oriented large enterprises through tour organizing, workshops or seminars.
- The current financial institutions are working very well, but banks are strongly biased against "risky" SMEs. This is the problem of asymmetric information. In response to this problem, banks demand collateral and other forms of guarantee thereby rationing credit. At the policy level, government could help SMEs by expediting land titling, offering a credit guarantee scheme, and creating a credit information bureau that would facilitate the process of lending.
- Competition among banks is necessary, as they remain concentrated in Phnom Penh. Policy is needed to encourage the banks to expand across the country rather than allowing the creation of many different banks that concentrate in Phnom Penh. The same is true for the micro finance activity of MFIs and NGOs. It is necessary for merger to take place across financial products, so as to take advantage of scale and cost efficiencies. Some of financial products could be undertaken by the banks in order to enlarge the scope of operation.

- This would lead to an improvement in the terms and conditions of loans through competition among the larger banks or financial institutions.
- Further development of the financial system is a key to creating financing options for SMEs. Currently, SMEs can only access finance through MFIs and some specialized banks. The establishment of different schemes targeting SME financing could expedite further development. Stock market development would not directly serve SMEs, but would create space for bank to focus more on SMEs, if large company turns to capital market that would offer cheap financial resources.

The risk of moral hazard needs to be addressed, especially among non-registration of SMEs. The issue of the formalization and registration process for SMEs should be addressed since it has a positive implication on tax revenues as well as on access to finance among SMEs. The formalization could make policy intervention by government possible. There is no specific policy to target registration or formalization. The problem of persuading SMEs to formalize their existence, can be dealt with through offering tax benefits, consultancy, technological know-how transfer, management skills training, information, government contracts, study tours, trade fairs, exhibition priority and other benefits that they could immediately obtain. It is important to keep SMEs engaged and to highlight the benefits of being formal.

References

- Asian Foundation (2009), The Provincial Business Environment Scorecard in Cambodia: A measure of Economic Governance and Regulatory Policy, Summary Report.
- Beck, T. and Demirguc-Kunt, A. (2006), Small and Medium-Size Enterprises: Access to Finance as a Growth constraint.
- Beck, T. (2007), Financing Constraints of SMEs in Developing Countries: Evidence, Determinants and Solution.
- Chheang, S., Oum, S. and Leng, T. (2009), Constraints on SMEs in Cambodia and their Participation in Production Networks, Chapter 5, Research Project No 8, ERIA.
- ERIA (2010); SMEs Survey 2010 for Cambodia
- Hang, C.N. (2010), Cambodian Economy: Charting the Course of a Brighter Future, a Survey of Progress, Problems and Prospects, SNEC.
- Harner, S. S. (2003), Financing SMEs in Cambodia: Why do Banks Find it so Difficult? Private Sector Discussions No. 14, MPDF.
- International Financial Corporation (IFC) (2010), Understanding Cambodian Small and Medium Enterprise Needs for Financial Services and Products, Cambodia Agribusiness Series No.2.
- Ijiri, Y. and Simon, A.H. (1964), Business Firm Growth and Size, The American Economic Review, 54 (2), 77-89.
- JICA (2010), The preparatory Survey on the SME Two Step Loan Project in the Kingdom of Cambodia, Final Report, No.33.
- Kaufmann, C. (2005), Financing SMEs in Africa, Policy Insights No.7, OECD Development Centre.
- SME Secretariat (2005), SME Development Framework, SME Sub-Committee, Ministry of Industry, Mine and Energy.
- Sleuwaegen, L. and Goedhuys, M. (1996), The Size Distribution and Growth of Manufacturing Firms in Cote d'Ivoire, RPED paper no.87.
- Tanaka, K. and Hatsukano, N. (2010), The Size Distribution of All Cambodian Establishments, Discussion Paper No.253, Institute of Developing Economies.
- The World Bank (WB) (2009), Second Investment Climate Assessment: A better Investment Climate to Sustain Growth in Cambodia.
- Williamson, Stephen D. (1987), Costly Monitoring, Loan Contracts and Equilibrium Credit Rationing, Quarterly Journal of Economics, 102, 135-46.