4.2 Risk Analysis of Non-Banking Financial Institutions (NBFIs)

CY17 tested the resilience of the NBFIs to major macroeconomic developments from stock market volatility to interest rate expectations and even exchange rate losses booked by the dominant foreign group in the deposit taking/ lending segment. Even though investor confidence seems disturbed, availability of alternates has maintained the market inflows. Investors earlier pursuing "capital appreciation" motives in the equity markets have diverted most of the fresh investments towards the "capital preservation" quality of the income and money market funds. Big investors seem too cautious; they have preferred to rest their savings under professional advice switching towards the discretionary-type portfolios. Market prices of REIT reflect relatively mild co-movement with the broader equity indices while its net assets are building-up from unrealized gains on underlying property. Diversification from introduction of microfinance segment and private equity funds may reduce the NBFI's assets dependence on the performance of the public markets.

Diversification is a key element of financial depth in an economy. An ideal financial system has a variety of institutions that provide a range of products and services to the end users. Such a setup promotes competition and leads to efficiency and low cost of financial services.

The NBFI[181]sector helps in achieving this ideal. It has continued to add diversity to the available business models; e.g. CY15 witnessed introduction of a REIT fund; CY16 the inclusion of NBFMCs segment and CY17 the addition of Pakistan Microfinance Investment Company (PMIC), an important entity in the IFC segment, that is to serve as a sector developer for the NBMFCs and the first PE fund. With these recent additions, the NBFIs have added the social welfare component to their portfolio; while the PE segment taking a more commercial route will possibly benefit merger and acquisition activities in the corporate sector that could build some momentum for public listings of companies (**Table 4.2.1**[182,183]).

Table 4.2.1

Asset Profile of NBFIs

	FY12	FY13	FY14	FY15	FY16	FY17	Dec-17
	PKR billion						
AMCs/IAs	40.2	42.7	29.8	31.9	37.3	40.9	37.3
Mutual Funds	410.0	402.2	452.0	492.2	546.2	710.0	654.2
Pension Funds	2.8	4.9	8.3	13.9	19.3	25.8	24.1
Portfolios	44.4	56.5	72.1	96.6	139.2	141.1	139.0
Total AUMs	457.2	463.6	532.4	602.7	704.8	876.9	817.3
RMCs	-	-	0.1	1.5	1.5	1.5	5.0
REITS	-	-	-	23.2	27.2	40.9	40.6
PE & VC Firms							0.2
PE Funds	-	-	-	-	-	-	0.6
MMCs	-	-	-	-	2.4	3.3	3.3
Modarabas	29.3	31.7	30.0	31.1	36.5	44.1	48.1
Leasing Companies	33.0	34.5	35.7	40.3	42.3	43.3	44.6
IFCs	17.3	12.4	11.1	10.2	9.9	20.7	25.1
NBMFCs	-	-	-	-		61.5	70.3
Total Assets	**576.9**	**584.8**	**639.0**	**741.0**	**861.8**	**1,133.2**	**1,092.4**

Source: SECP

181 NBFIs 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.

182 AMCs/IAs(Asset Management Companies/Investment Advisors), AUMs(Assets Under Management), RMCs(REIT Management Companies), REIT(Real Estate Investment Trust), PE & VC(Private Equity & Venture Capital), MMCs(Modaraba Management Companies), IFCs(Investment Finance Companies), NBMFCs(Non-Banking Microfinance Companies)

183 Financial Year (FY) for NBFIs ends in June. but for the purpose of complete analysis of CY17 and to give due coverage to the experienced changes in the asset management segment, the six month period from July-December 2017 has also been included in the analysis.

The sector has also been spreading the vision of an Islamic financial system by offering business models such as modarabas in the past. Overtime, the sector has included more Shariah compliant offerings such as mutual/pension funds and REITs in its list. The performance of the pioneering structure i.e. modarabas has remained sub-par, though, with 25[184] MMCs offering only 27 Modaraba funds. However, newer structures have been gaining more traction as their share in total assets has expanded from 8.9 percent in FY12 to 32.4 percent in FY17 (30.3 percent in December 2017). Among these, Shariah-compliant mutual and pension funds have been most popular accounting for 26.6 percent of total assets in December 2017[185].

Risk averse sentiments prevail…

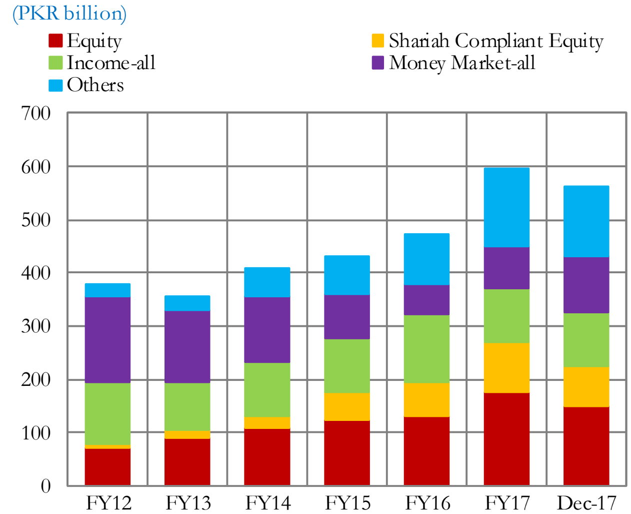
Over the last few years, NBFIs have surfaced as a growing segment in the financial sector achieving average growth of 14.9 percent during FY13-17. Almost all of this growth is sourced in the expanding mutual fund segment, which has dominated the NBFI assets with an average share of 66.4 percent from FY13-17.

Within the mutual fund segment, the top three fund categories i.e. Equity funds, Income fund and Money Market Funds (MMFs) together have accounted for 78.7 percent of the overall net assets. Equity mutual funds constituting 45.3 percent of total mutual fund net assets in June 2017 have been the mainstay, growing at average rate of 28.1 percent from FY13-17. However, with bearish trend in the equity market during second half of CY17, the share equity funds' has decline to 39.9 percent by end December 2017. Net assets of conventional and Islamic equity funds have declined at relatively higher rates of 15.9 percent and 19.0 percent respectively, suggesting lower fresh inflows besides valuation effects. The initial decline did trigger liquidation from some cautious investors but the bulk seems to have occurred after the market recovered partially (**Figure 4.2.1**).

Figure 4.2.1

Equity Funds share in net assets diluted by almost five percent

Money Market funds are substituting the equity funds



Source: MUFAP

Large redemptions from mutual funds are a norm at half year and annual closings. This is associated with financial institutions' redeeming mutual fund units to realize profits over these periods. In previous years, despite these redemptions strong equity market performance enticed sufficient fresh inflows leading to a net increase in equity fund assets. This year, however, risk-aversion has prevailed due to

184 Only three of the MMCs are offering more than one modarabas fund. SECP has suggested a Draft Modaraba bill in May 2017 that is currently open for pre-legislative debate of stakeholders. If the industry professionals are able to suggest some enabling changes to the regulatory regime, it may provide the needed impetus to modarabas.

