BANKING FINANCE INNOVATION FOR MSME SECTOR IN EMERGING ASIAN ECONOMIES

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ABSTRACT

MSME sector is important for economic growth and development of emerging economies as it shows the highest rates of employment growth, contributes a major share of industrial production and exports, while functioning with a low capital base. However, one of the major constraints it faces is access to adequate and timely formal bank finance. MSME sector in emerging economies also presents a glaring opportunity for the banks as there is a potential for high growth in bank's Return on Equity (ROE) in MSME segment. This paper seeks to argue that since this sector provides a profitable opportunity for growth in banking revenue and it should be catered to by using various innovative approaches. An extensive literature survey has been done to study the innovative practices being undertaken in Asian economies like India, Indonesia, Thailand and Philippines. A framework that can be used by banks leveraging technology for improved access to finance by MSMEs is also suggested.

Key Words: Innovative Bank Finance, Technology, Finance, MSMEs, Emerging Economies.
JEL Classification: G20, G21, G23

INTRODUCTION

The micro, small and medium sized enterprises (MSME)[1] constitute a segment of the economy which has special relevance in the growth of an economy. This segment of any emerging economy is expected to grow and increase its contribution to the GDP as the economy transitions from emerging to a developed economy. This segment functions with a low capital base. The micro enterprises can have net assets lower than 4000 USD) (Delloite, n.d.).

Worldwide, this segment constitutes more than 90 percent of the total enterprises and are the greatest contributor to the generation of employment (60 percent), besides having a significant contribution to GDP, exports and serving as an ancillary industry and service provider to the main industries. (Walson, 2018).

Due to the very nature of these enterprises, there are several hurdles faced by them in an emerging economy, one of those being the lack of access to formal means of finance. While on one side, provision of opportunities to the MSME enterprises to access timely credit at affordable rates of interest can be an important factor in the growth of the economy; on the other side, it can prove as a profitable business opportunity for the local/regional and even foreign banks. According to estimates by McKinsey, in 2010, the banking revenues from MSMEs in emerging markets totalled \$150 billion or around 1/6th of all emerging market banking revenues. The McKinsey consultants estimate this to grow around 20 percent p.a. to \$ 367 billion by 2015. (Chironga, et al., 2012)

Specifically, for banks in the Asia Pacific region, the MSME sector can serve as a steppingstone to acquire a strong foothold in the region; driven by the rising wealth in these countries, governments implementing structural reforms in the financial sector and strengthening of macro policy frameworks. (Ernst & Young, n.d.)

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[1] Throughout the paper, the term MSME/SME/MSE have been used to refer to the same sector. The usage of the term varies according to the terms used by different agencies/countries.

According to the research undertaken by 'Ernst & Young' on Banking in Asia-Pacific region, the banks in this region delivered an average return on investment (ROE) of 13 percent during 2007-14.[2] The point is that the banking sector cannot afford to ignore the SME sector. Instead, it should view it as an opportunity for achieving steady profits and prepare to take the challenge by competing against disruptive 'fintech' firms; through consolidation and adopting innovative bank lending models to cater MSME segment profitably. Therefore, in this paper, we look at the approaches being adopted by Asian emerging economies to cater to MSME sector profitably. There is also a need for the banks to adopt an innovative approach, leverages technology and therefore empowers it to tackle competition effectively. Such a framework has been suggested in the last section.

MOTIVATION AND LITERATURE REVIEW

The role of banks in growth of MSMEs cannot be overemphasised. The banks are means of formal finance to these institutions that play a multi-dimensional role in supporting these start-ups. Though large foreign banks are considered to be financially sound and stable with a greater ability to provide finance to enterprises; the local banks have been found to play a vital role in strengthening the MSME sector. One of the unique challenges in access to finance for SME sector is that their financial requirements are too large for microfinance and too small for the big corporate banks to effectively cater to them. (Delloite, n.d.) Small local banks are found to be beneficial to the SMEs, the presence of these banks are found to accelerate the pace of new firm creation, improve SME access to long term financing, also lowering the financing costs for MSMEs in areas where there is a strong presence of cooperative banks in the area. (Hasan, et al., 2017)

Innovative models of bank lending can pave the way to remove the obstacle to finance faced by the MSME sector and also contribute to furthering the goal of financial inclusion in emerging economies. One such model that delivered positive results is the SENDFiNGO model, a separate entity established by the SEND Foundation of West Africa. The agency called SENDFiNGO used the 'Credit Unions' to expand microcredit outreach in North Ghana. The Credit Unions collect funds from the members, while SENDFiNGO enters into strategic partnerships with Credit Unions (CU) to provide infrastructural support, human resources and technical assistance to the Credit Unions. The members of the community who do not qualify for a CU loan are helped to get external funds as the promoter of CU takes special steps to facilitate the organisation and orientation of that class of community. (Brien & Haruna, 2013) This model has some unique features; for example, it provides all kind of support to the Credit Unions to enable it to cater to different needs of the entrepreneurs.

If this sector receives targeted support, it would be possible for emerging economies to create more jobs and ensure rapid economic growth. (In-dependant Evaluation Group IEG World Bank, n.d.)

