

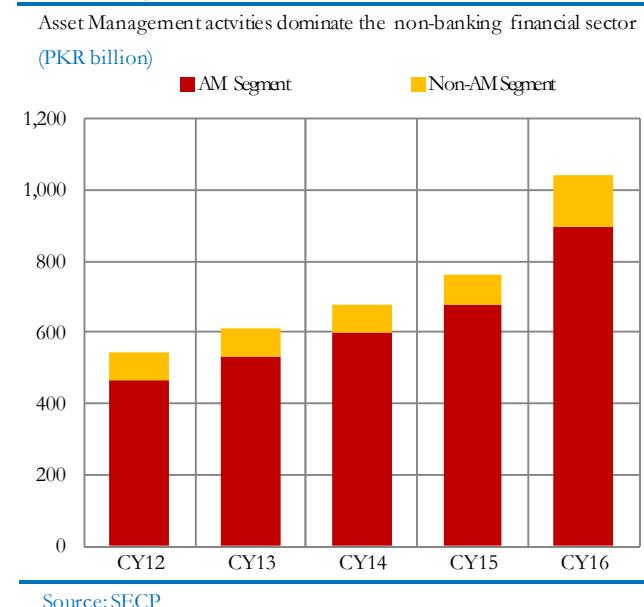
3.5 Risks to the Non-Banking Financial Institutions

The country's non-bank sector is evolving, both in terms of structural complexity and size, supported by an adequate regulatory framework to safeguard against risks to the stability of the financial system. Within the sector, increasing share of equity funds is spurring growth as the stock market continues to offer significantly higher returns to investors. Rapid expansion of the discretionary/non-discretionary portfolio signals active wealth management intent of private investors who may in their "search for yield" also turn to the stock market. Inclusion of Non-Bank Microfinance Companies' (NBMFCs) segment within SECP's domain last year has resulted in increasing the sector's asset base to over a trillion rupees. The significance of the sector's activities in the country's financial landscape is growing; realization of its full potential, though, depends upon both the demand factors (such as, financial literacy, investor confidence, technology adoption etc.) as well as the supply aspects (such as, product diversification, ease of access, taxation etc.). Moreover, operationalization of recently licensed big-ticket businesses i.e. three REIT Management Companies (RMCs) and two Private Equity and Venture Capital firms and documentation of resources and activities of NBMFCs could provide added boost.

The NBFI's¹¹⁹ sector constitutes a diverse set of financial intermediaries; some offering predominantly market based products (Asset Management activities¹²⁰-AM) while others involved in traditional financing products for businesses and individuals (Non-Asset Management activities¹²¹- Non-AM). The non-bank players with an asset base of 6.59 percent of that of the banking sector assets in CY16 have improved their comparative position from 5.38 percent in CY15. The NBFI posted a 37.05 percent increase in the asset base during the

year backed by growth in both AM and Non-AM activities (**Table 3.5.1**).

Figure 3.5.1
Sector Composition



¹¹⁹ NBFI's for our analysis purpose include NBFCs, REITs and Modaraba Companies. As per section 282A of Companies Ordinance, 1984, Non-banking finance companies (NBFCs) include companies licensed by the Commission to carry out any one or more of the following forms of business, namely Investment Finance Services, Leasing, Housing Finance Services, Venture Capital Investment, Discounting Services, Investment Advisory Services, Asset Management Services and any other form of business which the Federal Government may by notification in the official Gazette specify from time to time. Non-Bank Microfinance Companies are also included in NBFCs.

¹²⁰ Asset Management activities include: Asset Management Companies (AMCs), Investment Advisors (IAs), Real Estate Investment Trusts (REITs), Mutual /Pension Funds, discretionary / non-discretionary portfolio (Discretionary Portfolio is a portfolio wherein investment decisions rest with the Investment Advisor on behalf of its client. Under a Non-Discretionary Portfolio, investment decisions are made as per the written instructions of the clients.)

¹²¹ Non-Asset Management activities include: Leasing, Modarabas, IFCs and NBMFCs

AM activities have long dominated and driven the growth of the non-bank financial sector in Pakistan with an average share of 87.22 percent in total NBFI's assets over the last five years (**Figure 3.5.1**). Internationally, such growth has been synonymous to the shifting of the function of financial

intermediation towards less/unregulated space but this has not been the case for Pakistan. The sector has adequate regulatory framework, developed and implemented by SECP that addresses structural vulnerabilities associated with asset management activities making the growth desirable as a diversified source of credit supply and as a support to financial inclusion and real economic activity.

Contrasting the trend, the Non-AM segment -driven by the inclusion of NBMFCs- registered growth of 73.46 percent outpacing the 32.46 percent growth of the AM segment in CY16. Inclusion of the PKR 50 billion NBMFC segment made the non-bank sector hold an asset base of PKR 1.04 trillion¹²² in CY16 (**Table 3.5.1**).