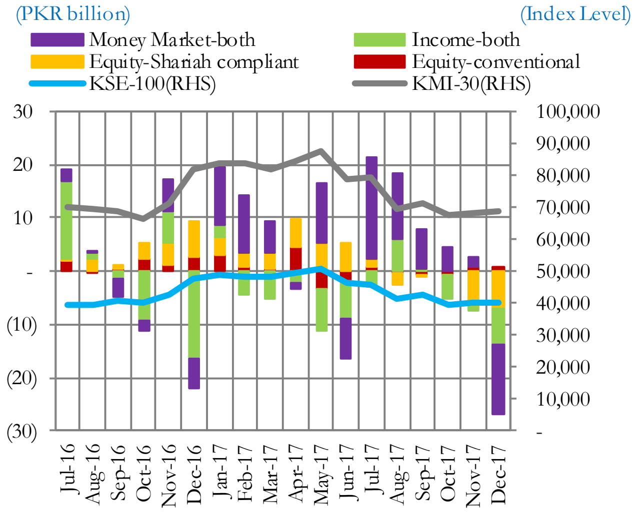
185 SECP has been making efforts to facilitate growth and promote credibility of Islamic financial services. Accordingly, SECP has notified i) Draft Shariah Advisors Regulations in September 2017, ii) Draft Shariah Governance Regulations, 2018 which cover Shariah-compliant companies and entities, Shariah-compliant securities and Islamic financial institutions for public consultation .SECP is also gradually adopting accounting and Shariah standards issued by Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI).

market weakening as investors have avoided making fresh investments in equity funds (**Figure 4.2.2**).

Figure 4.2.2

Net sales from top three mutual fund categories

Diversion of fresh inflows towards safer funds have helped maintain size



Source: MUFAP & PSX

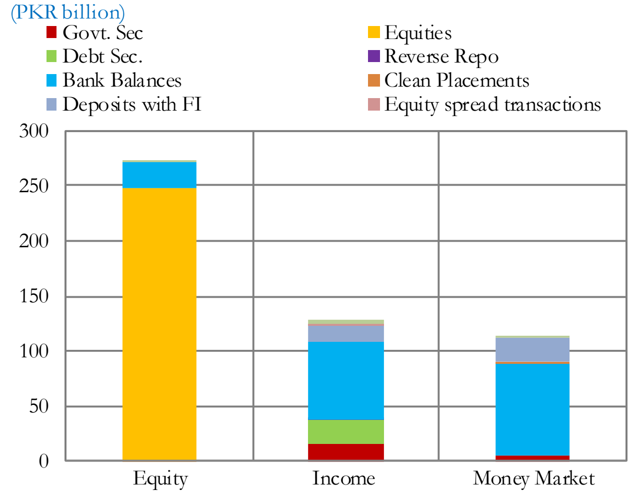
...diverting fresh flows towards the money market funds...

Availability of diverse products like equity and money markets funds have given investors freedom to quickly switch their investments based on changing market dynamics, expectations and risk appetite[186]. This flexibility has helped contain the size of the industry's AUMs despite volatility in equity returns. Over the last six months of CY17, MMFs have increased their presence by 6 percent; against an overall outflow of PKR 7.5 billion (May to Dec 2017) from the equity category, the money market funds have received a net inflow of PKR 36.4 billion (**Figure 4.2.2**).

Figure 4.2.3

Asset allocation of dominating fund categories in CY17

Relative safety of Money Market funds



Source: SECP

....with investments mainly in shorter tenor instrument due to changing interest rate expectations...

Despite international literature, which highlighted the systemic dimension of MMFs and lessons learnt following the GFC, which suggest MMFs may pose stability risks[187], these funds prove to be the safest in domestic market. Firstly, in the absence of corporate debt, the primary interest rate based investment avenues remain either risk free government paper or deposits and placements with the financial institutions. Further, under SECP's regulatory requirements, requirements on maintaining liquidity buffers and maturity caps (on both individual asset and weighted average for the overall portfolio) exist which cover for risks from liquidity/maturity mismatches. [188] Analysis of net inflows into the income and MMFs reveal that investors have confined themselves to the shorter-duration

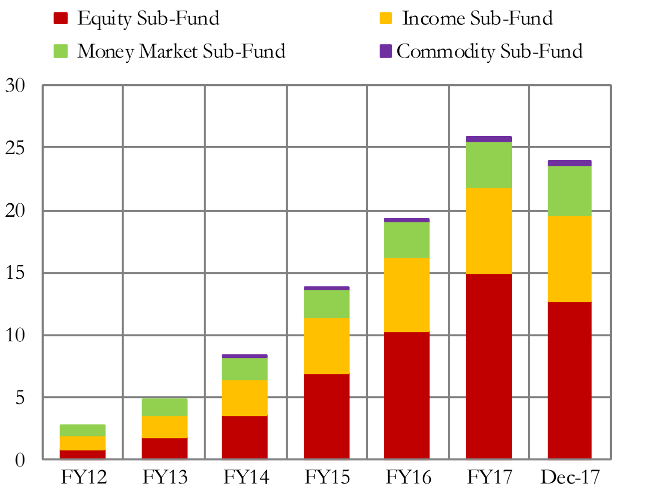
[186] Equity funds target capital appreciation, while money market funds focus on capital preservation.
[187] Policy recommendation on money market funds (http://www.csrc.gov.cn/pub/csrc_en/affairs/AffairsIOSCO/201210/P020121010500138903810.pdf)
[188] https://www.secp.gov.pk/document/categorization-of-open-end-collective-investment-schemes-3/?wpdmdl=13058

instruments to avoid the repricing losses due to expected changes in interest rate.[189,190] (**Figure 4.2.3**).

Figure 4.2.4

Equity sub-funds in Pension Funds have also witnessed outflows

Change in pension fund assets from ensuing volatility in equity market
(PKR billion)



Source: SECP

Equity market performance has also reduced pension coverage …

Pension funds too have witnessed similar compositional change with their pension participants switching away from sub-equity funds. While availability of sub-money market funds has contained some of the outflow, there has been a decline of 19.3 percent in H2CY17 in average pension coverage per pension account[191]. Of this decrease, 12.8 percent is attributable to increase in number of accounts while 7.5 percent is due to the overall decrease in pension fund AUMs. The pension fund segment currently hold a small share of NBFI's assets but their significance emanates from their socio-economic benefits. In view of the need to promote this segment to extend pension coverage to a wider market, closer vigilance of performance and enhanced risk management of pension funds are warranted (**Figure 4.2.4** and **Box 1**).

Portfolios of eligible investors have witnessed changes that may reduce panic trading in the market…

Investment advisory services has been a growing segment of NBFIs and holds a share of 12.7 percent (highest after Mutual Funds). Both the discretionary/non-discretionary portfolios[192] have observed growth as large investors are relying on professional advisors to cope with the uncertainty in capital markets.

Table 4.2.2

Portfolios classified by responsibility of investment decision-making

	FY12	FY13	FY14	FY15	FY16	FY17	Dec-17
	PKR million						
Discretionary Portfolios	14.3	23.3	35.9	53.1	89.3	97.4	104.3
Non-Discretionary Portfolios	30.1	33.2	36.3	43.6	49.9	43.7	34.7
Total Portfolios	**44.4**	**56.5**	**72.1**	**96.6**	**139.2**	**141.1**	**139.0**

Source: SECP

But recently, in the face of the market disturbance, this trend has gained momentum as is reflected in continuous switching towards discretionary portfolios. This is a positive development for the sector as high net worth investments of the portfolios can be flighty in nature, as these clients

189 This is primarily due to the expectations of increase in interest rates, which has already actualized to some extent with the upward revision in the policy rate.

190 The shorter maturity investments will shield investors from both re-pricing losses on traded debt if interest rates were to rise and opportunity loss of coupon/interest income on bonds/deposits/placements if funds are committed for longer-tenor at the currently lower rates.

191 Since Pension accounts are not unique, they may not represent pension participants accurately. Hence, a rough estimate of provision coverage has been used.