Several factors affecting the access to finance by SMEs have been studied and tested empirically by researchers. One of the constraints that SMEs face is that banks perceive the SME portfolios to be risky and unprofitable, which deters them to finance SMEs. Though, experience in the field has proven that this may not be true. Hence, a proper risk assessment training can be helpful to the banks (more relevant in case of local small banks) in bringing about an element of objectivity in risk assessment and benchmarking project risks against the average. (Cattani, 2002). One of the causes for SME portfolios appearing to be riskier is that, in emerging economies, the market institutions are less effective and it is

2 Figure based on the largest 180 banks by assets from 13 markets (Australia, HK, New Zealand, S Korea, Singapore, Taiwan, China, India, Indonesia, Malaysia, Philippines, Thailand, Vietnam)

difficult to obtain reliable business information on SMEs. Hence, banks rely on informal sources to gather information on SMEs and rely on evaluation of firm legitimacy done by them. If SMEs are mentored to develop suitable networking ties with stakeholders like official networks, networks with suppliers, network with customers, with members of social organisation, network with friends and relatives; then such networks can help them to either obtain bank finance with ease or some networks (specifically networks with suppliers and social ties) can reduce the need for bank loans. A study done in the context of manufacturing firms in Vietnam demonstrated that different networks serve different purposes and establish that in emerging economies, private SME firms need to cultivate various network ties to attract bank finance by demonstrating creditworthiness. (Le & Nguyen, 2009). Thus, the banks looking to SME sector as a lucrative opportunity can consider networking and ties of the enterprise as one of the basis to establish the legitimacy of the institution and assess its risk portfolio.

One of the world's biggest financial services provider, China's Minsheng Bank caters to over 1.2 million Small and Micro Enterprises (MSE) with over USD 60 billion outstanding loans to this sector as on May 2013. In 2009, the Bank launched the "Shang Dai Tong", a loan product targeted to cater to MSE. The innovation brought in the business model was the concept of 'batch processing' that referred to the process of identifying customers in MSE concentrated regions, supply chains or industry chains and granting credit lines to the whole batch in order to enable reduction of labour costs for the bank. It sought to increase the customer base of MSEs in order to offset the impact of low amounts of a single MSE loan. The interest charged was calculated with an aim to cover potential loan cost and loss. The model also catered to provide all kinds of financial and non –financial services to those majority MSEs that do not need bank finance but look for services as settlement, wealth management and financial knowledge education. With positive results, the Bank started the expansion of dedicated MSE finance sub-branches aiming to expand the number to 300 in next five years. Also, a unique step taken by the bank included forming an organisation of MSE customers dispersed in the same industry and region to promote the integration of MSE customers and build up a nation-wide Value-Added service platform. (The Financial Times Limited, 2013)

When it comes to bank lending to SMEs, credit risk evaluation cannot be overemphasised. If the lending banks can evaluate the credit risks of projects precisely and accurately, they will be naturally more forthcoming to lend to the SMEs. Post financial crisis, calculation and assessment of credit scores has increased tremendously, but not many credit scoring models have been developed specifically for this sector. An accurate credit scoring model can go a long way in risk mitigation of SME portfolio, less capital requirements by the banks and lowering of interest rates for borrowing firms. In a recent study, a hybrid model for credit risk estimation approach was developed using statistical methods and Artificial Intelligence techniques combining logistic regression approach and Artificial Neural Networks (ANN). In a research paper, which tested the model using data of Finnish SMEs from 2004-2012 and found the model to be more accurate than any of the earlier models, or only ANN or logistic regression. (Li, et al., 2016)

Innovations in bank lending models have been recently fuelled with the advent of new technologies. Leveraging technology, the lending models created would make it easier for the borrower to get finance and for a lender to obtain complete information on the borrower's credit history, about the entrepreneur's idea/product, thus building 'trust' between the two parties, reduce the time for credit disbursal and transaction costs.

For example, (a) Lenddo, a technology company founded in 2011, uses non-traditional data (Facebook, LinkedIn, Twitter) to compute people's credit scores, thus, providing microloans to the emerging middle class in developing countries.

(b) Kickstarter, a crowdsourcing platform, where entrepreneurs can pitch their idea for a product and get financing from interested people on the internet.

Such innovative approaches to financing has been possible due to technological advances like big data – which according to estimates by International Data Corporation (IDC) the world's total stock of data will more than double every two years between 2013 to 2020 and the total data market is expected to nearly double in size, growing from $69.6 billion in revenue in 2015 to $ 132.3 billion in 2020. The analytical and processing capabilities have grown to enable algorithm-driven predictive analytics to deliver insights on credit data. Also, smart mobile devices have enabled wider access to data and technology. These disruptions have provided an opportunity to a new segment of financiers to place themselves between the MSMEs and banks and take advantage of MSME lending and payment value chains.

