Small and Medium Enterprises Financing
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The darker area of the map represents the members and associate members of ESCAP.

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ABSTRACT

Stable access to appropriate funding sources is an important factor for the survival and growth of potential SMEs. However, most SMEs face poor access to finance in the region’s bank-dominant system. This implies that further policy support for bank loans for SME finance is needed. However, such policy support alone is not sufficient to provide long-term financing to growth-oriented SMEs because of the nature of the banking sector’s short term credit in the region and rigid banking regulations. Furthermore, the bank-dominant system makes SMEs more vulnerable to financial shocks because these firms do not have an opportunity to diversify their funding during crises. The diversification of financing modalities beyond conventional bank lending can provide an alternative platform for the financing needs of SMEs and expand their financial access. In this context, this paper analyzes the SME financing landscape by examining the banking sector, nonbank financial institutions and capital market financing for SMEs and provides policy considerations for improving access of SMEs to finance.
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1. **Background**

Financial inclusion is key to the development of the small and medium enterprises sector (SMEs), which is a driver of a resilient national economy in every country due to its nature of stimulating domestic demand through job creation, innovation, and competition. As of 2014, SMEs accounted for an average of 96% of all enterprises and 62% of the national labor force in Asia and the Pacific. They also contributed an average of only 42% of the gross domestic product (GDP) or manufacturing value added in the region. SME development is therefore critical to growth towards a more sustainable and inclusive future in the region. Stable access to appropriate funding sources is an important factor for the survival and growth potential of SMEs. However, most SMEs face poor access to finance within the region’s bank dominant system. Bank loans to SMEs consist of 11.6% of GDP and 18.7% of total bank lending in the region, with a decreasing trend of the latter since the 2008/09 global financial crisis. This implies that further policy support for bank loans to SME finance is needed. However, such policy support alone is not sufficient to provide long-term financing to growth-oriented SMEs because of the nature of the banking sector’s short term credit in the region and rigid banking regulations. Furthermore, the bank dominant system makes SMEs more vulnerable to financial shocks because these firms do not have an opportunity to diversify their funding during crises. The diversification of financing modalities beyond conventional bank lending can therefore be a better alternative platform for the financing needs of SMEs and expanding their financial accessibility.

In this context, this paper analyzes the SME financing landscape by examining the banking sector, nonbank financial institutions (NBFIs) and capital market financing for SMEs to provide policy implications for improving access of SMEs to finance.

2. **SME Financing Landscape**

The ability of SMEs to develop, grow and be sustainable relies heavily on their capacity to access and manage finance. However, accessing the right type of finance at an affordable cost to start and grow the business is the fundamental financing difficulty for SMEs. The total credit gap for micro, small, and medium-sized enterprises (MSMEs) was the largest in East Asia with the most number of MSMEs when compared to other regions (Figure 1). In 2014, while the total credit gap for MSMEs was $706 billion in East Asia and $206 billion in South Asia, this gap was $620 billion in Latin America and $132 billion in Sub-Saharan Africa. Furthermore, less than 15% of Asian SMEs have bank credit lines, compared to 24% in Latin America. Thus, the average SME obtains its own capital and/or informal borrowing from friends and family members. Although SMEs relying on their own capital and with limited access to finance are better positioned to avoid serious shocks from financial and banking crises than large firms, this condition impedes the creation and development of sound and competitive SMEs, and inhibits inclusive economic growth in Asia.

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1. Asia SMEs Finance Monitor, ADB, 2014. The Asia-Pacific group consists of Bangladesh, Cambodia, China, Fiji, India, Indonesia, Kazakhstan, Republic of Korea, Kyrgyz Republic, Lao PDR, Malaysia, Mongolia, Myanmar, Papua New Guinea, Philippines, Solomon Islands, Sri Lanka, Tajikistan, Thailand, Viet Nam
2. Ibid
3. NBFIs include microfinance institutions (MFIs), finance companies, factoring firms, leasing firms, pawnshops, credit cooperatives, credit unions, and venture capital firms.
4. Credit gap Funding gap refers to the difference between the actual credit extended and the total credit needed by MSMEs
The development of capital markets and NBFIs is still in the early stages in the region. For example, while NBFI financing accounted for an average of 3.1% of GDP, and represented one tenth of bank loan assets\(^7\), market capitalization of equity markets for SMEs is less than 10% of GDP\(^8\). In this context, the MSMEs financing gap suggests the limitations of bank lending for MSMEs financing. To overcome the constraint of bank lending for SMEs, the diversification of financing modalities is required as an alternative channel for providing growth capital, with more sophisticated and innovative institutional arrangements needed in order to effectively meet their financial needs. However, underdeveloped capital market financing and NBFs do not seem a realistic option for financing SMEs in the region in the short term. National SME finance policies related to access to finance in the region across Asia still focus mainly on enhancing bankability. However, a balanced approach is needed to design extensive policy measures for banks, capital markets and NBFIs to promote SME access to finance in Asia and the Pacific for the long term.