192 Portfolios are investments of eligible investors (person offering a minimum of PKR 3 million investment) managed by Investment Advisors. Under "Discretionary Portfolios", investment decisions are made and executed by the Investment Advisor on behalf of clients. While under a "Non-Discretionary Portfolio", investment decisions are made as per the written instructions of the clients.

tend to exit markets at the earliest signs of trouble. Placing investments in the hands of professionals may contain panic sell-outs under episodes of political/macroeconomic uncertainty adding some length to the investment-holding period (**Table 4.2.2**).

Table 4.2.3

Two Major heads of REIT Earnings

	Jun-15	Jun-16	Jun-17
	PKR million		
Rental Income	193.7	2,526.6	2,841.6
Change in Fair Value of Property	-	15,422.0	1,181.0
Total Profits	2,776.8	17,724.6	3,787.1

Source: Annual Audited Accounts of REIT

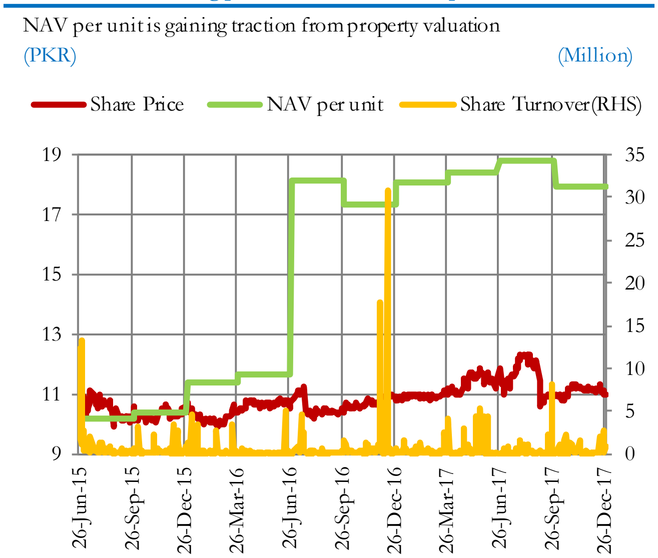
REIT share prices indicate relatively insignificant co-movement with the broader equity indices

Since inception, the asset base of REIT funds has expanded by PKR 17.7 billion increasing the NAV from PKR 10.2 per unit in June 2015 to PKR 17.53 per unit in December 2017. Most of this expansion is sourced in the unrealized property valuation gains of PKR 16.6 billion from underlying property (**Table 4.2.3**). The REIT's property valuation is based on projected net operating incomeand as the rental income and occupancy levels thrived in FY16, property valuation rose to reflect the underlying prospects[193].

Quality of a REIT is reflected in higher occupancies (which reduce opportunity costs of lost rentals) and longer lease terms (which dilute risks of downward revision in rental rates upon term expiry). As of FY17, the REIT had an occupancy rate of more than 97.0 percent while the average lease expiry stood at 3.4 years[194]. In terms of its share price, the REIT shows a relatively lesser correlation with the broader equity indices and despite the high quality of the underlying property and cashflows generated from it continues to trade at a discount to its NAV i.e. 38.7 percent as of December 29, 2017(**Figure 4.2.5**).

Figure 4.2.5

REIT share's closing price, turnover and NAV per unit



Source: Audited accounts of REIT and PSX

Revival of the PE segment may dilute the sector's vulnerability to market volatility by promoting "private equities"

Amidst the volatility in the public markets this year, Private Equity and Venture Capital firms have again made their way into the sector. The first Venture Capital (VC) firm started its operations in Pakistan back in 2001. And even by 2006 there were only three VC firms in Pakistan with an asset base of PKR 4.13 billion (less than 1 percent of NBFI assets). The performance of the firms had been below par mainly due to losses from high financial charges (on financing obtained for acquisitions of

[193] To value the property, income capitalization approach has been used wherein the projected Net Operating Income (based on existing rental agreements and expected rent for the vacant area) has been capitalized at the rate of 7 percent. Two other approaches are cost-basis and sales-comparison basis, which look at selling prices of other similar deals to arrive at the property value.

[194] Annual audited accounts of the REIT for FY17.

companies). Consequently, the VC companies ceased to exist until new licenses were issued under a broader category to establish "Private Equity and Venture Capital Firms".

As of November 30, 2017, there are three licensed PE firms (two new players and one existing NBFC) with a total asset size of PKR 1.1 billion. One of these firms has launched a PE Fund of PKR 590 million and is currently in the stage of calling commitments from investors while PE funds from the other two PE firms are in pipeline. Growth of this segment is desirable in our market for diversification of institutional players so as to compete against the current dominance of the mutual funds, stabilization effect on the the equity markets due to longer-term investments and probable revivial of corporate in financial distress thereby faciliating stability of the financial sector (**See Box 2**).

A number of enabling factors including current low valuation of the stock market[195] and investments in Pakistani companies under the CPEC project utilizing the PE vehicle as the Chinese PE investors dominate the Asian PE market. However, on the down side, there is a dearth of institutional investors that can provide long-term funding to PE. In view regulatory concern of protecting public savings, the regulatory framework for institutional investors (mutual funds, pension funds and insurance)[196] has contained many of the key sources of risks through prescribing liquidity and maturity characteristics of their allowed investments. Further, interest from high net worth individuals also seems low because the share of "discretionary/non-discretionary portfolios" targeting a similar clientele, although growing, is still relatively small to provide meaningful resources to sufficiently support the PEs.

An enabling regulatory environments needs to be developed to promote a strong segment of long-terms / institutional investors in our financial sector and PE can be a strong vehicle for it. Efforts in this regard may be targeted towards mobilizing corporate sector's resources by allowing various tax concessions etc. In addition, the existing institutional investors may be allowed to invest some portion of their investments in PE funds to provide some initial support for the sector.

Financing momentum for NBFIs with establishment of PMIC ….

The NBFIs have been growing from market-based structures while performance of the traditional intermediaries like modarabas, IFCs and leasing companies have been lagging behind due to insufficient availability of funding. But the financial intermediation function may get the necessary boost under the NBMFCs model spurred by the country's strategic vision which is focused on enhancing financial inclusion. SECP is taking steps to bring the non-deposit taking microfinance institutions, non-governmental organizations (NGOs) and Rural Support Programs (RSPs) under the NBFC framework. So far, out of the 27 microfinance providers (other than MFBs), 22 entities have been licensed. This recognition as a financial institution will benefit the NBMFCs in fundraising opportunities through greater donor confidence. Further, the establishment of PMIC, which has been licensed as an IFC, will mobilize resources for

[195] Low valuations allow PE firms to purchase the companies at a relative discount supplementing the IRRs on investments
[196] Mutual funds have limits on illiquid investments and an elaborate criteria for investments that effectively limits their trading within the most liquid segment of the market. Weighted average maturity of investments for pension funds is capped at 5 years. For Insurance, specified percentages regarding admissibility of assets under solvency requirements have been prescribed. Shares in unlisted companies (aggregate) are admissible to the extent of only 5 per cent in case of non-life insurer and only two and half percent in case of life insurer. This will effectively hamper insurance companies' involvement in unlisted shares.

microfinance services by attracting funding from commercial lenders as development agencies, financiers, commercial banks and capital markets. As PMIC starts to build resources to meet the funding needs of the microfinance sector (with a potential demand of USD 3 billion.[197]), it will simultaneously support financing function of both the IFCs and NBMFCs.