The alternative lending platforms and aggregators (the so-called fin-tech companies) are offering services to MSMEs that are convenient, efficient, flexible and tech-enabled. These players have erupted in large numbers in the past few years. To quote a few examples, some Indian companies like Happy Loans, Ziploan, Biz2credit, Faircent, KredX etc. are using the latest technology and riding on the wave of big data, analytics and automation. The companies are using aggregator data from platforms like e-wallets, e-commerce etc. to compile information on the re-payment abilities of the MSME clients while also offer innovative services like "a weekend loan product" to offer what traditional banks are unable to offer. However, the models adopted by these new-age companies are not time-tested as most of them have not completed an entire loan cycle. These models will have to prove 'right' by giving returns to their investors (private equity firms/ angel investors/ venture capitalists). Till then, these provide an opportunity for banks and NBFCs to partner with them, thereby, helping them to scale –up and shift some of their risk to NBFCs/banks and also enable NBFCs/ banks to gain some of their MSME portfolios; thus, creating a win-win situation for all stakeholders. (Palepu, 2018)

The traditional banks in emerging economies have to adapt themselves and act fast enough to not let go of MSME lending by becoming more connected with their customers, digitize the payment and delivery mechanisms, taking advantage of their brand value, experience as well as rich customer data accumulated over the years. (Peric & Wilhelm, 2014).

MSME DEFINITIONS

The contextual definitions of SMEs are varied in accordance with the relative sizes of the economies (OECD, 2017), phase of economic development, social conditions (Harvie & lee, 2002). Even the criteria for defining SMEs are many like the size of the business, capital assets, number of employees, turnover etc. changing from country to country and organisation to organisation. The Bolton Committee in 1971 in its Report on Small Firms gave a description of key characteristics of small firms, while stating that a 'small' firm is an independent business, managed by its owner and having a small market share. The Report observed that the firm size would be dependent on the sector, for example, a firm can be considered of small size in a sector with large market share and many competitors whereas same size firm can be considered as large or medium in a different sector with small market share. The Report also recognised that for some sectors, it may be advisable to define firm size on the basis of turnover whereas the number of workers in other (The National Archives, n.d.).

Similarly, various bodies have adopted different criterion for defining the Micro, Medium and Small enterprises. A summary of approach used for defining MSME sector used by different organisations has been summarised below. (Table 1)

However, out of the four countries considered as a case study for the purpose of this paper, only two countries viz., Thailand and Philippines are found to be using the number of employee's criterion for defining Micro, Small and Medium enterprises. Additionally, these countries also refer to the size of assets for the definition.

In case of Thailand, to be classified as a small enterprise the maximum number of employees of the firm must not exceed 50 (for manufacturing or services); 25 for (wholesale trading) and the maximum limit is 15 (retail). Also, the prescribed upper limit for all sectors except retail – (where the upper cap in of 30 million Thai Baht (THB)) must not exceed 50 million THB. For the medium enterprises, the number of employees should be in between 51-200 (for manufacturing and services) 26-50 (for wholesale) and 16-30 for the retail sector. The total fixed assets should be in between 50-200 m TBH for manufacturing and services, 50-60 m TBH in wholesale and 30-60 m TBH in retail. In the Philippines, the Magna Carta for Micro, Small and Medium Enterprises defines these enterprises as "any business activity or enterprise engaged in industry, agribusiness and/or services, whether single proprietorship, cooperatives, partnership or corporation whose total asset value excluding land falls under Philippine Peso (Php)3,000,000 as micro-enterprise, between Php 3,000,001 – 15,000,000 as small enterprise and if it is more than Php 15,000,000 but less than P 100,000,000, then it is classified as a medium enterprise" further says that MSME council may use other variables also like number of employees. (Anon., n.d.)

Indonesia defines MSMEs on the basis of asset and turnover. The definition of SMEs in Indonesia was laid down in the Small Enterprise Act No. 9 of 1995, according to which, the enterprise with total assets valuing less than 50 million Indonesian Rupiah (IDR) and turnover 300 million IDR are considered Micro, those with assets in between 50-500 million and turnover 300 million -2.5 billion IDR are considered as small and those with assets between 500 million – 10 billion IDR with turnover between 2.5 to 50 billion IDR are considered as medium enterprise (International Finance Corporation, 2016).

Table 1: MSME Definition Matrix

Economy/ Defining Authority	No. of Employees	Industry	Asset/ Turnover/ Capital/ Investment/ Total Sale	Distinction between Micro, Small & Medium	Particulars
India	No	No	Turnover	Yes	Recently amended definitions. Turnover 5 -250 crore for Micro, Small and Medium.
Indonesia	No	No	Assets & Turnover		
Thailand	Yes	Yes	Assets	Only Small & Medium	
Philippines	No	No	Total assets excluding land	Yes	
UNIDO	Yes	No	No	Yes	Only no. of employee
World Bank	Yes	No	Sale, Asset Turnover,	Yes	Definition considers all Three
OECD	Yes	No	No	Yes	Only no. of employee

Source: Author

In India keeping in mind the new tax regime revolving around GST (Goods & Services Tax) the government recently amended the definitions. According to the new definitions, "a micro enterprise will be defined as a unit where the annual turnover does not exceed five crore rupees, a small enterprise will be defined as a unit where the annual turnover is more than five crore rupees but does not exceed Rs. 75 crore and a medium enterprise will be defined as a unit where the annual turnover is more than seventy-five crore rupees but does not exceed Rs. 250 crore. (Press Information Bureau, 2018)

