UNIVERSITY OF AGDER

Domestic vs Foreign:

A Comparison of Financial Performance of Domestic and Foreign Banks In Pakistan

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This Master's Thesis is carried out as a part of the education at the University of Agder and is therefore approved as a part of this education. However, this does not imply that the University answers for the methods that are used or the conclusions that are drawn.

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List of Abbreviations

ROA……………………………………………………………Return on Asset

ROE……………………………………………………………Return on Equity

DEA……………………………………………………………Data Environment Analysis

DOM…………………………………………………………Domestic

FOR……………………………………………………………Foreign

CEO……………………………………………………………Chief Executive Officer'

SBP……………………………………………………………State Bank of Pakistan

Abstract

This study examines the relationship between ownership and financial performance of domestic and foreign banks of Pakistan during 2001-2010. The ownership is divided into domestic banks and foreign banks. To measure the financial performance, we used return of assets, return on equity and dividend payout ratios. The study has used the secondary data,obtained from Stock market and annual financial reports of Pakistan. By applying the panel data, we have found significant relationships of domestic banks with the financial performance of the banks. Our results show domestic banks performed better as compared to foreign banks in Pakistan.

Key Words: Performance, Ownership, Domestic Banks, Foreign Banks, Pakistan.

Chapter 1: Introduction

1.1 Background

The growth of the banking sector is considered as an important factor in the development of the economic growth of the country. The key policies towards micro and macro level stability, as well as, instability concerned with the efficient banking system of the respective country. The soundness of the banking system is most important in the growth framework particularly for developing countries since the banking sector has great influence on the growth in the early stages and also for the better financial market .

The reformation of the banking sector initiated in the decade of 1990s, when the government of Pakistan allowed a multitude of foreign banks to venture and locate their businesses in the realm of the Pakistan banking sector. It is found from several sources that that foreign banks' entry have borne quite healthy and positive influence in the efficiency and working of the domestic banking sector of Pakistan (Atsushi Iimi, 2004).

Demirug-count and Huizinga (2001) has done their investigation in developing and developed countries for comparison of performance in foreign and domestic banks during the years 1988-1995. Their results showed the positive impact on profit and reducing the overhead expenses.

However, unfortunately, not so much research has done in developing countries in this regard, but the effect of financial reforms has been examined in various capacities in the developing world's financial sector. This research on the financial reform provides an empirical proof of insight findings on government policies, regulatory authorities regarding the efficiency of the banking sector indirectly (Berger and Humphrey 1997). The financial reforms started in developing countries during the early 1980 have its desirable impacts on reforms regarding the efficiency and performance of the banking sector was examined recently.

1.2 History of Pakistan banking system

The banking system in Pakistan has been under the transformative phase for the last fifteen years via the instruments of deregulations and privatization of multiple banks being privatized which were once under the title of Government. It is also important to note that all domestic banks were once nationalized in the era of the 1970s when former Prime Minister Bhutto initiated the Step of nationalization of private assets under the banner of Socialism. This nationalization of banks resulted in overstaffing, an unnecessary expansion of branching and politicization of recruitment policies, which led towards the week portfolio. The political instability and disorder in regulatory policies resulted into under-efficient performance of the banking sector for these reasons. For this reason the Government of Pakistan overwhelmingly decided to take the financial system reforms with the assistance of international monetary fund, the World Bank and other donor agencies as the result of structural adjustment programs.

However it is to be noticed that the major reason of the reforming the financial system in the decade of 1990s was to adopt a market-based monitoring system of portfolio management, which creates a complete milieu in the banking sector. Through market-based monitoring system, there can be judgment of demand and supply of services churned out of the banking sector, which is quite difficult in the nationalized banking sector.

