

# A Comparative Research on Banking Sector and Performance Between China and Pakistan (National Bank of Pakistan Versus Agricultural Bank of China)

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## Abstract

The main aim of this paper is to investigate the financial performance and an analysis of two banks and their role in economic development of both countries. The data is taken from annual reports of both banks National Bank of Pakistan and Agricultural Bank of China during the period of 2005-2014. As "banks are the financial intermediary and money creator that creates the money and lending money from borrowers." In other words banks are the financial institutions that kept the money and saving for commercial purposes or invested and supplied for loans. Here we will use the both banks total assets and total liabilities last ten years from 2005-2014. We will check the performance of both banks with comparison.

## Keywords

Financial Performance, Economic Development, Assets & Liabilities, Banking Competition and Elasticity of Demand

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## 1. Introduction of NBP & ABC

National Bank of Pakistan was established in November 20, 1949 a semi-public commercial bank. The primary objective of NBP was to purchase jute from growers and provide credit for agriculture and agriculture production. NBP is now the biggest financial institution having assets above 270 billion PKR, in agriculture and commodity operation sector having above 35 billion PKR.

The Agricultural Bank of China ABC established in 1951. Later in 1970s Agricultural Bank of China specialized and wholly state-owned as a commercial Bank and subsequently controlled by Commercial Bank. In January 2009 the bank

was restructured into a joint stock limited company, later bank was listed at the Stock Exchange of Shanghai and Hong Kong Stock Exchange in July 2010. Agricultural Bank of China is one of the major banks who provide integrated financial services, also capitalizing the urban areas of the country. It provides diversified services and strives to expand into international market to become first class bank. Due to good business portfolio and advanced information technology, bank provides various types of banking. Agricultural Bank of China provides investment banking, fund banking management, financial leasing and life insurance services.

The bank has total assets of RMB 13,244,342 million,

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deposit of RMB 10,862,935 million and loans of RMB 6,433,399 million at the end of 2012. Bank capital and non-performing loan ratio are 12.61% and 1.33% respectively. In 2012 bank achieved a net profit of RMB 145,131 million. Agricultural Bank of China has 23,472 domestic branches which includes Head office. Bank has four overseas branches and above five overseas representative offices. It has nine domestic subsidiaries and three overseas subsidiaries.

The bank ranked No. 84 in Fortune's Global 500, ranked also at No.5 Top 1000 World Banks due to profit before tax in 2011.

## 2. Banking Review of Literature

An increasing number of research articles have been investigated competition and comparison in the banking sector, financial markets and banking harmonization. Competition in the banking sector has a major impact on the wealth of consumers and companies and affects the performance and financial health of banks. The literature review focuses on the empirical banking literature with established insights from studies of banking competition and comparison. It also focuses on assessment of the different methodological approaches on banking competition and review of theories on competition in the banking system.

Panzar-Rosse [1] Hall and structural approaches for measuring competition using stimulation experiments. This paper demonstrates that the Hall results are very sensitive to deviations from constant return to scale and for decreasing returns to scale, it gives a consistent overestimates. For increasing return to scale, it leads to underestimates. Hence, it cannot estimate market power without additional information. Structural models gave consistently good results with random errors which were higher than that observed in manufacturing experiments. Panzar Rosse model is the easiest method to use but stimulation experiments showed that it was not able to differentiate between collusion and competition.

Carbo et al [2] argued that PRH statistic when used with other direct measures of measurement like Lerner index and interest margins gives better information for analysis. Panzar-Rosse model is more accepted amongst the researchers and has been modified by researchers to overcome the shortcomings of the model. However, there is no one perfect model. Thus, reliance on one model for a comprehensive assessment of competition will not give good results and thus combination of models should be used.

Zhao *et. al* [3] looks at the deregulation – prudential reregulation framework which has been adopted in Indian

banking sector and its impact on competition and performance. Authors argued that deregulation induced competition should lead to efficiency and better performance in banking industry. Re-regulation is aimed at stability and minimizing risk leads to leads to higher costs and lowering of competition. Efficiency is analysed using cost frontier approach and a partial adjustment model. For measuring competition an adjusted AR model is used where Persistence of Profitability (POP) approach is used with reduced POP with increase in profit.

Burdisso and D' Amato [4] analyses the impact of restructuring process on competition and bank profitability. Argentinean banking market was opened to foreign banks and new prudential norms were set. As a result, there was consolidation in banking and concentration increased. This lead to question on competitive strengths of Argentine's banking system. This paper analyses the relationship between profitability, competition and efficiency hypothesis for the 20 largest banks during the period 1996 1998. To measure the effects of concentration, authors construct concentration indices for each particular bank, in order to have a good measure of the degree of concentration they face in local markets. Market share indices are constructed following the same methodology. Those indices are included in a profit equation to determine the relevance of the SCP hypothesis and Market power respectively. Results suggest there is no evidence of market power in the retail banking sector and the effect of prudential regulations have been positive though it led to consolidation in the markets.

