2 CONSOLIDATION OF THE FINANCIAL SECTOR

As the transformation of the banking sector through consolidation picks up pace, and well-capitalized, large banks start to emerge, it is important to assess the implications of the consolidation process on the stability of the financial system. This article discusses the causes of financial sector consolidation and the potential impact on the structure and stability of the banking sector. Specifically, it assesses the impact of consolidation on competition, financial risk profile, conduct of monetary policy, efficiency of financial institutions, and implications for SBP as the regulator/supervisor of the banking sector. The results based on the 'difference in difference' approach and temporal changes in various indicators suggest that there is no indication of a negative impact of financial consolidation on the banking sector, generally perceived on theoretical grounds.

2.1 Introduction

Both Banks and Non-Bank Financial Institutions (NBFIs) have witnessed around 50 cases of Mergers and Acquisitions (M&As) involving more than 150 financial institutions since the year 2000. Notably, 8 of the 30 M&A transactions involving commercial banks have been executed in CY06 alone. This suggests that the ongoing consolidation of the financial sector is well on its way to create new opportunities and challenges for the stakeholders of the financial sector. Importantly, this is not a phenomenon unique to Pakistan. Factors such as financial liberalization (deregulation and privatization), globalization of financial markets, advances in information technology, changing regulatory environment, and increasing pressure of shareholders to improve financial performance continue to play a vital role in shaping the financial landscape around the globe.[1]

Opportunities and challenges stemming from consolidation have a strong bearing on the stability of the financial sector. Specifically, consolidation bodes well for stability considerations if M&As are able to create efficient and well-diversified financial institutions. On the other hand, risks may arise if they lead to the emergence of big conglomerates venturing into risky areas, and if issues related to 'too big to fail' start to emerge.

In this backdrop, this article provides a detailed analysis of the process of financial sector consolidation in Pakistan. The main focus is on the consolidation of the banking sector, which is the predominant player as it constitutes around 71.8 percent share of the overall financial sector assets. The issues covered in this article relate to the *causes* of financial sector consolidation and the *potential impacts* of this consolidation on the structure and stability of the banking sector such as competition, financial risk profile, conduct of monetary policy, efficiency of financial institutions, and implications for SBP as the regulator/supervisor of the banking sector. It may be worth emphasizing at this stage that the estimation of *partial* impacts of financial sector consolidation is a difficult process, as a given change in any financial indicator used for this purpose is simultaneously affected by all other changes taking place in the financial sector, i.e. other than consolidation. It is our effort to focus on those indicators which can explain the possible impact of consolidation to a greater extent.

2.2 Background and Stylized Facts

In response to financial liberalization reforms initiated in the early 1990s to develop a sound and competitive banking system, a number of private banks appeared in the banking arena. As a consequence, the number of scheduled banks increased from 31 in CY90 to 41 in CY92, and then to 45 by end CY95. However, these newly established small sized banks were unable to provide any meaningful competition to the big five banks.[2] The financial health of these small banks also deteriorated with the passage of time. These developments

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[1] For details, please see International Capital Markets Report, Developments, Prospects and Key Policy Issues, August 2001, IMF (Chapter V - Financial Sector Consolidation in Emerging Markets).

[2] The share of the top 5 scheduled banks in the overall assets of the banking sector was around 70 percent in 1995.

undermined the basic objectives of banking sector reforms to develop an efficient, sound and competitive banking sector. Consequently, SBP imposed an unannounced moratorium on commercial banking licenses in 1995 to limit the fragmentation of the banking sector. This step was followed by the introduction of risk-based regulatory capital requirements (as specified in BASEL capital accord I) in 1997.[3]

To further strengthen the capital base of the banking sector, SBP increased the minimum paid-up capital (net of losses) requirement (MCR) in a phased manner during 2000.[4] Subsequent increases in the minimum paid up capital requirements for banks/NBFIs, restructuring of public sector financial institutions, and corresponding changes in the business strategies of the various categories of financial institutions are the main drivers of on-going M&As in the financial sector. The role of the SBP in promoting mergers and acquisitions is discussed in **Box 2.1**.

Box 2.1: Measures to Facilitate Mergers and Acquisitions by the SBP

Regulatory capital requirements: SBP raised the minimum paid-up capital requirements gradually from Rs 500 million to Rs. 750 million from 1st January 2002, to Rs. 1,000 million from 1st January 2003, to Rs. 1.5 billion from 31st December, 2004 and to Rs. 2 billion from 31st December, 2005. Under the existing road map for increase in capital requirements, banks/DFIs are required to raise their paid up capital to Rs 6 billion by 31st December, 2009.

Changes in Legal Framework: SBP has facilitated M&A transactions by incorporating the necessary amendments in the legal framework; Section 48 of Banking Companies Ordinance 1962 was amended to allow the merger of NBFCs with banks and simplify the process for merger of foreign banking companies.