Table 3.5.1

Asset Profile of NBFI

	CY12	CY13	CY14	CY15	CY16
PKR billion					
Asset Management (AM) Segment					
AMCs/IAs	42.7	42.2	31.0	31.3	39.0
Mutual Funds	367.4	417.8	477.6	495.5	653.6
Pension Funds	3.5	6.0	10.4	15.7	22.9
Portfolios	50.6	66.9	81.8	108.8	139.8
REITS	-	-	-	24.5	39.8
Non-Asset Management (Non-AM) Segment					
Leasing companies	33.4	35.0	38.3	41.6	44.1
Modarabas	29.8	30.7	30.2	33.7	40.6
Investment Finance Companies	13.9	11.3	10.7	9.9	12.8
Non-bank Micro Finance Companies	-	-	-	-	50.2
Total Assets	541.2	610.0	680.2	760.9	1,042.8

Source: SECP

¹²² The asset figure excludes one public sector IFC with a PKR 60 billion paid-up-capital. The IFC was licensed in 2007 but is not yet operational. SECP has started reflecting the capital of the entity in NBFI assets from CY16.

Despite the growth and wide regulatory scope which allows creation of more complex structures¹²³, the NBFI sector is constrained by simpler business models. Even with its tremendous growth of 92.68 percent registered from CY12 to CY16, the share of the sector still remains small at 4.84 percent of the total financial system and represents only 3.52 percent¹²⁴ of GDP.

Liquidity risk remains paramount for NBFI amid concentration risk

A few relatively larger institutions are dominant in the non-AM. Further, AM segment is characterized by absence of relatively riskier business models which implies lower market depth. This is evident from the fact that Hedge Funds are non-existent, two Private Equity and Venture Capital Entities have been licensed in CY16, and among the licensed REIT Management Companies only one has a product offering.

Figure 3.5.2

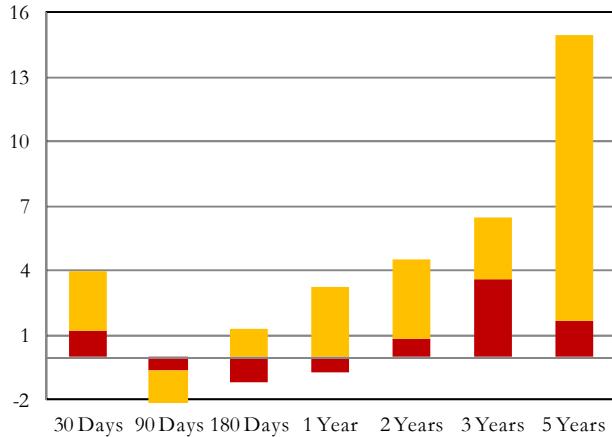
Maturity Mismatch of the Single Group in Non-AM segment

Risks from maturity mismatches in the nearest maturity bucket

(PKR billion)

■ Largest Group Asset-Liability Maturity Gap

■ Other Companies Asset-Liability Maturity Gap



Source: SECP

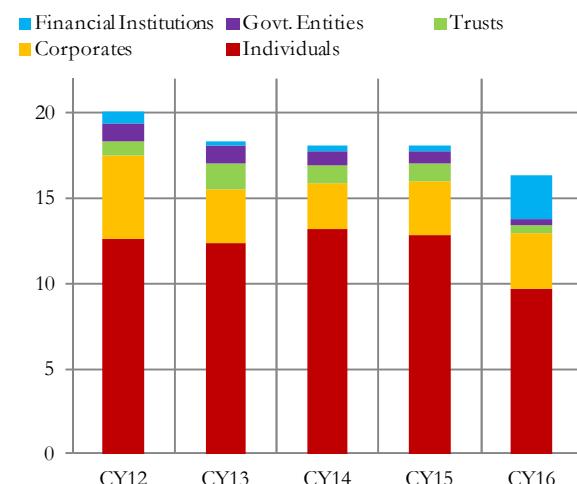
¹²³ Private Equity and Venture Capital, Hedge Funds, Discount Houses, House Finance Services.

¹²⁴ See Overview of FSR 2016

Concentration in large groups may be risky for the NBFI sector which lacks contingency liquidity support in the form of the “Lender of Last Resort”; a fall-back cushion in times of stress. Also, maturity mismatches in assets/liabilities of these large institutions may create stress in the segment (**Figure 3.5.2**). Currently, larger groups are financially strong and have adequate credit lines to provide safeguard against liquidity stress. However going forward, more companies and business models should be incentivized to open up in this segment to dilute the risks from concentration. Inclusion of the non-bank microfinance category may diversify away concentration of the segment’s activities in leasing business.