Figure 1-MSMEs Financing Gap\(^9\)
(Bubble Size: Total Credit Gap)

<table>
<thead>
<tr>
<th>Percent of firms with a bank loan or line of credit</th>
<th>Number of MSMEs (Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>-50</td>
</tr>
<tr>
<td>10%</td>
<td>0</td>
</tr>
<tr>
<td>20%</td>
<td>50</td>
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<td>100</td>
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<tr>
<td>40%</td>
<td>150</td>
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<td>200</td>
</tr>
<tr>
<td>60%</td>
<td>250</td>
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</table>

a) Banking Sector

Given the bank dominant financial system in Asia and the Pacific, limited access to bank credit is a persistent problem for SMEs. Lending to SMEs has declined over the course of the global financial crisis. SME bank loans were averages of 11.6% of GDP and 18.7% of total bank lending for the region in 2014\(^10\). Although this illustrates the poor access to bank credit for SMEs, these numbers do not show the whole picture of the region due to its diverse economic structure. For example, while SMEs have relatively high access to bank credit in developed countries, such as China, the Republic of Korea and Thailand, they have critically low access to bank credit in developing or less developed countries, such as Pakistan, Afghanistan and Fiji (Figure 2). In this context, the share of SME loans to GDP stood at an average of 18.5% in advanced countries and an average of 5.3% in developing and less developed countries as of 2014\(^11\).

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7 Asia SMEs Finance Monitor, ADB, 2014.
9 http://smefinanceforum.org/data-sites/ifc-enterprise-finance-gap
10 Ibid
11 Ibid
The financing needs of SMEs are dependent on their stage of growth. Figure 3 illustrates the conceptual combination of life cycle of SMEs and capital and credit providers. For instance, while in the early stage of SME growth, the financial needs of SMEs are generally met by family, friends and founders, while in the steady growth stage, the banks are one of the capital providers amongst other investors. The latter is because only at this stage do SMEs have an ability to provide requested collateral and business track records to banks. Therefore, to tap bank credits by SMEs that are in the other growth stages, such as startup and expansion stages, the policies related to financial infrastructure, such as credit guarantees, credit registries or bureaus and collateral registries, need to be developed by countries.

To improve bankability for SMEs, various government interventions to enhance SMEs access to bank credit have been promoted in the region. These government interventions involve mandatory schemes for banks or interest rate subsidies to banks. For example, Bangladesh and India have set annual credit volume targets for lending to SMEs. The central bank in the Philippines has also set up mandatory lending to MSMEs, where banks should extend 8% of their net loan portfolio as credit to MSEs and 2% to medium-sized enterprises. However, these interventions can disrupt financial stability if they are not well designed. For example, comparing SME NPLs ratios relative to the income level of the countries in which they operate, this ratio decreases as the country’s economy becomes more advanced. The SME NPLs ratios of Bangladesh and Papua New Guinea are higher than the ratios of Republic of Korea and Thailand. In general, the ratio of SME NPLs to total SME loans ranged between 2% and 18%, while the ratio of SME NPLs to total bank loans was between 1% and 3% in the region.

However, since these government interventions are not proven in terms of sustainability, financial stability and credit market suppression, private sector initiatives should also be encouraged to expand SME lending. For example, private banks have developed innovative strategies for lending to SMEs in Argentina and Chile. In these countries, banks ask their large clients for references on their most dependable buyers and suppliers to obtain missing information related to their borrowers, which, in many cases, are SMEs. Such strategies can also be used in the region, especially in low income countries.

In this context, further policy support for financial infrastructure, such as credit registries or bureaus, collateral registries, and credit guarantees, is needed to promote the access of SMEs to bank credit and lower the SME NPLs in the region, particularly in low income countries.
i. Credit guarantee schemes

Credit guarantee schemes are relatively well-established in Asia and the Pacific. Outstanding guaranteed liabilities consist of 1.6% of gross domestic product (GDP) on average in selected Asian economies. In particular, advanced economies in Asia, such as Japan and Republic of Korea, have granted larger volume of guarantees than advanced non-Asian economies and other Asian countries (Figure 4). However, while credit guarantee institutions in advanced Asian economies are unprofitable, these institutions in emerging and low income Asian economies are profitable (Figure 5). These suggest that SME access to guarantees is still being restricted in emerging and low income economies in the region. On the other hand, it is questionable whether guarantee schemes are sustainable in advanced countries when considering unprofitable business. In this respect, guarantee operations for SMEs should be well designed to ensure sustainable guarantee services.

