

Banking: Interest spread, inelastic deposit supply and Mergers

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Abstract

Interest spread of the Pakistan's banking industry had been on the rise for the last two years. The persistent increase in spread discourages savings and investments besides this casts doubt on the effectiveness of bank lending channel of monetary policy. Given the implications of raise in spread, this study examines the determinants of interest spread. We found that inelasticity of deposit supply is the main driving force behind the rising interest spread however industry concentration does not exercise influence upon the spread. One reason for inelasticity of deposits supply to the banks is the absence of alternate options for the savers. The on-going merger wave in the banking industry will further limit the options for the savers. Given the adverse impact of banking mergers on competitive environment, we argue that to maintain a reasonably competitive environment, merger proposals be subjected to review by an antitrust authority with the State Bank retaining the veto over merger approval.

1. Introduction

Interest spread of the banking sector has been on an upward course during the last few years. During 2005 the average interest spread of the banking sector has increased by 2.14 percent. Interest spread being the difference between what the bank earns on its assets and what it pays on its liabilities, the increase in the spread implies that either the bank's creditor/depositor or the bank's borrower or a mix of both stand to loose.

Bank lending channel is an important channel of monetary policy transmission mechanism. The channel works like this: With a commitment to market based monetary policy the central bank influences the yield on Treasury bills (T.bill hereafter) that in turn affects the deposit and lending rates of banking industry². The change in these rates influences the cost of capital that in turn affects the level of consumption and investment in the economy. If the pass-through of the changes in yield on T.bill rate to the deposit and lending rate is asymmetric then this changes the spread, for better or worse, depending upon the nature of asymmetry. If the increase in spread is due to lower return

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² For discussion on channels of monetary policy, see Mishkin (1995)

to depositors than this discourages savings, alternatively if it is due to higher charge on loans, investment decisions are affected. In either case the increment in spread has an adverse bearing upon the effectiveness of bank lending channel of monetary policy and has therefore important implications for the economy³. Samuel and Valderrama (2006) argue that wide bank spreads in Barbados may have contributed to low rates of private investment and economic growth. According to Peria and Mody (2004) in developing countries, the impact of increase in spread could be severe as the capital markets are relatively less developed and a sizable percentage of agents depend on banks for their financial needs. Thus the lack of alternate avenues of financial intermediation aggravates the adverse impact of increase in spread. Therefore it is important to study the determinants of Interest spread. We found inelasticity of deposits supply to the banks to be the main determinant of interest spread. Industry concentration, for which the evidence in literature is mixed, does not appear to influence interest spread of the banking industry in Pakistan.

Another question addressed in the paper is: Should the proposed bank Mergers and Acquisitions (M&As) be reviewed by, besides the central bank, antitrust/competition authority as well. Typically, antitrust authorities review mergers from the perspective of impact upon competitive environment. Banking industry, in Pakistan, is currently under a wave of Mergers and Acquisitions (M & As). One reason for the recent surge in bank mergers is Basel Accord II which is to be implemented from January 2008. Pakistan is signatory to the accord. To ensure that the banks, at all times, remain financially sound, the accord links the capital that a bank is required to hold with its risk weighted assets (RWA). The accord requires that the capital of a bank should be 8 percent of the bank's risk weighted assets. Given the spirit of the accord the State Bank of Pakistan (SBP) has asked commercial banks to raise their capital gradually to the level of RS. 6.0 billion, till end of year 2009. Some of the banks whose capital is less than the required level and who feel that raising capital through equity injection, or reinvestment of profits will be difficult, are opting for mergers to bring their capital to the requisite level. Besides the

³ For discussion and empirical evidence regarding the impact monetary policy on the level of real economic activity see Friedman and Schwartz (1963), Romer and Romer, (1989), and Bernanke and Blinder, (1992).

approaches prescribed by the Basel accord for risk-weighting the assets also has something to do with expected further consolidation of the banking industry. The accord allows the banks to choose either the standardized or the internal rating based (IRB) approach for weighting of risky assets. The internal rating based approach requires the banks to themselves perform the task of risk-weighting of their risky asset using a model prescribed by the accord. The IRB approach is beneficial for the banks relative to standardized approach but requires initial fixed investment in some equipment, software and human expertise as well to generate the data required for risk-weighting the assets using IRB approach. Given the initial fixed cost involved, it is expected that only larger banks would be able to go for IRB approach. So bank mergers are on the cards on this count as well.