The banking sector of Pakistan went through various phases of reform in accordance with the needs of the time. The initial and first phase of reforms was started in the late 1980s. In the initial stage, there occurred a policy of softening the liberalization regime for state-owned banks. Many banks like nationalized banks were partially privatized by the Government such as the ABL (Allied Bank Limited) and MCB (Muslim Commercial Bank). But another remarkable feature of this whole process was to grant the full autonomy to State Bank of Pakistan, national regulatory bank of Pakistan. Prior to its autonomy it was also under constraints to function under the ministry of finance. Later on it became independent of all shackles. It is pertinent to note here that during this tenure of liberalization policy initiation, all these steps were taken by the government to solely focus on enhancing the efficiency in the banking sector of Pakistan to ensure the competition base market system. An environment ridden with competition always

brings within it efficient methods of operations to maximize profits in private hands. The state is less concerned with profit and more with power. It resulted into inefficiency of the financial sector as this section will be perused in the literature review. Its priorities are based on power-structure not on market-oriented stages of economic growth. In this regard, some of the considerable effort had been taken such as an increase in asset quality, improve the managerial structure, reducing control on credits and leading the market environment (Ramiz ur Rehman and awais Roaf, 2010).

In the second stage of reforming the banking sector in 1990s, the major aim was to totally finalize the privatization and liberalization policy. In this phase:

➢ Firstly, the capital structure of the banks was modified.
➢ Secondly, partially privatized banks were fully privatized.
➢ Thirdly, the ownership of the State Bank of Pakistan was decreased by 93% to 34% (SBP).

In the second phase of reformation, following are the beneficial outcomes in the banking sector of Pakistan:

➢ Ten new private banks were given licenses to enter into the market in 1991.
➢ The residual share value was covered by 25 foreign banks including the some of international banks.
➢ Banks were given detailed instruction regarding the credit policy for specific sectors, expansion of the branches and also the given administration of interest rates.
➢ At the end of 2010, the number of banks were 46, which includes 33 private banks and 13 as foreign bank (SBP).

The net-effect of all of this reformative phases of the financial sector came in early 2000 and within the short span of 5 years in the banking industry in Pakistan was of worth 4 trillion rupees in 2005. The total share of the banking sector assets to GDP ratio increased from 47.2% to 55.6% during 2000 to 2005. These facts show the tectonic, but hopeful changes in Pakistan GDP with compare to later years of 1990. All these achievements were due to the liberalization, privatization and transformation of banking sectors from public to private sector. Another interesting factor was the return on the banking asset which was uplifted up to 2.6% and return

on equity was in 25.4%. According to the World Bank, Pakistani banking sector has been ranked second amongst the South Asian countries. The profitability and the capital structure were improved and it reached at exorbitant levels of 11.91%. Inefficient loan was reduced significantly to 2.1% which was almost close to international standards. The payback ratio of loan is now at 70% (Ramiz ur Rehman and awais Roaf, 2010).

Current statistical facts about Pakistan Banking Sector
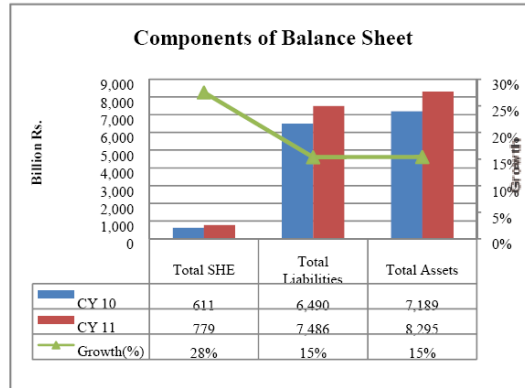
Figure 1: components of balance sheet (source: SBP)
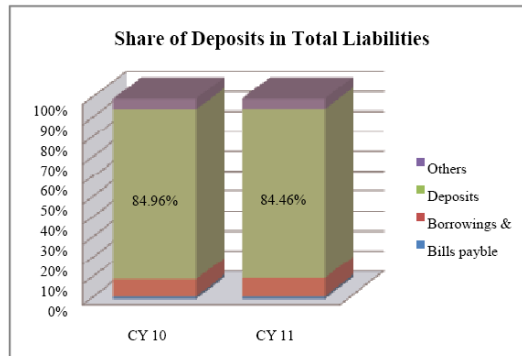
Figure 2: Share of Deposits
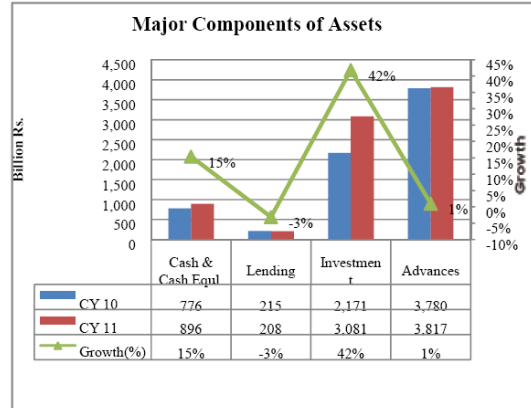
Figure 3: Major Components