DISCUSSION

SME & MSME Financing – Case Studies

Indonesia

The presence of micro, small and medium scale enterprises has been growing in Indonesia post the global financial crisis of 2008-09. MSME in Indonesia account for 99 percent of all business enterprises, provide 89 percent of private sector employment and contribute 60 percent of GDP. Refer to Figure 1 (Anon., 2018) as cited by the Bank Indonesia in one of its reports are the same as of the other emerging economies. Firstly, the MSMEs are only a miniscule percentage of the total market share with their products mostly not in high demand. Secondly, these enterprises lack assets to provide as collaterals. (Tambunan, 2014)

SME Policies and Role of Bank Indonesia

According to the Economic Report on Indonesia, published by the Bank Indonesia has implemented several policy strategies to improve the competitiveness of MSMEs. The Credit Guarantees are an important tool to accelerate the empowerment of MSMEs for sustainable economic growth. This Credit Guarantee industry has two layers – (a) Central guarantee institutions and (b) Regional Guarantee Institutions. To improve the access to finance, the Bank has focused on expansion of the financing schemes through channelling of People's Business Credit (KUR), which is a public credit guarantee scheme for MSMEs; several economic packages to support development of MSMEs by government like provisions for lowering of interest rates

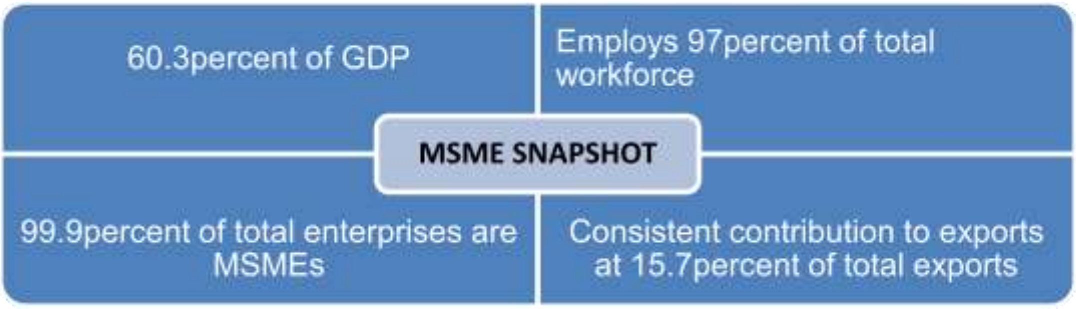

Figure 1: MSME Snapshot -Indonesia

Source: Anon (2018)

Bank Lending to MSMEs

In Indonesia, the bank lending to MSMEs is still very small, to only about 6.9 percent of GDP, which is lowest as compared to other ASEAN countries like Cambodia, Thailand and Malaysia. Thus, only 23.1 percent of total MSMEs (which constitute a whopping 99.9 percent of total enterprises) have access to formal bank finance. (Economic Report on Indonesia, 2016) The reasons for a small share of MSMEs in the total bank finance, of KUR up-to 9 percent p.a, setting disbursement target of Rs. 100 trillion, providing stimulus to increasing MSME exports, (by Export Oriented People's Business Credit KURBE facilities) etc. In order to encourage the banks to lend to this sector, a minimum loan rate to MSMEs at 20 percent has been prescribed for commercial banks and various incentives are given to the banks to meet the requirements quickly. This is similar to the 'Priority sector' lending by banks in India.

In order to encourage provision of innovative and financially inclusive services from banks and mobile authorities, the Bank of Indonesia repealed the Electronic Money Regulation in 2012 and through a regulation on Funds Transfer, the Cash Payment Points (Tempat Penguangan Tunai /TPT) were allowed to provide a cash-out service without requiring a funds transfer license; thus clearing the way for full encashment of person to person transfers on electronic wallets at agents. (Joyce, 2013) In order to improve access to finance to other sectors besides agriculture and trade, several financial services products have been developed which do not always require collaterals. Besides, Bank Indonesia has adopted an innovative approach to make use of mobile technology by developing an android application called APIK (a financial information recording application) to record financial transactions. This application would make it easier for MSMEs to prepare financial reports and records and thus help in access to finance from formal financial institutions.

Role of Microfinance (MF) in financing MSMEs

Indonesia has had a successful and sustainable Micro Finance (MF) model starting from 1970 with Bank Rakyat Indonesia (BRI), which is also one of the few banks having a majority share of MSME loans in its portfolio; as the focal point and its driving agency. The BRI unit network is the largest and one of the most profitable rural micro banking networks in the world. Hence, it is imperative that the best practices can be identified from this micro banking network. Microfinance can be defined as the provision of financial services (microcredit, micro-savings and micro-insurance) to poor and low – income individuals/enterprises. (KPMG, n.d.).