Nevertheless, concentration risk in modarabas and leasing remains …

The deposit-taking/lending segment[198] of NBFIs is highly concentrated and has continued to be dominated by one leasing company (57.1 percent of the overall deposits and 57.7 percent of loan portfolio in CY17). Profile of the dominating company has indicated vulnerability from external shocks and solvency position and may serve as a possible pass-through of external macro-economic changes to the domestic financial sector to the detriment of the financing segments that are already barely thriving[199]. As the entity is foreign-owned, it is active in overseas operations through associated undertakings (ten percent of its total assets in FY17) and has booked losses on its foreign associates in the MENA region and Egypt.[200] Further, its CAR[201] (11.1 percent in FY17) might become borderline with the applicability of the new benchmark of 10 percent (**Table 4.2.4**).

Table 4.2.4
Concentration of foreign and bank-owned entities in NBFIs sector

	Advances	Deposits	Borrowing	Total Assets
	PKR billion			
Foreign entities in Leasing	33.2	6.1	13.0	38.5
Bank sponsored entities in leasing	2.9		0.2	3.2
Total Leasing Segment	**36.7**	**6.1**	**13.4**	**44.6**
Foreign entities in Modarabas	5.0	3.0	0.9	14.7
Bank sponsored entities in Modarabas	9.2	4.9	1.4	13.1
Total Modaraba Segment	**16.9**	**8.6**	**4.2**	**48.1**
Foreign entities in IFCs	11.4	-	-	12.8
Bank sponsored entities in IFCs		-	-	-
Total IFC Segment	**12.6**	**1.3**	**2.5**	**25.1**
	Mutual Funds	**Pension Funds**	**Portfolios**	**Total AUMs**
Foreign entities in Asset Management	6.6	-	8.2	14.8
Bank sponsored entities in Asset Management	497.4	21.4	79.1	597.9
Total Asset Management Segment	**654.2**	**24.1**	**139.0**	**817.3**

Source: SECP

….. there is no indication of risks from regulatory arbitrage

Although risks from inter-connectedness and the need to have diversity in ownership in the financial sector cannot be ruled out, banks need to facilitate development of an alternate credit system that would actually lend stability to the financial sector in the long run. However, segments offering similar products may give rise to regulatory arbitrage as banking sector is generally more tightly regulated. Even internationally, greater presence of NBFIs sector has been spurred from regulatory arbitrage. But in our system, firstly, the NBFI sector is also adequately regulated and for the banking sector companies which have ventured into NBFIs this looks like a matter of offering a whole suite of financial products (particularly the asset management function) rather than the motive of arbitrage.

Further, although banks including Islamic banks that have active leasing portfolios can take

197 http://pmic.pk/who-we-are/
198 Only three of the eight leasing companies have deposit-taking permission with total deposits of PKR 6.1 billion in CY17. One of the bank-owned leasing company obtained deposit-taking permission in September 2017 and so as of CY17, it had no deposit liability.
199 In February-2018, re-licensing of this leasing company as an IFC has resulted in diminution of the leasing sector from PKR 44.6 billion to PKR 8.5 billion.
200 Economic and political turmoil in the MENA region, depressed oil prices and losses from devaluation from free float of the currency in Egypt were the primary reasons impacting the overseas operations of the entity.
201 As per clause 17(A) of Non-Banking Finance Companies and Notified Entities Regulations, 2008 updated up to November 25, 2015, deposit-taking NBFC shall be required to maintain CAR of eight per cent (8) for the first two years from coming into force of these regulations and ten per cent (10) for subsequent years.

advantage of CAR differentials[202] between the two sectors, only three of the bank-owned companies have leasing companies (representing only 9.1 percent of leasing sector's asset base in CY17). In the modarabas segment, five banks have floated modarabas.

Table 4.2.5
NBFIs flow of funds & exposure to the banking sector

	Total Value (i)	Banks share (ii)	Banks share in Total* (iii= ii/i)	Total Value (iv)	Banks share (v)	Banks share in Total* (vi= v/iv)
	Jun-17			Dec-17		
	PKR billion		Percent	PKR billion		Percent
1. Equity of AMCs/ IAs	24.0	12.0	50.00	23.7	11.9	50.22
2. Assets Under Management of AMCs/ IAs	876.9	637.9	72.74	817.3	597.3	73.07
3. Mutual Funds size	710.2	32.4	4.56	654.2	30.0	4.58
4. Mutual Fund exposure in Financial Institutions	229.5	221.5	96.51	254.2	230.6	90.70
5. Mutual Funds exposure in top 20 equity securities	122.9	3.8	3.08	91.8	3.8	4.18
6. Mutual Funds exposure in top 10 debt securities	11.7	7.9	67.91	15.0	9.0	59.74
7. Top 20 holders of mutual fund units	68.9	21.1	30.58	68.7	13.1	19.10

Source: SECP
*Banks share for the respective head means:
1.Equity of Bank-owned AMCs /IAs
2.Mutual/Pension Funds and Portfolios being managed by bank-owned AMCs /IAs
3.Banks' investments in mutual fund units
4.Mutual Funds' investments in deposits, COD/TDR/COI and money at call/placements with banks
5.Mutual Fund investments in ordinary shares of banks
6.Mutual Funds investments in TFCs/Commercial Paper/Sukuk etc. issued by banks
7.Banks(investment value) in the top 20 holders of mutual fund units

Inter-connectedness with the banking sector may further increase…

The banking sector has been a key facilitator for development of the NBFI sector as more than 70 percent of the mutual fund assets have been mobilized by bank owned AMCs. Besides ownership links, banks have also invested directly in mutual fund units. On the flip side mutual funds also have exposure on banking sector through deposits maintained with banks and investments in securities issued by the banking sector e.g. shares, TFCs, Sukuk etc. (**Table 4.2.5**).

The existing interconnectedness may further increase from the flow of funds and dependence on common clients channels as: i) investor's tendency towards money market funds, which are mostly invested in bank deposits and given the government's deteriorating acceptance of bids[203] for short-term government paper leading to their lower availability for investment , more money market funds will be invested in deposits/placements with the banking sector, and ii) establishment of PMIC which will seek commercial funding to pass on to microfinance providers. If such funding, which is to be passed on to MFBs/MFIs, is solicited from banks, it will make the banks credit quality portfolio dependent on the credit quality of the NBMFIs.

This channel primarily represents interconnectedness through flow of funds from the point of view of NBMFIs, but may also present inter-connectedness through common market, as the target group of MFBs and NBMFIs are similar. The overlap in targeted beneficiaries especially if

202 Currently, Desposit-taking NBFCs have applicable CAR requirement of 10 percent while there is no CAR requirement for Deposit-taking Modarabas.

203 GoP's acceptance-to-pre-auction target ratio for T-Bills has declined from 1.0 in CY16 to 0.8 in CY17.

borrowing is concentrated in particular sectors/segments can turn out to be a growing source of inter-connectedness. Any indication of deterioration in quality of micro-borrowers is bound to affect IFCs, NBMFIs and MFBs simultaneously and iii) In case of insufficient mobilization for PE funds from private investors, PE firms may decide to lever the available funds through bank debt.

Box 4.2.1: Pension Funds in Pakistan

Pension Funds in the Context of Social Safety Nets
Social pension systems continue to be relevant to nations worldwide as they strive to ensure economic stability and security of their aging populations. Countries grapple with adopting a Multi-Pillar Pension System that has some participant-funded elements but also includes other options that allow States to extend effective old-age protection in a fiscally responsible manner.