Fiscal Measures: SBP proposed changes in the Income Tax Ordinance, 2001 including reduction in the tax rate for banking companies from 58 percent to 35 percent and tax incentives to facilitate mergers between financial institutions through addition of a new section 57-A which allows carry forward of tax losses of both amalgamated (target) and amalgamating(surviving) institutions.

Innovation: SBP introduced the concept of Newco which facilitated the merger of foreign banking companies not incorporated in Pakistan through issuance of a new license to a new banking company.

Moral suasion: Promoted various acquisition deals through moral suasion.

Fast track processing: SBP has processed most of the merger and acquisition transactions on fast track basis to facilitate the market players, while ensuring compliance with the relevant legal and regulatory requirements.

Source: Banking Surveillance Department, SBP

In practice, there is usually more than one factor responsible for M&As in the financial sector (**Box 2.2**). **Table 2.1** indicates that a host of factors are responsible for M&As in Pakistan. The most notable factor is the MCR, which is a reflection of the regulatory push for consolidation in the banking sector. It may be noted that such a regulatory strategy is not unique to Pakistan. International experience suggests that regulatory pressure is more prominent in emerging economies, while market pressure encourages this process in developed economies.[5]

M&A transactions in the banking sector are likely to remain in the limelight for the next couple of years as: (1) scheduled banks are required to increase their MCR to Rs 6.0 billion by end December 2009, compared to an MCR of Rs 3.0 billion as on end December 2006; and (2) unprecedented profitability of the banking sector is likely to attract more foreign banks to increase their stake in the country. Specifically, the after tax profits of commercial banks reached Rs 84.1 billion (US$ 1.4 billion), with return on assets (ROA) at 2.1 percent, well above the international norm (data for CY06). Stable macroeconomic environment along with a relatively low penetration level of the banking sector are also factors which have contributed to attracting foreign banks to the country.

[3] BPRD Circular No. 36 dated November 4, 1997.
[4] SBP doubled the minimum paid-up capital (net of losses) requirement from Rs 0.5 billion to Rs 1.0 billion for scheduled banks vide BSD Circular No. 31 dated December 6, 2000.
[5] For details, please see 'Group of Ten: Report on Consolidation in the Financial Sector', BIS, January 2001.

Year	No. of M&As	Institutions Involved	Major Reason
Table 2.1: M&As in the Banking Sector			
CY00	1	Merger of Bank of America into Union Bank	Inorganic growth, Change in Business Strategy
CY01	4	Amalgamation of SBFC & RDFC into SME Bank	Restructuring of Public Sector DFIs
		Merger of NDFC into NBP	Safe Exit for NDFC
		Acquisition of Gulf Commercial Bank (PICIC Commercial Bank) by PICIC as subsidiary	Diversification, Safe Exit, MCR
		Acquisition of Prudential Commercial Bank by Saudi Pak Commercial Bank	Diversification, Safe Exit
CY02	5	Merger of Faysal Investment Bank into Faysal Bank	Group consolidation, Economies of Scale
		Merger of Societe Generale into Meezan Bank	Safe Exit
		Merger of Emirates International Bank into Union Bank	Inorganic Growth, Change in Business Strategy
		Acquisition of Platinum Commercial Bank by Khadim Ali Shah Bukhari & Co.	Diversification
		Merger of Standard Chartered Grindlays Bank into Standard Chartered Bank	Consolidation at regional level: Retrenchment, Business Strategy
CY03	4	Merger of KASB(non-securities Section) with KASB Bank (formerly Platinum Commercial Bank)	Group Consolidation, MCR
		Merger of Mashreqbank & Crescent Investment Bank into Mashreqbank Pakistan Limited	Safe Exit, Appetite for Commercial banking
		Merger of NDLC and IFIC Bank with and into NDLC-IFIC Bank	MCR
		Merger of KASB Leasing with KASB Bank	Group Consolidation, MCR
CY04	5	Merger of Bank of Ceylon-Pakistan Operations with and into Dawood Bank Limited	MCR, Consolidation
		Acquisition of Bolan Bank by Iqbal Alimohammed Group	Safe exit, Restructuring
		Merger of Trust Inv.Bank Ltd, Fidelity Inv.Bank Ltd., and Doha Bank with and into Trust Com.Bank Ltd	Group consolidation, Business Strategy
		Merger of Trust Commercial Bank with and into Crescent Commercial Bank Limited	Business Strategy
		Merger of Credit Agricole Indosuez with NIB	MCR, Business Strategy
CY05	2	Merger of Ibrahim Leasing Limited with Allied Bank Limited	Group Consolidation,
		Acquisition of Majority shares of Dawood Bank Limited by Atlas Group	Appetite for Commercial banking, MCR
CY06	8	Merger of Atlas Investment bank with and into Atlas Bank Limited	Group consolidation
		Merger of Rupali bank with and into Arif Habib Rupali Bank Limited	Appetite for Commercial banking,
		Merger of First Allied Modarba Limited with and into Allied Bank Limited	Group Consolidation
		Acquisition of majority shares of Union Bank by Standard Chartered Bank(Pakistan) Limited	Inorganic growth
		Merger of Habib AG Zurich Pakistan operation with and into Habib Metropolitan Bank	Business Strategy
		Merger of American Express Bank and Jahangir Siddiqui Investment Bank Limited with and into JS Bank Limited	Diversification, Change in business Strategy
		Merger of Standard Chartered Bank-Pakistan operations and Union Bank Limited with & into Standard Chartered Bank (Pakistan) Ltd	Inorganic growth
		Merger of Investment Corporation of Pakistan with and into Industrial Development Bank of Pakistan	Restructuring
CY07	2	Acquisition of majority shares of Crescent Commercial Bank Limited by SAMBA Financial Group	Appetite for expansion of commercial banking
		Acquisition of Prime Commercial Bank by ABN Amro Bank and named as ABN Amro Bank (Pakistan) Limited.	Inorganic Growth

