Nature and Characteristics of *SME Financing and NPLs in Pakistan*

November 2017

ARANDAAZ

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Published in Pakistan in November 2017 by **Karandaaz Pakistan** with financial support from the United Kingdom's **Department for International Development (DFID)** and the **Bill and Melinda Gates Foundation (BMGF)**.

Authored by **Ali Khizar Aslam** and **Huma Sattar**.

Design and Layout by **Hammad Hussain Bhatty**.

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Acronyms

ADB	Asian Development Bank
ADR	Advance to Deposit Ratio
BAFL	Bank Alfalah Limited
BOP	Bank of Punjab
BSE	Bombay Stock Exchange
CAR	Capital Adequacy Ratio
CGS	Credit Guarantee Scheme
CIB	Credit Information Bureau
DFI	Development Finance Institution
DFID	Department for International Development
ECF	Equity Crowd Funding
EU	European Union
FBR	Federal Board of Revenue
FI	Fixed Investment
FIP	Financial Inclusion Programme
FMDP	Financial Market Development Project
GDP	Gross Domestic Product
GLP	Gross Loan Portfolio
GOP	Government of Pakistan
GoPj	Government of Punjab
HBL	Habib Bank Limited
IFC	International Finance Corporation
IMF	International Monetary Fund
LC	Letter of Credit
Mai	Market for Alternative Investment
ME	Medium Enterprise
MFB	Microfinance Bank
MFI	Microfinance Institution
MSME	Micro, Small and Medium Enterprise
NBFI	Non-Bank Financial Institution
NPL	Non Performing Loan
NSE	National Stock Exchange
OECD	Organization for Economic Co-operation and Development
OTC	Over the Counter
PFI	Public Financial Institution
PMN	Pakistan Microfinance Network
RDFC	Regional Development Finance Corporation
RFD	Retail Finance Department
SAM	Special Asset Management
SBFC	Small Business Finance Corporation
SBP	State Bank of Pakistan
SE	Small Enterprise
SMBC	Small and Medium Business Corporation
SME	Small and Medium Enterprise
SMEBL	SME Bank Limited
SMEDA	Small and Medium Enterprises Development Authority
SMEF	SME Foundation
TF	Term Finance
USAID	United States Agency for International Development
WB	World Bank
WC	Working Capital

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Note on Report Methodology

Broadly, the study uses multiple secondary sources as well as consultative meetings with different stakeholders. Details of consultative meetings are provided in **Annex A1.**

Major secondary sources: Most Small and Medium Enterprise (SME) loans and Non-Performing Loans (NPLs) data for Pakistan is taken from the Quarterly Development Finance Reports of the State Bank of Pakistan (SBP) dating back to 2002, and the quarterly SME Finance Review publications. Private credit data is taken from the Banking Soundness Review conducted by the SBP. Data by sector or institution was provided by the SBP on request. Bank-wise data, where cited has come from sources within the bank. Macroeconomic data is taken from the SBP economic data portal and archives. Citations throughout the study have been made accordingly.

Cross country comparisons: For the sake of consistency, we have selected countries mostly in the Asia region, comparing Pakistan to countries in East and South East Asia (China, Thailand, South Korea, Malaysia, Indonesia, and Vietnam). Together with India, these economies are categorized as Emerging and Developing Asia by the International Monetary Fund (IMF).[1] Two other South Asian economies, Sri Lanka and Bangladesh, are also chosen for comparison since they have similar regulatory and SME business environments as Pakistan, with more or less the same demand/supply side issues in the SME economy. Data for cross-country comparisons is mostly taken from the Asia SME Finance Monitor published by the Asian Development Bank (ADB) as well as an ADB-Organization for Economic Co-operation and Development (OECD) collaborated study.[2]

Definitions: Using the SBP's definition of SMEs: Enterprises that have up to 50 employees and an annual turnover of PKR 150 million are categorized as Small Enterprises (SE), while enterprises with an annual turnover between that of PKR 150 million to PKR 800 million come under Medium Enterprises (ME). The Small and Medium Enterprise Development Authority (SMEDA) categorizes SMEs as enterprises with up to 250 employees and turnover up to PKR 250 million.[3]

There is no universal definition of SMEs across the globe which poses a fundamental problem in cross-country comparisons of this nature. For many countries, the usual practice is to categorize firms that have 1 to 10 employees as Micro; up to 50 employees as Small; 50 to 99 as Medium; and all firms with over 100 employees as Large. In this report we refer to "Micro" and "Small" firms interchangeably.[4] See the different definitions used in Pakistan across institutions in **Annex A2.**

[1] International Monetary Fund (IMF). "World Economic Outlook Update". January 2017. Accessed June 6, 2017. https://www.imf.org/external/pubs/ft/weo/2017/update/01/.

[2] ADB–OECD. "Study on Enhancing Financial Accessibility for SMEs." April 2014. Accessed June 6, 2017. https://www.adb.org/publications/adb-oecd-study-enhancing-financial-accessibility-smes-lessons-recent-crises.

[3] SMEDA. "Research Journal." December 2016. Accessed June 6, 2017.

[4] SME Finance Forum. "MSME country database." Accessed June 6, 2017. https://smefinanceforum.org/data-sites/msme-country-indicators.

Executive Summary

Pakistan's small and medium enterprises (SMEs) suffer from low access to credit against a sobering trend of low overall private sector credit. At PKR 405 billion, SME financing in Dec-16 was 6.7 percent of overall private sector credit. At its peak in Dec-07, the proportion of SME credit to overall credit was 15 percent (PKR 437 billion), lower than, but still comparable with other emerging and regional economies averaging 18 percent.[5]

During the 2008 balance of payment crisis in Pakistan, lending to the private sector declined. **The decline in funding to SMEs was even steeper,** falling from 11 to 9.8 percent of total private sector funding. High inflation and interest rates, coupled with sharp currency depreciation and intense energy shortages contributed to high toxicity in assets. Non-performing loans (NPLs) against private sector lending surged from 7.6 percent in CY07 compared to 15.8 percent in CY11. Significantly higher NPLs were reported for the SME sector—9 to 32 percent between CY07-11. The infection ratio for the SME portfolio continued to mount, reaching 35 percent in CY12. Since then, NPLs for the SME segment have declined, but slowly, remaining north of 20 percent as of Dec-16.

A singular aim of this study is to assess the persistently high NPLs in the SME segment and determine its primary drivers. A key research agenda has been the legacy impact of NPLs persisting since the 2008 crisis and before, versus those of relatively fresh loans issued to SMEs. The study determines that **the legacy of toxic assets from failed portfolios continues to linger, inflating current SME infection ratios.** Whereas the SME infection ratio currently stands at 20 percent (Dec-16), the NPL ratio may be significantly lower for fresh loans. Defunct portfolio of SME Bank as well as the failure of NIB's Salam Banking led to high NPLs of that portfolio which are being carried forward. This is because even when a significant portion of loans are categorized as losses, banks are not charging them off.[6] Instead, they are being carried forward in the existing NPL ratios. After discounting for these, the NPL ratio of newer SME loans is estimated at less than half the reported number, at approximately 8 percent (details provided in **Section 3)**. Loans that have been in the loss category for a long time or are stuck in litigation must be charged off to bring down the NPL ratio.

Applying a similar approach to outreach shows that **access to finance is much lower than the touted 5 percent for SME's.** The number of SME borrowers reported in Dec-16 was 177,000. Assuming 3.2 million SMEs as per the SME Survey of 2005[7] access to finance can be estimated at approximately 5 percent in Dec-16. However, if the borrowers accounting for the defunct portfolio and those counted in the Government of Punjab's *Apna Rozgar* scheme are removed, the adjusted number of borrowers falls to 67,000 which affectively brings down the current access to finance to 2 percent (detailed calculations provided in **Section 3)**.

On the supply side, **a contributing factor for this limited access to credit is the focus of banks on relationship lending without introducing tailored products suited to the needs of SMEs.** The relationship based model generates lower revenues per unit on the SME portfolio as compared to corporate loans (PKR 0.46 million compared to PKR 1.44 million). Given the sheer scale and variation in the SME segment, the current model has the potential to meet the needs of a very small fraction of SMEs. Also contributing to this weak appetite on the supply side are limitations in in-house capacity, a dearth of information on the SME segment(s), public sector crowding out and an underlying performance incentive structure better suited to corporate lending.

Program lending should include technological interventions that would reduce the burden of costly and time consuming paper work, and also assist SMEs in areas where they lack proficiency—such as cash flow

[5] Asian Development Bank (ADB). "Asia SME Finance Monitor." 2014. Accessed June 6, 2017. https://www.adb.org/sites/default/files/publication/173205/asia-sme-finance-monitor2014.pdf.

[6] The Prudential Regulations of the SBP do not restrict or regulate when and how loans are to be written off. However, they do instruct banks on provisioning as will be explained in later sections of the paper.

[7] Since this is an old survey, it is likely the number of SME businesses would be more than 3.2 million. Thus, the access to finance number is inflated to begin with.

management, records keeping, use of technology and branchless banking. At the same time, banks should also harness their existing SME depositors and provide better lending products to expand their portfolios.

Part of the reason for low SME financing has been low overall private credit but there are also a myriad of supply side and demand side issues that curb credit to SMEs. Lack of documentation, inadequate incentives, poor cash flow management, unawareness of banking products, and incentives are all reasons why demand from SMEs for bank lending is low. The bigger issues, however, are the requirement for adequate collateral and the information asymmetry between banks and SMEs. These are being addressed to an extent through government initiatives such as the credit guarantee schemes and through the Financial Institutions (Secured Transactions) Act 2016 for the registry of immovable and movable property.

Government and policy makers should introduce reforms and strengthen laws that provide remedies for collateral requirement, reduce information asymmetry, riskiness of SME portfolios and harness trust between banks and SMEs. Whereas the Financial Institutions (Secured Transactions) Act 2016 has been approved by the National Assembly, it now needs to be implemented by fast tracking the setup of an electronic collateral registry which would bring in record moveable property that can be used as collateral. Where the existing Credit Information Bureau (CIB) includes all loan transactions that take place, more work is required to provide detailed credit reports for SMEs and evaluate their credit worthiness. This is where the private sector bureaus can also play an effective role. To expand the work being done under credit guarantee schemes, the program should be converted into an on-going concern; the SBP and the Department for International Development (DFID) are currently working on an initiative that will result in the establishment of a credit guarantee corporation. Localized credit guarantee funds and private credit guarantee organizations also need to be encouraged.

1. SME Financing: A Comparative Overview

Small and Medium Enterprises (SMEs) are critical to the social and economic uplift of developing economies. SMEs play a major role in creating jobs and generating income, fostering economic growth and social stability, and contributing to the development of a dynamic private sector.[8]

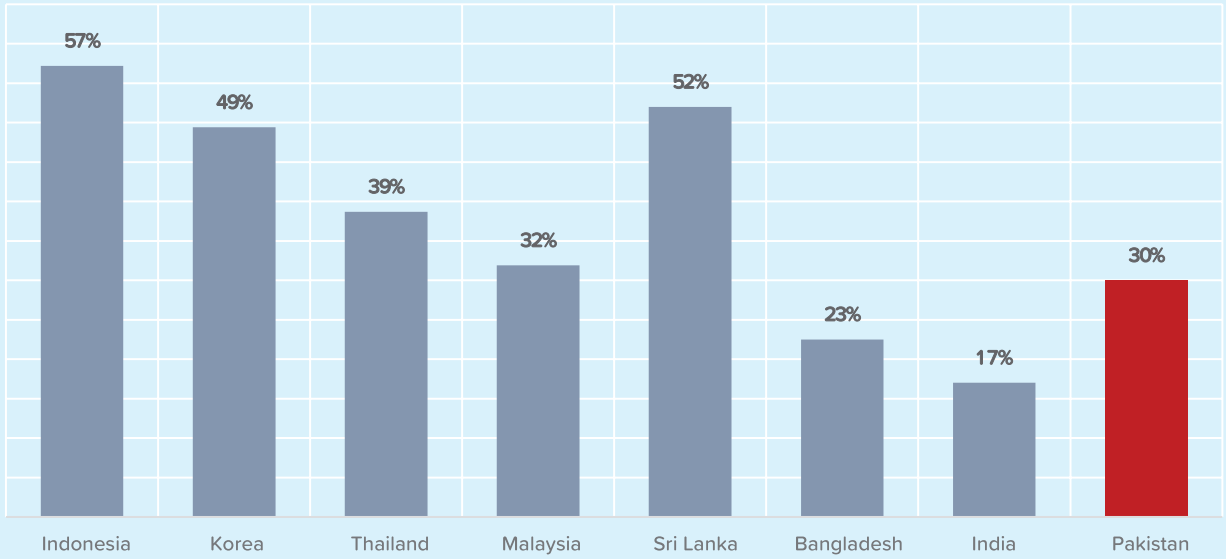
In emerging economies, SMEs contribute around 40 percent to Gross Domestic Product (GDP) while the same is nearly 51 percent for high income countries.[9] SMEs account for an estimated 96 percent of total enterprises in East and South East Asian economies. In Pakistan the economic census conducted in 2005 placed the number of SMEs at approximately 3 million registered units, which, at the time was more than 90 percent of the country's economic establishments. Today this number is likely to be even higher if one is to take into account the time elapsed since the census was conducted.[10]

SME output as a share of GDP was estimated at 30 percent for Pakistan, compared to 52 percent for Sri Lanka, 39 percent for Thailand and 57 percent for Indonesia (see **Exhibit 1**).[11] This indicates that Pakistani SMEs' contribution to the economy is relatively on the lower side.

Similarly, Pakistan's SME exports as a share of GDP are estimated at 25 percent. For India, this share is 40 percent; for Thailand, 29.5 percent; and for Korea, 31 percent.[12] In the Asia and Pacific economies, SMEs generate more than 60 percent of all jobs.[13] For Pakistan, this number is estimated to be 78 percent (see **Exhibits 2** and **3**).[14]

As the above comparisons show, SMEs constitute an important component of Pakistan's economy but their contributions to productivity and national GDP need to be further enhanced.

Exhibit 1: Cross-Country Comparison of SME Output as Share of GDP (%)



Source: SMEDA

[8] International Finance Corporation (IFC). "SME Banking." Accessed June 6, 2017. http://www.ifc.org/wps/wcm/connect/Industry_EXT_Content/IFC_External_Corporate_Site/Industries/Financial Markets/MSME Finance/SME Banking/.

[9] Edinburgh Group. "Growing the global economy through SMEs". Accessed August 6, 2017. http://www.edinburgh-group.org/media/2776/edinburgh_group_research_-_growing_the_global_economy_through_smes.pdf.

[10] Small and Medium Enterprise Development Authority (SMEDA). "SMEDA Research Journal." December 2016. Accessed June 6, 2017.

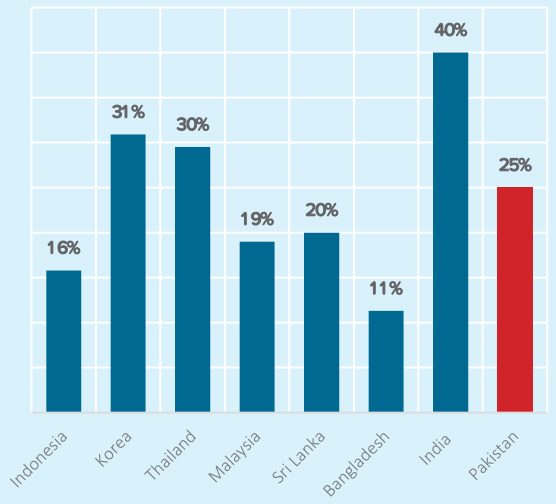
[11] Ibid

[12] Small and Medium Enterprise Development Authority (SMEDA). "SMEDA Research Journal." December 2016. Accessed June 6, 2017.

[13] Asian Development Bank (ADB). "Asia SME Finance Monitor." 2014. Accessed June 6, 2017. https://www.adb.org/sites/default/files/publication/173205/asia-sme-finance-monitor2014.pdf.