The above figures 1,2 and 3 show that total asset of this sector was growing from RS 7.2 trillion in year 2010 to 8.3 trillion in year 2011, showing an increase of 15.4%. Similarly the equity of the banking sector increased 28 % in year 2011 as compared to the year 2010. The growth in total equity of the foreign banks was also positive and increase of 23 % over the previous year. Total deposit rose up to RS 6.3 trillion in year 2011, showing an increase of 14.6% and it compose 15% share of total liabilities.

1.3 Significance of the study

Significance of study is an important part of the research as it exhibits that how much study is relevant to the current time of any modern trend prevailing that time. Therefore this study was taken to underline the changing banking structure of Pakistan as this area of research has not been touched in depth. The banking sector in Pakistan has gone through the dramatic phases, which include:

- ➢ Changing the ownership structure
- ➢ Regulatory authorities
- ➢ Supervision under the State Bank of Pakistan

After the nationalization of the banking sector during the 1970s, the structure of the banking was regulated by the government and it was considered as the most regulated sectors of the country's economy. This nationalization of the banking sector resulted in the poor performance and inadequate efficiency of the banking sector adversely affecting the economy of Pakistan during

that period. After this, adverse effect was discovered, it was decided to liberalize and deregulate the banking sector allowing the some of the banks to privatize. The five major banks were privatized during the 1980 and then the Government kept this process intact through the instruments of liberalizing financial policies and allowing the foreign banks to enter into the Pakistan market in 1990s.

All these dramatic changes have an impact on the Pakistan banking sector on their performance and productivity level. These reforms have provided an opportunity to analyze the performance and efficiency of Pakistan banks in some different dimension. For this we have to understand the historical background of the Pakistan banking system.

1.4 Objective of the study

The objective of the study is important to peruse that how the study will be beneficial to researchers, academicians and businessmen. The second objective of the study can be found in the extension of current knowledge available. The third objective of study is open to new vistas of research in the current study. The objectives of the current study are briefly discussed in the following lines.

The main objective of this study is to answer the main research question that the ownership structure of banks operating in Pakistan has an impact on bank performance or not. To answer the question knowledge about the Pakistan banking industry has extended to determine the financial performance indicator on the basis of financial ratios by analyzing the ownership of banks in different terms. From the previous literature, performance and efficiency of the banking industry has been determined on the basis of ownership, the size of banks, different financial ratios and etc.

1.5 Contribution of this study

This study will contribute to adding new knowledge on the basis of ownership and financial performance in one of the developing country i.e. Pakistan. This study will go one step further to previous literature about dividend payout. We will examine which bank pays more dividend.

The research design will include a study of Commercial banks with varying ownership. The results of this study will be of particular interest not only to Pakistanis regulators, professional bodies and boards of directors but also to international agencies such as the World Bank, International Monetary Fund and Asian Development Bank operating throughout East Asia and beyond.

1.6 Problem statement

In all over the world banking performance has been evaluated at different times for the study of the impact of different variables on bank performance. Most of the studies have been conducted in developed countries. But in developing countries this era has been neglected. This creates a huge space for the research in banking sector of developing and underdeveloped economies. The results vary from different points of view even for the same variables as well. For example Denizer (1970) found the result in Australia as the public banks are more dominant in new environment while the SUBRATA SARKAR et al (2003) also found the same result in India as the banks with public ownership are more dominant. Also Berger and Mester (2007), and Humphrey and Pulley (1997) describe the example of US experience with banks financial reforms and by Lozano-Vivas (1998) for Spanish banks and few studies are available to show the effect of financial reforms in Developing countries like (Gilbert and Wilson, 1998, and Leightner and Lovell, (1998) suggest that financial sector reforms does enhance financial sector efficiency, although in many instances profit (and revenue) performance improves more than cost efficiency. Similarly, the Berger et al (2007), found that public banks are less efficient, but in contrast to his previous research , investigated about the least GDP share for those developing countries' where the largest share of banks is state owned.