A host of regulatory policies have been framed by the Indonesian government and Central Bank post-2012 to further encourage microfinance in Indonesia. The regulatory measures were taken to overcome impediments like lack of access to capital, perception of risk in financing MFIs, excessive regulatory hurdles, inefficiency of MFIs, inadequate outreach to remote areas and government MFIs crowding out the private institutions. One of the significant steps taken by the bank Indonesia for consolidating and adding greater regulatory oversight of MFIs is the enactment of the New Microfinance Law in 2015. The New Law makes it possible for the MFIs to be established as co-operatives or as limited liability companies, which would be under the supervision of Otoritas Jasa Keuangan (OJK), a Financial Services Authority of Indonesia. Another major policy reform introduced by the Bank Indonesia was the introduction of the **New Branchless banking (Laku Pandai)**. This program started in 2015 with the aim of rapidly expanding the reach of banks, without physical branches and through the help of individual and institutional agents, with the help of mobile phones and IT facilities to the micro-segment or the 'unbanked' population. The OJK gave liberty to the state-owned Bank Mandiri and Bank Rakyat Indonesia (BRI) as well as private lenders Bank Central Asia (BCA) and Bank Tabungan Pensiunan Nasional (BTPN) to obtain permits from the OJK and run the program with their strategies and approaches. The program would provide all three type of micro-financial services, viz., microcredit, micro saving and micro-insurance to people. The credit facilities would be made accessible to MSMEs through agents who would recommend their applications to the banks.

This approach to banking would serve the purpose of bringing the formal finance within the physical reach of MSMEs, build 'trust' between the lender and the borrower as the agents will help banks better know their customers and mentor them, while also leveraging technology to make the access of finance faster at low transactions costs. (KPMG, n.d.)

Similar to the above described strategy, a bank in Indonesia had established a subsidiary focused on lending to MSMEs, especially the micro- sized businesses. The branches of the bank were opened very close, within 2-3 km of the target market and were 'lite' as were manned by the Relationship Officers (RO) appointed from within the community. It is also referred to as the 'Community Model' as the RO are locals who can interact with the customers in a very informal manner and establish close ties with them. The subsidiary offered only two loan products and interest rates were lower than offered by micro financiers. This model proved to be highly successful, posting a return on investment double than that of the group average. Thus, it is evident that (a) a focused client segment (b) a community model that allows the bank to know their customers better and (c) simple administrative processes/ quicker procedures could go a long way in developing a mutually beneficial model and help the banks to tap the MSME segment opportunity profitably. (Chironga, et al., 2012).

Thailand

The SME sector plays a crucial role in the Thailand economy as they account for 97.2 percent of total enterprises in 2013 with an annual increase of 1.2 percent. Unlike in Indonesia, the SME sector in Thailand was seriously damaged during the financial crisis of 2008-09 thus leading to a sharp drop in the SME numbers and growth rate. Post-2012, the numbers have been slowly increasing and in 2013, the SME sector contributed 37.4 percent of GDP and employed 81 percent of the total workforce. (Refer to Figure 2) The maximum concentration of SME in Thailand is in the trade sector.

Bank Lending to SME

The Banking sector, with commercial banks constituting 40.8 percent of total financial institutions in 2013, is a major source of funds for the Thai SMEs. Though the share of commercial bank lending to SMEs has been growing progressively since 2010, it still remains low at 34.5 percent of total loans.

As seen in fig. 3, the SME loan size obtained from banks remains small in Thailand. However, it is pertinent to note that the SME Loan to GDP ratio in Thailand is better as compared to other ASEAN countries. According to the Asia SME Finance Monitor, the SME loans to GDP ratio in Thailand was as high as 105 percent in 2013.

In order to encourage banks to lend to this sector, the Thai Credit Guarantee Corporation started a portfolio guarantee scheme in 2009 under which it guarantees 100 percent of the payment stated in the letter of guarantee for bank loans of less than 7-year maturity. The Corporation also launched a package guarantee scheme for micro-entrepreneurs in 2014. The scheme can be dubbed as a successful and innovative, one as the share of guaranteed loans to total SME loans reached 6.1 percent in 2014 almost eight times higher than 0.8 percent in 2008.

The government of Thailand also laid down the Business Security Act, which aimed to make easy the collateral requirement. In this Act, the government expanded the range of eligible collateral for loans. In order to make it easy for the Banks to know their customers, the National Credit Bureau collects credit information of customers and

Figure 2: MSME Snapshot –Thailand

Source: Author

makes it available to its members (banks and NBFIs) (Asian Development Bank, 2014)

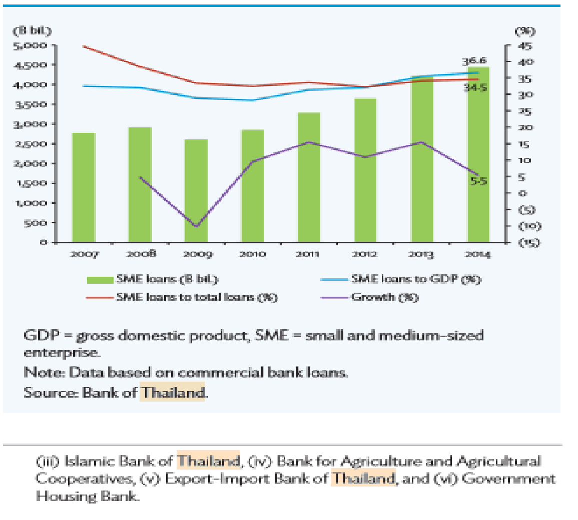

Figure 3: SME Outstanding Loans in Thailand

Source: Bank of Thailand

Microfinance in Thailand

A large number of banks are also moving towards Nano-finance, which provides small scale loans without collateral requirements. In Thailand, MFIs are divided into three categories – (a) formal MFIs (b) Semi-formal MFIs and Thailand Village & Urban Revolving Fund (TUVRF), the largest microfinance scheme in the world with an outstanding loan portfolio totalling $ 4.9 billion in 2011. The Fund was created to establish self-sustaining micro-finance banks in each of Thailand's villages. A unique feature of this scheme is that the funds are handled by intermediaries like BAAC (Bank for Agriculture & Agricultural Co-operatives) and administered by elected local committees. Though the loans that are being provided to villagers would help in bringing about financial inclusion, these are not targeted towards loans to SMEs. However, it deserved a mention in this section due to the fact that the program is helping rural residents access the credit in huge amount. (Oxford Business Group, n.d.)