Pakistan has been making efforts to strengthen its social security program to support the vulnerable. At the federal level, the Benazir Income Support Program complemented by smaller programs as the Zakat and Bait-Ul-Mal programs provide non-contributory social protection to alleviate general poverty. While state-mandated contributory retirement plans offered by employers in the formal sector provide consumption smoothing to the retired workforce.

The current pension system is considered ***inadequate*** as its coverage is confined to the formal sector employees, while a large portion of the labor force in Pakistan, either employed in the informal sector (especially the agriculture sector) or self-employed, remains uncovered. Another major issue is the system's ***sustainability***. Most of the pension schemes in our system are the unfunded Defined Benefit[204] wherein servicing burden lies with the employers.

The situation has led many employers (specially the private sector employers) to curtail pension benefits and switch to the defined contributory system wherein employers are liable to only pay out the defined amount and the financial risks of retirement savings are passed onto the employees who are themselves responsible for their investments and returns.

In case of public sector too, much of the pension liability remains un- funded. The future monetary obligations are taken to be met from future taxation, which places undue fiscal burden and responsibility on future generations. Age analysis of population suggests growing state pension expenses given the expected increase in the older age group. These conditions have led to reforms in the pension system increasingly stressing "funded" pension arrangements. Pension system reforms are focused on extending coverage to funded pension systems, which are professionally managed, extend to the informal sector, and facilitate switching from the existing employer schemes. While in the public sector, funds have been created at the provincial level to pre-fund the future liability.

Pakistan's Pension system -Regulatory perspective
The employer sponsored pension programs (called the Occupational Savings Schemes) are a product of Labor Laws and have been formulated with the core objective of increasing pension coverage. And FBR only regulates these schemes from a tax standpoint. Underlying different objectives, these regulations failed to address the peculiarities of a pension legislation- most importantly safeguarding pension savings by laying out criteria to discipline investments in a way that curtail risks without compromising returns.

SECP assumed the role of a Pension regulator with an amendment in Securities and Exchange Commission of Pakistan Act, 1997 in 2003[205], which expanded its

[204] There are two types of pension schemes i) Defined Contribution (DC) and ii) Defined Benefit (DB). In a DC plan, only fixed contributions (determined on the basis of the worker's age, earnings, contribution rate, investment return and normal retirement age) are made into individual accounts of employees by both employer and employee. Accumulated retirement amount is paid out by employer but this amount may be insufficient to cover the remaining life of the covered employee. Hence, the risk of insufficiency of funds in the future is borne by the employee. In a DB the retirement benefits are known (e.g. they will be provided for the entire period that the employee lives) throughout. Contributions depend on the amount that will be required to fund the future benefits that the employer has promised. Even if the investments returns are below par, employer must pay the promised benefit. An actuary determines the amount that shall be contributed to produce the desired benefits taking into account factors as length of service, level of wages etc. Regular pension amounts that are paid for the entire life of an employee and medical benefits are defined benefit plans. Unfunded plans refer to those wherein pension assets are less than pension liability/obligation.

[205] https://www.secp.gov.pk/document/secp-amendment-act-1997-for-your-information-and-record/?wpdmdl=17801

responsibilities to include promotion and regulation of Private Pension Schemes and Funds. Accordingly, the Voluntary Pension Rules were introduced in 2005, which more tightly regulate the pension products sold to individuals or institutions.

Mapping Pakistan's Multi-Pillar Social Pension system to the World Bank Model

Table 1

Multipillar Pension Taxonomy- World Bank

Pillar	Target Group: Lifetime Poor	Target Group: Informal Sector	Target Group: Formal Sector	Main Criteria: Characteristics	Main Criteria: Participation	Main Criteria: Funding or collateral	Pakistan's System of Social Pension
0	X	X	x	"Basic" or "social pension," at least social assistance (universal or means tested)	Universal or residual	Budget or general revenues	Benazir Income Support Program(BISP), Pakistan Bait-ul-Mal
1			X	Public pension plan, publicly managed (defined Mandated Contributions, benefit or notional defined contribution) perhaps with some financial reserves	Mandated	Contributions with some financial reserves	Mandatory State pension ,State-mandated registration with EOBI(industrial and commercial enterprises employing more than 5 employees)
2			X	Occupational or personal pension plans (fully Mandated Financial assets funded defined benefit or fully funded defined contribution)	Mandated	Financial assets	Occupational Saving Schemes with Private sector employers, Workers Welfare Fund(WWF)
3	x	X	X	Occupational or personal pension plans (partially or Voluntary Financial assets fully funded defined benefit or funded defined contribution)	Voluntary	Financial assets	Voluntary Pension Scheme
4	X	X	X	Access to informal support (family), other formal Voluntary Financial and social programs (health care), and other individual nonfinancial assets financial and nonfinancial assets (homeownership)	Voluntary	Financial and nonfinancial assets	Pakistan Poverty Alleviation Fund(PPAF), Microfinance Institutions

Source: World Bank

Note: Size of x is reflective of the importance of each pillar for each target group in the following increasing order of importance: x, X, X

Parallels can be drawn between the social pension systems in Pakistan to that of the five-pillar model suggested by the World Bank in 2005 (**Table B3.5.6**). The model suggests that ideally in low-income countries, the zero pillar should be the dominant form of protection against old-age risk. But since in many of these countries, both the public and the private sector are unable to deliver sufficient coverage, the model suggests that the third pillar (voluntary pensions) should be promoted with the basic zero pillar confined to providing for the basic needs of the most vulnerable.

Voluntary Pension Scheme in Pakistan

The Voluntary Pension Scheme (VPS) in Pakistan was established to move beyond the conventional concentration on the first and second pillars so as to i)provide for effective old age protection in a fiscally responsible manner, ii) extend coverage to the workforce of the informal sector and iii) allow differential amounts of coverage for employees than those available under EOBI .

Features of the VPS

VPS is a tax-advantaged defined contribution scheme under which contributions can be made in lump sum or regularly, to provide regular income during retired life. The scheme is available to employed/self-employed individuals wherein besides the employees their employers may also contribute to provide regular income during their retired life. Tax credit can be availed at the average rate of tax on the amount of actual contribution or 20 percent of annual taxable income whichever is lower. For those joining at 41 or above an additional credit of 2 percent is allowed for every year over 41 years of age, up to a maximum credit of 30 percent of the taxable income of the preceding year. Contributions can be made in lump sum or regularly with annual tax credit of 20% of taxable income. Further, the Contributions made by the Participants and/ or their employers (if any), plus the investment income, are accumulated tax free in the Sub-Funds until the Participant retires.

Participants of VPSs can change their Pension Fund Manager or the Pension Fund, once a year by giving 21 days prior notice. Further, participants can choose to change their selected Allocation Scheme, twice a year.