Austin (2002) argues that poorly conceived or badly executed M&As can present risks to the participating banks, the banking system and other economic sectors [Austin (2002)]. M&As on the one hand allows the merging banks to reap scale economies thereby improving efficiency on the other hand these tend to lessen competition. Given the adverse impact of M&As on competition, merger proposals in number of countries are scrutinized and at times even blocked if the degree of competition is expected to fall below a certain threshold level due to merger/acquisition. We find that concentration ratio, in banking industry is close to the threshold level, advocated in literature, and any further decrease in competition due to mergers may call for review from antitrust perspective.

In section 2 we briefly review the literature on determinants of interest spread and describe the model employed to examine the determinants of interest spread for Pakistan. Methodology employed the data used is discussed in section 3; section 4 presents the empirical findings; section 5 makes a case for allowing the antitrust/competition authority to review proposed mergers if the competition stands to reduce below a certain specified threshold level. Section 6 concludes the Paper.

2. Interest spread, concentration and inelasticity of deposit's supply to banks

The determinants of interest spread that come out of the literature can be grouped as (i) market structure of the industry; (ii) bank specific factors; (iii) macroeconomic

variables; and (iv) financial regulations. The industrial organization literature predicts that an oligopolistic market structure may result in higher spreads [Samuel and Valderrama, (2006)]. However the empirical evidence on this count is mixed. Hannan and Liang (1993) and Bajaras, Steiner, and Salazar (1999), among others, suggest that industry concentration may lead to higher spread. However, Classens and Laeven (2004) argue that traditional measures of concentration perform poorly because there is no direct relationship between concentration and competition. Instead they find that contestability, measured by Panzar and Rosse (1987) measure of bank behavioural response, affects competition. The authors find that contestability is enhanced by free entry and lesser regulations. Ho and Saunders (1981) view the bank as ‘a dealer’, a demander of deposit and supplier of loans. According to authors, bank interest margin depends upon four factors: (i) the degree of bank’s management risk aversion; (ii) market structure of the industry; (iii) average size of bank transactions; and (iv) the variance of interest rates. The authors also make the point that a number of imperfections and regulatory restrictions cast an impact upon spread. They consider the probability of loan defaults and opportunity cost of holding mandatory reserves as additional variables that influence the spread, though these are not included in their theoretical model.

To examine the determinants of interest spread for Pakistan’s banking industry, we employ a variant of the model used by Peria and Mody (2004). The original motivation is from the dealership model of bank spreads developed by Ho and Saunders (1981), extended by Allen (1988) and Angbazo (1989). These models predict that market structure of the banking sector, macroeconomic variables, operating costs, regulatory costs and the credit risk can affect spreads. Besides the variables referred above we include another variable viz. inelasticity of deposit supply to banks as a determinant of interest spread. This variable can also be thought of as insensitivity of deposits to interest rate. Our model is:

$$Spread_t = \alpha_0 + \alpha_1 Concentration_t + \alpha_2 DepositIndasticity_t + \alpha_3 mktshare_{i,t} + Liquidity_{i,t} + \alpha_4 Adimincost_{i,t} + \alpha_5 NPLs_{i,t} + \alpha_6 Equity_{i,t} + \alpha_7 Output_t + \alpha_8 Inflation_t + \alpha_9 realint.rate_t \quad (1)$$

Where the variable spread is the difference between interest earned on average assets and interest paid on average liabilities.

The literature on industrial organization offers two competing hypotheses. The structure-conduct-performance (s-c-p) hypothesis holds that market concentration encourages collusion that in turn enables the firms in the industry to engage in rent-seeking. The (s-c-p) is based on the axiom that sellers' concentration lowers the cost of collusion and therefore allows the firms to engage in tacit/explicit collusion. Given market power a bank would pay relatively less on its liabilities and earn more on its assets, thereby increasing the spread. If s-c-p holds then $\alpha_1 > 0$.