Figure 3.5.3
Individuals dominate Deposits

Deposits composition of Leasing companies, Modarabas and IFCs only
(PKR billion)



Source: SECP

The NBFI sector has been successful in mobilizing PKR 16 billion in deposits in CY16 held by 5 IFCs, 3 leasing Companies and 6 Modarabas. About 59 percent of these deposits belong to individuals (**Figure 3.5.3**). The lack of deposit protection mechanism in case of failure of any of these institutions may pose systemic risk for deposit raising NBFCs. As discussed in Box A, Deposit

Protection Corporation (DPC) Act, 2016 provides for coverage of deposit banking companies and member financial institutions.¹²⁵ Once operationalized, DPC may facilitate in resolution and deposit protection of financial institutions in addition to banking companies.

...minimal stake of the AMCs in the funds and prudential limits dampen structural vulnerabilities associated with the AMC structure.....

Traditionally, capital buffers are taken to be the primary fall-back cushion for entities in times of distress. But unlike banks which act as principals using their balance sheet in their transactions with the clients, asset management activity is merely an agency function. This feature may be stabilizing because the distress of the AMC does not extend to the distress for the funds. However, it may drive excessive risk-taking on part of the fund managers as they strive to increase the assets under management for increasing their asset management fee.

As of end December-2016, the 22 AMCs/IAs¹²⁶ have investment funds of PKR 816.25 billion (Mutual funds, Pension funds and discretionary/non-discretionary portfolio) under management with their own balance sheet footing that is only 4.8 percent of the fund assets (PKR 39 billion as of December-2016). The AMCs/IAs’ stake in the total Assets under Management (AUMs) is only 3 percent (**Figure 3.5.4**).

Although for the services industry it is desirable to have low entry barriers of in the form of capital, in the case of mutual funds industry, with few new entrants, increase in the flotation of funds overtime has given rise to concentration of funds floated by

¹²⁵ “Enactment of Laws”, BPRD Circular Letter No.33 dated October 21, 2016, <http://www.sbp.org.pk/bprd/2016/CL33.htm>

¹²⁶ There are 20 AMCs and 2 full fledge IAs while 16 of the AMCs have also obtained IA license.

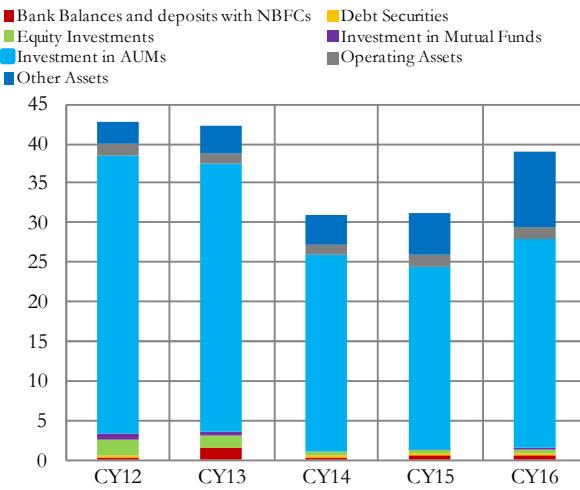
AMCs. While in CY12, none of the 25 AMCs floated more than 15 funds; in CY16 out of the 20 AMCs, six floated 15 or more funds. Three of the AMCs account for 33 percent of the active 200 funds in CY16. In view of this concentration, permissible criteria¹²⁷ for floatation of additional funds (in excess of three funds) which has been linked to minimum rating /track record of the AMC/fund may also be linked with capital. This may serve as an additional safeguard and provide a backstop buffer for AMCs that are floating funds more than the specified threshold.

Figure 3.5.4

Investments in AUMs by AMCs /IAs

AMC/IAs Asset Composition

(PKR billion)



Source: SECP

Leveraged investment funds are susceptible to runs as leverage in stressed events may amplify losses. To contain this risk, AMCs have been allowed to borrow only to meet the required liquidity for redemptions. Such borrowing has been limited to fifteen per cent of the total net asset value of the fund for a maximum of 90 days. Further,

¹²⁷Para 37(5) of Non Banking Finance Companies and Notified Entities Regulations, 2008,
<https://www.secp.gov.pk/document/non-banking-finance-companies-and-notified-entities-regulations-2008/>

amortization of the liability has been made a priority by requiring utilization of the net cash flows during interim period for repayment of borrowing.

Caps on funds' exposure to single entity, sector exposure limits and specification of the types of investments further extends resilience to concentrated/ large exposures. Since the daily redemptions of open-end investment fund do not align with illiquid investments, the regulations further disallow investments in real estate.