If credit guarantee schemes are not well established for SMEs, they can lead to increased risk of adverse selection and moral hazard. For example, credit guarantees schemes may discourage financial institutions from closely monitoring SME borrowers, resulting in in the use of funds inconsistent with loan objectives. These schemes may also prolong the life of poorly performing SMEs though guaranteed loans by discouraging them from developing their management without any collateral requirements, as owner assets are not at risk in the case of default.

It is a challenge to design and manage credit guarantee schemes in weak institutional environments where good governance is difficult to establish. In this respect, research and practitioner experience suggest that best practices for credit guarantee schemes involve the following features: (a) credit assessments and decision making should be made by the private sector, (b) to minimize moral hazard problems, capping coverage ratios and the payout of the guarantee should be determined until recovery actions are taken by the lender, and (c) the use of risk management tools should be encouraged. However, many existing schemes do not have these features, which prevent their effectiveness in improving SME lending.

![Figure 4. Outstanding Guaranteed Liabilities (% of GDP)](image-url)

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Askrindo = Asuransi Kredit Indonesia; CGCMB = Credit Guarantee Corporation Malaysia Berhad; CGTMS = Credit Guarantee Fund Trust for Micro and Small Enterprises; DGCC = Deposit and Credit Guarantee Corporation; Jamkrindo = Perusahaan Umum Jaminan Kredit Indonesia; JFC = Japan Finance Corporation; KODIT = Korea Kredit Guarantee Fund; KOREG = Korea Federation of Credit Guarantee Foundations; KOTEC = Korea Technology Finance Corporation; NFCGC = National Federation of Credit Guarantee Corporations; PKPI = Penjamin Kredit Pengusaha Indonesia; SBC = Small Business Corporation; SME = small and medium-sized enterprise, [Taipei, China] SMEG = Small and Medium Enterprise Credit Guarantee Fund of [Taipei, China]; TCG = Thai Credit Guarantee Corporation.
ii. Public and Private Credit bureaus or registries and financial statements

Financial inclusion can be enhanced by facilitating the access of banks to borrower information through numerous sources, including firm financial statements, credit registries or bureaus. Although firm financial statements and official documentation are essential parts of loan applications at many banks, SMEs often have fewer resources and lack sufficient technical knowledge and capacity to prepare their financial statements in accordance with international financial reporting standards (IFRS) for SMEs that include cash flows, liquidity, and solvency. In this respect, only about 60 countries in the world have adopted the SME standards as of 2013. Most of the non-adopting countries implement a simpler set of obligatory standards because the implementation of IFRS are too costly and burdensome for SMEs.

Public or private credit bureaus are databases established and managed by central banks or financial supervisors that capture information on both individual and firm borrowers and their credit. Private credit bureaus refer, meanwhile, to information-sharing arrangements spontaneously created and maintained by private financial institutions. Credit bureaus have been established in 8 out of 20 countries in the region. While 5 lower middle-income countries (India, Indonesia, Mongolia, the Philippines, and Viet Nam) have these bureaus, only 3 upper middle-income countries (China, Malaysia, and Thailand) established these bureaus as of 2014.

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15 Ibid
17 Ibid
18 These countries are Bangladesh, Cambodia, China, Fiji, India, Indonesia, Kazakhstan, Republic of Korea, Kyrgyz Republic, Lao PDR, Malaysia, Mongolia, Myanmar, Papua New Guinea, Philippines, Solomon Islands, Sri Lanka, Tajikistan, Thailand, Viet Nam
19 Asia SME Finance Monitor, ADB, 2014

Net profit and loss ratio is defined as total revenues of recovery amounts plus fee income divided by total payments of guarantee disbursement plus costs. If this ratio is more than 100%, its guarantee business is profitable; if the ratio is less than 100%, its guarantee business is not profitable.
A credit bureau’s primary function is to expand the information available to a lender to improve loan decisions. This is because borrowers can have an incentive to withhold adverse information from lenders to increase their chances of receiving a loan by improving the appearance of creditworthiness. In this context, the successful credit bureau system should have two important features. These are: a) the accuracy and security of the information collected and b) protecting the privacy of borrowers.

To improve the accuracy of credit information, laws and regulations should allow borrowers the right to access their own information to verify the data and dispute any inaccuracies. This ensures that any genuine errors are corrected in a timely manner. For example, Thailand’s Credit Information Business Act B.E. 2545 (2002) allows individuals to report data inaccuracies and requires credit bureaus to examine the potential mistakes within 30 days of notification. Credit bureaus must report any corrected information to every credit institution that received the inaccurate information.\textsuperscript{20}

Laws and regulations should also protect the privacy of borrowers and prevent the misuse of personal credit information. It is therefore important that regulations should limit the types of information credit bureaus may collect to that which is relevant for determining a borrower’s capacity to repay a credit. In Hong Kong China, for example, the Personal Data (Privacy) Ordinance requires that personal data may only be collected for a lawful purpose where the user of the data has a legitimate reason for collecting the data. The Ordinance also specifies that the detail of the data collected should not exceed the purpose\textsuperscript{21}.