I have constructed the problem statement for my research study by critically examine the result contradictions in developed and developing countries. As mentioned above that Pakistan banking industry has also gone through in financial reforms during the different time span. Most of the literature in current time also discuss the banks' performance after the reforms in the financial sector and then bring out their investigation.

So keeping in view the importance of financial ratios to study the bank performance and ownership structure I have developed my research problem based on available literature:

- Does the ownership impacts on financial performance of the domestic and foreign banks in Pakistan?
- How the financial ratios will determine the performance of the banks under domestic ownership?

- How the financial ratios will determine the performance of the banks under foreign ownership?

1.7 Layout of this study

This thesis has been divided into seven major chapters as shown in figure 1, i.e. Introduction, review of literature, theoretical and conceptual framework, Research methodology, result and analysis, Discussion and Conclusions and recommendations.

The first chapter of the thesis has provided an introduction regarding the topic of the thesis and has given a bird's eye view of the thesis. This chapter has discussed the aims and objectives of the research, followed by the research questions, rationale for conducting the research, the significance and contribution of the thesis.

The second chapter discusses the literature regarding the topic. In the second chapter, this thesis had conducted a thorough and critical investigation of relevant sources, outlined, compared, and discussed major ideas, explanations and concepts.

Figure 4 OUTLAY OF THE STUDY

1	• Introduction to the topic and discussion of aims, objectives, rationality and contribution of the study
2	• A critical review of relevant literature
3	• A development of theoritical background and Conceptual framework
4	• A compact description of the methodology, which has been applied for research
5	• Description of results, followed by analysis of the results. Answers to research questions
6	• Discussion and Conclusion • Limiations and assumptions of the study. • Recommedations for future course of study

The third chapter of this thesis has laid the theoretical foundation of the research by discussing the concept of agency cost, ownership theory and resource depenendent theory and finally built a conceptual framework for this study.

The fourth chapter has discussed the methodology that has applied for the research purpose in this thesis. The fifth chapter is the result and analysis of the findings that this thesis had made through research. In this chapter, this thesis has discussed and analyzed the results of the thesis, answered the research questions, and met all the research aims and objectives.

Finally, the sixth chapter consists of conclusions, recommendations and limitation of the study. In the sixth chapter, this thesis has summarized the whole thesis.

Chapter 2: Literature Review

The literature which is concerned to examine the relationship between bank ownership and performance or bank ownership and efficiency are mixed. We are going to discuss these results in detail in our literature review part. Brissimis and Delis (2006) observed that both exterior and domestic factors have their effects on the framework and performance of banking sector all over the world.

Cornett et al (2009) exhibits that how government ownership and government participation in a country's economic system affect the performance of banking sector from 1989 through 2004. The findings of the study also show that state-owned economic and banking institutions operated less profitably when compared with privately owned state institutions. It is because that these institutions held less primary investment, and had higher credit risk than privately-owned economic institutions before 2001, and the performance variations were more significant in those nations where higher government participation and political corruption joined hands in the economical system of the respective states.

In addition, from 1997 to 2000, the 4-year interval after the initiation of the economic problems of East Asian economies, the deterioration in the income profits, primary investment, and credit quality of state-owned institutions was significantly higher than that of privately-owned institutions, especially for the nations that were hardest hit by the East Asian economic and financial constraints. However, state-owned economical institutions closed the gap with privately-owned economical institutions on income profits, primary investment, and nonperforming loans in the post-crisis interval of 2001–2004.

Demirguc-Kunt and Huizinga (2001) studied the performance of domestic and foreign banks in eighty countries including developing and developed countries from 1988-1995. They examined that how the net profit margin, overhead expenses, taxes paid and profitability differ between domestic and foreign banks and found that foreign banks perform better in term of profitability in developing countries, but it's totally the opposite in developed countries.

Evans and Molyneux (2001) focus on the German banking market during 1989-1996 to differentiate between private commercial banks, public savings and mutual cooperative banks and found that private commercial banks are inefficient in terms of profit with compare to cost. Several studies have discussed the concept of performance with the profitability on a particular country like (Berger, 1995; Guru et al., 2002; Barajas et al., 2001; Ben Naceur and Goaied, 2001). Berger (1995) examines the return on equity and the capital asset ratio for the sample banks of US banks during 1983_1992 by using the Granger model and found that both ratios has a positive impact on performance.