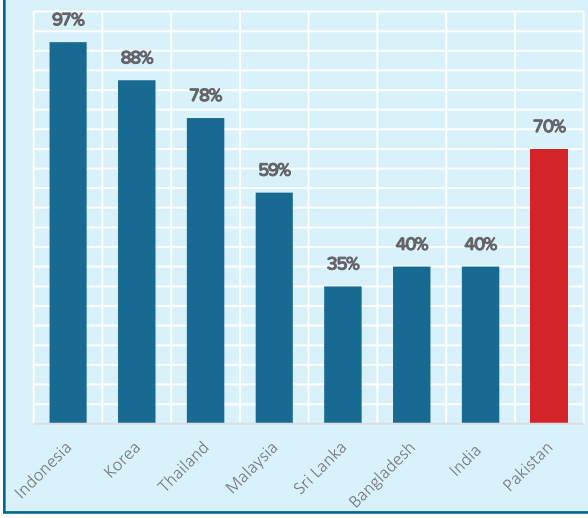
[14] Global Partnership for Financial Inclusion. "MSME Country Indicators". Accessed June 6, 2017.

Exhibit 2: SME Exports as a Share of GDP



Source: SMEDA

Exhibit 3: SME Employment as a Share of GDP



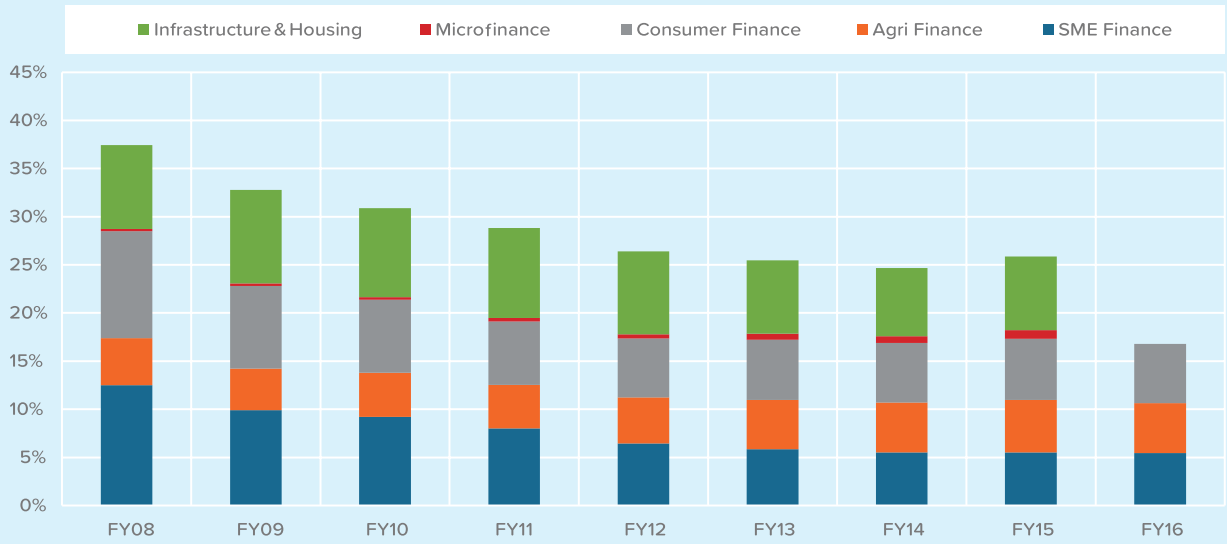
Source: SMEDA

1.1 Broad Trends in SME Lending

In terms of financing, lending by banks to SMEs as a share of total private sector loans in Pakistan is significantly low, reported at 7 percent of total lending in Dec-16.[15] To be sure, lending to a number of sectors is in comparable single digit numbers and has declined since 2008—consumer finance declined from 11.1 to 6.1 percent and infrastructure financing from 8.7 to 7.7 percent during FY08-16. Only agriculture financing has increased over this time period—4.9 to 5.5 percent between FY08-16 (see **Exhibit 4**).

However, the fall in SME credit is significant as its share has nearly halved since 2008. In terms of portfolio size, at its peak in Dec-07, SME financing was PKR 437 billion i.e., 15 percent of total private sector credit. By 2013, this number was down to 5.6 percent.[16] In comparison, SME loans in India accounted for 15 percent of all bank loans in 2013; in Bangladesh 25 percent, and in Korea, Thailand and Turkey over 30 percent. By 2016, even though the proportion of SME loans had improved marginally to 7 percent, it continues to be very low compared to other developing countries (see **Exhibit 5**).

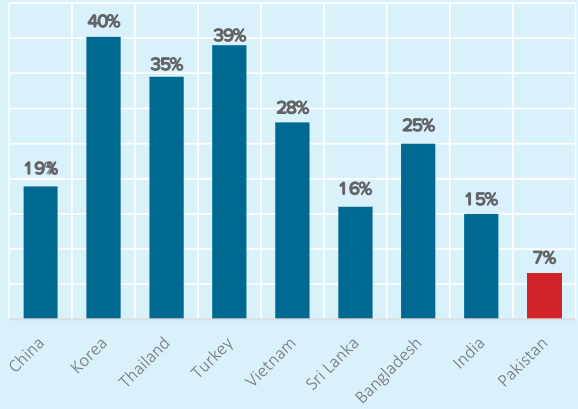
Exhibit 4: Sector Wise Distribution of Bank Financing (excluding Corporate)



Source: Multiple sources from SBP

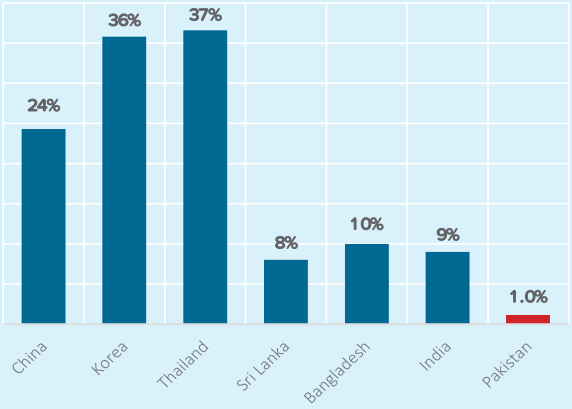
[15] State Bank of Pakistan (SBP). "Financial Soundness Indicators." Accessed June 6, 2017. http://www.sbp.org.pk/ecodata/fsi.asp.
[16] State Bank of Pakistan (SBP). "Financial Soundness Indicators." Accessed June 6, 2017. http://www.sbp.org.pk/ecodata/fsi.asp.

Exhibit 5: Cross-Country Comparison of SME Loans as a Share of All Loans



Source: SME Asia Monitor 2014, SBP Pakistan (2016), other countries (2013)

Exhibit 6: Cross-Country Comparison of SME Loans as a Share of GDP



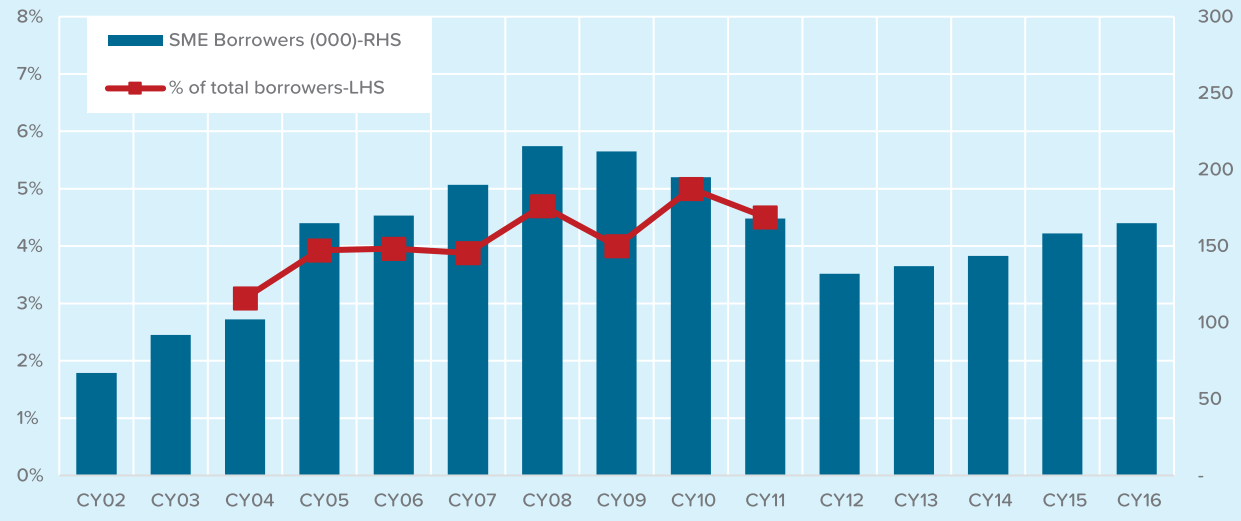
Source: SME Asia Monitor 2014, SBP Pakistan (2016), other countries (2013)

In terms of GDP, the decline is even steeper—SME loans as a share of GDP were 4.1 percent in FY07, dropping to only 1.0 percent in FY16.[17] For comparison, in 2013, the same was 24 percent for China, 36 percent for Korea and 37 percent for Thailand, while India, Bangladesh and Sri Lanka are around 8-10 percent (see **Exhibit 6**).[18] It would therefore, not be incorrect to conclude that access to credit among SMEs in Pakistan is highly constrained.

SME borrowers in Pakistan averaged 175,000 in the past twelve years from a pool of over 3.2 million establishments.[19] The total number of borrowers peaked at 230,000 in FY08, and hover around 160,000-170,000 today (see **Exhibit 7**). This puts formal financing at approximately 5 percent of all firms and consistently below 5 percent of total bank borrowers.[20]

In terms of sectoral distribution, in emerging economies such as Korea and Thailand, SME loans have been more concentrated toward the services sector, while loans in South Asian countries such as Bangladesh, Pakistan, Sri Lanka and India are more tilted toward wholesale, retail and manufacturing SMEs (see **Exhibit 8**).

Exhibit 7: SME Borrowers as Proportion of Total Private Credit Borrowers



Source: SBP

[17] ibid

[18] Asian Development Bank. "Asia SME Finance Monitor." 2014. Accessed June 6, 2017. https://www.adb.org/sites/default/files/publication/173205/asia-sme-finance-monitor2014.pdf.

[19] State Bank of Pakistan (SBP). "Development Finance Review." Accessed June 6, 2017. http://www.sbp.org.pk/SME/DFG.htm.

[20] State Bank of Pakistan (SBP). "Financial Soundness Indicators." Accessed June 6, 2017. http://www.sbp.org.pk/ecodata/fsi.asp.

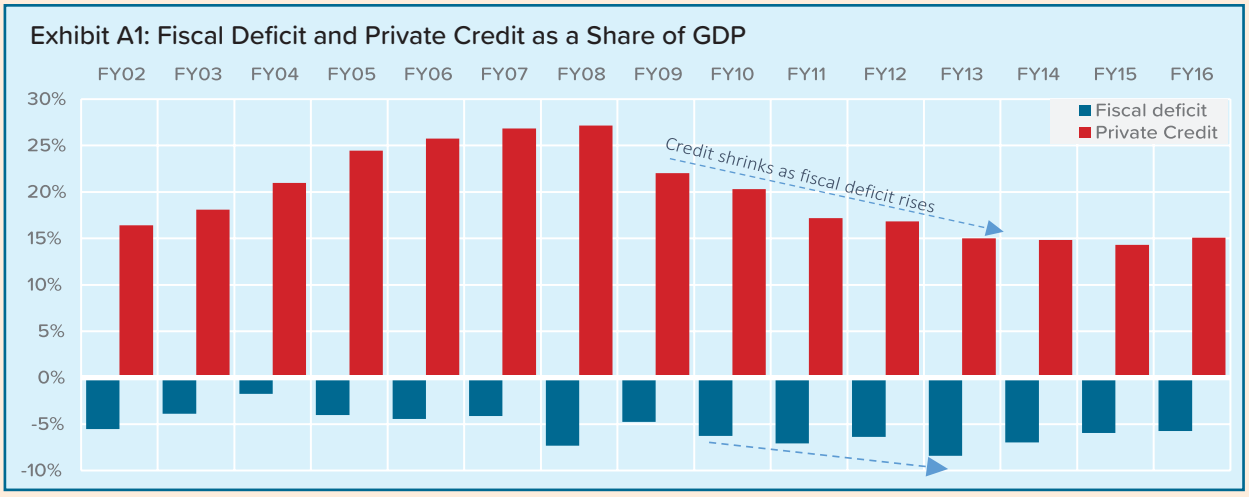
Box A: Private Sector Crowding Out

The issue of low SME financing cannot be seen in isolation of the overarching challenge of low credit penetration in the country. Pakistan is primarily a consumption based economy; approximately 90 percent of GDP expenditure is on consumption. The savings-to-GDP ratio averaged 13.9 percent for FY13-17. In comparison, the investment-to-GDP ratio averaged 15.3 percent for the same period. This is significantly below the requisite amount for the economy to sustainably grow at 5 percent.[1]

Total bank deposits (M2) are estimated at 40 percent of GDP[2] compared to 65 percent for India, about 50 percent as the global average and even higher for countries like China, Thailand, Korea and Malaysia.[3] The deposit base in Pakistan is gradually increasing as it was 33 percent of GDP in CY11 and reached 39 percent of GDP in CY16—in the last fifteen years (CY02-16), the average stood at 35 percent of GDP. As acknowledged in the National Financial Inclusion Strategy of the SBP, there is a need to increase bank deposits on a rapid footing.

In addition to this, the availability of low risk options (T-Bills) has resulted in low levels of lending to the private sector (see **Exhibit A1**). The private credit-to-GDP ratio declined from 27 percent in FY08 to 15 percent in FY16.[4] After the 2008 crisis, the situation for borrowers worsened. The currency depreciated sharply, inflation and interest rates shot up and virtually all the macroeconomic indicators worsened, resulting in a piling up of bad loans. The NPL ratio rose to 14.9 percent in CY10 and continued to grow up until CY11. Consequently, banks became cautious in lending to the private sector. On the other hand, a growing fiscal deficit resulted in growing demand for public sector borrowing. The banks cumulatively invested 84 percent of incremental deposits in public sector instruments (mainly government papers) during CY09-CY16. On the flip side, only one third of incremental deposits were deployed in advances during the same period. From a peak of 75 percent in CY08, the advances-to-deposits ratio (ADR) for the banking industry bottomed out at 46 percent in CY15; it stood at 47 percent in CY16.[5]

Nonetheless, the capital adequacy ratio (CAR) improved in the process since government paper is deemed the least risky in risk weighted CAR. The ratio of risk weighted CAR jumped from 12.6 percent in CY08 to 14.5 percent in CY09, and peaked at 16.9 percent in Sep-15. It stood at 15.7 percent in Dec-16.[6] The CAR ratio of most banks is less than the SBP minimum requirement of 10 percent, implying that there is room left for advances to grow within the stipulated risk requirements.[7]



Source: SBP/ Zakheera

[1]Ministry of Finance. Pakistan Economic Survey (2016-17). Accessed June 6, 2017.

[2]Ibid

[3]Bank Deposits to GDP. Market Data. Accessed June 6, 2017. https://datamarket.com/data/set/28m2/bank-deposits-to-gdp#!ds=28m2!2rr3&display=line

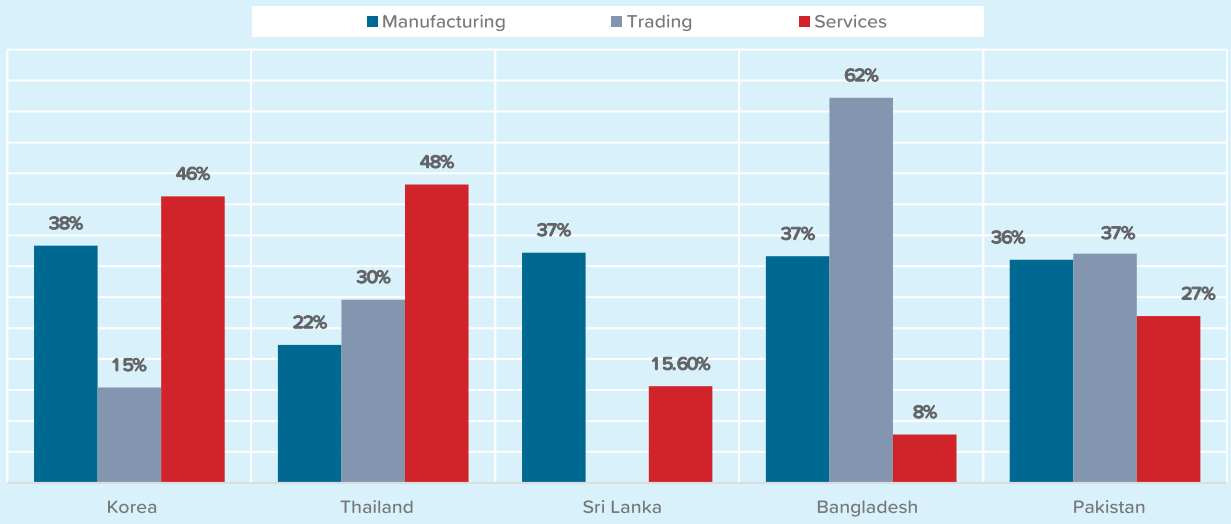
[4]State Bank of Pakistan (SBP). Financial Soundness Indicators. Accessed June 6, 2017.