Efficient-structure hypothesis on the other hand asserts that concentration rather than being a random event is the consequence of the efficient operations of the leading firms in the industry. Because of their efficient operations these firms earn economic or Ricardian rent. To the extent that efficiency is represented by lower marginal cost of producing output of a given quality, banks in concentrated markets should find it advantageous to offer higher interest on loans and charge lower interest on deposits, thereby decreasing the spread. Thus if the efficient-structure hypothesis holds then $\alpha_1 < 0$. These hypotheses have been tested extensively for the banking industry as well [Berger & Hannan (1989)].

Of the two competing hypotheses, we test for the s-c-p only. We do not test for efficient-structure hypothesis because our *a priori* belief is that concentration of banking industry in Pakistan, of whatever degree, is not the result of the *efficient operations of the leading firm in the industry*—the basis of the hypothesis. Rather the concentration is due to restricted entry. Currently, Pakistan's banking industry mainly constitutes three heterogeneous groups of banks. (i) The five⁴ major banks, that were nationalized in 1973 and four of them have been privatized, one by one, between 1991 and 2002. (ii) Domestic banks, that were allowed to be opened in private sector from 1991 onwards. (iii) Foreign banks that till recent past were allowed to operate only through limited number of branches. Given this characterization of the banking industry it is obvious that till 1991 the five nationalized banks mainly constituted the banking industry and hence the concentration. This has nothing to do with efficient operations. Rather, perhaps the lack of competition adversely influenced the efficiency of these banks. Even now it is only

⁴ NBP, HBL, UBL, MCB and ABL

logical to assume that hang over from the past, at least to some extent, persists for variety of reasons.

We feel that inelasticity of deposit supply to banks or the interest insensitivity of deposits is also a determinant of spread. Deposits that are not interest sensitive, their supply to banks is relatively inelastic. Theoretically changes in T-bill rate are passed on to the deposit and lending rates of the banks. Greater the inelasticity of deposits the less compelled a bank would be pass on the increase in T-bill rate to deposits, thereby increasing the interest spread. Therefore we hypothesize a positive sign on inelasticity of deposit supply.

Besides concentration and inelasticity of deposit supply, the remaining variables mentioned in equation (1) are control variables. We discuss these in the lines ahead.

High liquidity ratio, whether self imposed or the result of regulations, inflicts a cost upon banks as they have to give up the opportunity of investing these funds in alternate high yielding assets, like loans. Accordingly the coefficient is hypothesized to have a positive sign. Liquidity is measured as the ratio of banks liquid assets to total assets. If banks intermediation cost (i.e. administrative cost) is high, they are likely to offset it by charging their customers higher spread. Non performing loan (NPL) negatively affects the spread. This variable captures the credit risk. Higher the credit risk, higher the spread is likely to be. The reason is that the equity holders demand risk adjusted return. To put it more simply given a targeted spread, the actual spread varies positively with NPLs, because what the bank fails to recover from the not-so-good borrower it attempts to recover from the good ones, thereby raising the spread. Holding large equity, whether on a voluntary basis or as consequence of a regulation, is costly and therefore varies positively with spread. Banks market share is the ratio of each bank's deposits to total system's deposits. To the extent that the market share gets translated into market power, the relationship between market share and spread is hypothesized as positive. However larger banks may reap scale economies and transfer some of the benefits to their customers in the shape of lower spread. Given the conflicting expectations the ultimate hypothesized sign of market share is held ambiguous.

Given that interest spreads can be influenced by macroeconomic environment we control for real output, inflation and the policy interest rate. Real output growth is

included, in the model, to capture the affect of business cycles discussed by Bernanke and Girtler (1989). The authors argue that borrowers' creditworthiness is countercyclical. The reason is that slow down in economic activity affects borrowers' fortunes and hence their creditworthiness. The change in creditworthiness would affect the lending rate charged to the borrower that would be reflected in the changed spread. Inflation is included because if inflation shocks are not passed on equally, in terms of magnitude as well as speed, to deposit and lending rate then the spread would change. Finally we include the interest rate that reflects monetary policy stance, again if the changes in policy rate are not transmitted equally, to the deposit and lending rates then the spread would be influenced.