Individuals can choose among the specified allocation schemes a as per their risk appetite to achieve desired diversification. A pension fund must offer four pension allocation schemes for three or four sub-funds[206] as tabulated below (**Table 2 & 3**):

Table 2

Three Sub-Fund allocation schemes allowed to Pension Funds

Allocation Scheme	Equity Sub-Fund	Debt Sub-Fund	Money Market Sub-Fund
High Volatility	Min 65%	Min 20%	-
Medium Volatility	Min 35%	Min 40%	Min 10%
Low Volatility	Min 10%	Min 60%	Min 15%
Lower Volatility	-	Min 40%	Min 40%

Source: SECP

Table 3

Four Sub-Fund allocation schemes allowed to Pension Funds

Allocation Scheme	Equity Sub-Fund	Debt Sub-Fund	Money Market Sub-Fund	Commodity Sub-Fund
High Volatility	Min 40%	Min 20%	-	Max 25%
Medium Volatility	Min 20%	Min 40%	Min 10%	Max 15%
Low Volatility	Min 05%	Min 60%	Min 15%	Max 05%
Lower Volatility	-	Min 40%	Min 40%	-

Source: SECP

Besides this, some pension funds can also offer other allocation schemes as lifecycle products. Under these products, younger individuals can choose riskier/aggressive investments portfolios that are inclined towards equity funds and vice versa. Further, in the event that no allocations are chosen by an individual, pension fund manager shall allocate preferably to an approved lifecycle allocation scheme if available based on the age and risk profile. A typical lifecycle scheme may look like this (**Table 4**):

Table 4

A typical Life Cycle Allocation scheme

Plan	Equity Sub-Fund	Debt Sub-Fund	Money Market Sub-Fund
18-30 years	75%	20%	5%
31-40 years	70%	25%	5%
41-50 years	60%	30%	10%
51-60 years	50%	30%	20%
61 and above		50%	50%

At retirement, a participant can choose any one of the following:

- Encash up to fifty per cent of the amount accumulated in Pension Account tax free and remaining by paying tax as per Income Tax Ordinance 2001.
- Purchase i) an Approved Annuity Plan from a Life Insurance Company that pays regular income; or ii) an Income Payment Plan with Pension Fund Managers for monthly installments for fifteen years. This option is more suited for those willing to take some risk to earn incremental returns.

Performance and trends in Pension Funds

Pension funds have steadily been increasing with ten pension fund managers managing 19 funds. In CY17, the pension funds' AUMs stood at PKR 24.1 billion with investor accounts of 27,725. Islamic fund were the dominating category with PKR 15.2 billion assets.

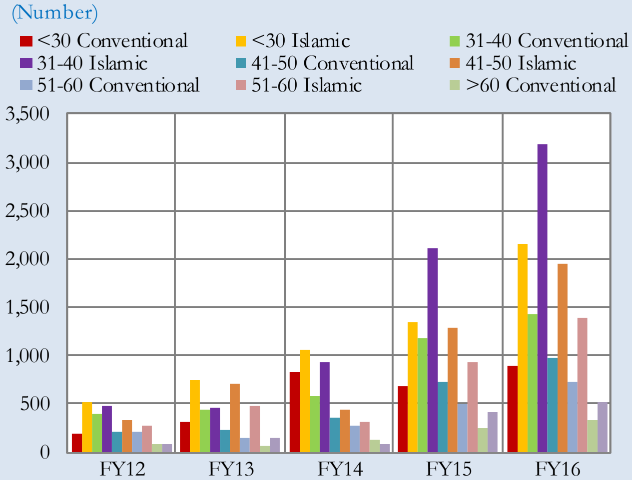
[206] Besides the equity, income and money market sub-funds, the commodity sub-fund was introduced in a pension fund under circular No. 6 of 2013 dated May 09, 2013. This commodity sub-fund shall invest in only commodity future contracts that are traded at the PMEX and are cash-settled futures (except gold which can be invested in a deliverable future contract).

Age analysis of the participants reveals that in terms of number around 34 percent of the participants are in the middle age bracket (31-40 years) which is an encouraging sign (**Figure 1**). In terms of amount, the total amount invested by the 51-60 year category dominates (43.4 percent of total AUMs) suggesting build-up over time. Comparison of retirement funds' investments in mutual funds with the size of VPS reveals that retirements funds prefer investments in mutual funds rather than their specialized product available for old-age security i.e. VPS. The size of the VPS is almost a third of the provident/pension funds' investments in mutual funds (**Figure 2**). This is probably due to difficult administrative burden for employers to manage an individualized pension plan for an employee. Until employers take the initiative to invest their retirement funds in VPS, or employees make the choice of opting for putting their employment fund contribution under the VPS, growth of this segment will remain subdued.

Figure 1
Age-wise analysis of Pension Fund Investors

Islamic products are more popular with pension funds

(Number)

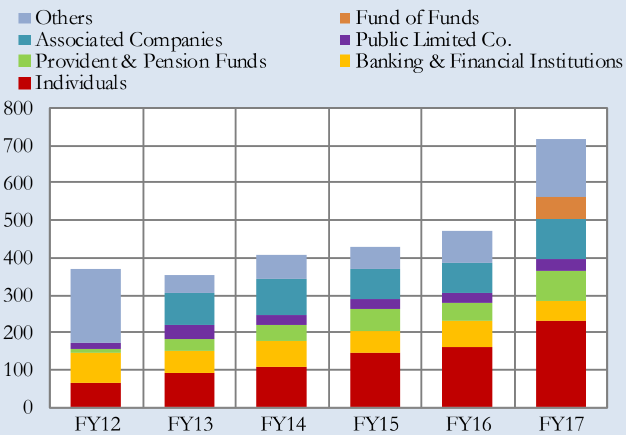


Source:MUFAP

Figure 2
Investor composition of mutual funds

Provident/Pension funds' investments in mutual funds is more than double the size of VPS

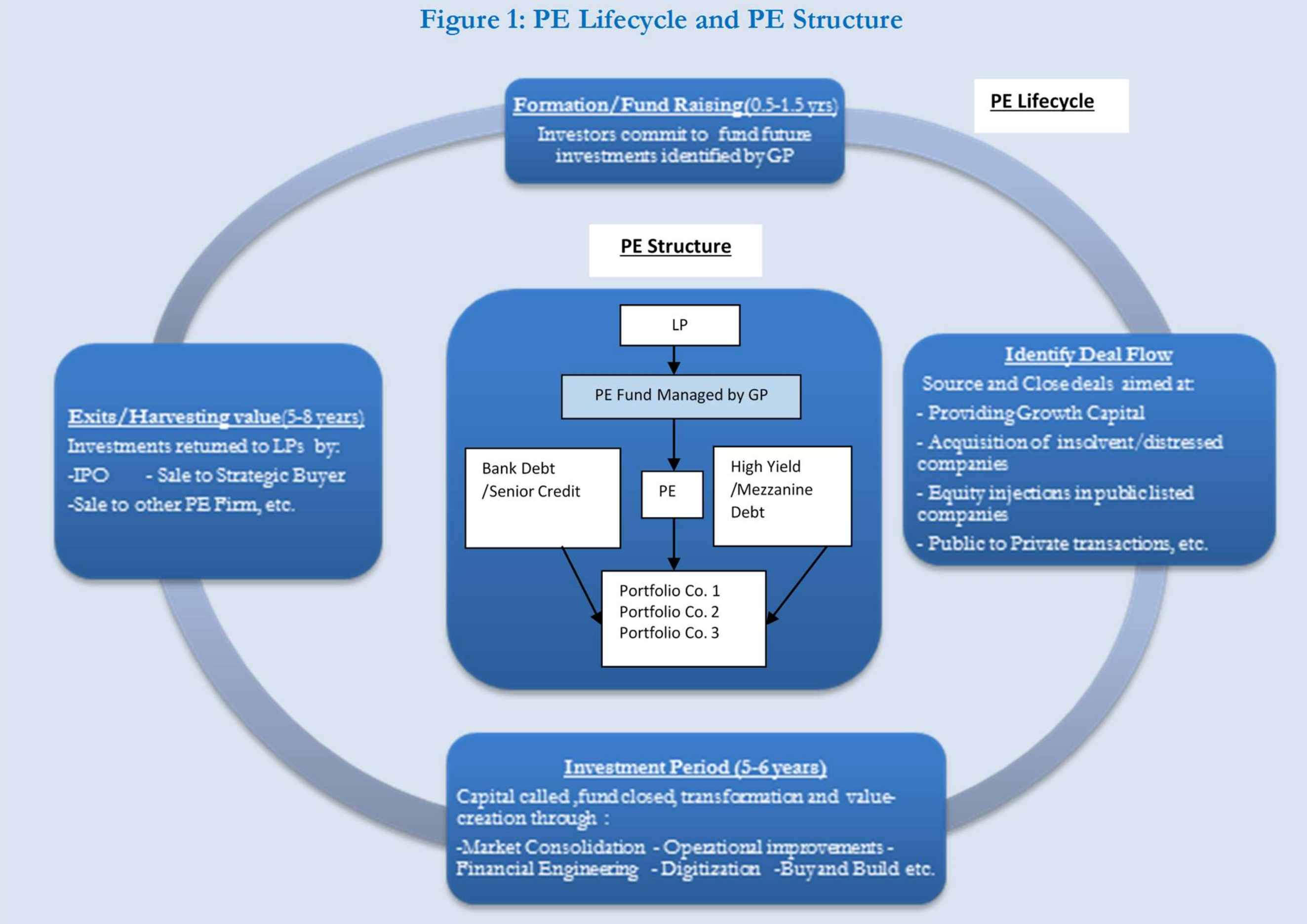
(PKR billion)