In this respect, while the depth of credit information index of South Asia lags the world index, the East Asia and Pacific index is nearly equal to the world index (Figure 6). According to World Bank data, while Malaysia received the highest possible score in the “depth of credit information index” with its private credit bureau covering 100% of the country’s adult population, Nepal, Myanmar and Bangladesh received the lowest score in this index. Therefore much more effort is needed to expand the information available to a lender to improve loan decisions in low income countries in the region.

\textbf{Figure 6. Depth of credit information index (0=low to 8=high)}\textsuperscript{22}

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\includegraphics[width=\textwidth]{figure6.png}
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\end{figure}

\textsuperscript{20} Asia Focus, Federal Reserve Bank of San Francisco, 2011

\textsuperscript{21} Ibid

\textsuperscript{22} http://data.worldbank.org/indicator/IC.CRD.INFO.XQ. Depth of credit information index measures rules affecting the scope, accessibility, and quality of credit information available through public or private credit registries.
iii. Collateral registries

To compensate for missing information on the creditworthiness of SMEs, banks ask for collateral to guarantee a credit. Data from the World Bank enterprise surveys show that while 64.8% of loans or lines of credit require some form of collateral in High Income OECD countries, 82.3% and 81.1% of loans or lines of credit require collateral in East Asia and Pacific and South Asia respectively. Since banks are often reluctant to accept movable assets as collateral due to the non-existent or outdated secured transaction laws and collateral registries, they generally require fixed assets such as land or buildings as security for loans for SMEs. This has led to many problems arising from communal and traditional forms of land holdings. Seizure after default is also especially difficult and can take years. Furthermore, many legal systems impose unnecessary restrictions on creating collateral, leaving lenders unsure whether a credit agreement will be enforced by the courts. In this context, reforming the movable collateral such as inventory, accounts receivables, crops and equipment framework may enable SMEs to leverage their assets to obtain credit. For example, some countries in the region have successfully reformed their systems, including Afghanistan, China and Viet Nam. These examples illustrate that the reformed systems should have three common features: (1) laws do not impose limits on what can serve as collateral; (2) creditors can seize and sell collateral privately or through summary proceedings, dramatically reducing the time it takes to enforce a collateral agreement; and (3) secured creditors have first priority to their collateral and can verify their priority through an electronic archive of security filings.23

b) Nonbank financial institutions (NBFIs)

Since there are limits to the amount of bank lending to SMEs due to the lack of sufficient financial infrastructure and rigid financial regulations for the banking sector, diversified funding alternatives beyond conventional bank credit promoting financial inclusion are needed for SMEs. The financing needs of SMEs also vary according to their stage of growth, with diversified funding alternatives better meeting the needs of SMEs than bank funding system. For example, banks generally extend credit to SMEs that are in the steady growth stage. The business model of venture capital firms and MFIs are more appropriate than banks to finance startups and SMEs in the expansion stage. Recent studies also indicate that more financially diverse markets are associated with improved access to finance24. In this respect, NBFIs have great potential to play an important role by supplementing available bank lending for SMEs in the region.

However, compared to the banking sector, the NBFI industry in many countries is still too small to meet the financing needs of SMEs. NBFI financing accounted for an average of 3.1% of GDP, with its lending only one tenth of total outstanding bank loans in the region. While MSMEs are mainly funded by private banks in South Asia, state owned bank are dominant in financing of MSMEs in East Asia. Asia and the Pacific, Latin America and Sub-Saharan Africa in terms of NBFIs used by MSMEs as a source of financing (Figure 6).

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24 Ibid
On the other hand, the performance of the NBFI industry is volatile and heavily reliant on the external economic environment and bank performance in the region. For example, the 2008/09 global financial crisis heavily hit the NBFI industry in the Kyrgyz Republic. NBFI have scaled back since 2011 due to the gradual improvement of banking sector in this country.

One of the important reasons for underdeveloped NBFI in the region is that many countries do not have comprehensive regulatory and policy frameworks for NBFI at the national level. A holistic policy and regulatory framework for NBFI is needed to establish a sound competitive environment between banks and NBFI. For example, existing credit bureaus or registries often cover only borrowing and transactions within the traditional banking sector. Coverage of existing credit bureaus or registries should be expanded to nontraditional lenders, such as nonbank financial institutions and microfinance borrowers. This would serve to prevent over-indebtedness among low-income borrowers, which has become a cause for concern in the wake of recurring default crises in microfinance and the rapid expansion of consumer finance in emerging markets.