3. Methodology & Data

We use eight years (1998-2005) cross section data of 29 banks (list at Anx-A). As of now the commercial banks number 35, however to have balanced data we have excluded the banks that were non-existent in 1998. Similarly the banks that do not exist today but were operating in 1998 have not been included.

Interest Spread is measured as the return on average assets minus the cost of average funds. Return on average assets has been worked out as the total interest income earned over average assets. The average assets include average, loans & Advances plus liquid, interest earning investments. All averages have been worked out by taking average of the balances held at the beginning and end of the year. Average cost of funds is worked out as total interest paid by the bank over all borrowed funds (Deposits plus Borrowings). Concentration is measured by Herischmann-Herfindhal index.

Inelasticity of deposit supply to banks being immeasurable directly, we use the interest insensitive deposit accounts as proxy for the inelasticity of deposit supply to the banking industry. We view, Deposit accounts, other then deposits of fixed maturities as interest insensitive. Thus the ones considered interest insensitive are Current Account, Savings Account and other accounts. The current account does not pay any interest and is thus obviously interest insensitive. The account holder deposits money in this account for features other than generation of interest income. These features include the option to withdraw huge sums of money at no or very short notice and the use of bank's clearing facilities to execute monetary transactions. A customer may like to have a current account

in one or the other bank due to difference, in service quality and location etc. among the banks, but given his reasons for depositing, he cannot take money out of the banking system. Thus for the industry as a unit the supply on this count is inelastic.

Savings Account offers relatively low rate of interest as compared to Fixed Deposit Accounts, but allows the depositor to withdraw his money at will without any penalty being charged. The depositors placing money in Savings Account are, typically, small account holders who cannot predict as to when they would have to withdraw. The uncertainty about the timing of withdrawal, short period for which the depositor wants to place money in the bank and smaller amount of money that is available for placement, extremely limits depositors' alternate options for placement of funds. This is especially true for Pakistan where capital markets are insufficiently developed, investment in securities traded at stock market is perceived very risky, given the pendulum like fluctuations in stock prices and other investment opportunities are considered less liquid. In sum, again, for the banking industry as a single unit the supply of deposit in savings account is more or less inelastic. Other deposit accounts constitute a negligible percentage of the total deposits and their inclusion on either side is not likely to alter the results. We consider these as interest insensitive and hence their supply to banks as inelastic.

Market share of each bank, is the bank's total deposits as percentage of the industry's deposits. Liquidity is measured as the ratio of liquid assets to total assets. Administrative cost is the ratio bank's administrative expenses to bank's total assets, NPLs is the ratio of provisions for bad and doubtful debts to earning assets and Equity is the ratio of bank's equity to total assets. Data on the variables referred so far is from '*Banking Statistics of Pakistan*' published annually by State Bank of Pakistan (SBP). The data on the three macroeconomic variables, viz. Real output growth, inflation and monetary policy rate (six-months T.Bill rate is used as the policy rate) is from annual reports of SBP.

We have used feasible Generalized Least Square (GLS) on pooled data to estimate equation (1). Presence of heteroscedasticity is very common in cross section data. The use of feasible GLS takes care of that.

4. Empirical Findings

Coefficients obtained from estimation of equation (1), in the manner referred earlier are presented in below in table 1.

Table: 1
Coefficient estimates of equation (1)

Variable	Coefficient	t-statistic
Concentration	-0.002	-0.97
Inelasticity	0.17	1.98
Liquidity	0.03	2.59
Market Share	0.03	1.67*
Equity	0.009	0.40
Non-performing Loans	0.02	1.72*
Administrative cost	0.17	1.66*
GDP growth	-0.55	-3.07
Inflation	-0.08	0.59
Interest rate	0.23	1.64*

* Significant at 10 percent level

The variable of our interest are concentration and inelasticity of deposit supply. Concentration does not cause statistically significant influence upon interest spread. This implies that the concentration is not high enough to cast an impact on interest spread. Inelasticity of deposit supply, as hypothesized, influences the spread positively and the fact that inelastic deposits were as large as 81 percent of the industry deposit in 2005 makes this finding a cause of concern.

To probe further the positive influence of inelasticity of deposit supply, the trend of elastic and inelastic deposits from 1998-05 is presented below in table 2.