Guru et al. (2002) investigate the performance of seventeen Malaysian commercial banks during 1986-1999 to determine the profitability performance of these banks. The profitability were divided into two main categories, namely the internal determinants (liquidity, capital adequacy and expense management) and the external determinants (ownership, firm size and external Economic conditions). They found that the bank has the low profit performance of banks to other determinants.

Taboada (2011) analyses that a new trend of financial institution privatizations in the past several years has considerably modified the possession structure of financial systems around the world. His study examines in depth that how the changes in the structure of the banking sector have an impact the allowance of capital within nations. Enhances in nation-based block holder possession of financial institutions negatively impact the allocation of investment through improved loaning action to less effective sectors and to those with less dependence on exterior finance. This result is more noticeable in nations with higher levels of data file crime error. I find some proof that international existence improves investment allowance performance by improving lending to more effective sectors, mainly in common law countries.

Lin and Zhang (2009) observed that the financial system in Chinese suppliers is the biggest and most complicated among the nations currently in conversion from main planning to market-based financial systems. In the last two years, Chinese supplier's government-owned financial institutions have gone through an amazing privatization program that, distinct from the experience of other conversion nations, has followed a step-by-step strategy to change. The producing changes in the possession of Chinese institutions of finance increase important concerns in this regard. In particular, what part national personal possession and international personal possession play in banks' performance compared to condition ownership?

To address these concerns, the authors implement an econometric technique that creates on the literary works on the performance effects of various types of bank possession in creating nations and apply it to a unique data set on Chinese supplier's financial institutions from 1997 to 2004. Outcomes indicate that four big state-owned professional financial institutions are less successful, are less effective, and have more intense resource quality than city-level professional financial institutions, household joint-equity financial institutions, recently established Chinese-foreign joint-equity financial institutions, and financial institutions capitalized entirely by international resources (static effect).

It also finds that financial institutions going through an international purchase or public record better pre-event performance than those that do not (selection effect). These outcomes recommend that international traders may choose to obtain the best performing banks, or on the other hand that the government offers the value of better doing financial institutions first in an effort to entice international and many.

Molyneux and Thornton (1992) explore the determinants of bank's profitability on 18 European countries during the 1986-1989 periods. They find positive impact on ROA and the level of interest rates in each country with government ownership.

Xiaochi Lin (2009) investigates the effect of bank ownership on performance for 60 banks. They used the Return on equity, Return on asset, Impaired (non-performing) assets to total loans, Costs to operating income to measure the performance of all the banks.

Muhammet Mercan et al (2003) investigated the financial performance index of Turkish commercial banks during 1989-1999. This index allowed them to investigate the effects of scale and mode of ownership of banks with the financial performance of banks. They used the DEA model by assuming the constant return of the scales. Financial ratios were used for input and output and showing the yearly based result which determined private and foreign owned Turkish commercial banks performed better than government owned banks.

Marcia Millon Cornett et al (2010) examines the effect of government ownership in the banking system during the Asian crisis. They include 16 countries from Asia to see the effect of the Asian crisis on the bank's performance during 1989 to 2004.the period from 1997 to 2000 shows the crisis effects on all the banks. The gathered the data from different sources to establish the ownership percentage of the banks. By using the capital/assets, Allowance for loan, Nonperforming loans/loans, Loans/deposits, Government securities/assets, Asset growth rate as dependent variables by using the regression finds out that state owned banks generally operated less profitable and have lower ability to take credit risks than privately owned banks prior to 2001.

The Banking sector in most of the transition countries consists of different segments with different functions and speared with an extensive branch network. Their primary function is to collect the deposit, handles the transactions including foreign currency matters. Domestic commercial banks were handled by state banks in many countries.

There are several studies discussing the concept of efficiency and ownership in the banking sector which also relevant to the performance of banks as well (Lin and Zhang , 2009).