[5]ibid

[6]ibid

[7]State Bank of Pakistan (SBP). "Instructions for Basel III Implementation in Pakistan". Accessed June 6, 2017.

Exhibit 8: Cross-Country Comparison of SME Lending by Sector



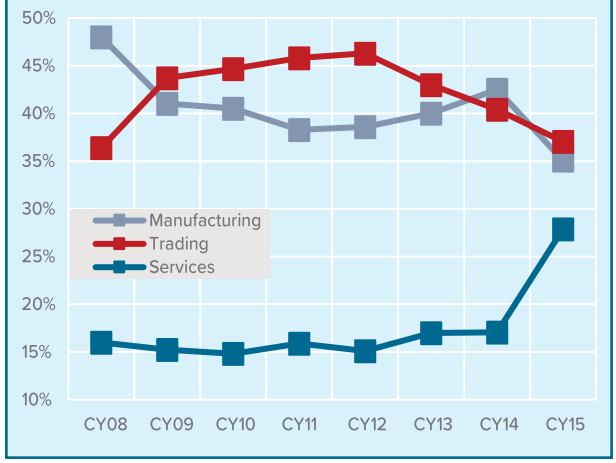
Source: SME Asia Monitor 2014, SBP Pakistan (2016), other countries (2013)

In Pakistan, the share of loans to the manufacturing sector has come down from 48 to 35 percent (see **Exhibit 9**).[21] This decline could partially be because of the dwindling growth of the manufacturing sector itself. From 2003 to 2005 the sector grew by 15 percent, but in the past six years, average annual growth has been only 4 percent.[22]

In contrast, the services sector has been gaining traction, going from 17 percent of all SME loans to 27 percent in just the past two years.[23] The most likely reason behind this increase is the positive growth path of the services sector in Pakistan shown by its share in GDP, which is estimated at 59.6 percent for FY17, up from 50 percent only a few years ago.[24]

Institution wise distribution suggests that private banks have historically remained dominant in providing access to formal lending to SMEs; their share in total lending hovering around 80 percent during Jun-09 to Jun-12. The top player has been Habib Bank Limited (HBL). After 2012, the share of private banks in SME lending has declined to less than 70 percent. Public banks' share increased from 14 percent in Jun-12 to 26.5 percent in Jun-16.[25] The share of specialized banks hovered around 3 percent in Dec-16. The portfolio size has not changed much in years and most of the loans are toxic within the specialized bank segment.[26] Development Finance Institutions (DFIs) contributed merely 0.1 percent to total SME loans in Jun-16, while the share of foreign banks has come down from 0.4 percent in CY09 to a mere 0.04 percent in CY16 (see **Exhibit 10**).[27]

Exhibit 9: SME Lending by Sector in Pakistan



Source: SBP Development Finance Reports

[21] State Bank of Pakistan (SBP). "Development Finance Review." Accessed June 6, 2017. http://www.sbp.org.pk/SME/DFG.htm.

[22] Ministry of Finance Economic and Social Indicators, Pakistan Economic Survey 2016-17.

[23] State Bank of Pakistan (SBP). "Development Finance Review." Accessed June 6, 2017. http://www.sbp.org.pk/SME/DFG.htm.

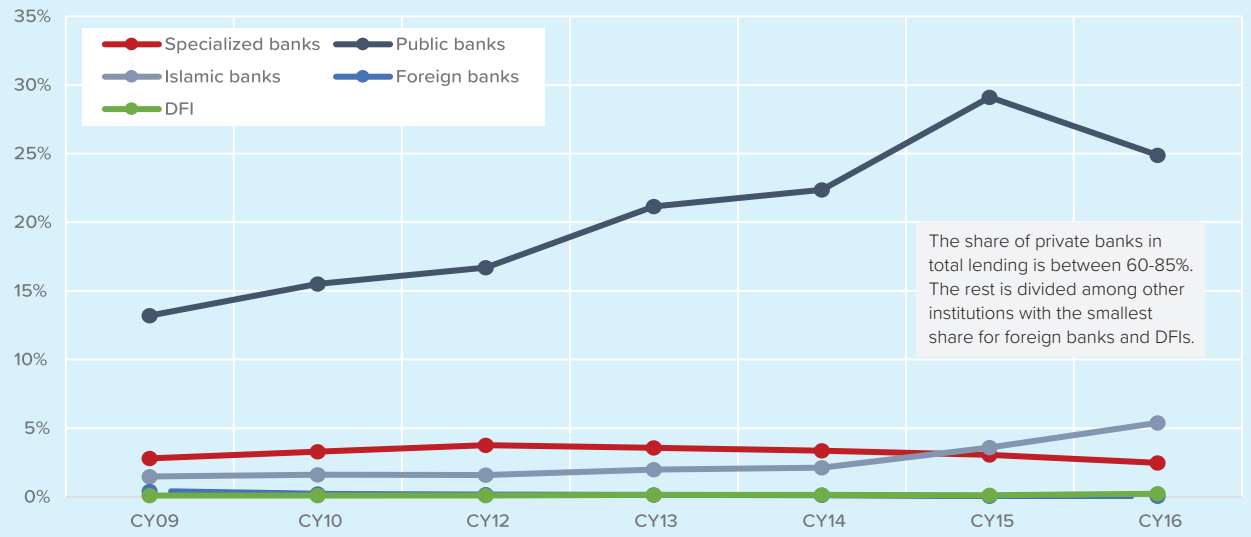
[24] State Bank of Pakistan (SBP). "Development Finance Review." Accessed June 6, 2017. http://www.sbp.org.pk/SME/DFG.htm.

[25] State Bank of Pakistan (SBP). "Development Finance Review." Accessed June 6, 2017. http://www.sbp.org.pk/SME/DFG.htm.

[26] Specialized banks are those that have special or specific lending objectives or cater to specific needs of the borrowers. They are usually development, foreign exchange or export-import banks. In Pakistan, the most prominent specialized bank is the SME Bank.

[27] Development Finance Institutions (DFIs) are public-private or government-controlled institutions that invest in private sector projects. These include microfinance institutions.

Exhibit 10 : SME Loans by Bank Type (excluding Private Banks)



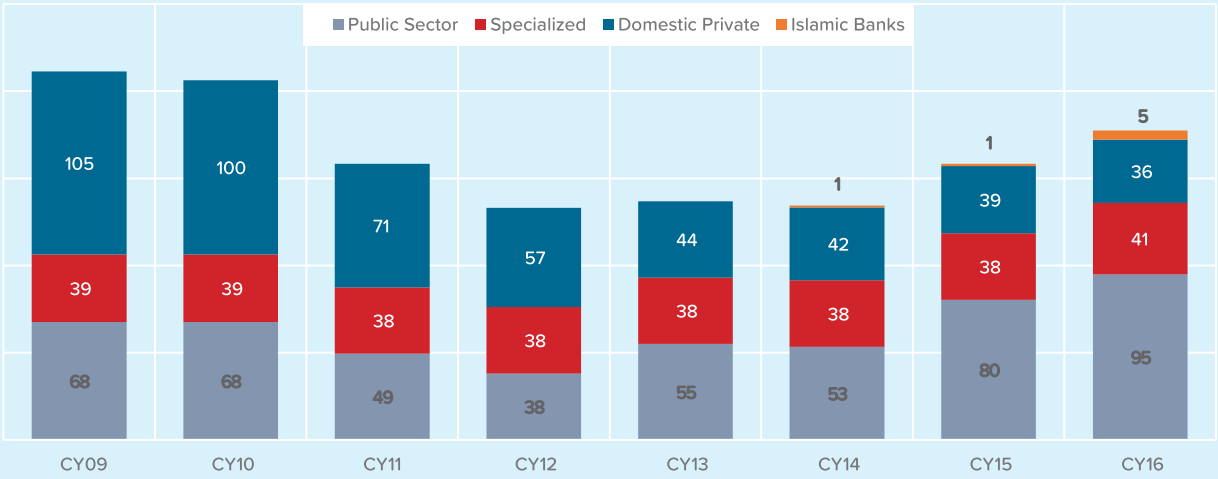
Source: SBP

In terms of the number of borrowers, domestic private banks used to account for the largest number of borrowers, estimated at 104,892 in CY09. Thereafter, the share of borrowers accounted for by public sector banks started to increase; in CY16 public banks accounted for 94,928 borrowers compared to 36,424 for domestic private banks. DFI borrowers, showed an increase from 22 to 77 between CY14 and CY16. SME borrowers of foreign banks declined from 53 to 14 during this time period (see **Exhibit 11**).

1.2 Broad Trends in SME NPLs

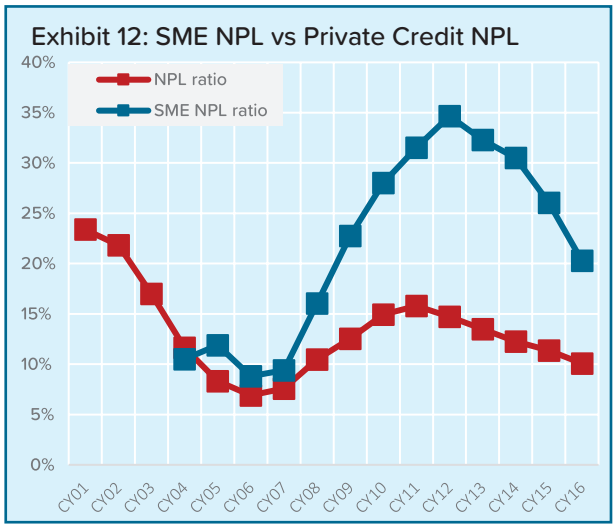
Non-performing loans (NPLs) for the SME segment were around PKR 20-40 billion during FY04-08, but jumped to PKR 77 billion in FY09. Following the economic crisis of 2007-08, which resulted in a sharp increase in domestic interest rates, delinquencies not only for the SME segment but the entire private sector spiked (see **Exhibits 12, 13** and **14**).[28]

Exhibit 11: SME Borrowers by Type of Institution (000's)



Source: Data provided by SBP

[28]In 2008 when oil prices sharply went up, the impact was not passed onto consumers in Pakistan. This triggered a twin deficit crisis: both current account and fiscal deficits swelled to 8.2 percent (FY07:4.5%) and 7.3 percent (FY07:4.1%), respectively. Subsequently, inflation crossed 20 percent in FY09. SBP had no choice but to sharply tighten the monetary policy, increasing the policy rate by 450 bps between Feb-08 to Nov-08 to 15 percent. Input prices also increased disproportionately for businesses. Most of the manufacturing sector, including cement, automobiles, textile, fertilizers, etc. are sensitive to commodity prices. The industrial sector exhibited negative growth of 5.2 percent in FY09. High interest rates squeezed margins and negative growth resulted in higher overall NPLs for the private sector.



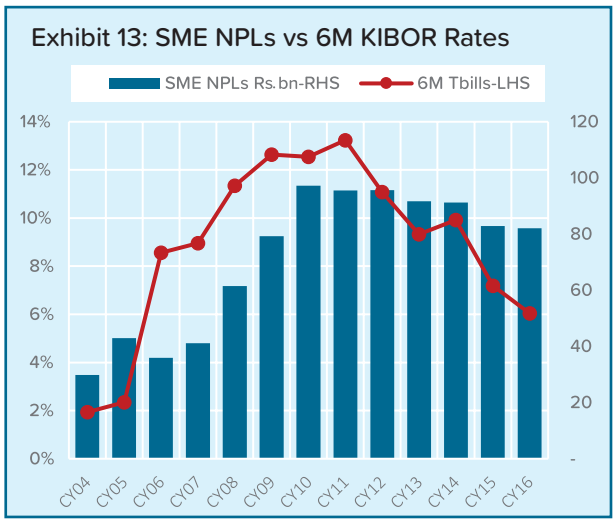
Source: SBP Banking Soundness Data

SME NPLs peaked at PKR 101 billion in Mar-11. In May 2013, SBP revised the Prudential Regulations for SMEs after which NPLs came down to PKR 90 billion in Jun-13.[29] The SME NPL ratio ranged between 32-35 percent during Mar-11 and Sep-14. Prior to 2008, it hovered between 8-13 percent (FY04-08). This hike in the ratio was not only a result of an increase in NPLs but was also caused by a shrinking of the SME portfolio, which was down to PKR 252 billion by Sep-14.

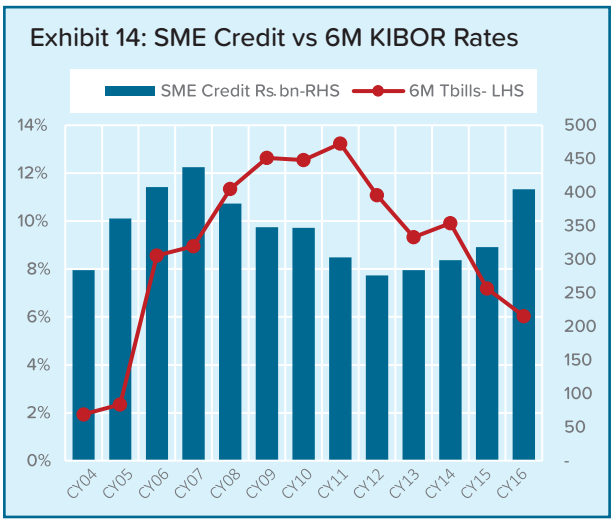
In FY16, lending to the SME segment saw a noticeable revival—the total SME portfolio was PKR 310 billion in Jun-16 and jumped to PKR 405 billion in Dec-16, indicating growth of approximately 30 percent.[30] However, this sudden jump in portfolio size was more due to another revision in the SME definition—in May 2016, the SBP revised the annual sales turnover for categorizing medium enterprises, doubling it from PKR 400 million to PKR 800 million.[31] This change in definition resulted in PKR 30-40 billion being moved out of the bottom end of the commercial segment to the higher end of the SME segment.

Interestingly, the addition did not result in a change in NPLs attributed to the SME segment, which remained unchanged between Jun-16 and Dec-16 at PKR 82 billion. One can therefore conclude that improvement in the NPL ratio from 27 percent in Jun-16 to 20 percent in Dec-16 is primarily due to the change in definition.