Table: 2
Deposit supply elasticity & Interest Spread (percent)

Year	Inelastic: Current + Savings+ others	Elastic: Fixed	Interest Spread	Six months T. bill rate
1998	67	33	7.38	11.87
1999	69	31	7.68	10.10
2000	71	29	7.82	10.96
2001	75	25	8.69	7.93
2002	77	23	6.75	4.32
2003	85	15	4.84	1.64
2004	83	17	4.51	3.73
2005	81	19	6.65	8.25

First it is evident from the table that the variables used to capture the inelasticity/elasticity of deposit supply to the banks are the correct choice. A glance at the table shows that fixed deposits as percentage of industry deposits have been declining with the decline in interest rate [T.bill rate, (Column 4)], thus pointing towards the elastic/interest sensitive nature of fixed deposits. The decline in fixed deposits in turn increased the composition of inelastic deposits. With the disintermediation of fixed deposits from the banking system, the banks, being left largely with inelastic deposits, were not too pushed to pay attractive returns on deposits, hence the rise in spread. It is no coincidence that the period (i.e. 2002-04) during which the percentage of fixed deposits was very low, real estate prices in Pakistan were on the rise and had skyrocketed by 2004. This implies that at least some part of the fixed deposits withdrawn from the banking system had probably ended up in real estate market. This also point towards the lack of alternate depository avenues.

It is also apparent from table 2 that the composition of deposits in 1998 had a clear tilt towards inelastic deposits. This tilt continued to aggravate during most of the data span. The interest spread (column 4) increased by 2.14 percent in 2005. Further pondering shows that interest earned on earning assets increased by as much as 2.86 percent (not shown in the table) whereas the cost of bank funds (that mainly includes interest paid to depositors) surged by 0.72 percent only, thereby causing the spread to rise by 2.14 percent. A competitive environment if it existed in the industry, and assuming that banks were earning a competitive return, would require that the increment in revenues be passed on to customers, depositors in this case. The fact that the banks were able to retain the increment for themselves, as reflected by the increase in spread, implies that banks enjoy market power. As this power stems from inelasticity of deposit supply to the banks, therefore concentration ratio fails to capture this.

Given that inelastic/interest insensitive deposit constituted 81 percent of the industry deposits in 2005, the inference drawn above should not seem strange. It's the inelasticity of deposit supply that accords market power to the banker. Given the finding if the raise in spread is to be checked, first, the emergence of financial intermediaries, that

serve as alternate to banks, is essential. Second, given the imperfect market, perhaps there is some role for the regulator to play.

5. Bank Mergers

As mentioned earlier banking industry in Pakistan is currently going through a wave of Mergers and Acquisitions. M&As, in United States, besides being approved by the Fed are to be approved by another agency that specially looks into mergers. Additionally, the antitrust division of the department of justice issues advisory reports on competitive aspects of all bank mergers and is empowered to bring suit against merger proposal that it believes will have significant adverse impact on competition. As of now, the scrutiny and the approval of the banking M&As in Pakistan, falls under the sole jurisdiction of the State Bank of Pakistan, the regulator of banks. Neither the criteria employed, for the purpose is easily available, nor an institutional mechanism exists to seek public opinion or take into account grievances of the stake holders, especially that of depositors. It is worth mentioning here that a proviso of the code *Good Transparency Practices for Financial Policies by Financial Agencies* developed by IMF⁵ says that:

Financial policies should be communicated to the public in an open manner, compatible with confidentiality considerations and the need to preserve effectiveness of actions.

According to Austin (2002) the objective of the review by the antitrust authorities is:

“a determination of whether, within the identified geographic and product markets, the effect of transaction will be to substantially lessen competition”.