Source:MUFAP

Box 4.2.2: Private Equity Funds in Pakistan

Figure 1: PE Lifecycle and PE Structure



Private Equity (PE) Fund-Structure and Lifecycle

PE is a buy-to-sell business model that allows high-net-worth individuals and institutional investors[207] to directly acquire ownership interest in companies. These funds are commonly structured as limited partnerships; PE Firms (General Partner) obtain capital commitments from limited partners (LPs/ investors) and manages a portfolio of companies generally charging management fees which is typically 2 percent of AUMs and 20% performance fees(on profits after accounting for hurdle rate).

Besides equity investments, PE funds may also engage in Leveraged Buy-Outs (LBOs) wherein they supplement equity investments through bank debt, senior credit facility or mezzanine (hybrid) debt.

PE is a source of patient capital for companies. Unlike mutual funds that have infinite lives, a PE fund has finite but longer lives generally spanning 7-12 years. The firms are continually involved in identifying deal flow or potential companies that could be invested in to create value. A number of investment philosophies guide a PE firm in choosing its target. It may buyout companies, provide expansion capital, undertake PIPE (Private Investment in Public Companies) or de-list and privatize them. Globally, in CY17, buyouts have been the popular category (**Table 1**).

[207] E.g., pension funds, university endowments, insurance companies etc.

Table 1

Global Private Equity Backed Buyout Deals and Exits in 2017 by Type

	US$ billion		US$ billion
Deal Type		**Exit Type**	
Add-on	50.3	Trade Sale	145.0
Buyout	159.6	Sale to GP	65.2
Growth Capital	17.6	IPO & Follow-On	39.6
PIPE	17.9	Restructuring	0.2
Public-to-Private	101.6		
Recapitalization	0.1		
Total Assets	**347.1**		**250.0**

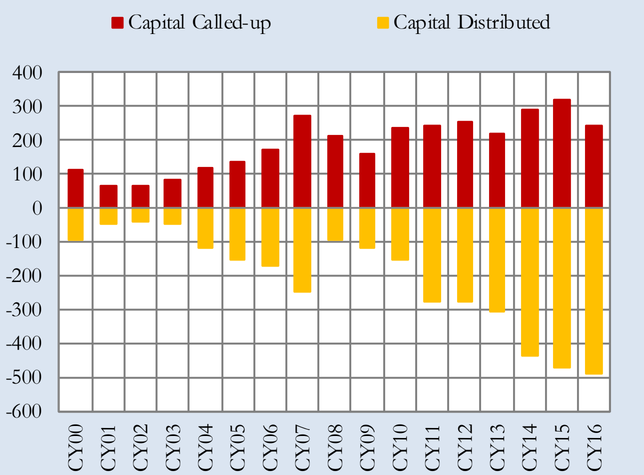
Source: Preqin

Figure 2

Global PE Capital Called and Distributed

Sizeable distributions were channeled back into the funds

(US$ billion)



Source: Preqin

These firms may invest at any stage of a company i.e. start-ups, expanding or mature. After a target is identified, PE firms may provide financial resources, strategic guidance, technical expertise through its professional team, technological support, cost cutting, or other operational improvements to create value and help companies actualize their potential. Such support is especially valuable for public sector companies that typically have outdated business philosophies and are in dire need of operational and strategic revamping. After enabling a company to reach its potential, harvesting this value through deciding on the most productive exit option is a crucial decision. Globally, sale to strategic buyers has been the popular exit option (**Table 1**).

Global trends in fundraising, acquisitions and exits[208]

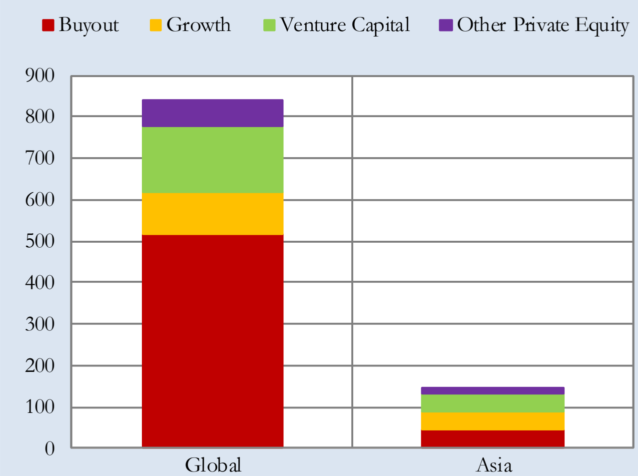
Globally, AUMs of PE stood at US$ 2.83 trillion as of end June-2017. The financial crisis had led to a build-up of huge inventory of companies with the PE funds. As market conditions became favorable in 2013-14, PE firms started exiting their pre-crisis huge inventory of companies at a brisk pace and distributed massive amounts of capital back to their LPs. Most of the distributions have ploughed back to the PE leading to a record year of fund-raising that remained strongest in 2017 witnessing an influx of US$ 453 billion (**Figure 2**). On the other hand, high valuations of firms, competition from corporate acquirers, and increased macro and geopolitical uncertainty had curtailed new acquisitions making the industry's Dry powder (unused commitments) reaching historic highs. Now the global PE industry is all set to begin a new fund deployment phase (**Figure 3**).

Figure 3

Dry powder with PE Firms

Global and Asian Composition in CY16

(US$ billion)



Source: Preqin

[208] Preqin Private Equity Online

Asian PE Industry

The Asian private equity and venture capital market had an AUM of US$484 billion as of end December 2016. China and Japan account for a major portion of investors (51 percent) followed by South Korea (12 percent), India and Hong Kong (10 percent each), Singapore (7 percent), Taiwan (4 percent), others (7 percent).