The data available on SME loans, especially SME NPLs, is fairly patchy across countries, and studies that have attempted to compile regional databases or monitor the progress, for instance, the ADB's Asia Monitor for 11 Asian countries or the OECD scoreboard for OECD countries, have discovered that it is difficult to do a comparative analysis. While the former study does not compare trends for SME loans or NPLs, the latter argues that when analyzing NPLs, given the wide differences in definition, classification of loans across different countries poses many challenges.[32]



Source: SBP Banking Soundness Data



Source: SBP Banking Soundness Data

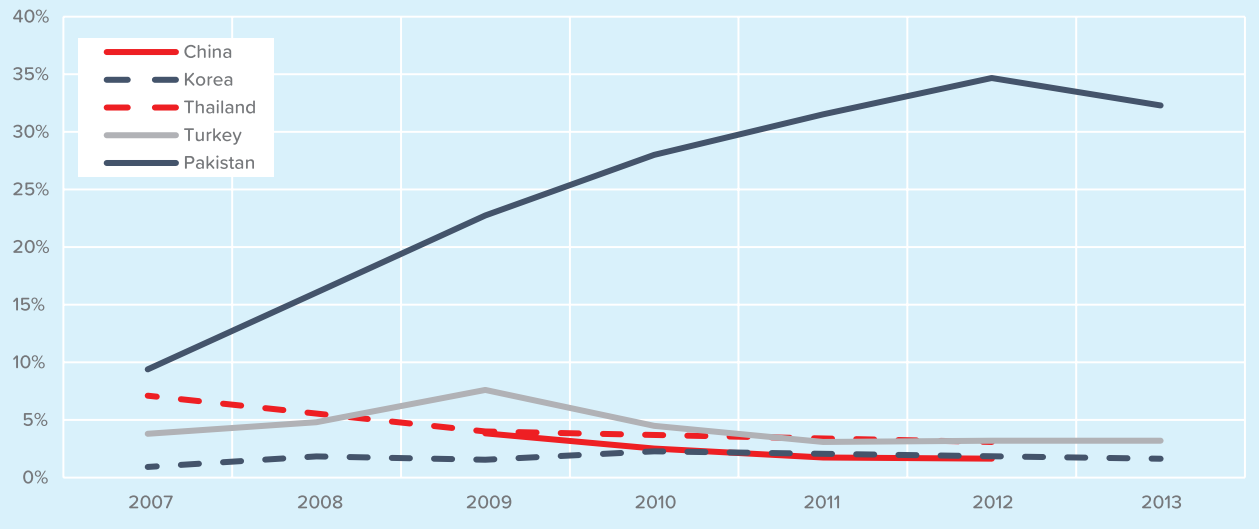
[29] The definition of SMEs was expanded to include enterprises with annual sales turnover of up to PKR 400 million. Previously this number was PKR 300 million. This resulted in a reversal in trend, but with only marginal increments reported in SME lending.

[30] ibid

[31] Consultative meetings with SBP.

[32] ibid

Exhibit 15: Cross-Country Comparison of SME NPL Ratio



Source: SME Asia Monitor 2014, SBP

With that caveat in mind, a cross-country comparison clearly shows that SME NPL ratios for Pakistan are significantly higher, even though the contribution of SMEs toward employment (60-70 percent) and in the share of enterprises (over 90 percent) are similar. In fact, Pakistan's SME NPLs are higher than all the countries this study uses for comparison.

For most SMEs in East Asian and South Asian economies, the NPL ratio is between 2 and 18 percent.[33] In Turkey, for instance, the NPL ratio has come down from 8 to 3 percent between 2009 and 2013. In Thailand, the share has come down from 7 to 3 percent between these years. In China, share fell from 4 to 2 percent, and in Korea, the infection ratio fell from 2.27 in 2010 to 1.6 percent in 2013. Conversely, the SME NPL ratio for Pakistan increased from 23 to 32 percent between 2009 and 2013, and despite moving along a downward trajectory since 2012, at 20 percent it continues to be a key deterrent to SME lending (see **Exhibit 15**).

1.3 Preliminary Conclusions and Research Questions

Preliminary conclusions based on this overview of SME financing in Pakistan and comparisons with other countries are:

i. Overall lending to the private sector in Pakistan has been low for a variety of reasons. Within this context, the proportion of SME lending has fallen over time with limited evidence of recovery.
ii. Evidence from cross-country comparisons shows that SME NPLs are high during economic deterioration but recover thereafter. In Pakistan, though SME NPLs have fallen in recent years, they have not fallen commensurately and continue to be on the higher side.
iii. There is a strong negative relationship between SME NPLs and SME lending. Due to persistently high NPLs reported for the SME segment, lending has remained weak.

In light of these preliminary findings, the following points are discussed in the latter sections of the report:

i) What factors have contributed to persistently weak SME lending in Pakistan and why have this sector's NPLs remained persistently high?
ii) How do these factors impact metrics for tracking access to finance among SMEs?
iii) What policy measures have been put into place to support lending to SMEs in Pakistan and how do they compare with global initiatives?

[33] Asian Development Bank (ADB). "Asia SME Finance Monitor." 2014. Accessed June 6, 2017. https://www.adb.org/sites/default/files/publication/173205/asia-sme-finance-monitor2014.pdf.

Box B: Literature Review of NPLs

Access to finance is no doubt an eternal struggle for SMEs, especially in developing economies. This phenomenon is not unique to Pakistan but as we will learn in coming sections, countries have adopted mechanisms, introduced financing models and utilized government programs to facilitate SMEs' access to finance. A major deterrent to lending to SMEs has been the high ratio of NPLs. NPLs tie up bank capital which hinders further lending, reduce bank profitability and raise funding costs, greatly dampening credit supply.

SMEs by their very virtue are considered high risk and the incidence of high NPL ratio in this sector compared to corporate lending is a common feature across the globe. A World Economic Forum study estimated the average NPL ratio in developing countries for SMEs at 6.5 percent, compared to 4.1 percent for large corporate loans. The same is true for most European countries where SMEs contribute almost two-thirds of Europe's output and employment, and tend to be more reliant on bank financing than large firms.[1]

The Asia Monitor published by the Asian Development Bank (ADB) argues in its 2014 report that *"...bank credit reaches out to a larger number of SMEs (with a relatively low ratio of NPLs) as the country's economy becomes more advanced. This suggests that further policy support for SME finance is needed in low-income and lower middle-income countries. In particular, financial infrastructure comprising of credit bureaus, collateral registries and credit guarantees needs to be developed in low-income countries."*[2]

A 2013 study on overall NPLs in European economies argues that there are two main factors that explain the evolution of private sector NPLs over time. One is the macroeconomic conditions that hit the smaller borrowers faster and harder, adversely impacting their ability to repay loans. *"Higher unemployment rate, and higher inflation contribute to higher NPLs"*, the study argues. A second reason for higher NPLs are considered to be bank-level factors.[3]

In 1997, Berger and DeYoung studied the relationship between NPLs, cost efficiency (the cost of processing and managing loans relative to revenues generated by them) and capitalization in the US commercial banks for the period 1985–94. They argued that low cost efficiency could be attributed to "poor management practices" of banks, implying that as a result of poor loan underwriting, monitoring and control, NPLs of a particular bank were likely to increase. Many other authors that were studying European or South American economies found relevance in this hypothesis.[4]

The same authors also suggested an alternative hypothesis called "skimping" which suggested that there was a positive causality between high cost efficiency and NPLs. In particular, high cost efficiency may reflect little resources allocated to monitoring lending risks and therefore, may result in higher NPLs in the future.[5]

Another hypothesis called "moral hazard" discussed by Keeton and Morris in 1987 found a negative relationship between capital ratio and NPLs. They argued that banks with relatively low capital respond to moral hazard incentives by increasing the riskiness of their loan portfolio which in turn results in higher NPLs on average in the future. The authors showed that loss rates were higher among banks that had a relatively low equity-to-assets ratio.[6]

[1] Shekhar Aiyar. World Economic Forum. "Which EU countries are struggling with non-performing loans?" 2015. Accessed June 6, 2017. https://www.weforum.org/agenda/2015/11/which-eu-countries-are-struggling-with-non-performing-loans/

[2] Asian Development Bank (ADB). Asia SME Finance Monitor. 2014. Accessed June 6, 2017. https://www.adb.org/sites/default/files/publications/173205/asia-smr-finance-monitor2014.pdf.

[3] Nir Klein. International Monetary Fund (IMF). Non-performing loans in CESEE: Determinants and Impact on Marcoeconomic Performance." https://www.imf.org/external/pubs/ft/wp/2013/wp1372.pdf.

[4] The lower the loan size, the higher the cost per loan. Since banks tend to lower the cost for smaller loans, lower cost efficiencies tend to enhance chances of NPLs. Once the NPL is booked, cost efficiency is adversely affected by additional monitoring of delinquent borrowers and valuing their collateral, the expense of analyzing and negotiating possible outcomes and cost of disposing of collateral if default occurs.

[5] ibid

[6] ibid

2. Breaking Down SME Financing and NPLs

2.1 By Bank

Habib Bank Limited (HBL) has historically remained the top lender to SMEs. In Dec-09, its share in the total SME portfolio was 14.4 percent (PKR 50 billion); the infection ratio was aligned with the industry trend at 23 percent (PKR 11.3 billion). HBL continues to be the largest lender to SMEs with a portfolio size of PKR 57 billion (14.1% of total).[34]

Bank Alfalah Limited's (BAFL) SME lending portfolio constituted about 8 percent of all bank lending in Dec-09 (PKR 27 billion).[35] The bank remains cautiously aggressive with a portfolio of PKR 38 billion (9.5% of total) and is second to HBL.

NIB Bank introduced an SME program lending credit model in 2007 after it was acquired by Temasek in 2005.[36] The bank's SME portfolio jumped from PKR 17 billion (4.4% of total SME portfolio) in Sep-07 to PKR 32 billion (8.4% of total portfolio) in Sep-08, making it second to HBL in the SME lending space.[37] Its share fell however, after its SME program suffered significant losses. By Dec-09, the infection ratio in NIB bank's SME portfolio was around the industry average of 23 percent; PKR 7.9 billion out of PKR 34.2 billion. At the time, NIB bank accounted for 41,000 SME borrowers (20% of total). Today, around PKR 6.8 billion (8% of total) SME NPLs are from NIB.[38]

Other Big Private Banks were building their portfolio in SME lending prior to the crisis; but their interest fell due to the economic crisis and NIB bank's experience. Their own portfolios also got infected during this time: Muslim Commercial Bank Limited's (MCB) SME portfolio was PKR 24 billion (6.5%) in Sep-08, thinning to PKR 17.9 billion (5.1%) by Dec-09 with the infection ratio surging to 27 percent[39] (industry: 22%). United Bank Limited's (UBL) SME portfolio reduced from PKR 23 billion (6.3%) to PKR 17.3 billion (5%) in the same period. Only Allied Bank Limited's (ABL) SME portfolio grew from PKR 22 billion (6.1%) to PKR 27.2 billion (7.8%).

Silk Bank's SME portfolio is approximately PKR 15 billion, which is 4 percent of the total SME portfolio versus its share in total advances at 1.2 percent.[40] The bank reduced SME NPLs to 23 percent in FY15. It is unclear whether this was achieved by writing off loans or expediting recovery. Silk Bank's total exposure of funded and unfunded SME portfolio is around 25 percent of the bank's total loan portfolio of PKR 75 billion. With a smaller branch network, Silk Bank has been using technology to build platforms for traders to open letters of credit (LC) from their offices.[41] It is also opening cash management systems for SME borrowers to track real time activity online. The system enables clients to remotely track their transactions, including runtime cheque and LC status.

The Bank of Punjab (BoP) has recently built a sizeable SME portfolio based on support from the Government of Punjab (GoPj). The bank's SME portfolio is around PKR 40 billion. The SME segment portfolio which can extend loans up to PKR 100 million is estimated at PKR 7.5 billion (sanctioned loans: PKR 12 billion). The NPL ratio is low (2-3%), with the current portfolio catering to 2,500 customers. The average loan size is estimated at PKR 2.5 million.

[34] State Bank of Pakistan (SBP). "Development Finance Review." Accessed June 6, 2017. http://www.sbp.org.pk/SME/DFG.htm.

[35] ibid

[36] Temasek had earlier launched a similar program with Bank Danamon in Indonesia.

[37] The model was adapted fully on paper but enforcement at lower tier of management was reportedly missing. Banks employees at the regional/branch level reportedly colluded with borrowers which resulted in an allocation of loans to high risk clients. Soon after the interest rates went up in 2008-09, NPLs shot up.

[38] Based on informal discussions with bank representatives.

[39] State Bank of Pakistan (SBP). "Development Finance Review." Accessed June 6, 2017. http://www.sbp.org.pk/SME/DFG.htm.

[40] Estimates based on informal discussions with bank representatives.

[41] A letter of credit is a letter from a bank guaranteeing that a buyer's payment to a seller will be received on time and for the correct amount. In the event that the buyer is unable to make payment on the purchase, the bank will be required to cover the full or remaining amount of the purchase.

BOX C: Apna Rozgar Scheme

The retail finance department (RFD) has created a sizeable portfolio within one year in the *Apna Rozgar* Scheme (2014). The portfolio is comprised of auto loans for commercial purposes - two Suzuki four wheeler variants (Bolan and Ravi) are financed for five years at 8 percent. There are 50,000 active borrowers in this scheme, with an average lending size of PKR 500,000. Currently, the net value of loans is PKR 21-22 billion with very low NPLs (1-2%). Since the GoPj is subsidizing the loans, the terms are much easier for borrowers. The scheme is primarily responsible for a sharp increase in public banks' share from 18 percent (FY13) to 25 percent (FY15).[1] ME loans between PKR 100-200 million are extended by the commercial loans credit department. The total portfolio value of ME loans is PKR 8-9 billion. In addition, roughly PKR 5 billion bad loans are reported by the Special Asset Management (SAM) department.[2]

[1] "Development Finance Review." SBP. Accessed June 6, 2017. http://www.sbp.org.pk/SME/DFG.htm.

[2] SAM is a separate department within a bank that helps recovery of NPL assets.

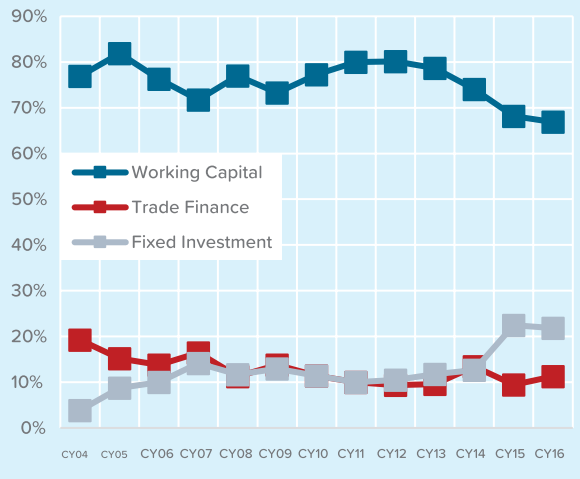
Islamic Banking Institutions (IBIs): Islamic banking boomed in the last decade. The asset size of IBIs increased from a mere PKR 118 billion in Dec-06 to PKR 1.9 trillion in Dec-16. Total financing in Dec-16 stood at PKR 821 billion (14% of total banking), with a net advance-to-deposit ratio (ADR) of 52 percent versus 47 percent for the industry as a whole.[42] In Jun-16, the cumulative SME loan portfolio of IBIs was PKR 20.3 billion, constituting 6.5 percent of total SME financing. Five years ago it was 4 percent, while ten years ago, a mere 0.7 percent, indicating a steady increase. The current private sector NPLs of IBIs are much lower at 4.1 percent compared to an industry estimate of 10.1 percent. Given that SME NPLs for Islamic banks were also significantly lower in Dec-13 (15 percent versus 32 percent for conventional banks), it is safe to assume this trend has continued to persist.

2.2 By Type of Financing

Working capital (WC) has, on average, constituted 72 percent of SME financing in the past twelve years, while trade finance (TF) and fixed investment (FI) shares stood, on average, at 13 percent each (see **Exhibit 16**).[43] The lion's share of SME financing is thus in short term loans (less than one-year loans); the segment's day to day needs are met via stock financing and receivable financing.[44] Focus on long term fixed loans has largely been missing, with SMEs lacking formal sector financing to expand.

This is one of the reasons that may have hindered corporatization in Pakistan. Small and medium businesses globally raise equity through Initial Public Offering (IPOs) and use banks as a source for long term debt financing. Evidence can be found in countries like Malaysia, Singapore, and Thailand.[45] However, both avenues are not deployed optimally

Exhibit 16: SME Lending by Type of Financing



Source: SBP Banking Soundness Data

[42] State Bank of Pakistan (SBP). "Islamic Banking Bulletin". Accessed June 6, 2017. http://www.sbp.org.pk/ibd/bulletin/bulletin.asp

[43] Working Capital loans are typically short term loans used in financing the everyday operations of a company. Trade Finance is utilized by exporters, importers and domestic traders where each lending cycle is for specific transaction and used to purchase or sell inventory. Fixed Investment loans are taken for the purpose of acquiring capital—land, machinery, etc.