Literature is more focused on developing countries but growing literature is available from developing countries particularly from Asia. In this section I will try to summarize the relevant literature related to efficiency and ownership. Different researches have discussed the concept of efficiency in different dimension with the ownership for example Berger et al (2007) measure the cost of efficiency and income efficiency in U.S banking also Ali et al (2004) determines the efficiency of Pakistan and Indian banking by comparing the resource utilization of credits and income generation of all commercial banks with the help of the DEA.

As we have already discussed Pakistan banking system has gone through in different reforms, including the liberalization and deregulation. The results of these studies are mixed. The objective of the deregulation is to increase the efficiency in the financial system. The result of deregulation in US banking shows the cost of efficiency decline.

Isik and Hasan (2003) also investigate by using the total factor productivity index and conclude financial reforms have a positive impact on Turkish commercial banks during 1980-1990. Other studies conducted by Ozkan Gurney et al (2006) to compare the Turkish banking industry before and after the crisis by using the DEA. They took the date from private and foreign banks for ten

years during 1990-2000 and computed the efficiency by using the two models. The results reported that 25% of the domestic commercial banks were taken by saving banks and the overall efficiency score decline in this span due to stroke weeks in the pre crisis era.

Avkiran (2000) and Sturm and Williams (2004) investigate about the productivity of ten banks of Australia during 1986-1995 after the financial reforms concluding the increase in productivity of banks. Kirkwood et al (2003) compared the cost and profit efficiency for 10 Australian banks during (1995-2002) by using the DAE approach in estimating the efficiency scores of two comparing the two models. In model A, labor and net fixed assets as inputs and interest bearing assets and Non interest bearing assets as outputs. In model B, they used the same inputs as in model A, with different outputs as profit before tax and abnormal items. For both models applied Malmquist Productivity indices to separate the technological changes on profit efficiency. After combining the result it was concluded revenue efficiency was increased in major banks while the regional banks show the negative results. However, major banks show the same result towards profit and cost efficiency and the regional banks shows the reverse results.

Sathye (2001) also used the DEA to measure the efficiency score of 29 commercial banks of Australia in 1996.To estimate the efficiency score by taking labor, physical capital and loan able funds as inputs while loan and demand deposit as outputs and also address the issue of ownership by separating the sample in term of the ownership. The estimated result of the Australian banks was 0.58 which was lower as compare to world efficiency score. However, the results showed that domestic banks performed well as compared to foreign counterpartners.

Some pioneer studies have been conducted in Eurpean context where Tulkens (1993) to compare the efficiency of two large bank branches in Belgium where one bank is publicly owned and the other one is privately owned by using the non-parametric techniques. This work compares the results between two bank branches and derived the conclusion the public bank branches are more efficient than the private bank branches.

2.1 Literature From Pakistan

An increasing trend has been shown in studies regarding the concept of efficiency in Pakistan banking industry. Researchers have done their research in order to know the efficiency of banks under different dimensions. For example, Akhtar (2002) used Data Envelopment Analysis (DEA) and took the sample of 40 banks in 1998. Deposits and capital of the banks were used as input and investment portfolios and loans advancements were considered as output. The result showed that the overall efficiency of Pakistan banks was .80 which was lower than the world average banking efficiency score .86 by Burger and Humphery (1997).

Rizvi (2001) conducted a study during 1993-98 to measure the productivity of Pakistan banks by applying the DEA. A sample of 36 banks including domestic, foreign and public banks was used during the first financial reforms in Pakistan banking industry to see the effects of reforms. The result showed that domestic banks performed better than a foreign bank in this duration.

Qayyum et al (2006) conducted his study by taking the sample of 29 including the domestic, foreign and public banks during 1998-05. They used Stochastic Frontier Analysis by using input as labor, capital and borrowed funds while taking two outputs, loan advances and investments. The results showed that the efficiency score was highest in 2004 for all types of banks while it was lowest in 2001 for all groups. The result showed that domestic banks were less efficient than foreign banks. The scale of economies also exists in this study for all banks which shows the scale of economies was higher for small banks and lower for big banks. A domestic bank has a lower economy of scales as compare to foreign banks.

Usman et al (2009) conducted a study for 20 domestic commercial banks of Pakistan and used the data since 1990-2005. For measuring the efficiency of banks they also used DEA and Malmquist Productivity Index of Total Factor Productivity (TFP) for the purpose of the change in date over the time. They divided the data in three stages of time period i.e. pre-reform period (1991-1997), first reform period (1998-2001) and second reform period (2002-2005). For the estimation purpose they also used deposits, labor and capital as inputs and loan advances and

Investment as outputs. Overall result showed that efficiency of the banks increase after the financial reforms.