Philippines

The Philippines banking system is a fragmented market with low penetration in rural areas; hence, it offers major opportunities to both local and foreign banks to tap the unbanked sections. The MSMEs in the Philippines play a pivotal role in economic growth, representing 99.6 percent of total enterprises and having the largest share of total jobs generated at 61.6 percent. However, these account for only 35.7 percent of the GDP. (Refer to Figure 3) The bank lending to MSMEs in Philippines is a major source for concern as it constitutes only 6.1 percent of the total loan portfolio. Thus, 80 percent of SME investments are internally financed.

The Central Bank of Philippines, 'Bangko Sentral NG Pilipinas' (BSG) identifies the barriers to access of finance as the cost of finance, information asymmetry and the lack of infrastructure.

The Central Bank of Philippines is entirely focused on creating a regulatory environment in the country that would produce an inclusive financial system. In order to promote MSME access to finance, Comprehensive Credit Risk Management (CRM) guidelines for banks were implemented by BSG. The objective behind this provision was to enable the banks to extend more credit and have the flexibility to implement innovative credit products and lending programs. The intention behind this step is to make the banks focus on cash flow analysis and ability-to-pay while determining creditworthiness instead of relying on only the quality of collateral for approving the loans. (Espenilla, 2017)

Microfinance in Philippines

According to a speech delivered by BSP Governor, Nestar A Espenilla Jr., a wide range of microfinance services are being offered to 1.7 million micro-entrepreneurs with outstanding loans of P 13 billion. (Espenilla, 2017).

In Philippines, the retail microfinance loans are classified by purpose as (a) micro-enterprise loans (b) microfinance plus (c) micro-agriloan and (d) micro housing loan. It is also mandated for banks to allocate 10 percent of their loan portfolio to MSMEs and this compliance is monitored by the BSP. However, the compliance ratio in micro and small enterprise credit falls short

Figure 4: MSME Snapshot -Philippines

***naoyuki yoshino, presentation on "sme internationalization & finance in asia, imf-jica conference, 2015**

of the mandated requirement suggesting a hesitation on the part of banks to finance micro and small enterprises. (Asian Development Bank, 2014)

In order to leverage technology to find solutions to pressing problems like access of finance by SMEs and financial inclusion, BSP is moving towards the digitisation of payments system through the National Retail Payment System (NRPS) which would also serve as a platform for fin-tech innovations. A Digit al Payments Systems, bio-metric based digital identity system and other such innovative measures would help in reducing the cost of doing business for MSMEs. In November 2017, one of the e-payments enablers of the BSP's NRPS called the PESO Net was launched. This was done with the aim of furthering the objective of financial inclusion, cashless economy and also help MSMEs broaden their customer reach, reduce the cost of managing cash and provide greater access to credit. (Anon., 2017)

India

Since the MSME sector has the capacity to provide a larger number of jobs in comparison to the large enterprises, it becomes an important sector for India, a country with a labour force of more than 520 million. (World Bank, n.d.) This role and capacity of MSME has been recognised by the Indian government and the sector has been given due focus in the country's planning process. The Make in India programme, which was launched in September 2014, with an aim to transform India into a global design and manufacturing hub, recognises this sector as an important segment to fulfil the aim. The government document mentions that "MSMEs would be the cradle for Make in India vision…. a nursery where small existing businesses have the potential to become world-beaters tomorrow" (Ministry of Corporate Affairs, Government of India, n.d.) The Figure 5 shows some statistics regarding the role of MSMEs in India.

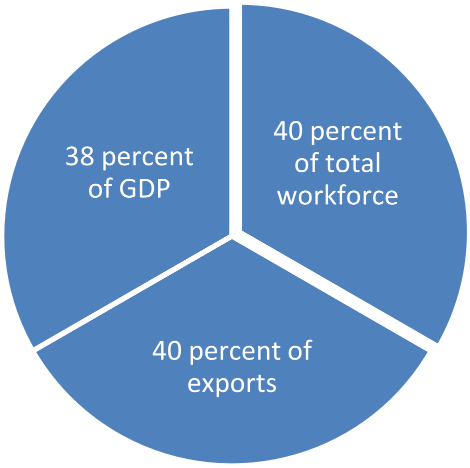

Figure 5: MSME Snapshot -India

Source: www.msme.gov.in

Thus, the policy framework has sought to encourage this and the Ministry of Micro, Small and Medium Enterprises specifically frames policies with regards to financial assistance, technical assistance, infrastructure development, skill development, market assistance etc. to encourage the sector.

According to 73rd round of NSSO the estimated number of MSMEs in India is 633.88 lakhs, out of which rural 309 lakhs are rural and rest 324.88 lakhs are urban.