[44] Accounts receivable financing is a type of asset-financing arrangement in which a company uses its receivables—outstanding invoices or money owed by customers—as collateral in a financing agreement. Stock finance is a mechanism which releases working capital from stock such as finished goods or raw materials, which works by lenders purchasing stock from a seller on behalf of the buyer.

[45] Shinozaki, Shidehara. "Capital Market Financing for SMEs: A Growing Need in Emerging Asia." January 2014. Accessed June 6, 2017. https://www.adb.org/sites/default/files/publication/31179/reiwp-121.pdf

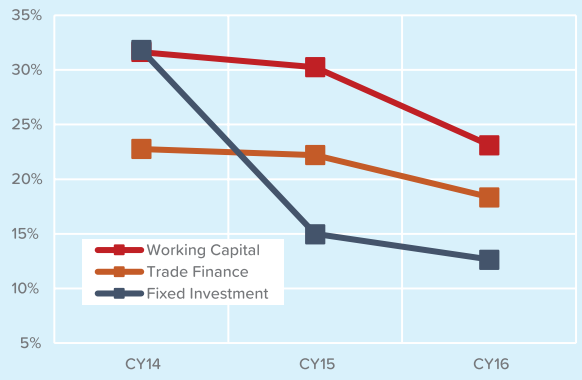
by businesses in Pakistan which partially explains why companies do not scale up. The dominance of WC is also reflective of the fact that banks avoid betting on the performance of small enterprises over longer periods.[46]

TF, which is done on the basis of a LC, has also traditionally remained low, with further decline recorded recently—19 percent in Dec-04, to 9 percent in Dec-15 and 11 percent in Dec-16.[47] Exporters claim that attaining TF is difficult as even on LC, banks require a guarantee. This is especially true for new exporters, but for those who have an established relationship with buyers, LC is not opened, and an open contract (deferred account) is made based on mutual trust. In this instance, exporters have a surety that they will get payments after a certain period of time. The bank lends on that basis—up to 60 percent of the total amount, but this too requires security. The overdraft limits have to be first sanctioned by the SBP. Banks take permission from the SBP and then give out the loan, adding significantly to the turnaround time.[48]

One major problem highlighted by SME stakeholders is mismatching of needs and financing. At times, if a business requires running finance, the bank can only approve term finance; in which repayments (including principal and mark-up) are due on a monthly basis right from the onset of acquiring the loan (or after an agreed grace period of a few months). However, many businesses are cyclical in nature and their cash flows are erratic. In that way, banks have failed to develop customized sector wise products and that is one reason SMEs are reluctant to get formal financing.[49] This is why SBP is encouraging banks to assess SME clients based on their cash flows.

NPLs are highest for WC and lowest for FI loans—the average toxic ratio for the last twelve quarters stood at 33 percent for WC loans versus 21 percent for FI

Exhibit 17: SME NPL Ratio by Type of Financing



Source: SBP Banking Soundness Data

loans.[50] Given these numbers, one wonders why banks are not focusing more on FI (see **Exhibit 17**).

There are three reasons behind banks' inclination towards WC:

a. Businesses do not have the required collateral for attaining expansion financing.
b. Banks find it costly to evaluate long term projects, partly because they do not have the required information or data.
c) Banks have shorter maturity of liabilities.

Encouragingly, the share of FI loans started to increase in Dec-15. In CY16, it was 22 percent of total SME loans, compared to a 12 year average of 13 percent and also accounted for a lower NPL ratio of 12.6 percent, compared to 20 percent for SME lending as a whole.[51]

2.3 By Loan Size

Since 2005, the average SME borrowing is PKR 1.75 million while the median ticket size is less than PKR 0.5 million. In Jun-16, 93 percent of borrowers were using less than PKR 5 million loan facility, majority of which were less than PKR 0.5 million.[52] High concentration in this category (less than PKR 0.5 million) has existed

[46] State Bank of Pakistan (SBP). "Development Finance Review." Accessed June 6, 2017. http://www.sbp.org.pk/SME/DFG.htm.

[47] A letter of credit (LC) is a letter from a bank guaranteeing that a buyer's payment to a seller will be received on time and for the correct amount. In the event that the buyer is unable to make payment on the purchase, the bank will be required to cover the full or remaining amount of the purchase.

[48] Consultative meetings with exporters in Sialkot.

[49] ibid

[50] Data provided by SBP on request.

[51] ibid

[52] Not including micro loans.

for many years—in Jun-11 for instance, half of the SME borrowers were in that segment.[53] Lately, the small borrowers' number has increased further because of BoP's *Apna Rozgar* Scheme. Under this scheme, 50,000 loans have been sanctioned to borrowers for leasing cars for commercial purposes.

Anecdotal evidence suggests that banks usually extend a fraction of the loan demanded by a small enterprise (SE). Although this is difficult to determine based only on available numbers, the small ticket size reinforces the argument. Moreover, as we will discuss in later sections, collateral free loans to SEs are nearly impossible to sanction despite the size of these loans. In contrast, a platinum credit card holder can get an unsecured credit line of PKR 0.5 million with only a few questions asked.

Exhibit 18: Distribution by Size of Loan (2016)

Loan Size (PKR)	Share of all SME Loans (%)
Up to 5 million	36.7
5-30 million	37.6
30-50 million	10.5
Over 50 million	15.2

Source: Quarterly SME Report, June-16 SBP

In Jun-16, 37 percent SME loans were of a ticket size below PKR 5 million. Recall that, 93 percent of borrowers were availing loans of less than PKR 5 million. A similar chunk fell into the PKR 5-30 million category, while 11 percent fell into the category of PKR 30-50 million. Thus, 85 percent of the total SME portfolio was in loans below PKR 50 million in value.[54] The total SME portfolio was estimated at PKR 310 billion in June-16. Thus, loans over PKR 50 million can be estimated at approximately PKR 47 billion. The number of borrowers under this category is likely to be small.

[53] State Bank of Pakistan (SBP). "Development Finance Review." Accessed June 6, 2017. http://www.sbp.org.pk/SME/DFG.htm.

[54] State Bank of Pakistan (SBP). "Quarterly SME Finance Review." June-16. SBP. Accessed June 6, 2017. http://sbp.org.pk/departments/ihfd-sme.htm.

Box D: Relationship Lending vs. Program Lending

Most banks in Pakistan use the relationship banking model for their SME portfolio. Given the sheer number of SMEs, this is a cost inefficient model, adversely impacting per loan earnings. The following figure illustrates the economics of the relationship management (RM) model for the small, medium, commercial and corporate portfolio of a bank.

Table D1: Cost Implications of the Relationship Model by Portfolio Category

	Small	Medium	Commercial	Corporate
RM Cost (PKR ,000)	45-75	65-110	125-225	150-300
Average RM Cost (PKR ,000)	60	88	175	225
Clients (number)	50	30	25	5
Avg. Loan Size (PKR million)	5	18	60	1,000
Spread	K+5	K+2	K+1.5	K+.5
Assuming KIBOR @ 6%	11%	8%	8%	7%
Revenue/RM (PKR million)	28	43	113	325
Revenue per Unit Cost (PKR million)*	0.46	0.49	0.64	1.44

Assumptions are based on consultative sessions with SME bankers.
** Unit cost is assumed as PKR 1,000 spend on RM*

As shown in the table above, significant cost inefficiencies arise from the time and resources needed to evaluate SME loans. Since SME loans are smaller, applying a Baseline Credit Assessment (BCA) methodology results in a higher per loan cost, which discourages banks to extend loans to SMEs. Some banks have a set of internally approved industries/sectors to lend to; and within it they extend loans to select clients after doing extensive due diligence. In most cases, the products are not tailor-made for sectors. Two banks, Alfalah and HBL are involved in program lending, but most of the facilities are generic and cater to certain needs of certain segments:

Bank Alfalah Limited[1]

- **Alfalah Bill and Cash:** Any contractor can get loans for short term financing needs without any formal collateral by showing bills of pre-approved companies.
- **Alfalah Merchant Line:** A loan is granted by evaluating the cash flow history of an enterprise through POS machines. Alfalah has the potential of 3,400 merchants; this facility is currently availed by roughly one third of the total merchants.
- **Alfalah Milkiat Finance:** This is a long-term loan, similar to home loans in the consumer segment. It is for the purchase, renovation and expansion of commercial properties. This is an optimal product for educational enterprises, such as building a purpose based school building.
- **Alfalah Fleet Finance:** That is for running a small fleet of vehicles for commercial use.

Habib Bank Limited[2]

- **HBL Seasonal Finance:** This is a sector specific product which caters to the financing needs of flour mills, cotton ginning, rice husking, oil seed and pulses processing mills. They have credit models for each industry cash flows and provide cash finance, running finance, and lend working capital requirements.
- **HBL School Finance:** This is similar to Alfalah Milkiat finance but HBL's product is more sector specific, and has more options of cross selling. The product provides complete banking solutions for small and medium size schools from fee collection to payroll to demand finance for expansion/renovation.
- **HBL Channel Finance:** This is similar to Alfalah Bill and Cash. The model needs to be more sector specific. There are two products in this segment: i) Dealer/Distributor finance facility: This provides restrictive finance facility to finance the purchase from large corporate, ii) Supplier/vendor finance facility: This product is for receivable financing, payable discounting and invoice financing.

[1]Bank Alfalah Limited. Program information from the web portal. http://www.bankalfalah.com/business-banking/business-loans
[2]HBL. Program information from the web portal. http://hbl.com/RetailLending

3. The Legacy of Toxic Assets

Till FY04, the corporate sector's NPL ratio was higher than the SME sector's (14.9% versus 8.8%). By Dec-05, NPLs for the corporate sector shrank to 8.3 percent whilst SME NPLs rose to 12 percent (see **Exhibits 19** and **20**).

The reason for the surge in the SME infection ratio is the inclusion of the SME Bank Limited's (SMEBL) portfolio in banking sector statistics. NPLs for the specialized bank's segment were 95 percent, and as a result the SME NPL ratio increased from 8.8 percent (FY04) to 12 percent in FY05. In absolute amounts, the NPLs of SMEBL amounted to PKR 7.2 billion, nearly one-fifth of the then total (PKR 38.7 billion).[55] [56]

Within SMEBL's loan book, the defunct portfolios of Small Business Finance Corporation (SBFC) and Regional Development Finance Corporation (RDFC) are still in record. This amount was PKR 7 billion in 2005. The NPL amount was reduced to PKR 5.5 billion in FY07, but has remained virtually unchanged since then. Thus, a legacy of approximately PKR 5.5 billion was contributing to overall SME NPLs of PKR 82 billion in Dec-16.[57]

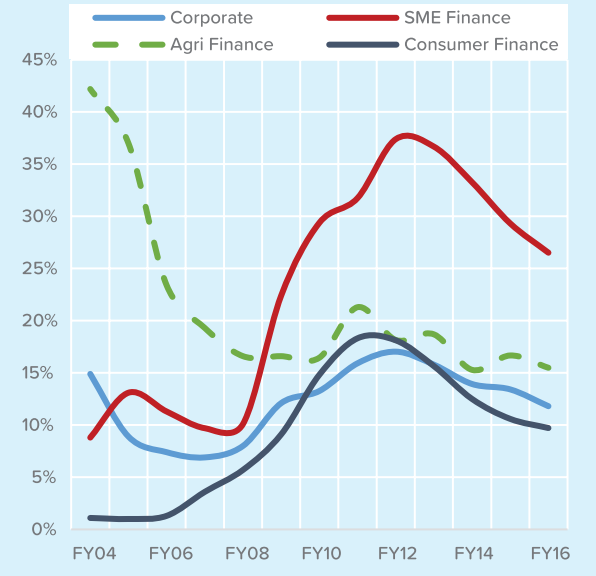
Similarly, the NPLs for NIB bank were estimated at PKR 7.9 billion in Dec-09.

In terms of borrowers, there were around 37,000 borrowers of SMEBL in Dec-16, majority of which are small size loans in the loss category. The bank's gross loan portfolio (GLP) was PKR 8 billion and its NPL stood at PKR 5.5 billion clearly indicating that more than 50 percent of the SMEBL borrowers are not likely to be active.

Similarly, NIB claimed 41,000 borrowers in Dec-09. With an estimated PKR 7.9 billion in NPLs, this number contributes to an inflated SME borrower figure. As per a range of stakeholders consulted for this research, over 20,000 sick borrowers are still part of the portfolio.[58]

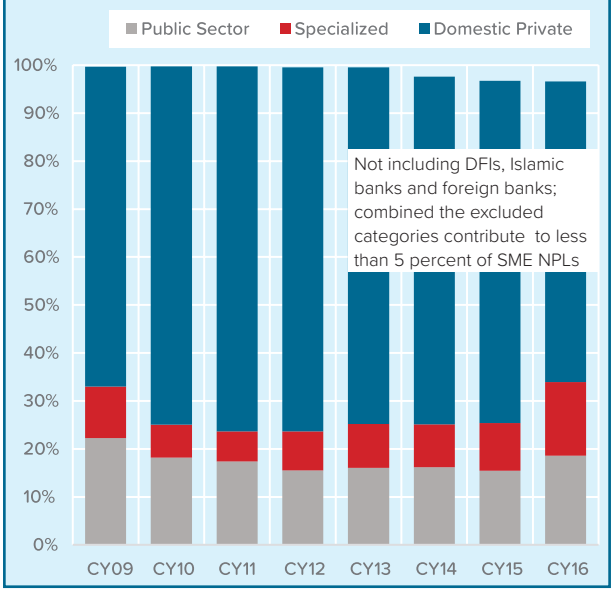
In addition to severely dampening the flow of financing to the SME segment, this legacy of

Exhibit 19: NPLs by Sector



Source: SBP

Exhibit 20: Share of Institutions in Total SME NPLs



Source: Data provided by SBP

[55] State Bank of Pakistan (SBP). "Development Finance Review." Accessed June 6, 2017. http://www.sbp.org.pk/SME/DFG.htm.

[56] State Bank of Pakistan (SBP). "Financial Soundness Indicators." June 2005. Accessed June 6, 2017. http://www.sbp.org.pk/ecodata/fsi.asp.

[57] Data provided by SBP on request.

[58] Estimated through conversations with stakeholders.

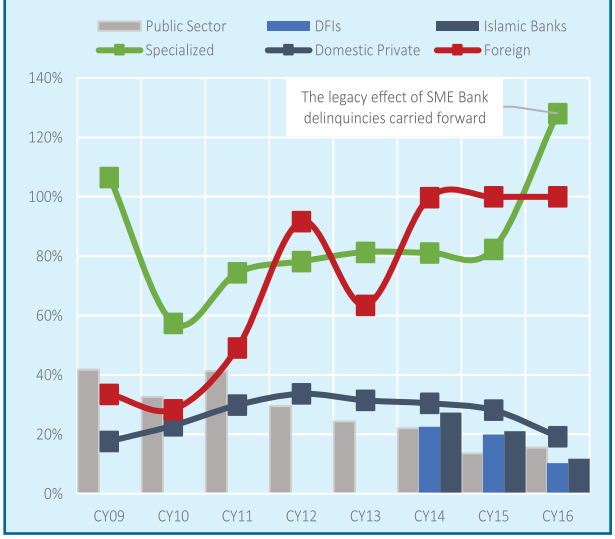
toxic assets impacts key estimates tracking the performance of SME lending in Pakistan. These are explained in further detail below.

3.1 Banks Not Writing Off Losses

The question remains why this legacy effect has persisted, and why NPLs did not fall to pre-2007 levels after they peaked in 2011-12. One reason for a persistently high NPL ratio is banks halting fresh lending following the economic crisis of 2007: most banks reduced renewals of loans to existing SME clients and booking of fresh loans to new clients during the last four to five years has also been lackluster. A second reason is the persisting NPLs: according to the SBP's development finance review report NPLs of *"banks and DFIs as on September 30, 2013 show that a predominant portion (around 92%) fall in the category of loans already classified as loss."* The report further states that this may be an indication that banks are not proactively cleaning up their NPL positions by writing off old NPLs.[59]

According to the Prudential Regulations for SME Financing[60], banks have to provision for[61] and categorize all loans according to the time, the mark-up and share of principle that is overdue—for 90 days (other assets especially mentioned), 180 days (sub-standard), over 12 months (doubtful) and over 18 months (loss). After 18 months, banks are required to provision for 100 percent of the outstanding value.[62] Banks are also supposed to make delinquency reports (for 30, 60, 90 180 and 365 days and above) on a monthly basis to track and manage SME lending. Interestingly, there is no regulation or requirement for writing off the loans within the PRs, which is left to the discretion of the bank.