Source: Banking Policy and Regulations Department, SBP

Institutional level data on MCR indicates that 12 of the 35 commercial banks were unable to meet the minimum capital requirements as on 31st December 2006. While some of these banks are well positioned to meet the desired MCR due to strong general reserves and accumulated un-appropriated profits, few weak banks would have to join hands with others if they want to remain in the banking sector. To date, one of these banks has already been acquired by ABN Amro Bank. Moreover, although 7 out of 35 commercial banks have already achieved the MCR of Rs 6.0 billion, some more M&As will still be inevitable during the next few years. As a result, it is generally expected that the banking sector in Pakistan will comprise of well-capitalized commercial banks by the end of this decade, each offering a broad range of financial services.

2.3 Effects of Financial Sector Consolidation

While changes in the number of financial institutions due to the on-going M&As, and the future direction of these changes is evident from the above discussion, how all these changes will affect the stability, structure and operations of the financial sector will be discussed in the following sections.

Box 2.2: Motives of Consolidation

In practice, there may be a wide variety of factors behind mergers/acquisitions (M&As) in the financial sector which depend on the characteristics of financial institutions. All these factors can be bifurcated into two broad categories, namely: (1) value maximizing factors; and (2) non-value maximizing factors.

In case of value maximizing factors, M&As are likely to increase the expected future profits by reducing expected costs and increasing expected revenues. Specifically, costs are expected to decline due to benefits from economies of scale and scope, change management, favorable change in the risk profile due to product and geographic diversification, increased bargaining power etc. On the other hand, revenues are likely to increase as the relatively bigger size of the surviving institutions allows them to offer a number of different services ('one-stop shopping'), attract and better serve big customers, invest in more risky assets, and increase service charges to some extent.

Given market imperfections in the real world, M&A decisions may not always be driven by value-maximizing factors. There may be non-value maximizing factors emerging from the management's inclination to control big organizations to match the size of competitors, and to reduce risks (even when value remains unchanged), or there may be defensive acquisitions.

Empirical evidence based on interview surveys on the motives of M&As in advanced economies shows that motives vary across product lines and across various segments of financial institutions (for example, M&As across the commercial banking, investment banking, insurance sector etc.). Motives also differ for different sizes of financial institutions. Findings indicate that 36 out of 45 respondents ranked economies of scale as a 'very important' motivating factor for M&As within a country-within a segment. Desire to increase revenue, size and market power were the other important factors. However, reducing risk through product diversification and cost through change management were largely considered unimportant. In comparison, the desire to offer one-stop shopping facilities and increasing revenue through product diversification were considered 'very important' for mergers within a country, across segments.

Source: Group of Ten: Report on Consolidation in the Financial Sector, BIS, January 2001.

2.3.1 Impact on the Structure of the Banking System

The on-going consolidation of the banking sector has significantly affected its ownership structure. Not only is the number of banks declining despite the issuance of new licenses to Islamic and Microfinance Banks, the underlying ownership structure is also changing. **Table 2.2** indicates that the overall number of banks has declined from 43 to 39 since CY00. Over the same period, the number of domestic banks has increased to 32 from 24 as of end CY00. As a result, local private banks have emerged as the leading player in the banking sector, with an asset share of 72.4 percent as at end CY06. The asset share of both foreign banks and public sector commercial banks has declined over the same period.