MSMEs contribute around 30 per cent to both GDP and GVA.

It is interesting to note that out of the 633.88 lakhs MSME enterprises, more than 99 percent (630.52 lakhs) are the micro enterprises. These enterprises form an important part of manufacturing as well as service sector. MSME policy of Indian government emphasises equally on both sectors.

MSME and Financing in India

The fourth All India Survey of MSMEs states that close to 90 percent of MSMEs are dependent on informal sources of credit. (Mundra, 2016). The fact is worrisome as informal means of credit are always costly and risky for MSMEs. In the Indian banking system, this sector has always been catered to by the 'Priority sector' lending scheme initiated in the year 1974. In 2016, the public sector banks had approximately 3000 branches specialized for MSME lending and the private banks have built up products and processes to help in quick disbursal of loans. Yet, there is a huge unmet demand for credit in this sector. In March 2016, the total outstanding loan of the banking system to MSME sector stood at around 11 trillion rupees in 20.6 million loan accounts, in contrast to the estimated need for INR 26 trillion and the number of MSMEs at 51 million. (Mundra, 2016)[3] Though, the commercial banks are one of the main sources of credit for this sector, the role played by various Non-Banking financial companies, the specialised banks (like Small Industrial Development Bank of India) and innovative fintech firms has been gaining importance. According to an estimate by ICRA (a MOODY'S Investors Service Company), the Non-Banking Financial Companies (NBFCs) and housing finance companies are expected to expand at about 20-21 percent compounded annual growth rate (CAGR) in the MSME segment, while bank credit (accounting for 84 percent of the total MSME credit) is estimated to grow at a lower CAGR of 9-11 percent. (Press Trust of India, 2018) This trend is not unique in India in the sense that notwithstanding the growth rates of credit, there is still a likelihood of unmet demand for credit in this segment and given the 'unique features' of Non-Banking Financial Companies (NBFCs) and fintech firms, the credit growth by these agencies is expected to be higher. However, this also means that it is an opportune time for the traditional banks to innovate the lending models to seize the opportunity of profitably lending to this sector.

One of the innovative approaches that can be used by the public sector banks (PSBs) to reach out to MSMEs is dealing through specialized NBFCs, which, with improved compliance standards are better suited to manage the credit risk, whereas large PSBs should instead focus only on managing the risk of NBFCs through stringent wholesale banking compliance. The compliant NBFCs can, on the other hand, focus on the flow of credit to the MSMEs and in this way the PSBs can ensure credit flow to MSME while reducing the moral hazard associated with lending. (Mukherjee, 2018)

Similar to the model described above, the Reserve bank of India, has been working towards a formal 'Co-Origination' model. Under this model, the bank financing an MFI or NBFC and the concerned MFI/NBFC join at each underwriting and sharing the loan amount at an agreed percentage with all other structures put in place. This model brings together strengths of both NBFCs (which have a better understanding of ground realities of MSMEs) and the banks (that have resources). This model is different from a simple e-finance or on-lending. (domain-b.com, 2017)

As far as government initiatives are concerned, there are myriad of sectoral policies for MSMEs being implemented through the ministry that are aimed to make access to finance simpler for MSMEs in India.

Small Industries Development Board of India (SIDBI), which was established in

[3] Provisional estimates for period ending March 2016

1990 under parliamentary statute, aims to promote, financing and development of MSME sector in India. Besides, the ministry for MSMEs takes a number of steps through various measures to solve the various bottlenecks faced by this sector. For example, (a) there are special guidelines for rehabilitation of sick MSMEs issued by the central bank of the country (Reserve Bank of India) to various banks (b) delayed payments to MSME units by suppliers are penalised (c) Interest subsidy scheme for MSMEs is in place, through which the difference between actual lending rate and 4 percent (concessional rate) is paid by the government to the lending banks. (d) Scheme called the 'Credit Linked Subsidy Scheme CLSS for technology up gradation in MSMEs is implemented through nodal banks. (e) A unique scheme for promotion of innovation, rural industry and entrepreneurship (ASPIRE) is being implemented by the Ministry of MSMEs. One of the components of this scheme is to create a framework for start-up promotion through SIDBI by using innovative means of finance to enable ideas/innovation and convert these into commercial enterprises.

Several such initiatives are being taken by the Indian government to promote the MSME sector – the nodal agency for these initiatives being the Ministry of MSMEs.

Another innovative and revolutionizing step taken by the Government of India to simplify access to finance for MSMEs was announced in 2016 – The Prime Minister's MUDRA(Micro Units Development & Refinance Agency Ltd.) Yojana. This scheme aimed to provide financial assistance to Banks / MFIs for lending to micro units (in non- farm sector) having loan requirement of up to INR 10 lakh. These loans are issued without collaterals and are provided through various financial institutions like banks, NBFCs and Micro Finance Institutions.

The scheme is an innovative one as it seeks to support micro enterprises through strategic plan of re-financing the 'last mile' financial institutions. The loans disbursed under this scheme have helped in creating more than 1 lakh self-employment jobs, however in the unorganized sector. If we look at the number of loans given the scheme looks quite successful, though the loan amounts sanctioned and disbursed have been of very small amount, which is one of the major criticisms this scheme is facing.