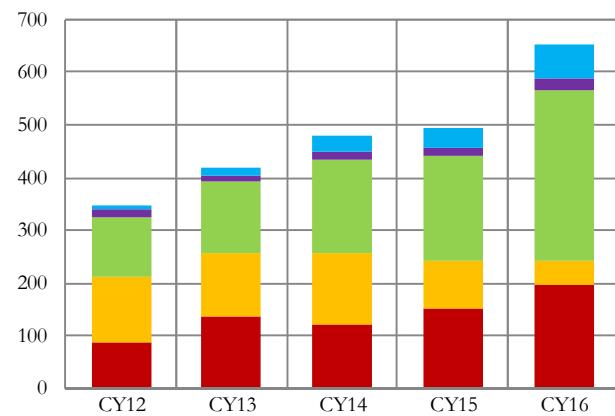
Figure 3.5.5

Liquid assets account for thirty percent of funds investments

Investment portfolio of funds

(PKR billion)

Bank Bal/Place/Depo with FIs	Government Securities
Equity Securities	Debt securities
Other Assets	



Source: SECP

Liquidity remains the primary risk for the mutual funds

Open-end funds account for more than 96 percent of the total AUMs of the mutual fund industry. Primary risk of open-end funds remains their ready-cash position. In market stress situations large-scale redemptions may be triggers which require immediate generation of liquidity. To limit such severity, the Non Banking Finance Companies and Notified Entities Regulations, 2008 have placed various limits of AMCs. For example an AMC must meet the redemption request within 6 days, suspension of redemptions is allowed under SECP

orders for up to 15 days initially, and cap on investments in unlisted securities have been adopted.

As of end December-2016, 30 percent of the all mutual/ pension fund assets are available as liquidity buffers¹²⁸ (**Figure 3.5.5**).

On the fund categories level, review of available liquidity buffers reveals lesser buffers on an average with the equity category of funds (6.35 percent of total assets)¹²⁹ and more with the income and money market funds (in excess of 50 percent of total assets). The excess liquidity with the income and money market funds is in view of their current net redemptions status while the lesser ready cash buffers with the equity funds are understandable considering the opportunity cost associated with idle cash (and equivalents). But, less liquidity may also mean selling-outs of investments in securities to generate liquidity which may threaten market valuations if it coincides with sell-outs from other participants. To contain this risk, special redemption reserves may be created by the industry to provide liquidity in any adverse event.

Activity from sales and redemptions of units possibly driving valuation effects which dominate YoY growth of equity funds AUMs

Redemptions have far exceeded the available cash of the mutual funds. Given the insufficient ready cash balances and in case of income and money market categories where redemptions further exceed the total assets invested in these categories (**Figure 3.5.6a**), related liquidity seems to have been

¹²⁸ Liquidity buffers for this analysis means balances with banks and NBFCs' placements with Financial Institutions which represents cash pools that can be tapped into without liquidating any investments.

¹²⁹ As per Direction No. 07 of 2017, all equity funds and funds of funds are required to maintain 5 percent of net assets in cash & near cash instruments and committed credit lines equal to 10 percent of each fund are required to be arranged by AMCs of each fund; thereby, creating the liquidity buffer of 15 percent of net assets of these funds.

generated from the sale of units. While this cycle of sales feeding redemptions is currently working smoothly (the industry generated net inflows of PKR 45 billion in CY16) as long as there are inflows whether fresh or reinvestments, any unmatched outflows may cause problems for the funds.

Figure 3.5.6a

Excessive trading activity may be driving security valuations

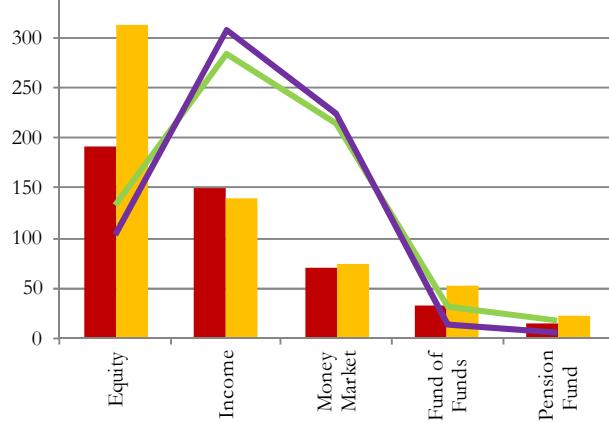
Fund-wise AUMs and trading activity

(PKR Billion)

AUMs-CY15

Sales-CY16

Redemptions-CY16



Source: SECP & MUFAP

Figure 3.5.6b

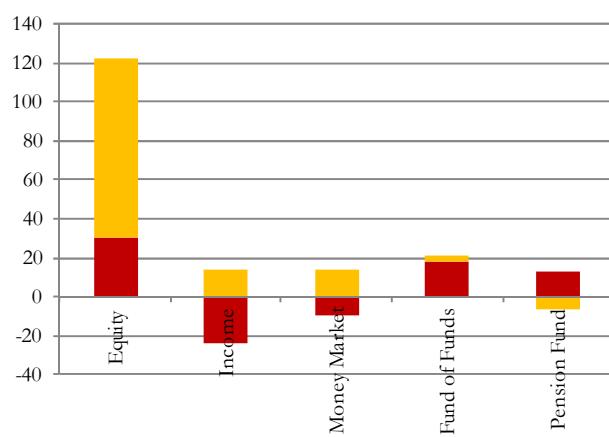
Valuation effects drive change in YoY equity fund assets