Finally, MFIs, factoring and venture capital firms play a critical role among other NBFI in financing SMEs. This is because the business models of these firms are more appropriate to extend credit to SMEs that are in the startup and expansion stages where banks are reluctant to provide funds to SMEs. For example, since factoring companies do not see SMEs as an underwriting risk because of factoring’s nature of individual-transaction based financing, they are beneficial for start-ups, rapidly growing SMEs with weak credit history and no collateral. In this respect, these firms will be reviewed in detail below.

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25 http://financegap.smefinanceforum.org/?country1=South%20Asia&country2=Latin%20America&country3=Developing%20Countries. Other refers to family, friends or capital of founders.

26 Ibid
i. Micro Finance Institutions

In East Asia and the Pacific, for every 1,000 commercial bank branches, there are 138 cooperatives, 74 state specialized financial institutions, and 22 MFI branches. However, in South Asian countries, there are 146 MFIs for every 1,000 commercial banks, and 71 cooperative and 149 state specialized financial institutions. The ratio of MFIs to bank branches is the highest in South Asia and Sub Saharan Africa, where there are 146 and 480 MFIs per 1,000 commercial bank branches respectively. (Figure 7).

**Figure 7. Ratio of Cooperatives, State Specialized Financial Institutions, and Microfinance Institution Branches to Commercial Bank Branches**

Microenterprises show lower rates of use of bank accounts and rely less on banks and more on MFIs for working capital financing. This is because they often remain opaque given their usually inadequate documentation on formal accounts and their transaction cost is high for the banking sector due to their low volume of credit demand. Lending techniques used by MFIs allow them to extend credit to these informationally opaque firms. They employ intensive screening technologies to collect information on potential borrowers, including visits to the borrower’s house or firm leading to these institutions typically charging higher interest rates than banks. However, given that the returns to capital are also high among microenterprises, credit from MFIs could potentially lead to more investment and growth in these firms. In the default microfinance crises in India in 2010, it can be seen that MFIs relied on traditional credit reporting, which underscores the need for reliable identification at the bottom of the financial pyramid. This is a challenge in many low income countries where no universal identification system exists. To address this challenge, besides improving their credit bureaus, these countries can also resort to innovative technological solutions for improved borrower identification. Local and national governments have, for example, introduced biometric forms of identification, which utilize biometric data on individuals, such as fingerprints which can be linked to credit histories.

Although earlier studies suggest that smaller financial institutions are better able to serve the credit needs of small, opaque borrowers, recent studies reject that smaller financial institutions are better at providing finance to SMEs. They argue that large financial institutions use different transactional

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technologies that benefit from the economies of scale of larger institutions. For example, a large pool of clients is needed to use credit scoring models. While larger banks can easily establish these pools to be used in their credit score, it is difficult for small financial institutions to establish these pools. In this respect, this subject should be studied in detail before establishing a strategy to support MFIs related to access to finance.

The other concern is that while formal and semiformal MFIs are generally regulated and supervised under the banking legislation and an apex organization or other government body in the region, informal MFIs are not regulated although some of them are of sufficient size to become NGO-MFIs or even banks. In this respect, internal controls, governance and ownership structure are disappointing for many NGO-MFIs and the informal MFIs in the region. This situation can lead to microfinance crises in some countries as happened in India in 2010.

ii. Factoring

In general, factoring facilitates start-ups and rapidly growing SMEs that have a weak credit history and no collateral to access finance. This is because factoring companies do not see SMEs as an underwriting risk due to factoring’s nature of individual-transaction based financing. Particularly, reverse factoring enables factoring companies to reduce information costs and finance even risky SMEs because they assume only the risk credit of the high-quality buyer. The factoring industry also has potential to promote SMEs finance by taking on a catalytic role in connecting SMEs to big enterprises through the trade finance and supply chain finance for SMEs. In this regard, the factoring industry has great potential to promote SME internationalization in support of intraregional trade and financial inclusion in the region.

Asia is the second largest continent for factoring with 23.8% of the world total factoring volume. While factoring grew at a CAGR of 19.63% since 2009 to a new high of € 614 billion in 2014, its volume shrank by 8% to € 563 billion in 2015 reflecting the slower economic growth both in the region and the world (Figure 8). The reason for the downsizing is that in heavyweight countries such as China (13%) and Taiwan Province of China (7%) pulled down the overall growth of the region.