Table 2.2: Number of Banks

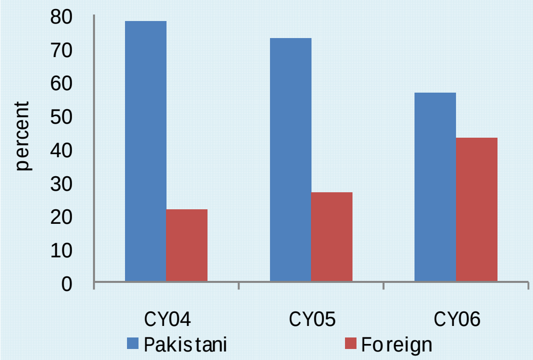
End December

	CY00	CY01	CY02	CY03	CY04	CY05	CY06
PSCBs	6	6	5	5	4	4	4
DPBs	14	14	16	18	20	20	24
FBs	19	19	16	14	11	11	7
SBs	4	4	3	3	3	4	4
Total	43	43	40	40	38	39	39

Source: Banking Policy and Regulations Department

It may be noted, however, that the declining asset share of foreign banks should not be interpreted as indicative of the declining interest of foreign banks in Pakistan. The opposite is certainly true though, as foreign direct investment in the banking sector is on the rise. Acquisition of a strong mid-sized local commercial bank by Standard Charted plc to establish Standard Charted Bank (Pakistan) Ltd, acquisition of another mid-sized local commercial bank by ABN Amro Bank N.V., and acquisition of majority shares of Crescent Commercial Bank by the SAMBA financial group, are some of the noteworthy transactions, as a consequence of which the foreign stake in the Pakistani banking sector has jumped to 43.4 percent (**Figure 2.1**). Incidentally, these M&As have also led to the transformation of foreign banks operating in branch mode to locally incorporated subsidiaries of their respective parent organizations.

Figure 2.1: Position of Shareholding

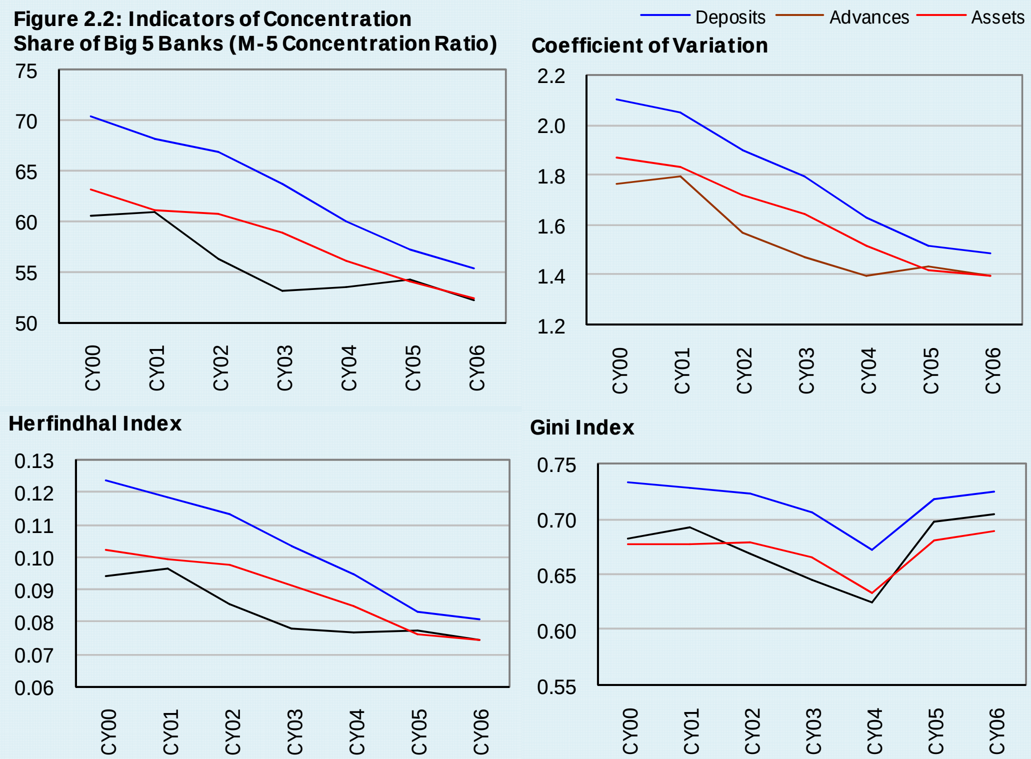


Source: BPRD, SBP

2.3.2 Effects on Competition

Consolidation affects the level of competition in the banking sector by reducing the number of market players. However, the intensity of this effect largely depends on the behavior of the acquiring/surviving entity, the type of consolidation and market entry conditions. If new entry is banned, consolidation may increase the market power of some institutions. This is particularly true in case of mergers of direct competitors. International experience based on advanced countries' data indicates that concentrated markets are less competitive and mergers of direct competitors (within-market mergers) have a direct bearing on the market share of the surviving entity.[6]

Figure 2.2: Indicators of Concentration



Source: SBP Calculations

In case of Pakistan, the impact of consolidation on the state of competition in the banking sector is evaluated by using various measures of concentrations. These include: (1) M-concentration ratio; (2) coefficient of variation (3) Herfindhal Index; and (4) Gini-coefficient. With the exception of the Gini-coefficient, all measures indicate that the level of concentration has declined in recent years (**Figure 2.2**). The M-5 concentration ratio along with the

[6] Group of Ten: Report on Consolidation in the Financial Sector, BIS, January 2001.

coefficient of variation indicates that not only has the share of big five banks declined, the degree of dispersion around the average has also decreased. A more sophisticated measure of concentration, i.e. the Herfindhal index also indicates a decline in concentration. Finally, the Gini-Index, while not showing any significant change in CY06, did increase during CY05. However, this is not a cause for concern, as this rise is primarily attributed to the increasing market share of the second tier big five banks. The asset share of these banks has reached 22.8 percent of the overall banking sector by end CY06 as compared to 18.5 percent for CY05, and only 13.3 percent in CY00.