Sources of YoY change in AUMs of major fund categories

(PKR billion)

Valuation effects

Net Sales



Source: SECP & MUFAP

Equity funds have experienced strong growth in AUM as the rising equity prices are reinforced by net inflows into the funds. Equity funds drew-in the highest inflows (net of sales) of PKR 30 billion in CY16. But, of the PKR 121 billion increase in equity fund AUMs over the year, 75 percent is attributable to valuation effects- the rest is coming from net inflows (**Figure 3.5.6b**).

The trading activity is further a sign of the flighty nature of investors. In such a scenario, growth of faith-driven Islamic funds and pension fund (which tend to hold long-dated investments) is desirable- given their low frequency trading in theory- to dilute market volatility providing cushion from short term price shocks due to excessive activity. But both, the Islamic funds (38.02 percent of total AUMs) and Pension funds (about 3 percent of the total mutual fund assets) have turned out to be frequent traders in our market, thus bringing little comfort from market participation by these investing groups.

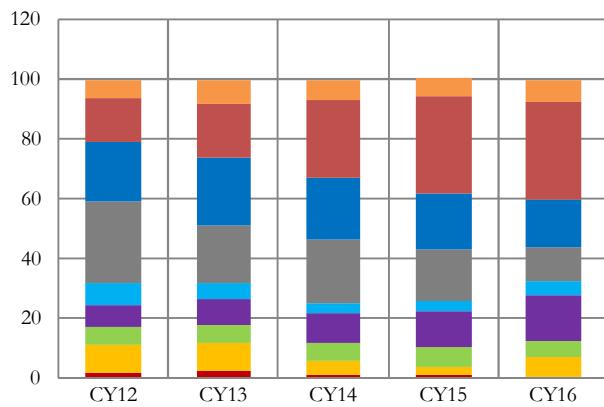
Figure 3.5.7

Institutional Investors account for 60 percent of Net Asset Value

Mutual Funds Investor Composition (by NAV)

(Percent)

■ AMCs	■ Banks/DFIs	■ Insurance Co.
■ Retirement Funds	■ NBFCs	■ Associated Co.
■ Other Co.	■ Individuals	■ Others



Source: SECP

The non-existent big-ticket¹³⁰ (private equity and venture capital, hedge fund) structures while playing down on the structural complexity indicate shallow institutional participation...

Retail participation, by bringing benefits of diversification in terms of product demand and stable funding provides fund managers with a solid base to plan and finance investments; while participation from institutional groups tends to validate market prices as their thorough research is translated into trading behavior. Over the past five years, individual investments have grown from 14 percent to 33 percent of the NAV (**Figure 3.5.7**) and institutional investments (AMCs, Banks, Insurance, Corporates, Retirement funds etc.) came down from 79 percent to 60 percent.

The institutional investment is still sizeable making the market susceptible to manipulations by institutional investors as the uninformed retail clients follow investments of institutional investors given their superior investment acumen. It may also propagate pro-cyclicality as with the concentration of trading intent (information-based/ speculative motives) in few hands, market sentiments tend to move together in financial markets. A varied set of players in the market are desirable to limit herd behavior by bringing in diversified analysis, risk appetite, and investment strategies.

Operationalization of structures as hedge funds which are engaged in style- based investing (style may move contrary to the market) and private equity and venture capital firms (which may create demand for distressed securities) by taking counter-market positions may help stabilize market-driven valuations. There is a need to develop the market

¹³⁰ Private Funds Regulations, 2015 lay down rules for Private Equity and Venture Capital Firms (PE & VC) and other alternative funds (infrastructure funds, hedge funds). These funds can only solicit investments from high net worth individuals. Such an investor is defined to be one with a minimum investment of 3 million rupees in the fund.

for these structures to give needed depth and support to the financial sector.

A shallow breadth of institutional participation is especially disruptive for our financial system which is already bank-centric and most of the non-bank players are, in some way, have linkages with the banking institutions. Asset management function in Pakistan is largely confined to 22 AMCs/IAs of which 12 are part of banking groups. This kind of concentration could also feed into systemic risk for the banking system if a problem triggers on the other side of the financial system.

Inter-connectedness with the banking sector...