Figure 8. Factoring Volume In the Asia (Billion)

29 Regulation of Microfinance Institutions in Asia: A Comparative Analysis, Mamiza Haq, Mohammad Hoque and Shams Pathan, 2008.
30 ADB–OECD Study on Enhancing Financial Accessibility for SMEs Lessons from Recent Crises, ADB, 2014
31 Trade finance is short-term supplier financing to hedge the payment risks between importers and exporters through the exchange of specific proof documents such as the letter of credit and shipping documents. Supply chain finance is defined by the International Factors Group as a combination of trade finance and a technological platform that connects trading partners and financial institutions, and provides various services related to supply chain events.
32 FCI Annual Review, 2016
The factoring industry has faced several challenges in supporting SMEs. One of them is that since factoring is typically part of the operations of banks or their subsidiaries, this situation leads to an uncompetitive environment for these industries. The second one is that factoring requires an appropriate legal framework that allows firms to transfer their receivables to factors, giving factors the right to enforce payment without consent of the firm. However, most low income countries do not have this required legal framework. These countries can benefit from detailed recommendations on how to set up a legal framework related to factoring transactions from “The Legislative Guide on Secured Transactions of the United Nations Commission on International Trade Law (UNCITRAL 2010)” to establish their legal frameworks. On the other hand, it is crucial to enhance factoring literacy on both the supply and demand sides of the sectors. However, the awareness level of factoring is still low in most of the economies in the region. The shortage of factoring professionals also hinders the development of the factoring industry.

iii. Venture Capital Firms

Venture capitalists provide financing for SMEs in the start-up and expansion growth stage. Venture capital firms (VC) differ from banks in that they typically have more specialized skills to evaluate projects that have few assets that may act as collateral and carry significant risk. In addition, high-powered compensation structures give venture capitalists incentives to monitor firms closely.

Venture capital firms have been active in the United States, as well as in Canada, Israel, and the United Kingdom, but few Asian countries have been able to build up large domestic VC industries, with the notable exceptions of China and India. The Russian Federation and Japan show a considerably small size of their VC industry, especially compared to their GDP. Only Singapore has managed to develop a VC market that is relatively large compared to its GDP. A likely explanation for developed VC in Singapore is being a success case of both economic and technological development. A comparison of China and India with the United States indicates that the number of deals, the number of companies that are VC-backed, and the number of VC firms active in investing remains a fraction of those in the United States. Moreover, while a majority of the countries in other regions have VC industries that are above 0.5% of their GDP, all Asian countries apart from China, India, and Singapore, have ratios that are well below this value (Table 1 and 2).

A key reason for having an underdeveloped VC market in the region is that North America and Europe concentrate on technological innovation and have a robust initial public offering (IPO) market. A robust IPO market is important for the development of venture capital firms because IPOs allow venture capitalists to transfer control back to the entrepreneur. The lack of developed IPO market is therefore one of the important reasons why venture capital funding is not common in developed economies in the region dominated by banks such as Japan. The studies also show that the presence of an IPO market is only necessary for venture capital investment in existing firms, not start-ups. In this respect, it is difficult for countries with limited internal markets, and with low levels of per capita income to develop innovation-led growth where venture capital can play a relevant role. Furthermore, studies suggest that the legal framework, legal origin, and accounting standards may influence the characteristics of the venture capital industry. For example, better laws are associated with more rapid deal screening and origination.

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33 Financing Growth Through Venture Capital In Asia and the Pacific, Marco Da Rin, UNESCAP, 2016.
Recent studies indicate that as economies develop, capital market financing increases relative to bank based financing\textsuperscript{37}. However, although economic expansion in Asia has created many SMEs that need access to long term financing, SME capital markets are still in the early stages of development. Market capitalization of equity markets for SMEs equals less than 10% of GDP and market performances varies significantly by country\textsuperscript{38}. For example, while in China there are more than 1,000 listed companies on both the SME Board and ChiNext combined, the market size of Catalist Singapore, ACE Malaysia, and mai Thailand has not expanded as well as similar markets in China and the Republic of Korea (Table 3). Furthermore, although Malaysia and Thailand have created secondary trading exchanges with regulations and requirements specifically adapted to smaller firms based on a sponsor-driven alternative investment market (AIM) modeled on the United Kingdom’s

c) Capital Markets

i) SME stock markets

Table 1\textsuperscript{36}

<table>
<thead>
<tr>
<th>Country</th>
<th>Deals, total (number)</th>
<th>Companies, total (number)</th>
<th>VC Firms, total (number)</th>
<th>Average Investment, per Deal (USD million)</th>
<th>Average Investment, per Company (USD million)</th>
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Table 2

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<th>Country</th>
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<th>Companies, total (number)</th>
<th>VC Firms, total (number)</th>
<th>Average Investment, per Deal (USD million)</th>
<th>Average Investment, per Company (USD million)</th>
<th>Average total Investment, per VC Firm (USD million)</th>
<th>Total Capital (USD million)</th>
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<td>4</td>
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\textsuperscript{36} Financing Growth Through Venture Capital In Asia and the Pacific, Marco Da Rin, UNESCAP, 2016


\textsuperscript{38} Asia SMEs Finance Monitor, ADB, 2014.
AIM (UK-AIM)\textsuperscript{39} to develop their markets, their stock markets have not developed as intended. This implies that extensive national policies and strategies are required for many equity markets in Asia to be financing venues for SMEs.