Typically, the likely affect of M&As on competition is tested by employing a measure of industry concentration. More often the concentration measure used is the Herfindahl-Hirschman index (HHI) of market concentration. The HHI measures industry concentration in terms of relative size of the competitors. Adding the squares of market

⁵ International Monetary Fund, *Code of Good Practices on Transparency in Monetary and Financial Policies: Declaration of Principles*, (September 26, 1999), and related Factsheet entitled *Transparency in Monetary and Financial Policies* (March 2001).

shares of all banks in the industry, yields the HHI. The credit market share or deposit market share is used as a measure of the market share. The HHI approaches zero when market is served by large number of players of equal size and it goes to 10,000 in case of a perfect monopoly. Under the merger guidelines published by antitrust division of United States⁶ an industry, other than banking, with post-merger HHI below 1000, is considered unconcentrated; between 1000 and 1800, as moderately concentrated and above 1800 as highly concentrated. In industries, other than banking, a merger generating a raise of 50 points or more in HHI, in a highly concentrated industry raises significant competitive concerns. However in banking industry, the US department of Justice allows an increase of 200 points. In US, the higher than normal threshold concentration levels for banking industry are meant to take into account the competitive effect of limited purpose lenders, that are alternate to banks, such as credit unions, saving and loans association and other non-depository institutions. However in Pakistan the competition to banking industry from other Depository/lending institution being non-existent, as emphasized by our finding regarding the main determinant of interest spread, one cannot convincingly argue for applying a concentration ratio higher than that applicable to other industries. We feel that research avenue exists for developing our own threshold concentration level based upon specifics of the industry. Bu for the moment, given the absence of financial intermediaries that serve as alternate to banks, we take the general US criteria, that is, HHI⁷ above 1000 points and raise of 50 points due to merger as the condition that would call for review of M&As proposal by antitrust/competition authority.

The actual trend of banking industry’s concentration based on HHI is presented below.

⁷ The operation of Herschman-Herfindhal index is described below.

Assume that the six banks indicated in the table below constitute the banking industry. Each of the four of the banks in the industry enjoy 20 percent share of the market. The two other banks are relative smaller with 10 percent share each of the market. We show below what happens to the HHI in case of merger of two large banks, A & B (with share of 20 percent each), a large bank and a small one, D & F (with share of 20 percent and 10 percent respectively) and two small banks E & F (with market share of 10 percent each). It is evident from the table that merger between two large banks is potentially more harmful from competitive point of view, as it increases concentration by 800 points while merger between two small banks causes an increment of 200 hundred points in concentration.

		Concentration ratio			
		Post Merger Scenarios: Banks			
Mkt.Share (%)	Pre-Merger HHI	A&B HHI	D&E HHI	E&F HHI	

Table: 3
Banking Industry: Concentration

Year	Concentration Ratio (HHI)
1998	1,385
1999	1,446
2000	1,403
2001	1,320
2002	1,200
2003	1,112
2004	1,030
2005	912

Based on Deposit Market Share

Though the industry concentration had been on a declining course but it is still close to the threshold level, referred above, that should kick off review from antitrust perspective. A merger or two can push the concentration above the threshold level of 1000. Whatever the concentration level it is useful to examine the cause of decline in concentration. This cause is apparent from look at the trend of market share composition, presented below in table 4.

Table: 4
Deposit Market share

	Five major Domestic Banks	Banks established in private sector since 1991
1998	74.4	10.6
1999	76.9	10.4
2000	75.1	11.9
2001	72.2	14.8
2002	68.9	17.7
2003	66.2	20.7
2004	62.4	24.4
2005	57.8	29.0

It is clear from table 4 that the five major banks that had been in the market for a long time now and were protected from competition due to restricted entry till 1991 have lost a significant part of their market share to private banks with opening up of the banking industry to the private sector. (The share of foreign banks, not shown in the table, has not seen a significant shift).

Now using an actual case from Pakistan’s banking industry, as an illustration, we make the point that taking into account pre and post concentration ratios is important while approving bank mergers. In year 2001 United Bank Limited (UBL), then a nationalized bank, was put up for sale under the privatization programme. Muslim Commercial Bank (MCB) that had already been privatized by then, made a bid for UBL and its bid being the highest, the sale was initially approved but was latter on withdrawn given concerns raised in the print and electronic Media. Based on the market share enjoyed by the two banks, we present below what the pre and post merger concentration ratios (HHIs) would have been, had the proposed Acquisition gone through.