Inter-connectedness of the NBF sector with the banking system may flow through various channels with the prime one being the flow of funds. The banking sector has been a net receiver of funds from the non-bank sector with 21 percent of the sector's assets placed as deposits with the banking sector.

Deposits of the NBFCs with the banking sector accounts for a minor portion of total deposits of the banking sector but the mutual funds sector's exposures are concentrated in banking sector's debt/equity securities (**Table 3.5.2**). With the adoption of Basel III capital regime's "look through approach"¹³¹ for collective investment schemes, capital advantage for banks from investing in mutual funds has diluted. This led to a decrease in banks/DFIs' share in mutual funds from around 9 percent in CY12 to 6 percent in CY16. Despite this change, the banking sector remains one of its top holders of investment units. Any drying up of liquidity with the banking sector and related redemption pressures could make the mutual funds susceptible to performance of the banking sector.

¹³¹ Under look through approach, banks are required to calculate capital charge on their Mutual fund investments as if the underlying exposure/asset class is held by the banks themselves.

However, liquidity support by the banking sector to its owned AMCs in order to prevent reputation and funding risks may work towards diluting that channel of liquidity stress.

Yet another form of feed-back loop may flow from common customer groups and common investment exposures.¹³² Some of the top borrowing groups of the banking sector are also among the top 20 holders of mutual fund investments and issuers of equity securities in which the mutual funds have invested. Extent of such commonality reveals possibility of simultaneous stress by both the sectors from deteriorating credit profile of the common exposure entities (**Table 3.5.2**).

Table 3.5.2

Flow of funds & exposure to the banking sector by the NBFCs

	Total Value (i)	Bank & DFIs share (ii)	Bank/ DFIs Share in Total (iii) = ii/i
		PKR billion	Percent
NBFC deposits with banks as a percentage of total assets	810	169	20.8
Equity of AMCs	24	12	50.7
Mutual Funds AUMs	654	38	5.8
Mutual Fund exposure in top 20 equity securities	83	13	16.0
Mutual Fund exposure in top 10 debt securities	12	7	57.8
Top 20 holders of mutual fund units	70	26	36.5
Mutual Fund exposure in top 20 equity issuers- common*	83	15	17.6
Mutual Fund exposure in top 10 debt issuers- common*	12	4	34.8
Top 20 holders of mutual fund units- common*	70	15	21.5

Source: SECP & SBP

*Issuer/holder group common to banking sector's top 15 large borrowing groups as on June 30, 2016

¹³² Banking sector large exposure data as of June 30, 2016.

Risks from common investment exposures could also emanate from possible decline in value of direct investments in equities and bonds held by the banking sector due to any large-scale unwinding of positions by the mutual funds. However, the banking sector currently holds 89.89 percent of investments in government securities and only 3.49 percent in listed shares as the bank prudential regulations cap aggregate equity investments (inclusive of mutual fund investments) to 30 percent of equity for fund-mobilizing banks/DFIs and to 35

percent of equity for those Islamic banks and DFIs which are not mobilizing deposits/COIs. In contrast, for the funds 50 percent of the AUMs are invested in equities and only 8 percent in government securities. Risk from this contagion channel is, therefore, likely to be contained given the two sector's varied investment concentrations.

Box 3.5: Analysis of Shadow-Banking Risks

Financial Stability Board (FSB)¹³³ Framework

The financial crisis of 2007-09 underscored the risks of credit intermediation by the non-bank financial institutions enough to prompt regulatory reform in the area. FSB has been especially active in this domain with its regulatory reforms focused on transforming what it terms to be “shadow banking”, into resilient market-based finance.

Broadly, FSB defines shadow banking as “credit intermediation involving entities and activities outside the regular banking system”. More specifically, the term refers to conduct of bank-like activities of maturity¹³⁴/liquidity transformation¹³⁵, credit risk transfer and creation of leverage by the loosely regulated non-bank sector which may pose systemic risks either on its own or through its inter-connectedness with the regulated banking system.

Initially, casting the net wide, FSB started out with an entity-based definition of shadow banking to derive a list of entity types¹³⁶ followed by an assessment of their shadow banking risk factors (i.e. maturity/liquidity transformation and leverage). However, differences in classification across jurisdictions arising from variation in business models, risk profiles and regulatory structures of the entities made way to a more universal definition. In its Global Shadow Banking Monitoring Report 2015,

FSB took a narrowed down focus on the shadow banking system by adopting a risk-based definition. The new definition uses an activity-based “Economic Function (EF)” measure to determine the extent of shadow banking risks in the non-banking financial sector entity classes. The non-banking entities are considered part of the shadow banking system if they are:

- Part of a credit intermediation chain,
- Not subject to bank supervision through prudential consolidation in a banking group, or
- Engaged in bank-like risks such as liquidity, maturity and credit transformation risks, and leverage.