Hence it can be safely concluded that the level of concentration has a declining trend and has witnessed considerable reduction during CY06. Albeit this is not to say that the absolute level of concentration has declined to a satisfactory level. Concentration is likely to decline further and healthy competition is expected to take hold as small banks will have to join hands with bigger entities in the wake of the on-going consolidation process. Besides these quantitative measures, the qualitative data/evidence suggests that stronger banks emerging from M&As are offering more diversified products, which is serving to improve competition in the banking system.

2.3.3 Effects on Efficiency

The M&A process should theoretically increase the profit efficiency of the institutions as the value maximizing factors generally play an important role in the consolidation process. Costs are likely to decline and revenues are expected to rise as a result of consolidation of operations (already explained in **Box 2.1**). As a result, the profitability of the financial sector is expected to increase. Despite strong theoretical backing, international experience based on advanced countries' data yields mixed results. The BIS report notes that "studies that examine ex post changes in cost efficiency resulting from mergers and acquisitions generally fail to find any evidence that efficiency gains are realized." However, it is acknowledged that the inability to detect efficiency gains by the author may be attributed to 'accounting complexities'.[7]

Table 2.3: Effect of M&A on Cost and Profit Efficiency

Difference in Difference Estimates

	Average Before M&A	Average After M&A	Impact
Ad. expense to total expense ratio			
HBL	6.28%	8.37%	2.09%
UBL	5.11%	12.17%	7.06%
ABL	9.74%	9.66%	-0.08%
NIB	1.01%	5.75%	4.74%
KASB	-6.85%	2.93%	9.78%
After tax Return on Assets			
HBL	0.40%	0.20%	-0.21%
UBL	-0.95%	0.32%	1.27%
ABL	-1.57%	-0.12%	1.45%
NIB	1.39%	0.19%	-1.20%
KASB	0.22%	-1.73%	-1.94%

Source: SBP calculations

In case of Pakistan, the administrative expense to total expense ratio and the after tax return on assets (ROA) is used to analyze the impact of M&As on the cost and profit efficiency of individual institutions. The *difference in difference* approach[8] is used to gauge the impact of consolidation on selected institutions. **Table 2.3** indicates that the administrative expense to total expense ratio for 4 out of 5 banks increased after undergoing acquisition (as in case of HBL, UBL and ABL), while it declined for one bank. These findings can be termed inconclusive at best, as there is no strong support for cost efficiency for the selected banks. The rise in administrative expense to total expense ratio at a rate faster than the industry may be attributable to a number of factors including the expense for right-sizing, changes in defined benefits, repair & maintenance etc.

[7] For details, please see the report 'Group of Ten: Report on Consolidation in the Financial Sector', BIS, January 2001.

[8] In the 'difference in difference' approach, as a first step the difference between the average administrative expense to total expense ratio for each institution from the industry is calculated both for the period before and after each M&A transaction. In the second step, the difference of the post-M&A ratios from pre-M&A ratios is estimated. This process helps to eliminate the impact of other usual changes taking place in the banking industry for these selected institutions.

Compared to cost efficiency, there seems to be a lot more room for profit efficiency for the big banks. The profits of two big banks witnessed a visible rise after being acquired. However, these profit efficiency gains are missing for small banks. This may be due to their inability to benefit from the economies of scale and scope.

2.3.4 Effects on Financial Risk

Consolidation can have strong implications for financial risk including both systemic financial crises and individual institutions. For individual institutions, consolidation can affect the risk profile due to the change in the level of managerial efficiency, geographical diversification, product diversification, operating risks, market power etc. The degree of changes in these risks will depend on the type of consolidation including (a) consolidation of big banks; (b) universal type consolidation, i.e. consolidation of bank and other non-bank financial institutions; and (c) international consolidation, involving a domestic and a foreign financial institution.

Financial Risk at Individual Institution Level

In case of Pakistan, there is not a single case of merger among the big five banks. Even the merger of Union Bank and Standard Charted Bank (SCB) could only improve the ranking of the acquiring entity i.e. Standard Charted Bank (Pakistan) Ltd (SCBPL) to the 7th position in terms of asset share. However, various M&A transactions have led to geographic and product diversification. Specifically, operations of SCBPL instantaneously expanded to 21 cities across the country compared to only 8 cities for SCB. The benefit from geographic diversification may arise from low or negative correlations among returns from financial instruments in different locations. However, these benefits are quite limited in case of diversification within a country as compared to diversification across countries/regions.