Exhibit 21: SME NPL Ratio by Institution



Source: Data provided by SBP

The combined effect of these two trends is reflected in an excessively bloated SME NPL ratio, which in all likelihood is not reflective of the NPL ratio of fresh loans to SMEs. High NPLs have had a direct bearing on the willingness of banks to build a bigger SME portfolio.

3.2 Access to Finance for SMEs is Lower and Average Loan Size is Higher

Barring the two banks' sick borrowers, and also excluding the numbers for the *Apna Rozgar* scheme, the adjusted number of SME borrowers falls to 67,000 in Dec-16, according to our estimations. This brings down the access to finance estimate from 5 percent to 2 percent assuming 3.2 million SMEs.

As for total loan portfolio, out of an estimated PKR 405 billion worth of advances in Dec-16, approximately PKR 18 billion is the combined NIB and SMEBL portfolio, while BoP's *Apna Rozgar* scheme accounts for an outstanding portfolio of PKR 22 billion. Excluding the portfolio of these three players, outstanding loans amount to PKR 365 billion with an average adjusted loan size estimated at PKR 5.49 million. The outstanding loan amount is further reduced to PKR 320 billion after deducting the impact of the new definition. The average loan size

[59] State Bank of Pakistan (SBP). "Development Finance Review." Sep. 2013. Accessed June 6, 2017. http://www.sbp.org.pk/SME/DFG.htm.

[60] "Prudential Regulations for Small & Medium Enterprises Financing". Circular No. 02 of 2016 dated May 06, 2016. SBP. Accessed June 6, 2017. http://sbp.org.pk/publications/prudential/index.htm

[61] "A provision is an amount put aside in your accounts to cover a future liability. The purpose of a provision is to make a current year's balance more accurate, as there may be costs which could, to some extent, be accounted for in either the current or previous financial year". https://www.reviso.com/accountingsoftware/accounting-words/provision

[62] Provision of 100% of the difference resulting from the outstanding balance of principal less the amount of liquid assets realizable without recourse to a Court of Law and Forced Sale Value (FSV) of pledged stocks, plant & machinery under charge and mortgaged residential, commercial and industrial properties (land & building only) to the extent allowed.

after adjusting for the new definition is PKR 4.96 million, which is much higher compared to the unadjusted average loan size of PKR 2.28 million.[63]

3.3 Fresh SME NPLs Significantly Lower

In Dec-16, 70 percent of SME loans were in the loss category, carried forward for many years. These loans amounted to PKR 57 billion. In 2013, this number was higher. Fresh NPLs are around PKR 25 billion (taking out the PKR 57 billion in the loss category) out of the total portfolio of PKR 320 billion (after adjustments). The effective fresh NPL ratio comes down to only 8 percent, against the reported 20 percent (see **Exhibit 22**).[64]

Exhibit 22: Computing Average Size of Loan

	No of Borrowers (000)	Loans (PKR bn)	Average Size of Loan (PKR mn)
Specialized banks- SME Bank	41	9.8	2.28
NIB- Bad loans	20	7.9	5.49
BoP- *Apna Rozgar* Scheme	50	22	
	111	**39.7**	4.96
All banks	177.5	405	
All banks minus 3	66.5	365.3	5%
New Definition impact	1.77	44.4	2%
After above adjustments	64.73	320.9	

Access to Finance

	No of Borrowers (000)	No. of SMEs (m)	
All banks	177.5	3.4	82.8
After adjustments	64.73	3.4	57.4

Computing Fresh NPL Ratio

Date	Loss Descript	Loss (PKR bn)
Septemeber 2013	92% of PKR 91 bn NPLs were loss	
Septemeber 2016	70% of PKR 82bn NPLs were loss	
	(in PKR bn)	NPL Ratio
Total loan	405	20%
Net loans	320.9	
All NPLs	82.07	
Loss	57.4	
Fresh NPLs	24.6	8%

Computing Fresh NPL Ratio

1. SME Bank: Specialized banking, borrowers are 41,000. Majority are SME bank
2. The NIB carry forward of bad debts Is PKR7.9 bn (according to SBP), Since majority of them are Salam Bank, assuming 400,000 avg size of loans, make NIB sick borrowers at 20,000
3. BoP: These are *Apna Rozgar* Scheme. BoP says that the borrowers are 50,000 and outstanding loans are PKR 22 bn. Since these is a government susbized scheme we took its impact out
4. Change in definition: As per SBP, after change in definition in March 2014, PKR 44 billion loans were added to SME loans that were earlier under private sector loans. To compute borrowers, we assumed average loan size because of new definition is 25 mn - take the impact out to find the average borrower size
5. Net loan after adjustments: Subtracting the impact of the above 4
6. The 70% loss in Dec-16 figure were given by SBP
7. Fresh NPLs: All NPLs minus Loss

[63] Calculation based on a portfolio of PKR 405 and number of borrowers at 177,500.

[64] Data provided by SBP on request.

4. Interventions Supporting SME Access to Finance

Most emerging economies have achieved tremendous growth and created opportunities for their SMEs to get access to finance. For most economies in the East and South Asia regions that have been included in the study, over 90 percent of the total private sector comprises of SMEs. The governments of several economies have created an environment conducive for SMEs to thrive, including initiatives aimed at improving the regulatory and policy environment to bolster SME financing.

4.1 Developing SME Capital Markets

There is a belief that diversification of financing avenues can facilitate more flexibility and innovation in SMEs. Therefore, to supplement bank lending, development of SME capital markets has begun to take shape not only globally, but also in the region.[65] Globally, there are over 40 exchanges that provide an equity market to SMEs; their sizes range from 1 to 2,000 listed companies with an average market capitalization from as low as USD 4 million to over USD 1.5 billion.[66] A list of selected SME exchanges is provided in **Exhibit 23** on the following page.

In Pakistan, the establishment of an SME Board on the stock exchange has been under discussion. Proposals include reduced paid up capital requirements, simplified processes and documentary requirements for listing and providing exit avenues for venture investments in SMEs.[67] However, as per market information, no SME listing has occurred as yet.

4.2 Policy and Regulatory Framework

There are two key aspects from the regulatory and policy perspective that many Asian governments are working towards. One is diversification of financing avenues as discussed above. The second aspect is providing support for SME bankability in terms of counteracting many of the supply-side and demand-side issues, knowing that the banking sector will remain a prominent source of finance. While non-banking institutions and SME equity markets have picked up in many countries, they are still at the trial stages. The non-banking financial institutions (NBFIs), for instance, represented only one-tenth of bank loan assets in the Asia region.[68] To increase bankability then, many of the countries have made dedicated efforts to work on developing a policy framework along the following lines:

1. Absence of adequate collateral remains a prominent hurdle to provide loans to SMEs. This constraint is being addressed through policy initiatives. For example, a number of governments in the region are promoting movable asset financing through secured transaction reforms and creating collateral registries that reduce excessive reliance on real estate as collateral. Other policy initiatives include providing support to public credit guarantee schemes to incentivize financial institutions to lend to SMEs.
2. The information asymmetry between lenders and borrowers is also a major obstacle and a policy initiative has been to establish credit

[65] "The number of companies listed on these dedicated markets has grown from less than 5,000 in 2002 to nearly 9,000 in 2015 representing a 91.5% increase in 12 years. Over the same period, the number of companies listed on main boards or exchanges without dedicated SME markets grew by 13.5%". World Federation of Exchanges. "SME financing and equity markets." Accessed June 6, 2017. https://www.smefinanceforum.org/post/sme-financing-and-equity-markets

[66] ibid

[67] Aga Khan Development Network (AKDN). "SME Ecosystem Assessment Paper". SMEs will be required to have a post listing paid up capital of PKR 25 million (USD 250,000), as compared to the previous PKR 200 million (USD 2 million) requirement.

[68] For the countries used in the SME Monitor. "Asia SME Finance Monitor." 2014. Accessed August 4, 2017. https://www.adb.org/sites/default/files/publication/173205/asia-sme-finance-monitor2014.pdf.

Exhibit 23: List of Selected SME Exchanges

Country	Exchange	Market Type	No. of Listed Companies	Market Capitalization-USD million (2014)	Highlights
China	SME Board (2004)	SZSE (Exchange)	732	834,417	Established for high growth SMEs
China	ChiNext (2009)	SZSE (Exchange)	406	357,101	Venture board for startups
China	NEEQ (2014)	CSRC (OTC)	1,572	68,000	Aim is to broaden SME funding channels and ease financial problems. The number of listed companies rose from 356 in 2013 to 1,572 in 2014.
Korea	KOSDAQ (1987)	KRX (Exchange)	1,061	130,163	Mainly an equity market for large firms where SMEs are also participating
Korea	FreeBoard (2000)	KOFIA (OTC)	117	11,563	Set up to boost liquidity and raise capital for unlisted SMEs. This was later upgraded to "K-OTC" in 2014 (after KONEX was established) for the trading of stocks of all unlisted companies more transparently.
Korea	KONEX (2013)	KRX (Exchange)	71	1,296	Especially for startups and SMEs. Growth in listings from 21 to 71 between 2013-14
India	SME Platform (2012)	BSE (Exchange)	82	1,432	Listed companies on SME platform doubled from 43 to 82 between 2013-14
India	EMERGE (2012)	NSE (Exchange)	6	68	High ease of listing with low costs. Migration to the main board as the company grows
Malaysia	ACE (2009)	Bursa (Exchange)	107	2,765	The Securities Commission Malaysia is also designing the regulatory framework for equity crowd funding (ECF)
Thailand	mai (1998)	SET (Exchange)	109	11,907	The Securities & Exchange Commission and Thai Credit Guarantee Corporation are now exploring guaranteed SME bond products in Thailand
Vietnam	UPcoM (2009)	HNX (Exchange)	169	1,749	This market is a trading venue for unlisted public companies. Although this is not a dedicated SME market, it enables SMEs to raise growth capital without any listing fees.

Source: Asia Monitor 2014. Notes/Highlights from multiple sources.

NEEQ= National Equities Exchange and Quotations, BSE = Bombay Stock Exchange, HNX = Hanoi Stock Exchange, KOFIA = Korea Financial Investment Association, KONEX = Korea New Exchange, KOSDAQ = Korean Securities Dealers Automated Quotations, KRX = Korea Exchange, mai = Market for Alternative Investment, NSE = National Stock Exchange, SET = Stock Exchange of Thailand, SZSE = Shenzhen Stock Exchange.

OTC = over the counter. These are less regulated forms of financial markets.

Exhibit 24: Cross-Country Comparison of SME Finance Policies

Facilities Available	China	Korea	Thailand	Vietnam	Indonesia	Turkey	Sri Lanka	Bangladesh	India	Pakistan
SME Refinancing Facility	1	1	0	0	0	1	1	1	1	1
SME Credit Guarantee Schemes	1	1	1	1	1	1	1	0	1	1
Mandatory SME Lending Requirements	0	1	0	0	1	0	1	0	0	0
Public Credit Bureau (inclusive of SMEs)	1	0	1	1	1	0	0	0	1	0
Secured Transaction Laws	1	0	1	0	0	0	0	0	0	0*
Access to/ Existence of SME-specific Capital Markets	1	1	1	1	1	0	0	0	1	0

Key: 1= exists, 0= does not exist.
**In Pakistan, secured transactions reforms have recently been passed by parliament but no timeline for its implementation has been specified.*
Sources: SME Asia Monitor, OECD/ADB study; State Bank of Pakistan

bureaus as well as credit rating agencies.

3. Central banks have, on occasion, provided SME lending targets to commercial banks or mandated lending to expand SME financing. Governments also incentivize SMEs to attain financing through measures such as public sector led refinance schemes, long-term financing schemes at subsidized rates and soft loans.

A summary overview of policy measures impacting SME financing is given in **Exhibit 24**.

In Pakistan, the SBP is the governing body that introduces regulations for SME financing. The Prudential Regulations of the SBP for SMEs were first introduced in 2003. These regulations were updated first in 2013, and again in May 2016.[69] The regulations lay down the foundation for the functioning of banks where credit to SMEs is concerned. The aim is to create an enabling environment for SME financing. The framework contains the following:

1. Limits for per party exposure to SMEs and limits to clean lending at 5 percent;
2. Cash flow based lending for small enterprises and the use of proxies to evaluate the financial standing of the firm;
3. Guidelines for collateral valuation and maintenance of reserves;
4. Guidelines for categorization and provisioning of loans based on 30, 60, 90 and 180 days;
5. Upper limit to the credit approval process at 30 working days;
6. Among general measures: it encourages banks to maintain grievance and compliant management systems, to set up a MIS that would gather data and generate periodical delinquency reports, to improve delivery channels for program based lending and to boost lending to existing SME depositors by maintaining and mining a database.

The Government of Pakistan (GoP) has also committed to a National Financial Inclusion Strategy (NFIS), which includes the following headline targets for SME financing: by end of 2020, SME credit outreach would increase to 300,000 SMEs; increase the proportion of SME lending to total bank credit to the private sector from 7 percent in 2015 to 15 percent in 2020.

4.3 Credit Guarantee Schemes

Credit Guarantee Schemes (CGSs) are commonly used tools to reduce the supply-demand gap in SME finance.[70] They are known to reduce dependency on collateral to mitigate risks arising from information

[69] "Prudential Regulations for Small & Medium Enterprises Financing" Issued vide IH&SME FD Circular No. 02 of 2016 dated May 06, 2016. SBP. http://www.sbp.org.pk/smefd/circulars/2016/PR_SME_C2_Annex.pdf

[70] There are two approaches to CGS: A regional credit guarantee scheme is developed by licensing local credit guarantee institutions by law. This has been the approach in Indonesia. Then, a centralized credit guarantee scheme is created with sophisticated products like

Exhibit 25: Credit Guarantee Schemes Across Countries

Country	Fund	Coverage	Highlights
Korea	Korea Credit Guarantee Fund (KODIT) Korea Technology Credit Guarantee Fund (KOTEC) Korean Federation of Credit Guarantee Foundations (KOREG)		KODIT provides guarantees to startups that are export oriented. KOTEC provides support to SMEs and venture businesses with competitive technology and innovation. KOREG supports 16 credit guarantee foundations by offering re-guarantees to them. Since its foundation, KOTEC has provided a total of $99.7 billion in guarantees.
Thailand	Thai Credit Guarantee Corporation (2009) and specialized portfolio guarantee schemes	In 2013, an upgrade program was launched where the corporation would offer guarantees to 100% of the payment issued to participating banks under certain conditions*	Thailand's share of guaranteed loans to total SME loans by commercial banks reached 6.1 percent in 2014, 8 times higher than the ratio in 2008 (0.8%).
Vietnam	Credit Guarantee Fund Vietnam Development Bank. In addition, there are 21 local credit guarantee funds operated by provincial authorities and supervised by the Ministry of Finance	Federal: 85% of partial guarantee on the total capital of a project.	The Bank issued guarantee deeds amounting $0.5 billion on which commercial banks offered loans to SMEs in 2014.
Indonesia	Peoples Business Credit (KUR) Guarantee Scheme	70%–80% of the credit. The remaining 20%–30% credit risk is taken by participating banks. Provides WC as well as 5-10 long term loans	KUR is a public guarantee scheme. Country also has central and regional credit guarantee institutions;
India	Credit Guarantee Fund Trust (2000)-Partial Government of India; Small Industrial Development Bank of India (SIDBI)	This trust provides partial credit guarantees to SMEs on loans> 75% of credit	By the end of 2014, over a million accounts amounting $11 billion had been accorded guarantee approvals.
Pakistan	Credit Guarantee Scheme (2011)	40% of the guarantee is taken by SBP	The scheme is supported by DFID under its FIP Program

Source: DFID. SME Asia Finance Monitor 2014 and other multiple sources.