Carbo et al explains that mergers on one hand brings economies of scale but on the other hand increases market power and hence may lead to welfare losses. Liberalization reduces concentration and hence may improve competition, inducing banks to control costs. Both these measures improve efficiency; this paper tries to analyze which is more effective. This study analyses Spain which had both a wave of mergers and deregulation between the periods 1986 to 1998. This paper found that deregulation yielded more social benefits as compared to mergers. Thus, policy makers should focus on deregulation for the benefit of the society. Authors use H statistic to measure competition pre and post-merger competition and finds that competition has not changed significantly over the period 1986-1998.

Berg and Kim [5] state that retail banking differ from corporate banking in terms of concentration, the importance of information asymmetries and the extent of customer mobility. This paper considers banks as multi-output industry analyze banking concentration. Authors opined that customers cannot substitute retails loans for corporate loans or vice-versa whereas banks can and do divert funds from one market to other. As a result of these differences among

customers, the degree of competition will differ, and the elasticity of demand as perceived by individual banks will be different in these markets. Banks are found to have substantial market in retail banking as retails customers do not have resources to search for best market offer. Banks are not able to press market power in corporate segment as corporate customers have the resources to find the best market offer. The mobility of customers in corporate banking is much higher as compared to retails customers.

Rozas [6] analyses competition in the Spanish Banking system using PRH statistic for the period 1986-2005. This paper uses weighted procedure to control for size and number of branches. The author gives a brief on the three NEIO based empirical models, i.e., Bresnahan and Lau [7] and Panzar and Rosse. The first models have been scarcely used due to their data intensiveness. The author says that previous studies have found that Spanish banking system have monopolistic competition and the contribution of this paper is its finding of increasing competition in the later periods of the study.

Bikker and Groenveld [8] analyzed the competitive structure in the European Union as a whole and also as individual countries. This paper analyses the market condition in which the banks operate in the 15 EU banks for the period 1989-1996 to see whether market conditions have changed. Then this paper tries to see whether the banks operate in European markets or national markets by using a modified version of Panzar Rosse model. It also tries to analyze whether concentration impacts competition.

### 3. Data Analysis and Comparison

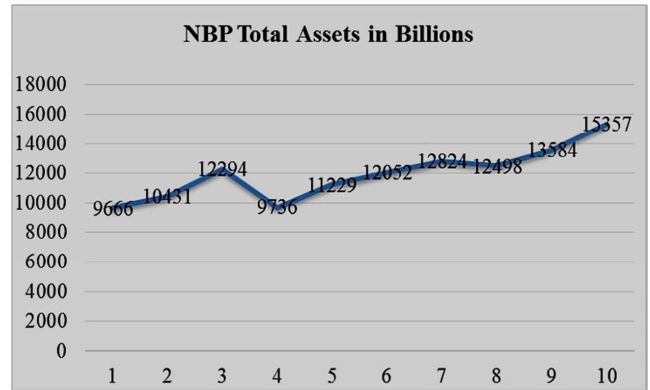
Total Assets of National Bank of Pakistan (NBP) and Agricultural Bank of China (ABC) are show in the Table 1.

**Table 1.** ABC & NBP total assets from 2005-2014.

Years	NBP Total Assets in Billions USD	ABC Total Assets in Billion USD
2005	9666	582243416
2006	10431	670212956
2007	12294	795326340
2008	9736	1009549655
2009	11229	1300334944
2010	12052	1526853066
2011	12824	1807282787
2012	12498	2098146822
2013	13584	2367821464
2014	15357	2510238229
	11967.1	1466800968
	1685.623176	672561771.4
	Coefficient of variances of NBP = 14.0854775	Coefficient of variances of ABC = 45.8522858

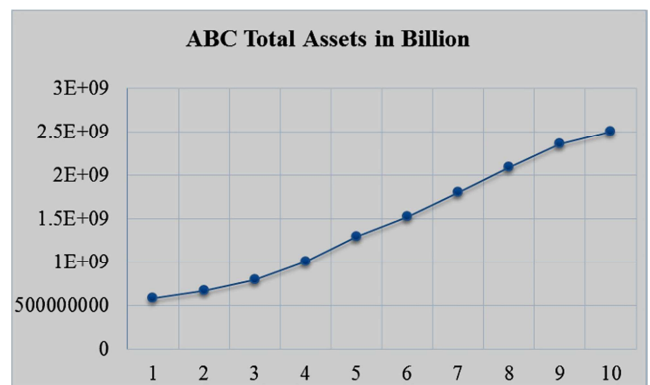
Data Sources: ABC & NBP annual reports 2005-2014

The coefficient of variances of National Bank of Pakistan (NBP) is less than the coefficient of variances of Agricultural Bank of China (ABC). Graphically total assets of National Bank of Pakistan and Agricultural Bank of China are shown in the following fig. 1-2.