In case of product diversification, benefits generally arise from universal-type consolidation. This seems to be very important in case of Pakistan as: (1) commercial banks are allowed to undertake a wide range of financial activities, including investment banking and full-fledged commercial banking activities; (2) a large number of M&As have taken place between commercial and investment banks in Pakistan. Moreover, few Development Finance Institutions (DFIs) have also acquired commercial banks. All this is gradually changing the product mix of the surviving entities.

While considerable risk reduction is envisaged from both geographic and product diversification, the impact of consolidation on managerial efficiencies, operational risks etc. remains ambiguous. Gains from managerial efficiency depend on taking advantage of technology, spreading out of fixed costs and the ability to access capital markets etc. On the other hand, significant efforts are required to mitigate potential operational risks including monitoring/controlling of employees, operating error etc.

Financial Risk at Aggregate Level – Too Big to Fail

On an aggregate basis, the most widely recognized risk from financial consolidation is systemic risk, which is generally defined as the risk that can affect the whole financial system. It is 'the risk that an event will trigger a loss of economic value or confidence in, and attendant increases in uncertainty about, a substantial portion of the financial system that is serious enough to quite probably have significant adverse effect on the real economy'.[9] To analyze the impact of consolidation on the possibility of systemic risk, we will focus on issues related to 'too big to fail' and direct and indirect interdependencies among the institutions.

In simple words, the term 'too big to fail' is generally applied to large domestic banks, which play a major role in the monetary and payment systems of the country. In case of Pakistan, the largest bank can qualify to be 'too big to fail'. However, despite maintaining its first position in the overall banking sector of Pakistan, its asset share in overall assets has declined to 14.8 percent by end CY06, compared to over 20 percent a few years back (CY01).

[9] BIS Report, page 126.

Moreover, the acquiring entities have so far been unable to replace any of the big five banks in the country.[10] In this backdrop, we will explore interdependences in the inter-bank market.

Financial sector consolidation may increase interdependence among financial institutions by increasing the average size of exposure, as the active players (or counterparties) in the inter-bank market are likely to decline. This, together with the distribution of inter-bank exposures, will help in understanding the possibility of a contagion effect. **Table 2.4** indicates that the average size of call-money lending to financial institutions remained unchanged over the period of analysis and is only Rs 1.2 billion for the year CY06, compared to Rs 1.0 billion for CY05. This marginal increase in average call money lending is attributed to both the increasing volume of market activity and the consolidation process. Average lending to financial institutions also witnessed a modest rise over the period of analysis. In sharp contrast to these indicators, a visible rise in the average size of borrowing from financial institutions is not particularly worrisome, as it primarily stems from the increasing use of SBP refinance facilities in recent years. All other indicators in **Table 2.4** indicate that the overall inter-dependence of banking institutions may have declined, as the share of financial institution deposits in total deposits, total unsecured and call borrowing in total borrowing, and call money lending to total lending has declined in recent years. In addition, most of the inter-bank lending is taking place under Repo agreements, which is a relatively less risky mode of transactions as compared to unsecured lending/borrowing.

Table 2.4: Interdependence Among Financial Institutions

	CY00	CY01	CY02	CY03	CY04	CY05	CY06
Average size of exposures *(billion Rupees)*							
Lending to FIs under Repo	2.5	1.8	2.7	3.9	2.1	3.5	3.3
Call Money Lending	0.9	1.0	0.7	0.6	0.8	1.0	1.2
Lending to Financial Institutions	3.7	3.2	3.7	4.9	3.8	5.4	5.4
Borrowing from Financial Institutions	6.2	6.2	7.0	7.5	7.6	8.7	11.0
Other Indicators*(percent)*							
Share of FI deposits in total deposits	10.4	8.8	6.5	3.8	4.1	4.8	4.7
Share of Unsecured borrowing in total borrowing	21.7	23.5	15.6	13.4	16.6	14.0	13.5
Share of Call borrowing in total borrowing	11.9	16.4	9.5	7.5	11.0	9.6	9.7
Share of Call Money lending in total lending to FIs	23.8	32.8	19.2	11.3	21.2	19.3	22.7
Share of Repo lending to total lending to FI	67.0	55.7	72.8	79.3	55.6	63.6	61.0

Source: SBP Calculations based on Audited Balance Sheet Data

While there is hardly any cause of concern at an aggregate level, distribution of bank-level indicators is of vital importance, as averaged numbers can conceal the underlying risks. Indicators of inter-bank exposures show that the call borrowing to equity ratio has witnessed substantial variation across the banking sector (**Table 2.5**). However, this level of variation has remained almost the same over the years. Similarly, the call lending to liquid asset ratio has also recorded considerable variation, while little variation is observed in the standard deviation over the period of analysis. Both these indicators suggest that inter-bank exposures remained almost unchanged over the past few years, as no substantial change has been observed over time. Moreover, indicators of inter-bank exposures for the big five banks remained below average for most of the years.