### Table 3-SME Equity Markets in Selected Asian Countries\textsuperscript{40}

<table>
<thead>
<tr>
<th>Name of Markets</th>
<th>Registered Companies (Numbers)</th>
<th>Market Capitalization(US million)</th>
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<tbody>
<tr>
<td>SZSE (SME Board)</td>
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<td>SZE (ChiNext)</td>
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<td>KRX (KOSDAQ)</td>
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<td>KRX (KONEX)</td>
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<td>KOFIA (Free Board)</td>
<td>117</td>
<td>11563</td>
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<td>BSE (SME Platform)</td>
<td>82</td>
<td>1432</td>
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<td>NSE (EMERGE)</td>
<td>6</td>
<td>68</td>
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<tr>
<td>Bursa Malaysia (ACE)</td>
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<tr>
<td>PSE (SME Board)</td>
<td>4</td>
<td>773</td>
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<td>SET (mai)</td>
<td>109</td>
<td>11907</td>
</tr>
<tr>
<td>HNX (UPCom)</td>
<td>169</td>
<td>1749</td>
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</table>

There are two important reasons that prevent more SMEs from listing on the stock market. One of them is the high fixed costs of an IPO. The other one is reporting requirements implied by the high costs for SMEs. In some cases, stringent regulations that are intended to meet the interests of investors may even prevent SMEs from listing on large stock exchanges altogether. The other factor that has prevented the growth of the exchange in the region is the lack of institutional investor participation. These investors, such as insurance, pension and mutual funds, tend to invest in relatively large firms due to the dictation of rigid criteria by regulation on their asset allocations, especially for pension funds. For example, one reason that prevented the growth of “The Over the Counter Exchange of India” established in 1992 as a platform where SMEs could generate equity capital was the lack of institutional investors. This market only had 60 listed companies as of March 31, 2012\textsuperscript{41}. On the other hand, SME stock markets are relatively illiquid when compared to stock markets where larger listed firms traded. A study of listed firms in China and India shows that larger firms are more likely than smaller firms to issue new equity, and the top 10 issuing firms capture a large fraction of the total amount raised through these issues\textsuperscript{42}.

The other important concern for the development of SME capital markets is that since investors tend to invest in the most rapidly growing SMEs in the market, stock markets may not be a financing solution for a broad range of SMEs that are in the startup and expansion stage. However, stock markets can potentially have positive spillover effects on SMEs by providing financing to large firms.

\textsuperscript{39} A crucial component of AIM is that each company that lists on the exchange needs to obtain a designated adviser who advises the company on its responsibilities during the listing process and on its duty to maintain its status once listed.  
\textsuperscript{42} Ibid
In this way, banks may expand SME lending operations as large firms may need less financing from banks.\(^{43}\)

In this respect, a comprehensive policy framework to promote SME access to capital markets is needed. First of all, policies should be developed to expand the investor base for an SME market and promote market literacy for SMEs and investors. The establishment of SME financial and non-financial databases should also be a policy support area for SME markets with transparency. The active SME markets also need professionals that support SMEs in capital markets, such as disclosure support by consultants and certified public accountants (CPAs). Establishing policy measures is therefore important to build the base of professionals that support SMEs in capital markets. From the regulatory perspective, a well-established regulatory and supervisory framework including a mechanism that supports SMEs in preparing disclosure documents and simplified listing procedures should be a priority for policy makers to develop SME capital markets.

ii. SME bond markets

Corporate bond issuance is commonly used by large companies. This is because it is easier for them to obtain credit ratings which make it less costly for investors to monitor these firms. However, bond finance is not widespread for SMEs. SMEs are ill-equipped to issue corporate bonds. For example, they do not have ratings. This situation makes them less attractive for a broader range of institutional investors. Thus the market for SME bonds is relatively small in terms of outstanding volume.