Table 2: Achievements under Prime Minister's Mudra Yojana since Inception

Year	No. of PMMY loans sanctioned	Amount Sanctioned In crore Rs.	Amount Disbursed In crore Rs.
2015-16	344880924	137449.27	132954.73
2016-17	39701047	180528.54	175312.13
2017-18	48130593	253677.10	246437.40

Source: https://www.mudra.org.in/

KEY LEARNINGS

Deeper Penetration

Mobile technology can be leveraged for deeper penetration of the banking services into the remote and unbanked areas. The low-cost basic services can be developed for the 'unbanked' sections of population enabled by simple mobile payments technologies. This is what is done through 'Branchless banking' in Indonesia.

Profitable banking Model

Private Banks find it difficult to cater to the MSME segment as it is often very price sensitive. When the banks push the costs of 'personalised service' and 'non-financial services' to customers, it naturally drives up the cost of access to finance. Also, investments in technology and meeting mandatory compliance requirements of the Central Banks is also pushing up the costs. In this scenario, for banks to remain profitable, they must either scale –up through partnerships and Mergers & Acquisitions or make efforts to drive down the costs. One way of this is to re-invent the model by reviewing the role of the 'Relationship managers. Though their importance in initiating and maintaining the relationship with the customers cannot be denied, they need to be used optimally. This can be done by supporting them with automating the back office, reducing their work by offering customised solutions to enable them to analyse the customer data (maybe by using behavioural analytics) and target the potential customers.

Customised Business Model for MSMEs

Traditional MSME banking is resource intensive and high cost as it heavily relies on the bank staff/relationship officers to understand the needs of MSMEs. Thus, there is a need to develop customised banking models for this sector. For example, there can be a – 'Close Knit SME Service' for micro firms that may need extra attention and hand holding at every stage in the form of mentorship or financial advisers and a 'SME Basic Service' for those MSMEs where round the clock monitoring or close relationship may not be necessary.

Develop Specialist MSME Banks

Traditional large banks can tap the MSME segment if they focus on developing subsidiaries that are specialist in catering to this sector. Such specialist banks or subsidiaries should attempt to develop core banking relationships with MSMEs focusing on advisory/ mentorship services, customised package deals and customer service.

Proposed Framework for Banks to Finance MSMEs Profitably with Ease

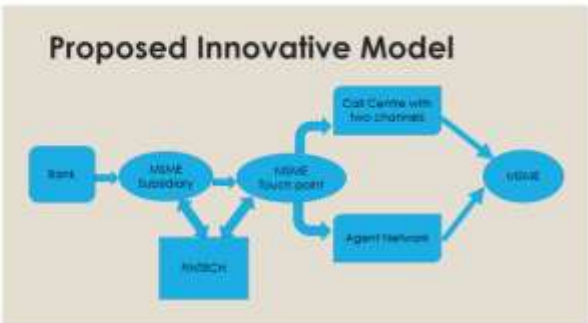

Fig 6: Proposed Model

A large traditional bank can have a separate unit functioning as MSME subsidiary for specific focus to MSME sector. This subsidiary can have multiple branches as touchpoints in the unbanked areas. Such touchpoints would enable banks to develop long standing relationships with MSME and help to build trust. The touchpoints will function through two approaches

- A well-trained agent network for cost-effective distribution and to educate MSMEs, thereby improving the financial literacy of potential clients (also creating awareness on govt. programs). These agents would use apps through mobile devises/ POS devices etc. to reduce transaction costs and enable deeper penetration.
- A toll-free number of a call centre where clients can call up to register applications & the telemarketing operators also proactively contact the prospective clients. The touchpoints will reduce the need for infrastructure and deliver basic banking services to unbanked areas. Also, help in identifying potential MSME clients.

One of the challenges that banks face is not having enough information on the credit history of MSMEs and not being sure of their business models. This makes banks perceive this sector risky, and hence access to formal credit becomes difficult and costly for MSMEs. The banks should now leverage technology to overcome this challenge. The alternative lending platforms and aggregators -the so-called fin-tech companies- can be hired or merged or certain services can be outsourced. These can be recording client credit history, computing credit scores using data from platforms like e-commerce, e-wallets etc.

CONCLUSION

The MSME segment serves as a backbone for all emerging economies. With time, these may or may not transition into larger enterprises, however, these remain relevant for economic growth, generation of employment, supporting the industrial sector of the economy in various ways etc. The enterprises in this sector also keep –

alive the unique traditional industries like handicraft, handloom, local specialised items etc. which help in creating some 'Brand value' for the economy thereby giving a boost to the service sector, especially tourism and promote exports.

Hence, it is pertinent for Central Bank/ banking industry of any country to ensure timely, adequate and affordable access to finance by the enterprises in this sector. It is also important to note that since the financial markets are not adequately developed and the process of financial inclusion not complete in these economies, hence it is only the Banking sector that has the potential to gear up to the challenge of financing firms in this sector. Though it cannot be denied that new technologies are helping in the rise of financial institutions that are a sort of 'hybrid' between traditional banks and the institutions which have only web-based presence.

The banking industry in emerging economies is thus in a transition phase and it is an opportune moment for the banks in emerging economies to develop innovative approaches to tap the opportunity of the MSME segment, and that too profitably.

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