In sum, little variation in indicators of inter-bank exposures, particularly the distribution of indicators over the period of analysis suggests that consolidation of the financial sector has had no significant impact on systemic risk in case of Pakistan. It may further be noted that the inter-bank exposures seem to be on lower side as compared to the reserve requirements under prudential regulations. In this context, three regulatory requirements are worth noting. These include the minimum capital requirements; cash reserve requirement on demand and time liabilities; and statutory liquidity requirement.

[10] It may be noted that Bank Alfalah Limited has replaced Allied Bank Limited by end CY06 in the list of the big five banks.

Table 2.5: Indicators of Inter-Bank Exposures
percent

	CY00	CY01	CY02	CY03	CY04	CY05	CY06
Call Borrowing to Equity Ratio							
Minimum	4.1	4.5	0.7	1.5	1.1	1.2	0.2
Maximum	460.5	610.2	712.6	439.7	137.9	60.6	142.5
Standard Deviation	99.0	144.9	158.4	92.5	36.3	17.4	31.6
Coef. of Variation	1.3	1.3	2.1	1.7	1.2	0.9	1.4
Call Lending to Liquid Assets Ratio							
Minimum	0.7	0.4	0.2	0.1	0.4	0.3	0.3
Maximum	55.7	52.0	22.0	28.4	27.3	21.1	35.5
Standard Deviation	11.8	13.3	5.4	7.9	7.2	6.4	9.1
Coef. of Variation	1.1	1.2	0.9	1.2	1.2	0.8	1.1

2.3.5 Impact of Financial Sector Consolidation on Monetary Policy

Effective implementation of monetary policy primarily depends on the behavior and level of development of financial institutions and markets. Financial sector consolidation can affect this behavior by changing the level of competition. At a most basic level, the number of active market participants may decline, which can restrict healthy competition in the market. Cautious efforts to exploit market power by certain market participants may increase the cost of liquidity for other participants. Although the ability to do so depends on the market conditions as well, this may lead to excessive volatility in short term interest rates. All this can make the implementation of monetary policy more difficult. On the other hand, if consolidation leads to healthy competition and overall development of the financial sector, it facilitates effective implementation of monetary policy.

Table 2.6: Impact of Financial Sector Consolidation on Monetary Transmission Mechanism
Summary of Responses

Effect of Consolidation	Australia	Belgium	Canada	France	Germany	Italy	Japan	Netherlands	Spain	Sweden	Switzerland	UK	US
Overall Impact on Policy	N	N	N	N	N	Y?	N	N	N	N	N	N	N
Impact on one or more specific channel of policy	N	N	N	N?	?	Y	?	N	N	?	?	N	N
Impact on Financial Markets	N	N	N	N	N	N	?	N	N	N	N	N	N
Impact on Information Indicators	Y	N	N	N	N	N	N	?	N	N	Y	?	N
Change in Monetary Policy Strategies	N	N	N	N	N	N	N	N	N	N	?	N	N

Y: Explicit effect observed or expected; N: No evidence of impact; ?: Uncertain
Source: Adapted from The BIS Report on Financial Sector Consolidation: Table IV.4 page 235.

In contrast to the above-mentioned potential impacts of consolidation on monetary policy, findings of the BIS Report indicate that there is no significant impact of consolidation on the implementation of monetary policy and its transmission mechanism (**Table 2.6**). Moreover, central banks also do not foresee any significant impact in the near future. In the absence of any empirical evidence in case of Pakistan, we focus on two indicators to understand the impact of financial sector consolidation.

Minimum Number of Market Participants

In Pakistan, only primary dealers (PDs) are allowed to participate in the auction system for government securities, while all scheduled bank are allowed to participate in open market operations (OMOs) conducted by SBP. Although not explicitly mentioned by SBP, these arrangements suggest that the number of PDs allowed to participate in the primary market is considered sufficient for the purpose of market-making and smooth functioning of the auction system. A quick view of data suggests that the number of PDs has ranged from 7 to 12 over the last 7 years – far below the number of banks well-positioned to meet the increasing MCR in the years to come. In other words, financial sector consolidation is less likely to affect the functioning of the primary market.

As far as short term liquidity management is concerned, the number of active participants in OMOs was around 20 over the past two years. This number is again almost half of the number of scheduled banks in the country. As the process of financial sector consolidation is likely to reduce the number of banks to around 20 by the end of this decade, it is expected that there will be hardly any negative implications for liquidity management. However, one can expect some improvement in the functioning of markets, as larger banks are expected to better manage their liquidity positions and participate as active market players. International evidence on the optimal number of market participants for open market operations varies from country to country, but is not substantially different in terms of the number of active participants in case of Pakistan (**Table 2.7**).