Some countries in the region use innovative methods to promote their SME bond markets. For example, the Republic of Korea established a qualified institutional buyer (QIB) system for SME bond trading. However, since bonds traded under the QIB system have low investment grade (BB or below), SME bond transactions under this system is quite limited and are not attractive to investors. On the other hand, China has developed three types of SME bond instruments: (i) SME Collective Note, (ii) SME Joint Bond, and (iii) SME Private Placement Bond. While the SME Collective Note market, an inter-bank market regulated by the People’s Bank of China and the National Association of Financial Market Institutional Investors, is growing rapidly, SME Joint Bonds that are traded in the inter-bank and exchange markets, which are regulated by the National Development and Reform Commission (NDRC), issue quite a limited volume of bonds\(^{44}\).

The main problems for investors to invest in these bonds are scarce liquidity in the market, relative lack of transparency compared to medium and large corporate bond issuances and incomplete ratings coverage. To overcome illiquid market problems, issuers should place these bonds in the market with more relaxed listing requirements than for larger companies. Countries can also establish intermediary vehicles that pool small cap bonds in funds, offering diversification to investors. The small cap bond fund Micado in France is an example of such bundling. Pooling of mini-bonds in aggregate vehicles, as well as multi-originator “club”/joint deals in the form of consortia can give SMEs the scale of issuance required to render the issuance attractive for smaller SMEs\(^{45}\). However, when consider that corporate bond markets (for large firms) in many Asian countries are relatively underdeveloped in terms of size, liquidity and maturity, it may be more appropriate for these countries to initially establish SME bond markets. In this way, many SMEs may have a chance to turn into large firms, thus creating demand for corporate bond markets in these countries, and especially for low income countries.

\(^{43}\)Ibid

\(^{44}\)Capital Market Financing for SMEs: A Growing Need in Emerging Asia, Shigehiro Shinozaki, 2014

3. Conclusion

The region has the largest total credit gap for SMEs, particularly in East Asia, as compared to other regions. However, up to the present, the region’s bank dominant system has not reduced this gap in lending to SMEs. Low bank loans to SMEs can be linked to several factors: the difficulty of assessing SMEs’ creditworthiness caused by inadequate data, requiring more collateral to guarantee a credit and higher cost to serve (as a percentage of loan size) and, in some markets, the lack of government sponsored credit guarantees. In this context, further policy support related to a set of financial infrastructure—such as credit bureaus, collateral registries, and credit guarantees for bank loans to SME finance—is needed.

While advanced economies in Asia have granted larger volume of guarantees than emerging and low income countries, their credit guarantee institutions are unprofitable. This situation raises the question whether guarantee schemes are sustainable in advanced countries when considering unprofitable business. On the other hand, SME access to guarantees is still being restricted in emerging and low income economies in the region. In this respect, well designed policy support is needed to establish credit guarantee schemes for promoting SMEs finance in the region.

The depth of credit information index in South Asia lags behind the world index. According to World Bank data, Nepal, Myanmar and Bangladesh received the lowest score in this index. Therefore much more effort is needed to develop credit bureaus in these countries that expand the information available to lenders to improve their loan decisions. To compensate for missing information on the creditworthiness of SMEs in countries where the depth of credit information is scarce, banks ask for collateral to guarantee a credit. In this context, reforming movable collateral such as inventory, accounts receivables, crops and equipment framework may enable SMEs to leverage their assets to obtain credit in these countries.

Even if these reforms are successful, SMEs need diversified funding alternatives because the financing needs of SMEs vary according to their stage of growth. For example, while banks generally extend credit to SMEs that are in the steady growth stage due to their rigid regulations, the business model and the regulations of factoring, venture capital firms and MFIs are more appropriate than banks to finance startups and SMEs in the expansion stage. However, compared to the banking sector, NBFI industry and capital markets in many countries are still too small to meet the financing needs of SMEs.

One of the important reasons for underdeveloped NBFI s in the region is that many countries do not have comprehensive regulatory and policy frameworks for NBFI s at the national level. However, a holistic policy and regulatory framework for NBFI s is needed to establish a sound competitive environment between banks and NBFI s.

To develop SME capital markets, strategies should be developed to expand the investor base for an SME market and promote market literacy for SMEs and investors. The active SME markets also need professionals that support SMEs in capital markets, such as disclosure support by consultants and certified public accountants (CPAs). Establishing policy measures is therefore important to build the base of professionals that support SMEs in capital markets. From the regulatory perspectives, a well-established regulatory and supervisory framework including a mechanism that supports SMEs in preparing disclosure documents and simplified listing procedures should be a priority for policy makers to develop SMEs capital markets.

Finally, when considering that corporate bond markets (for large firms) in many Asian countries are relatively underdeveloped in terms of size, liquidity and maturity, it may be more appropriate for

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these countries to initially establish SME bond markets rather than establishing corporate bond markets. In this way, many SMEs may have a chance to turn into large firms by accessing finance, thus creating demand for corporate bond markets in these countries, and especially for low income countries.