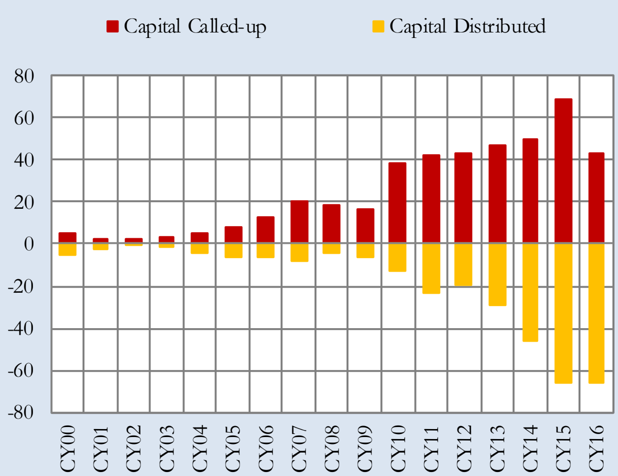
The Asian industry has raised total capital of US$ 562 billion since 2010 (South Asian[209] countries raised US$ 16.2 billion in 2017[210]), and has completed buyout and venture capital deals of US$521billion since 2010 (South Asian countries completed deals of US$ 78.8 billion in 2017[211]). In CY17, out of the global deal value of US$ 347 billion, deals worth US$ 62.5 billion have been managed by Asian PE while of the US$ 250 billion exits; exit deals worth US$ 22 billion have been managed by Asain PEs. China remains the dominating player representing 75 percent and 44 percent of venture capital and buyout deals completed. IT and health care have been the top industries accounting for 19 percent and 15 percent of global deal value, respectively.

Figure 4

Asia Focused PE & VC Capital Called and Distributed

Sizeable distributions channeled back into the funds

(US$ billion)



Source: Preqin

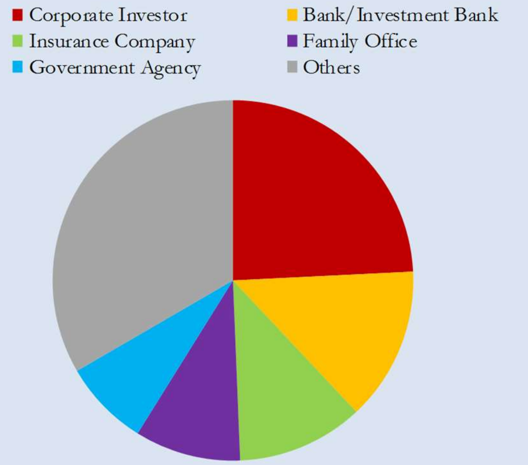
Although the fund-raising/ distribution patterns are similar in the global and Asian market, there is a marked contrast in investor composition. As against the developed markets of US and Europe where educational foundations and pension funds are the dominant investors, corporate investors, banks and insurance companies dominate the Asian industry. In China, recent regulatory changes in the framework for insurance companies has allowed them to launch PE funds increasing their presence in the sector (**Figure 5**).

Figure 5

Asia based PE &VC Investor Type

Insurance companies and Asset Managers account for 19 percent of investor base

(Percent)



Source: Preqin

Regulatory environment for PE in Pakistan

Initially, the Venture Capital Fund regulations were provided for in the Non-Banking Finance Companies (Establishment and Regulation) Rules, 2003 wherein a business entity could undertake all businesses allowed under the NBFC framework subject to compliance with the progressively tiered capital requirements. However, in 2008 the regulatory framework for NBFCs was revamped by creating firewalls between asset management and other services. Henceforth, companies, which could undertake asset management and advisory services, could not simultaneously offer leasing, discounting, housing finance, investment finance services or venture capital investment, simply by complying with the minimum capital requirements. SECP notified the regulatory framework for the registration and regulation of Private Equity and Venture Capital Fund Regulations

209 Bangladesh, India, Nepal, Srilanka and Pakistan

210 Up to September-2017.Source: Preqin

211 Up to September-2017.Source: Preqin

in Pakistan in 2008 later to be replaced with Private Funds Regulations in 2015.

The regulations[212] define PE & VC Fund to be an unlisted closed-end fund established under trust structure and offered for subscription only to eligible investors[213] (capped at thirty).The fund may:

- Invest in securities of an unlisted company
- Turn around a listed company or a company listed on SME board
- Invest in an unlisted company engaged in business of investing in developing a new product or process or expansion of business

The Private Fund Management Company must have at least PKR 30 million in minimum equity. Utilization of borrowing for the funds has only been recognized for the Alternative Fund[214].

Bottlenecks towards successful adoption of the PE model in Pakistan

Worldwide PE firms have played a vital role in helping companies realize their potential and have either spurred or capitalized on industry's Mergers &Acquisition activities. A great variety of businesses in different industry sectors and development stages (start-up or large established companies) like high technology, industrial, healthcare, consumer services, financial and other sectors have benefitted from additional financial or intellectual resources offered by PE experts. For our local industry, it can serve as an impetus for the financial and real sector in the following ways:

i) As the funds have a longer investment horizon and are relatively illiquid they stay invested across market cycles. This tends to be a stabilizing feature for markets as the deployment of funds is sustained across boom/bust episodes.

ii) By offering long-term investment products to match long-term liabilities, it tends to mitigate the risk of maturity mismatch in the financial system. Secondly, by mobilizing resources from large investors it might provide another vehicle to direct resources towards the active/organized financial sector (as against the passive real estate investments or cash/gold hoardings).

iii) The PE funds can act as a potent force for improving standards of corporate governance, disclosure and transparency for the unlisted sector and the small-tier enterprises as they compete for funds from the private investors.

iv) Building momentum for corporate sector's exchange listing if IPOs turn out to be a profitable exit strategy.

v) Since China is leading the Asian PE industry, Chinese PE firms may invest in Pakistan further through local corporate acquisitions. The firms may provide capital to local unlisted corporations to expand further catalyzing the domestic momentum that is being generated under the CPEC collaboration. By bringing in the necessary technology, it may further dilute the country's need for imports, which are currently burgeoning under the pickup in domestic aggregate demand.

However, some challenges exist, which may hamper growth prospects of PE sector with the primary one being the PE firms' inability to mobilize funds from large investors. The trend in the growth of the discretionary/non-discretionary portfolios under management of AMCs when assessed as an indicator of funds that could be mobilized from wealthy families/individuals suggests a rather bleak picture. Although there has been a growth of around 26.9 percent over the last five years, the portfolio size still

[212] The regulations cover two types of Private Funds: "Private Equity and Venture Capital Funds (PE & VC)" and "Alternative Funds". Alternative Funds are defined to be those that invest in Portfolio of securities and other financial assets other than a Private Equity and Venture Capital Fund.

[213] A person who offers a minimum of three million rupees for investment in a Private Fund and furnishes a declaration to the PE Company that he understands the risk of investment.

[214] A Private Fund, which invests in portfolio of securities and other financial assets other than a Private Equity and Venture Capital Fund.

remain small at PKR 139 billion to offer meaningful funding to promote the sector up to the level required to realize the above benefits.

Secondly, although it is highly desirable that savings of institutional investors be mobilized towards long-term investment, a rather conservative regulatory approach (specification of investment criteria for mutual/pension funds and insurance companies) has been adopted to protect resources of insurance and pension funds clientele. The pension funds' defined investment allocation are confined to mutual funds while for the insurance sector, the allowed assets classes only allow a limited percentage in unlisted securities(indirect capital related sanctions on unlisted investments). These restrictions limit availability of funds to PE from institutional investors.

Also, equity investments from abroad in unlisted companies are to be repatriated on book-value as certified by an auditor. The option for repatriation at share market price is available when the exit route of PE is through an IPO. But many of the private corporations remain shy of public listing given the transparency, disclosures and regulatory formalities associated with such listings.

Currently, the PE industry has been vying the regulators for relaxation on these fronts to open doors for more investments in the industry and success of the sector depends on availability of such key enablers.