Table 4
Banking industry concentration
HHI: Pre & Post-Proposed acquisition of UBL by MCB in 2001

	Deposits (RS. In Bil.)	Market Share (Deposit) (%)	Contribution to HHI (square: col. 3)
Pre-Merger			
MCB	155	10.93	120
UBL	141	9.94	99
All Banks	1,418*		
MCB & UBL			219
HHI (industry)			1320*
Post-Merger			
MCB-UBL (Merged)	296	20.87	436
All Banks	1418*		
HHI (Industry)			1539**
Increase in industry concentration due to Merger			219

* Shown in Table 3

**Worked out separately taking into account deposit market share of 29 banks (list at Anx.A) included in the study.

The figures given in table 4 indicate that had the proposed acquisition gone through the industry concentration, measured by HHI would have gone up 219 points which is much more than the 50 points criteria argued earlier. The second condition of the criteria is that the post merger concentration ratio should be more than 1000 points. The table shows that this condition is also fulfilled. Thus given our criteria the proposed acquisition of UBL by MCB should have attracted review by antitrust/competition authority. And the transaction should have been blocked, had the sponsors failed to satisfy the authority that

there are factors that would offset the adverse impact of reduced competition. This is the practice in countries where the mergers fall under the jurisdiction of antitrust authority.

Once it is agreed upon that bank mergers need to be subjected to review from antitrust perspective the issue arises that which agency should conduct the review; the regulator (central bank) or some antitrust/competition authority. Austin (2002) argues that regulator's interest in preserving the stability of the banking system favours a tilt towards greater concentration while public's objective of maximizing its return calls for a competitive banking industry. As central bank is a party to the conflict therefore it's a poor agency for conducting review from antitrust perspective. However central is still the most suitable authority for looking into mergers from other perspectives like financial soundness. The middle ground then is that the central bank should accord merger approval however the antitrust authority should have the power to block mergers if these carry the potential to reduce competition below a certain specified degree.

6. Conclusion

This study has investigated the determinants of interest spread of the banking industry in Pakistan. We also probed whether there exists a case for bringing banking Mergers and acquisitions under the purview of antitrust authority. The earlier evidence on industry concentration being mixed, we made an attempt to find out whether this influences interest spread of the banking industry in Pakistan. We found no evidence of such influence. Given the specific features of banking industry that includes the non-existence of financial intermediaries that can serve as an alternate to banks for small savers, we included inelasticity of deposit supply to banks as a determinant of interest spread and hypothesized a positive relationship between the two. Our finding is that inelasticity of deposit supply influences the interest spread as hypothesized, that is, positively. As the deposits whose supply is considered inelastic constitute an alarmingly large percentage of total industry deposits, the finding is a cause of concern. We feel that the emergence of alternate financial intermediaries is essential for lowering the spread. Meanwhile, the regulator can perhaps play some role in lowering the spread.

Secondly we probed whether the on going M&As in Pakistan's banking industry should fall under the jurisdiction of antitrust authority. Given that current level of

industry concentration is close to the threshold level found in literature for initiating such review, we feel that there is a case for bringing M&As under antitrust review. At present no law in this respect exists in Pakistan. We hasten to add that central should enjoy the veto over the decision in favour of M&As but the antitrust/competition authority should enjoy the power to block M&As if these are considered inimical to public interest.

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Annexture-A

Banks included in the study

- 1 Allied Bank of Pakistan
- 2 Askari Bank Limited
- 3 Al-Habib bank Limited
- 4 My Bank Limited

- 5 First Woman Bank
- 6 Habib Bank Limited
- 7 Alfalah Bank Limited
- 8 Metropolitan Bank Limited
- 9 Muslim Commercial Bank
- 10 National Bank of Pakistan
- 11 Prime Bank Limited
- 12 Soneri Bank Limited
- 13 Union Bank Limited
- 14 United Bank Limited
- 15 Faysal Bank Limited
- 16 Bank Of Punjab
- 17 Khyber Bank Limited
- 18 PICIC Commercial Bank
- 19 AL-Baraka Limited
- 20 ABN Amro
- 21 Ameriacn Express Bank
- 22 Oman Bank Limited
- 23 Tokyo Bank
- 24 Citi bank
- 25 Deutsche Bank
- 26 Habibk bank A.G. Zurich
- 27 Hong-Shinghai bank
- 28 Rupali Bank
- 29 Standard Charterd Bank