Table 2.7: Optimal No. of Institutions for OMOs

No of Institutions

	No of Counterparties	Central Banks Estimates
Australia	27	5
Belgium	15	10-25
Canada	13	5-10
France	65-71	N.A.
Germany	545	10-25
Italy	40	>25
Japan	50	N.A.
Netherlands	14	>25
Pakistan	39	N.A.
Spain	45	N.A.
Sweden	8	<5
Switzerland	15	10-25
UK	20	5-10
US	29	10-25

Adapted from BIS Report Page 226, Data from SBP

A simple regression analysis suggests that the primary market efficiency proxied by the bid-spread in T-bill auctions has considerably increased with the introduction of the PDs system.[11] This lends credence to our earlier assertion that financial sector consolidation is less likely to affect the efficiency of the money market, rather it is expected to facilitate the effective conduct of monetary policy.

2.3.6 Impact of Financial Sector Consolidation on Supervisory Issues

Consolidation in general, and cross-category and cross border consolidations in particular, have far reaching implications for the regulatory and supervisory authorities. Specifically, in case of cross-category consolidation transactions among financial institutions, the desire to provide one-window financial services and diversification of businesses may lead to the emergence of financial conglomerates. Financial services in this case may include the provision of commercial banking facilities, investment banking including asset management, and insurance facilities. Although the Banking Companies Ordinance 1962 prohibits commercial banks to undertake insurance business and a full range of financial services related to the securities markets, there is no restriction for a financial group to undertake commercial banking, securities and insurance businesses by establishing separate business entities. In this case, inter-linkages among financial institutions become especially important from the supervisory point of view. Specifically, issues related to the assessment of capital adequacy, double gearing, intra-group exposures, exposures at group level, contagion, transparency of group structure etc. are of vital importance for the supervisors. Close liaison among the supervisory agencies (SBP and SECP in case of Pakistan) is considered necessary for effective supervision in such an environment. SBP relies on the close coordination with SECP to deal with issues related to cross-category activities. However, provisions for strengthened coordinated supervision will be required in the wake of on-going M&A transactions across business categories.

Besides cross-category consolidation, cross-border consolidation has strong implications for both home and host supervisory authorities. Cross-border M&As are generally driven by the desire to expand business and profitability, diversification of products, locations and markets, etc. This type of M&A transaction, as highlighted earlier, is quite visible in the Pakistani banking sector. The issues highlighted in cross-category consolidation become much more important in case of cross-border financial conglomerates, which require a formal mechanism

[11] For details, please see page 124 of "Pakistan: Financial Sector Assessment 2005", State Bank of Pakistan.

in place between home and host supervisors. In case of Pakistan, foreign banks are allowed to operate in the country by incorporating a subsidiary or a branch. In both cases, efforts have been exerted to clearly delineate the responsibilities of home and host supervisors. Moreover, SBP has made formal arrangements in the form of MoUs with various countries to co-operate and share supervisory information.

2.4 Summary and Conclusion

The on-going process of mergers and acquisitions is driven by a host of factors including increasing minimum capital requirements, appetite for commercial banking, and diversification of businesses, change in business strategies, inorganic growth, and high profitability. Moreover, while these M&As are taking place voluntarily, the role of supervisory authorities (SBP and SECP) remains supportive.

The impact analysis of the consolidation process yields the following insights:

- Structure of the banking sector has witnessed visible changes over the period of analysis. Local private banks have emerged as the dominating category.
- Although the asset share of foreign banks has declined in the overall banking sector, equity holdings of foreign investors have jumped to 43.4 percent.
- Various concentration measures point towards increased competition in the banking sector. Specifically, the share of big five banks has declined and the share of second tier big five banks has increased. Moreover, indicators such as the H-index and coefficient of variation indicate a decline in concentration.
- Impact of M&As on efficiency indicators suggest that large institutions were able to benefit from M&As to some extent, while these gains were not visible in case of small financial institutions.
- There is no substantial change in financial risk at the institutional and aggregate level as a result of the consolidation process. Specifically, there is an indication of decline in financial risk at the individual institution level, due to gains from geographic and product diversification. On the other hand, there is no indication of an increase in contagion effect generally associated with M&As. The primary reason for this seems to be that a large number of M&As have generally involved weak and small banks and non-bank financial institutions.
- The impact of M&As on the conduct of monetary policy is gauged by looking at the minimum number of participants for the efficient market functioning of both the primary auction market and the market for OMOs. The results suggest that there is still considerable room for more M&A transactions, as the minimum number of existing market participants are still considerably lower than the overall number of market participants.
- As regulatory and supervisory requirements generally increase in response to cross-category and cross-border M&As, there is a need to put in place a strong coordinated supervisory framework in addition to the present coordination mechanism. This is particularly important in view of the expected changes in financial landscape in the near future.

In sum, the findings suggest that the on-going consolidation has had a generally favorable impact on the banking sector. The negative consequences generally associated with M&As for the competition of the banking sector are negligible, as a large number of M&A transactions have been among small and weak financial institutions. All this suggests that SBP is well on its way to create a well-capitalized and strong banking sector to cater to the needs of the growing economy more efficiently.