To identify the NBFIs that form part of shadow banking, detailed analysis is done which involves macro-mapping of the financial sector’s balances sheet (Central banks, deposit-taking banks, other financial institutions), examining their credit assets (to assess extent of involvement in credit intermediation) and flow-of funds to other financial institutions (to assess interconnectedness with other financial institutions). Part of the non-banking sector that is prudentially consolidated in a banking group and is adequately supervised is excluded. Using indicative ratios for liquidity transformation, maturity transformation, credit transformation, leverage and existence of policy tools in the existing regulatory framework to counter such risks, assessment of shadow banking in the non-banking sector is made (**see Table B3.5.1**).

The case of Pakistan

The starting point for our analysis of shadow banking risks in our financial system is the non-banking financial sector. As per our assessment, shadow banking risks exists but they are being addressed through regulatory limits on risky activities. Economic Function-wise assessment of the non-banking sub-sector is as follows:

¹³³ The Financial Stability Board is a group of finance ministries, financial sector regulators (including members of the G20) and international financial bodies established in April 2009 to coordinate at the international level the work of national financial authorities and international standard setting bodies and to develop and promote the implementation of effective regulatory, supervisory, and other financial sector policies.

¹³⁴ Maturity transformation refers to the short-term funding dependence in the form of material use of short term liabilities to fund long term assets.

¹³⁵ Liquidity transformation is the amount of assets, other than highly liquid assets, funded by short-term claims (liabilities and redeemable equity).

¹³⁶ The entities identified were: (i) credit investment funds; (ii) exchange-traded funds (ETFs); (iii) credit hedge funds; (iv) private equity funds; (v) securities broker-dealers; (vi) securitisation entities; (vii) credit insurance providers/financial guarantors; (viii) finance companies; and (ix) trust companies.

Table B3.5.1

Shadow Banking Risk Metrics

Credit Intermediation (CI1, CI2)	Maturity Transformation (MT1)	Liquidity Transformation (LT)	Credit Risk Transfer (CRT)	Leverage (L1, L2)
Economic Function	Typical Entity Types		Typical Policy Tools	
Management of collective investment vehicles with features that make them susceptible to runs (EF1)		Fixed income funds, mortgage funds, money market funds, hedge funds	Suspension of Redemptions, liquidity buffers, limits on illiquid investments/ leverage/ portfolio assets' maturity	
Loan provision that is dependent on short-term funding (EF2)		Finance companies, leasing companies, credit unions	Capital requirements, limit on leverage/large exposures	
Intermediation of market activities that is dependent on short-term funding or on secured funding of client assets (EF3)		Broker-dealers	Bank equivalent prudential regulations, liquidity/capital requirements, restriction on use of client assets	
Facilitation of credit creation (EF4)		Financial guarantors	Liquidity/capital requirements, restriction on scale/scope of business	
Securitisation-based credit intermediation and funding of financial entities (EF5)		Securitisation vehicles	Restriction of maturity/liquidity transformation, restriction on eligible collateral, restriction on exposure to/ funding from other financial entities	

Source: FSB

CI1 = credit assets(loans/ receivables and investments in debt securities)/ total financial assets; CI2 = lending/ total financial assets

MT1 = (long term assets - (long term liabilities + non-redeemable equity (equity or shareholders equity))) / total financial assets

LT = for EF1 (very short-term liabilities (< 30 days) + redeemable equity (< 7 days)) / liquid assets, for non-EF1 very short-term liabilities (< 30 days) / liquid assets

CRT = off balance sheet exposures (credit risk transfer type) / (total financial assets + off balance sheet total)

L1 = for EF1 total financial assets / NAV, for non-EF1 total financial assets / equity

L2 =for EF1 (total financial assets + off balance sheet total) /NAV, for non-EF1 (total financial assets+off balance sheet total) / equity.

Collective Investment Vehicles (CIVs)-EF1

Equity (46 percent), Income (21 percent) and Money Market funds (11 percent) make up 78 percent of the CIVs in Pakistan. Equity funds are not included in the FSB shadow banking framework as these funds do not invest in debt securities. Close-end investment funds (3 percent of total CIV assets) are also not part of the shadow banking system because they are not susceptible to runs.

For income and money market funds that are susceptible to maturity and liquidity transformation, requirements regarding proportions of total assets to be held as liquidity buffers and limits to weighted average maturity of total portfolio or individual assets have been adopted. For income funds, the weighted average time to maturity of the net assets have been capped at 4 years with no

maturity specification for individual assets. For money market funds, individual asset's time to maturity has been capped at six months while the weighted average time to maturity shall not exceed 90 days.