**Figure 1.** NBP total assets from 2005-2014.

Data Sources: NBP annual reports 2005-2014



**Figure 2.** ABC total assets from 2005-2014.

Data Sources: ABC annual reports 2005-2014

In 2005 National Bank of Pakistan (NBP) total asset was 9666 billion USD which increased in 2006 and 2007 and reached to 10431 billion USD. In 2008 NBP assets was 9736 billion USD which increased next three years and reached 12824 billion USD in 2011. National Bank of Pakistan total assets in 2012 was 12498 billion USD and increased in 2013 and 2014 with 15357 billion USD. In other side fig. 2 shows the Agricultural Bank of China total assets from 2005 to 2014. In 2005 Agricultural Bank of China total assets was 582243416 billion USD which is higher than the total assets of NBP in 2005. From 2005 to 2014, fig. 2 shows the total asset of Agricultural Bank of China (ABC) increased every year with a sequence and reached 2510238229 billion USD in 2014.

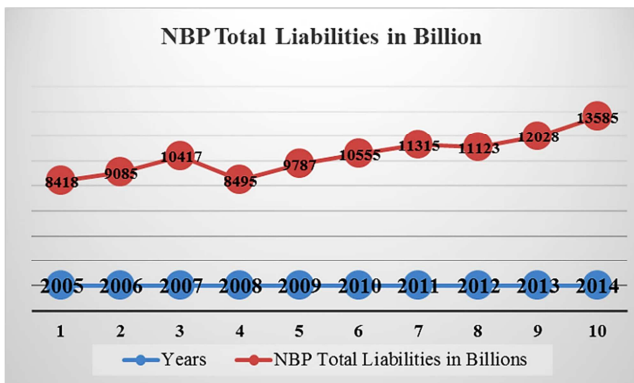
Total liabilities of National Bank of Pakistan (NBP) and Agricultural Bank of China (ABC) are shown in the table 2.

**Table 2.** NBP & ABC total Liabilities from 2005-2014.

Years	NBP Total Liabilities in Billions USD	ABC Total Liabilities in Billion USD
2005	8418	572528374
2006	9085	659677808
2007	10417	783675645
2008	8495	967733161
2009	9787	1250133655
2010	10555	1446763855
2011	11315	1706718204
2012	11123	1979118561
2013	12028	2230498374
2014	13585	4442125402
	1625.352393	1144169331
	10480.8	1562103852
	15.50790391	73.24540744
	Coefficient of dispersion of NBP = 15.51	Coefficient of dispersion of ABC = 73.24

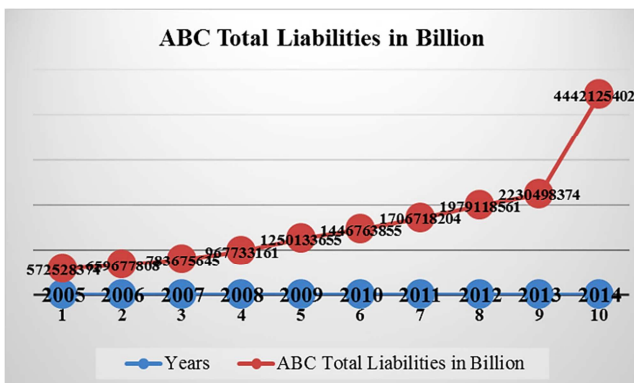
Data Sources: NBP and ABC annual reports 2005-2014

It is clear that the coefficient of variances (CV) of National Bank of Pakistan (NBP) is less than the Agricultural Bank of China (ABC), so the performance of National Bank of Pakistan (NBP) is better than the Agricultural Bank of China (ABC). Graphically it can be shown in the following fig. 3-4.



**Figure 3.** NBP total liabilities from 2005-2014.

Data Sources: NBP annual reports 2005-2014



**Figure 4.** ABC total liabilities from 2005-2014.

Data Sources: ABC annual reports 2005-2014

Fig. 3 shows the total liabilities of National Bank of Pakistan (NBP) in 2005 was 8418 billion USD and increased in 2006 and 2007. From 2008 to 2011 again liabilities of NBP increased with a sequence reached 11315 billion USD in 2011. NBP total liabilities in 2012 were 11123 billion USD and increased in 2013 and 2014. The total liabilities of Agricultural Bank of China (ABC) in 2005 were 572528374 billion USD, which shows a high ratio than the liabilities of NBP. In fig. 4 it is cleared that from 2005 to 2013 liabilities of Agricultural Bank of China increased year wise reached 2230498374 billion USD in 2013. ABC total liabilities reached to 4442125402 billion USD in 2014.

### 4. Conclusion

The competitive structure in banking sector in developed countries is found to be more competitive as compared to the developing countries. As the comparison between two banks National Bank of Pakistan (NBP) and Agricultural Bank of China (ABC) shows that the asset ratio of ABC is much higher than the assets of NBP. Similarly, liabilities of Agricultural Bank of China (ABC) are also higher than the liabilities of National Bank of Pakistan. The impact of various factors on comparison has been analysed in many developed economies. Comparison related studies are important for both the developed and the developing countries to formulate banking regulations and policies. Competition and comparison in banking sector as a research area have been bringing out quality research.

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