**.That the non performing guarantee does not exceed 16% of the average guarantee outstanding in each portfolio that pools all guaranteed SME loans from the participating bank every year.*

asymmetry and diversify risk across partners. CGSs are known to lead to credit additionality—the extra loans that would not have come about without the scheme.[71] Four out of five countries in Asia have established some form of credit guarantee scheme (see **Exhibit 25**).[72]

Well-designed credit guarantees substitute collateral with credit protection provided by an external guarantor. In such schemes, the lender recovers the value of the loan (or a pre-agreed proportion) through the guarantee in case a borrower defaults. Guarantees are provided against a fee that is either covered by the SME borrower, the lender/the bank or both. They allow for the complete or partial transfer of the credit risk of a loan, which is similar to credit insurance products or credit default swaps.[73]

While they are supposed to replace collateral, in some cases, external guarantees go together with some form of collateral on the same loan. This is important so that the borrower does not have an incentive to default, and in the event a default takes place, banks are sufficiently motivated to pursue

portfolio credit guarantees. This is the most common one.

[71] "Facilitating Access to Finance- Discussion paper on Credit Guarantee Schemes". OECD. Accessed June 6, 2017.http://www.oecd.org/globalrelations/45324327.pdf

[72] "Asia SME Finance Monitor." 2014. Accessed June 6, 2017. https://www.adb.org/sites/default/files/publication/173205/asia-sme-finance-monitor2014.pdf.

[73] "These schemes absorb or share the risks associated to SME lending, and providing funding beyond the collateral limits because the guarantee is in a form of loan collateral. The guarantee manager can also work as an assessor or monitor of the loan. These guarantee funds have a cost paid through the fees charged or subsidized by the government or by any third party institutions".
"Credit Guarantee Schemes for SME lending in Central, Eastern and South-Eastern Europe". Vienna Initiative Working Group on Credit Guarantee Schemes. Nov 2014

recovery efforts. For an effective credit guarantee, appropriate pricing and contractual mechanisms such as caps on the level of collateralization should be used to ensure that guarantees generate additional lending.

Japan is an example of a country that has moved from full credit guarantee schemes to partial guarantees so that all parties—the borrower, lender, and guarantor—share the risk and maintain a sufficient level of due diligence to ensure the repayment of loan.[74]

Different countries have adopted different forms of credit guarantee schemes. Several countries in South and Asia Pacific including India, Indonesia, Vietnam, China, Malaysia and Thailand have established either partially or fully owned public credit guarantee corporations which are separate legal entities.[75]

The SBP launched a CGS for small and rural enterprises in 2010 to help banks develop a portfolio of fresh borrowers that are creditworthy but do not fit within the usual credit parameters of banks, especially where collateral is concerned. The scheme was launched with support from the United Kingdom's Department for International Development (DFID). Under this scheme, the SBP shares 40 percent of credit losses of lending banks on their principal amount of loans. The SBP allocated guarantee limit of PKR 4.83 billion to the banks in 2012 against sanctioned loans of PKR 2.83 billion to 4,371 borrowers representing utilization of around 60 percent.[76]

The CGS utilization for the period ending June 2016 was estimated at 61 percent with 16 participating financial institutions allocated credit exposure limits of PKR 8.40 billion with guarantee coverage of PKR 3.36 billion up to December 2016.[77]

According to a review of the scheme by the SBP, the scheme has been considerably successful in targeting low-end borrowers in the SME and agriculture sectors. The number of agriculture loans are five times more than those for small enterprises so far. The average loan size for the latter is PKR 2.1 million. The loans are both short-term and mid-term (3-5 years). The infection ratio of the guaranteed portfolio is quite low—2.91 percent for agriculture loans and 1 percent for SME loans.

Most of the SME loans went to sole-proprietors with up to 5 employees which suggests that the scheme is *"reaching out to the lower segments of SMEs"*, according to a 2012 SBP report.[78] In terms of geographic distribution, 105 out of 120 districts have been served under the scheme. A review by DFID also found that over the past five to six years since its launch, the CGS has helped grow the flow of funding to the SME sector.[79]

4.4 Secured Transactions Reforms, Credit Database and Credit Ratings

In recognition of the challenges faced by SMEs in arranging for fixed collateral, a number of countries have developed the infrastructure and regulatory space for using moveable assets as collateral. This enables SMEs to leverage their assets into capital and for banks to mitigate risks from information asymmetries.

A number of countries across Asia have drafted and/or approved secured transactions laws that enable the creation of a collateral registry, thereby making movable asset financing possible. Under these laws, "pledgeable assets can typically include machinery/equipment, inventory of final goods, receivables, and intellectual property rights" and can be utilized as collateral for loans.[80]

[74] "Major Challenges Facing Small and Medium-sized Enterprises in Asia and Solutions for mitigating them". Yoshino et al. ADB.

[75] "Asia SME Finance Monitor." 2014. Accessed June 6, 2017. https://www.adb.org/sites/default/files/publication/173205/asia-sme-finance-monitor2014.pdf.

[76] State Bank of Pakistan (SBP). "Quarterly SME Finance Review". June 2016. Accessed June 6, 2017. http://sbp.org.pk/departments/pdf/Q-Review/2016/QSMEF-Jun-2016.pdf

[77] ibid

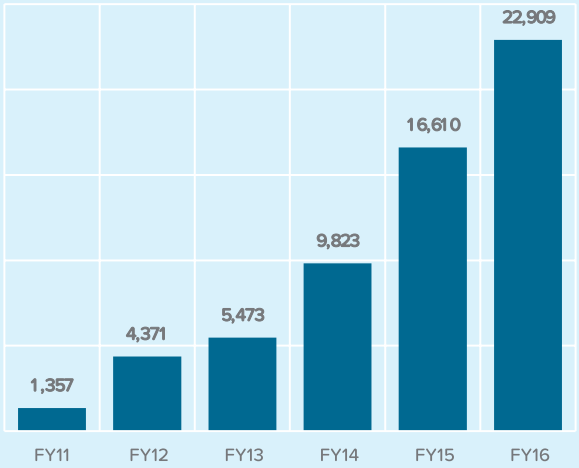
[78] State Bank of Pakistan (SBP). "Development Finance Review 2012". Accessed June 6, 2017. http://www.sbp.org.pk/SME/PDF/DFG/2012/DFG-Dec-12.pdf

[79] Department for International Development (DFID). "Annual Review of the Financial Inclusion Program". October 2016.

[80] "Asia SME Finance Monitor." 2014. Accessed June 6, 2017. https://www.adb.org/sites/default/files/publication/173205/asia-sme-finance-monitor2014.pdf.

- **China:** In China, the secured transactions reform work cumulatively facilitated USD 3.58 trillion accounts receivable financing, of which USD 1.09 trillion went to SMEs. *"As a result of the reform, the total number of commercial loans involving movable assets grew by 21% per year over 2008-2010, versus a flat growth rate over the period 2006-2008"*.[81]
- **Thailand:** In Thailand, in order to mitigate the burden of collateral requirement by banks for SMEs, the government drafted a Business Security Act to expand the range of eligible collateral for loans, including movable assets, as well as to expedite foreclosure processes.
- **Malawi:** In an alternative approach, Malawi is launching a business registration system—different from a collateral registry—with support from the World Bank to facilitate the online registration of businesses, reduce transaction costs and save time for business owners.[82]
- **Japan:** To counter the asymmetry of information, in Japan, a Credit Risk Database (CRD) was established that shows how SMEs can be rated based on financial and non-financial data.[83] This creates an infrastructure for improved credit ratings of SMEs.[84] Based on such data, banks can use these tools to strengthen, decentralize and quicken their credit assessment process to determine the credit worthiness of SMEs and lend accordingly[85] This database can also reduce information asymmetry between SMEs and lenders.
- **Bangladesh:** A similar example can be taken from Bangladesh where the Central Bank of Bangladesh has given recognition to a specialized credit rating agency for SMEs called Bangladesh Rating Agency Limited (BDRAL) and laid out the guidelines and methodology for credit ratings of SMEs in particular.[86] This enables banks to evaluate SMEs and their credit worthiness, allowing them to lend to smaller businesses.

Exhibit 26: Number of SME Borrowers in the Pakistan Credit Guarantee Scheme



Source: DFID

The National Assembly of Pakistan recently signed off on the Financial Institutions (Secured Transactions) Act 2016.[87] This Act has an important clause on the electronic registration of moveable assets under Secured Transactions Registry which is to be established at the federal level.

The Credit Information Bureau (CIB) was set up in 1992 to gather, organize and disseminate *"critical information relating to credit-worthiness of borrowers to assist financial institutions in their*

[81] "Secured Transactions and Collateral Registries". World Bank. Accessed June 6, 2017. http://www.worldbank.org/en/topic/financialsector/brief/collateral-registries

[82] "New Online Collateral Registry System Facilitates Increased Access to Business Loans in Malawi". World Bank. Accessed June 6, 2017. http://www.worldbank.org/en/news/feature/2016/02/04/new-online-collateral-registry-system-facilitates-increased-access-to-business-loans-in-malawi

[83] "There are various methods for performing credit rating analysis using data on SMEs. A comprehensive credit rating method developed by Yoshino and Taghizadeh-Hesary employed statistical analysis techniques on various financial variables of a group of SME customers of an Iranian bank. The analysis classified SMEs into several groups: financially healthy SMEs, medium-risk SMEs, and financially risky SMEs". "Major Challenges Facing Small and Medium-sized Enterprises in Asia and Solutions for Mitigating Them". Yoshino et al. Asian Development Bank.

[84] ibid

[85] ibid

[86] According to their website, "SME Credit Rating is a comprehensive and independent third-party evaluation of the SME. It takes into account the financial position and several qualitative parameters of the SME that have a bearing on the creditworthiness of the entity. It conveys the probability of the subjects' ability to pay back a loan or obligation to the lender or the investor". http://www.bdral.com/about-us/what-is-sme-credit-rating/index.html

[87] Financial Institutions (Secured Transactions) Act 2016. http://www.na.gov.pk/uploads/documents/1458284163_633.pdf

BOX E: ADB Recommendations on SME Lending

As per an ADB Study: *"For SMEs in the financially healthy group, banks can lend them more money by charging low rates of interest with no required collateral. On the other hand, for SMEs in the high-risk group, banks can charge higher rates of interest with greater collateral requirements. If an SME's performance improves and it moves into a lower risk group, banks can change their interest rates from high to low, accordingly. When data are not well established, banks lend money to SMEs based on their intuition rather than examining solid data. The establishment of SME databases will reduce information asymmetry between SMEs and lenders."*

lending decisions and averting the occurrence of default".[88] Later this facility was automated and is now online. This bureau captures information on smaller borrowers as well, and currently maintains records for over 4 million borrowers. The e-CIB, as it has come to be called, also expanded its reach by removing the floor of PKR 500,000 loan size borrowers and now incorporates all loan sizes to encompass SMEs and agriculture borrowers.

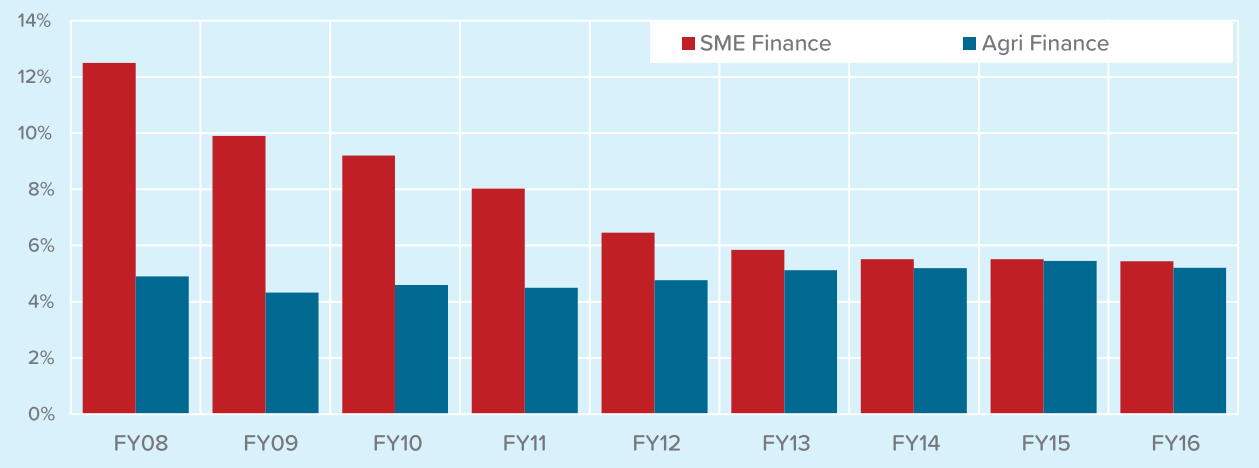
Moreover, the Private Credit Bureaus Act of 2015 now allows private companies to attain licenses from the SBP and operate as independent credit bureaus. Three private credit bureaus now operate in Pakistan and if they can expand their scope of work to a larger section of SME borrowers, it could substantially enhance lending to SMEs and increase their financial inclusion.[89]

4.5 Mandatory Lending and Targets

Setting lending targets, including mandatory ones, is another tool used by central banks.

- **Indonesia:** The Central Bank in Indonesia issued a regulation requiring banks to disburse 20 percent of all loans to SMEs by 2018.
- **India:** The Reserve Bank of India sets annual credit targets for lending to SMEs and claims that this has resulted in 20 percent annual growth in SME credit.
- **Bangladesh:** The Bangladesh Bank annually sets and monitors the target loan amount to SMEs for bank and NBFIs. Reportedly, banks and NBFIs in Bangladesh have outperformed, disbursing more loans than the annual targets.
- **Korea:** The Central Bank mandates banks to

Exhibit 27: SME Financing vs Agriculture Financing



Source: SBP

[88] Credit Information Bureau. SBP. http://www.sbp.org.pk/ecib/about.htm

[89] Datacheck, News-VIS CIB and ICIL/PakBizInfo

disburse a fixed proportion of their total loans to SMEs. For commercial banks, the ratio is more than 45 percent; over 60 percent for provincial banks; and over 35 percent for domestic branches of foreign banks. Banks that do not achieve these targets are penalized by having 50 percent of their unachieved target deducted from their aggregate credit ceiling.

- **Thailand:** There are no mandatory targets but the country strategy outlines a growth target for SME financing as a proportion of GDP—recently increasing it from 37 to 40 percent of GDP.

In 2004, SME lending in Pakistan exceeded banking advances to agriculture (7.3%) and consumer loans (6.9%). Sector's NPLs were also lower than those reported for agriculture.[90] Starting in 2008, the SME portfolio started to decline, while agriculture remained largely constant (see **Exhibit 27**). This may be attributed to the SBP setting annual agriculture credit targets for banks. In recognition of this pattern, the SBP has also started setting targets for SME lending.

However, one important aspect to note is that the SBP no longer sets mandatory lending requirements, (only targets) for banks.

4.6 Other Interventions

There are several other interventions focused on improving access to finance for SMEs in Pakistan. They are summarized below in **Exhibit 28**.