FSB's suggested policy tools to contain risks from collective investments schemes are part of the existing regulatory framework. Under this framework¹³⁷, 25 percent of net assets are to be invested in liquid assets. Investments in the illiquid real estate have been prohibited. Leverage has been limited by restricting borrowing only to meet redemptions for a period of 90 days only. Further, a provision for temporary suspension of redemptions for up to 15 days has been recognized to

¹³⁷ Non Banking Finance Companies and Notified Entities Regulations, 2008

contain run risk in case of excessive redemptions from funds.

DFIs/IFCs/ Leasing/Modarabas-EF2

Development Financial Institutions (DFIs), Investment Finance companies (IFCs), Leasing Companies and Modarabas may be classified in this economic function. DFIs are regulated by SBP and subject to bank-like prudential regulations and hence may be excluded from the shadow banking estimate.

Together IFCs, leasing and modaraba companies make up 7.7 percent of non-banking sector assets. Reliance of IFCs on short-term funding from the banking system was apparent in the aftermath of liquidity crunch of the

2007. But since the crisis the asset base of IFCs has been shrinking with activities focused on commission-based income which is to be treated part of the shadow banking.

As for the leasing and modaraba companies, credit assets (advances and leases) make up 60 percent of total assets indicating their active involvement in the process of credit intermediation. However, capital requirements (see **Table B3.5.2**), limits to individual/ group/ capital market exposures/ liabilities provide an adequate framework. Further, both leverage and maturity profile of assets/ liabilities is reported by the entities to the regulator (SECP) on a monthly basis.

Table B3.5.2

Minimum Equity Requirement of Non-banking Finance Companies

Form of Business	Minimum Equity Requirement PKR million
New deposit taking NBFCs for license of Investment Finance Services or Leasing or Discounting or Housing Finance Services	1,000.0
Existing NBFCs with valid deposit taking permission having Investment Finance Services license	750.0
Existing NBFCs with valid deposit taking permission having Leasing license	500.0
Non-deposit taking NBFCs for Investment Finance Services license	100.0
Non-Bank Microfinance Company for Investment Finance Services License	50.0
Non-deposit taking NBFCs for Leasing or Discounting or Housing Finance Services license	50.0
Asset Management Services	200.0
Investment Advisory Services	30.0
Modaraba Company	2.5

Source: Non-Banking Finance Companies and Notified Entities Regulations, 2008 and The Modaraba Companies and Modaraba (Floatation and Control) Ordinance, 1980

Brokerage Houses-EF3

Securities Brokers are subject to an intensive set of regulations as issued by SECP, Pakistan Stock Exchange (PSX), National Clearing Company Limited (NCCL) and Central Depository Company (CDC). Capital requirement have been aligned with the scope of a broker's activities to allow security clearing functions with financially sound brokerage houses only (see **Table B3.5.3**). Detailed regulations related to segregation and record of client assets from broker's proprietary assets have been laid out to avoid their misuse by a broker. Further, under SECP's Joint Inspection Regulations, 2015 a team composed of Chief Regulatory Officers of

CDC, NCCPL and PSX is responsible for conducting quarterly inspections of 16-18 brokers selected randomly to confirm their regulatory compliance.

Table B3.5.3

Paid-Up capital requirement of Securities Brokers

Category of Securities Broker	Paid-Up Capital
	PKR Million
Trading Only	15.0
Trading and Self-Clearing	35.0
Trading and Clearing	100.0

Source: [Securities Brokers \(Licensing and Operations\) Regulations, 2016](#)

However, some risks from regulatory non-compliance persist. For example, SECP had set out to replace Carry-Over-Trade (COT)/badla financing (in-house financing of brokers) by margin financing from banks in 2004 to extend due diligence to financing of brokers and their clients, but the COT still continues¹³⁸. The COT while allowing market participants to trade without the corresponding payment brings needed liquidity to the market but also sustains speculation. And as market liquidity dries up, the system stands vulnerable to escalating costs of unsettled trades pushing speculators to trade more in order to manipulate prices to move to the levels where they can comfortably settle their trades. This unchecked leverage and settlement risk of stock market participants can be problematic as default by one or more brokers might cause more defaults from others triggering a systemic event. Hence in the case of brokerage houses, existence of FSB suggestive policy toolkit in the regulatory framework might be insufficient.

Cognizant of these risks, SECP and PSX are currently contemplating establishing a national level self-disciplinary broker organization to formulate code of ethics and disciplinary policies. To ensure safe custody of client assets, capital requirements have been aligned with the scope of a broker's activities to allow security clearing functions with financially sound brokerage houses only (see **Table B3.5.3**). Further, expeditious sale of broker assets to satisfy investor claims and increased focus on investor education for self-monitoring of their cash and securities flows is being stressed as a strategy to protect investor interests.

Currently, there are no entities in the NBFI sector to be categorized under EF-4 and as for the EF-5 function, none of the securitized issues of the registered SPVs are currently outstanding.

¹³⁸ Securities & Exchange Commission of Pakistan press release dated February 07, 2017.