Exhibit 28: SME Programs in Pakistan

Program	Donor and Partner	Agenda of Program	Target Recipients	Duration	Funds (million
Financial Inclusion Program (FIP)	DFID, SBP	To improve access to finance via four main components: (i). Microfinance Credit Guarantee Facility (MCGF); (ii). Institutional Strengthening Fund (ISF); (iii). Financial Innovation Challenge Fund (FICF); (iv). SME Credit Guarantee Fund; (v). Technical Assistance (TA)	Microfinance Banks, Commercial Banks, FIs, Regulatory Bodies (SBP and SECP)	2008-2020	£50
Financial Market Development Project (FMD) implemented by PRAGMA Corp	USAID, SECP	To provide targeted institutional support for SME access to finance. The goal of this is to help expand sound SME lending through innovative lending product design, and related further enhancement of SME financial outreach procedures/practices. FMD will also support (where/as needed) regulatory and institutional reforms which streamline the establishment and operation of SME Equity Funds, and promote additional capital in-flows into the nascent SME equity fund industry in Pakistan.	MFIs, SMEs	2016-2021	
Development Credit Authority		Partner with banks to increase outreach of SME finance and increase utilization of the DCA partial guarantee extended to its partner banks.	Khushhali Microfinance Bank (KMBL) and other banks		$5
Small and Medium Enterprises Activity (SMEA) implemented by Chemonics	USAID	Improving the financial and operational performance of SMEs in Pakistan in select high-performing industrial, manufacturing and services sectors.	SMEs	2017-2022	$35
Pakistan Private Investment Initiative (PPII)	USAID, Abraaj Group, Indus Basin Holding, JS Private Equity Management	To provide equity capital to SMEs in partnership with local private equity firms.	SMEs		$100
Corporate Vendor & Distributor Finance Program	Karandaaz Pakistan, Meezan Bank, ORIX Leasing	To provide financial access to SMEs vendors in the country using the anchor-agent model*	SMEs	2014-2024	$90

[90] State Bank of Pakistan (SBP). "Development Finance Review." Accessed June 6, 2017. http://www.sbp.org.pk/SME/DFG.htm

Box F: Anchor Agent Model

The anchor-agent model has been used in many parts of the world to overcome challenges of information asymmetry, limited documentation and collateral. In this model, small suppliers and/or distributors (agents) within a supply chain are financed based on their agreements and relationships with a larger corporate (anchor). Banks receive visibility on the cash flows the suppliers/distributors by evaluating the smaller enterprises' receivables from the corporate and provide financing accordingly. This lending is without any hypothecation, or collateral.

In most instances, the financial institution enters into an agreement with the corporate, asserting first right of payment for receivables and services in case the smaller entity defaults on the loan. Sometimes, the anchor also agrees to cancel the relationship with its supplier or distributor in case of default.

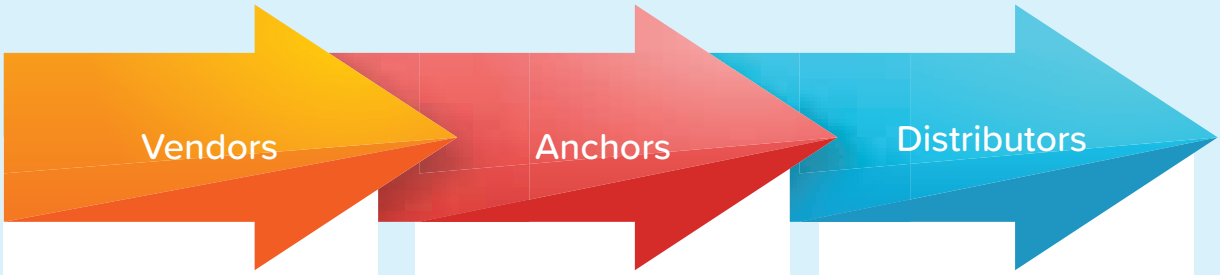
Karandaaz Pakistan has developed a supply chain financing model that leverages the information and influence of the corporate sector to bridge the documentation and collateral gap faced by small enterprises. Under this program, partner corporates direct partner financial institutions to strategic vendors and distributors, and assist in validating and ring fencing cash flows and penalizing delinquent vendors. Partner financial institutions leverage the risk capital provided by Karandaaz by a factor of 3 or 4 and manage loan origination, underwriting, and servicing. Facilities signed with Meezan Bank Limited and ORIX Leasing Pakistan make USD 90 million available in financing to creditworthy SME suppliers and distributors. For partner corporates, the program offers an opportunity to direct term and working capital credit to strategic vendors and distributors without assuming any credit or balance sheet risk or liability. This is similar to a stock supply agreement where the bank provides financing to SMEs while the corporate's payments to SMEs for services rendered or goods supplied are routed through the bank to discourage default.

The challenge Karandaaz is facing is in onboarding corporates into the framework agreement. Big companies are not only reluctant to disrupt their existing relationships with SMEs but also extend credit themselves. A potential solution is to focus on industries poised for growth in local and international markets.

Potential sectors where this model can be applied:

- The motorcycle industry would be most effective as there is a wide network of motorcycle vendors, distributors and dealers. The localization in the sector is also much higher compared to the Original Equipment Manufacturers (OEM). The players are small but run a steady competitive business. The informality in the segment amid lack of collateral is impeding banks to design products for motor cycle value chain players.

Exhibit E1: Anchor-Agent Model



- The vendors are mostly small enterprises that lack documentation and collateral.
- Bill discounting/receivable financing is the most viable product for this segment. It can cover risk by receiving payment directly from anchor.
- Once the bank develops a business history with vendors, they provide Balancing, Modernization and Replacement (BMR) facility along with fixed investment loans. There is an unutilized subsidized BMR lending facility by SBP that banks can use in this instance.

- Achor should be a well reputed corporate player such as Atlas Honda, Pak Fans, and Nestle

- The distributors, dealers and sub-dealers buy products from the anchor either on credit at higher price or in cash at a discounted price. Banks can finance them against the product purchase.
- The cash flows of SMEs in the segment are easy to trace based on their relationship with the anchor.

- Other sectors where the anchor agent model can be applied include: the fan industry in Gujranwala and Gujrat; and the shoe industry, electronic goods industry, washing machines and looming sector in Faisalabad. There are a handful of big players, including multinationals that can work as anchors. Most of their products are manufactured locally using local parts supplied by an established vendor network.
- Another interesting application of the model can be dairy suppliers from whom Nestle, Engro Foods and other big players collect milk. With some exceptions, the majority is small, with less than 100 animals in the herd. Products can be designed for procuring animals, and installing chillers and other equipment to enhance yield of animals against receivables. Once banks have confidence in clients, they can provide BMR and expansion financing.
- Developing distributor markets for importers: Products like TVs and mobiles phones are all imported as finished products with a handful of small authorized distributors for companies like Samsung and LG. There are also sub-distributors and dealers in the industry that can be financed against pledged stocks. The pharmaceutical sector is another industry that has many local and foreign companies such as Merck, Pfizer, Wyeth and Brookes. This industry does not have a market for vendors but holds potential on the distributor side.

5. Recommendations

5.1 Institutionally Structured Credit Guarantee Initiative

The existing CGSs offered by the State Bank of Pakistan (SBP) under the DFID-funded FIP have proved successful in attracting a considerable number of borrowers and engaging several microfinance and commercial banks. Since the current scheme is time bound and limited in nature, it would be advisable to convert it into an institutional structure for continuity and expansion of financing in the SME sector.

5.2 Collateral Registry, Credit Bureaus and Credit Rating Agencies for SMEs

While secured transactions reforms have been approved by Parliament in 2016, they need to be fully implemented. As a start, a database or a national collateral registry of movable assets ought to be built to mitigate the risk associated with SMEs.

While the existing Credit Information Bureau (CIB) of the SBP maintains a database of all individuals and businesses including SMEs applying for loans, there is a great need to expand the credit information services offered in the country. There are already three private credit bureaus—Datacheck, News-VIS CIB and ICIL/PakBizInfo—that have the potential to provide value added services, the scope needs to be expanded, in order to enable creditors to obtain comprehensive information on borrowers, especially SMEs that are considered risky lending prospects. This data can potentially be in the form of financial and non-financial information, including credit reputation, debt servicing and bill payments.

Moreover, among SMEs, especially the SE segment, documentation is weak and financial reports are not reliable. This makes the due diligence process for banks costly and time consuming. For this reasons, SME based rating agencies should be established, initially with the support of the Government and multilateral donor agencies. These rating agencies can even take the form of a public-private partnership.

5.3 Enhanced Product Innovation

Possibly the most overlooked issue in SME financing is that banks end up replicating products for SMEs without devoting time and effort in designing products unique to the needs and requirements of SMEs. There is a need to study sector and segment specific requirements and map them to identify opportunities for tailored products. Product prototypes may be piloted with assistance from multi- and bi-lateral agencies and support institutions.

Secondly, it is important to realize that SMEs require different and unique credit methodologies. Banks have to build a mechanism to engage with the borrower and detect loan payment problems for faster recovery. Thirdly, the speed with which loans are granted is crucial. For smaller clients, banks should have mechanisms that shorten the decision time down to a number of days, leveraging technology where possible.

Lastly, supply chain models like the Anchor-Agent model can be effective where established players with strong banking relationships work as anchors to help provide lending to their vendors and distributors. The risk is low because if the agents default on their payments to the bank, they risk losing their relationship with the anchor.

5.4 Vendor Development Programs by Corporate Sector

Another variant of the supply chain programme is an example from the private sector. A number of original equipment manufacturers (OEMs) in the automobile industry have adopted a model where when they venture into new product development, vendors are advised on the technical and technological fronts. OEMs also assist the vendor in upgrading their technology and training their work force. Under their arrangement the cost of supply and training is recovered within the billing arrangement; deductions are made over a period of time. This arrangement works only when the vendor is the sole supplier to these OEMs. Vendor development programmes are currently undertaken by both Honda and Toyota in Pakistan. For OEMs, the advantage is that they have a secure supplier at the right costs and quality, instead of importing equipment and parts. This model can be replicated across other sectors and clusters.

5.5 Awareness, Training and Knowledge Sharing

More on-ground training and awareness workshops are needed on schemes and financing facilities that are available, along with long term benefits of documentation and access to formal banking channels. These are especially necessary for SMEs that are less organized and do not have a representative association. SMEDA can play an important role in helping SMEs becoming more organized by forming associations to remain informed, securing bank financing and collectively lobby policymakers.

Annexures

A1. Consultative Meetings

Organization	Name	Designation/ Stream
State Bank of Pakistan	Imran Ahmed	Additional Director, SME Cell
Bank Alfalah Limited	Shahid Malik	Head of SME
Bank of Punjab	Tahir Masood Chishti	Head of SME
Silk Bank	Mansoor Mukhtar	Head of SME
Sialkot Chamber	Majid Raza Bhutta	President Sialkot Chamber of Commerce
Sialkot Chamber	M Ejaz Ghauree	Senior VP, Pakistan Sports Goods Manufacturing & Exporters Association; MD Raiz trading company
Sialkot Chamber	M Younis	Chairman Pakistan Gloves Manufacturer & Exporters Association
Sialkot Chamber	M Imran Akbar	VP Sialkot Chamber of Commerce - MTL instruments
Sialkot Chamber	Ijaz Khokar	PRGMEA Chairman, Ashraf Industries, Sports Wear exports
SMEDA	Farah Yasir	Deputy General Manager - B&SDS
SMEDA	Nadia Jahangir Seth	Deputy General Manager - Policy & Planning
SMEDA	Raja Hassanien Javed	Provincial Chief Punjab
SMEDA	Ashfaq Ahmed	Deputy General Manager - Industry Support Cell
SMEDA	Chaudhry Ahmed Mansoor	Deputy General Manager - Outreach
Pakistan Microfinance Network	Ali Basharat	Financial Analyst
Karandaaz Pakistan	Ali Janjua	Principal Credit

A2. Definitions of SMEs in Pakistan

	Small Enterprise	Medium Enterprise
SME Bank	Total assets of PKR 20 M	Total assets of PKR 100 M
Federal Board of Revenue (FBR)	Less than 10 employees	N/A
Punjab Small Industries Corporation	Fixed investment. Up to PKR 20 M excluding land and building.	N/A
Punjab Industries Department	Fixed assets of PKR 10 M excluding cost of land	
Sindh Industries Department	Equity engaged in handicraft or consumer and producer goods worth PKR 10 M	Number of employees not more than 250 (manufacturing) or 50 persons (services).
State Bank of Pakistan (SBP)	Number of employees: up to 50	Number of employees: 51-250 for (manufacturing/ services). Number of employees: 51-100 for (trading). Annual Turnover: above PKR 150 M and up to PKR 800 M
SMEDA	Number of employees: up to 250. Turnover: Up to PKR 250 M	
International Finance Corporation (IFC)	No. of Employees: 10 to 50 Total Assets: USD 100,000 to USD 3 M Total Annual Sales: USD 100,000 to USD 3 M	No. of Employees: 50 to 300 Total Assets: USD 3 M to USD 15 M Total Annual Sales: USD 3 M to USD 15 M
Source: SMEDA. IFC. SBP		

A3. International Best Practice Examples

Country	Program/ Instrument	Highlights	Leading Organization
Korea	Aggregate credit ceiling, and mandatory minimum SME loan ratio system.	Former sets a limited amount of short terms funds at a lower interest rate than the market for financial institutions with a positive SME loan record.	State-owned Specialized Bank
Vietnam	Zero rated loans to tech oriented projects	The foundation also provides credit guarantees for SME projects in energy efficiency.	National Foundation for Science and Technology
Sri Lanka	SME Bank Centers	These are formed to provide advisory services to SMEs, and assist in harnessing business skills. Three major banks in SL have formed 24 centers	Commercial Banks Bank of Ceylon, People's Bank, and Regional Development Bank
Bangladesh	Provides secured and collateral free loans	BRAC is a specialized bank for SMEs licensed by the Central Bank, and has set up a network of 572 customer touch points to increase its access to customers. It is the largest provider of SME loans in Bangladesh (6%)	BRAC Bank
Bangladesh	Collateral free SME loans	Loans at below 10% to target and predefined micro and SME segments in the manufacturing sector and services sector	SME Foundation (SMEF)
Bangladesh	Private investment into SMEs	SEAF in partnership with IFC provided structured capital of less than $500,000 per investment to SMEs in Bangladesh	-

Source: SME Asia Finance Monitor 2014, SEAF web portal.

SEAF=Small Enterprise Assistance Funds

A4. Cross-Country Role of SME Development Funds

The Role of SME Development Funds Across Countries						
	Malaysia	Korea	Bangladesh	Turkey	India	Pakistan
	SME Corp	SMBA	SMEF	KOSGEB	MSME	SMEDA
Provision of information on aspects of doing business	1	1	1	1	1	1
SME Policy Interventions	1	1	1	1	1	1
Business Development Services	1	1	1	1	1	1
Financing Schemes (For Start-ups and Running Businesses)	1	0	1	1	1	0
Partial Subsidizing of Credit Interest Rates/ Credit Guarantees	1	1		1	1	0
Facilitation in Access to Financing	1	1	1	1	1	0

Key: 1= yes, 0- no.

Source: SMEDA.

SMEDA= Small and Medium Enterprise Development Authority. SMEF= SME Foundation. SMBA= Small and Medium Business Corporation. MSME= Ministry of Micro, Small & Medium Enterprises

Authors:

Ali Khizar Aslam is a senior columnist with over fifteen years of experience in economic, financial and business research analysis and communication. He established the economic and business research department at Business Recorder, the country's leading financial news daily. Ali also engages with leading organizations in the development sector and with multinational entities in the corporate sector in the capacity of independent consultant and advisor. Ali has a MSc. in Economics from LUMS, and BSc in Civil Engineering from UET, Lahore.

Huma Sattar is an economic researcher and analyst. Aside from a range of consulting work, Huma works with the Business Recorder's research wing, covering micro and macro level issues pertaining to businesses and industries. Her research interests include socioeconomic development, free markets and public policy.

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Karandaaz Pakistan, a Section 42 company established in August 2014, promotes access to finance for small businesses through a commercially directed investment platform, and financial inclusion for individuals by employing technology enabled digital solutions. The Company has financial and institutional support from leading international development finance institutions; principally the United Kingdom's Department for International Development (DFID) and the Bill & Melinda Gates Foundation (BMGF).

The Company has four verticals:

- **Karandaaz Capital** provides wholesale structured credit and equity-linked direct growth capital investments in micro, small and mid-size enterprises (MSMEs) with compelling prospects for sustainable growth and employment generation in Pakistan
- **Karandaaz Digital** focuses on expanding the poor's access to digital financial services in Pakistan by working across the ecosystem with all stakeholders including regulators, policy-makers, government departments, businesses and researchers and academics with activities arranged in four key work areas– Policy and Regulation, Seeding Innovation, Experimentation and Solutions Development, and Scale and Outreach.
- **Karandaaz Innovation** manages the Innovation Challenge Fund, providing risk capital and grants to partners with an aim to generate innovative solutions to complex problems in areas of financial inclusion and entrepreneurship.
- **Knowledge Management and Communications** supports the company's core financial inclusion goal by developing and disseminating evidence based insights and solutions to influence markets and the financial ecosystem.

Tel: (051) 8449761 | Email: info@karandaaz.com.pk

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