Akmal et al (2008) estimated the technical efficiency of the Pakistan banking sector by taking the sample of 30 banks including 4 public, 18 private and 8 foreign banks during the period of 1996-2005. For estimation purposes they used the two stage DEA to calculate the score for technical and scale efficiency and also used the Tobin regression to find out the effect of several banks on macroeconomic factors. The results suggested that banking efficiency has increased since 2000 and foreign banks are more efficient than private and public banks in Pakistan.

Niazi et al (2006) also investigated the impact of financial reforms on Pakistan banking industry during 1993-96. For estimating the efficiency score, they also used DAE approach for 30 samples of banks including the public, private and foreign banks. They find that foreign banks have better performance than other banks and also confirm the negative relationship between the size of the banks and its efficiency score.

Hassan Mobeen Alam et al (2011) investigated the performance of public and private banks in Pakistan by using the profitability, efficiency, liquidity and capital ratio during 2006-2009. They found that the public bank performs better for the return on assets and equity while private banks perform better in Non-Interest Expenses to Total Income and for net interest margin ratios. For liquidity ratios, public banks are better on the base of cash & cash equivalents to total assets ratio of banking and investments to total assets ratio.

2.2 Rationality of Research

The above literature exhibits that whenever the privatization of the banking sector occurs anywhere in the world, the performance and productivity of banking sector improve very well. Numerous studies have been conducted in the past in different parts of the world from which different inferences have been concluded by the researchers. However, the research on this topic in Pakistan has been well-night absent. Some of the studies also present the result from Pakistan

but these studies do not the fill the gap during 2001-2010. This creates the gap for researchers, students and business entities as well. Therefore, I have undertaken research to peruse this sector.

Chapter 3: Theoretical Framework

For this study we will use the agency theory, the theory of ownership and resource dependent theory for describing the impact of ownership in different dimensions and resource dependent theory.

3.1 Agency Theory

Agency theory traditionally assumes that the objectives of the shareholders and management are inherently incompatible (Berle and Means 1932). Corporate governance mechanisms have to be designed to reduce this divergence in objectives. Lear (1997) defines corporate governance as "the whole process of running a company and serving the best interests of the shareholders in conformity with the laws and ethics of the land. All of the factors that are involved in balancing the power between the CEO, the board and the shareholders are now considered to be a part of the corporate governance syndrome". Corporate governance mechanisms thus refer to the set of internal and external agency cost-reducing arrangements (Agrawal and Knoeber 1996).

Prowse (1995) advances the view that concentrated shareholding is probably the most commonly found mechanism that alleviates agency problems efficiently even for corporations operating in a weak minority protection regulatory regime. In their study of 114 U.S publicly held corporations over 1974-84 periods. Holderness and Sheehan (1998) find that the identity of the seller or buyer as an individual or corporation does not influence the share price, when a shareholder owns at least 50 percent share capital. They suggest that majority shareholders in the U.S., where minority rights are well enforced legally, do not expropriate minority shareholders. Denis and Denis (1994) also finds that ownership concentration of both majority-owned and non-majority-owned control corporations are positively related to the family involvement in the management of their sample of 72 U.S. corporations in 1985, in which the insider controls at least half of the voting shares. They argue further that a family's or insider's effective monitoring eliminates the problem of management's opportunism.

McConaughy et al. (1998) also find that U.S. founding family-controlled corporations outperform its non-founding family-controlled corporations in terms of relative efficiency and corporate value after examining their accounting ratios, sales growth, market-to-book equity ratios and market returns. In contrast, recent research especially outside the U.S. such as those of Faccio and Lang (2002) and Faccio et. al. (2001) does not support the view that family shareholders are not corporate value enhancers because the cost of expropriation may exceed benefits accruing to their contributions. Surveying the U.S. literature that examines the effect of insider and shareholder share ownership of the value of corporations, Holderness (2003) concludes that the body of evidence indicates that even this relationship is mixed and never very pronounced positively or negatively.

U.S. research also identifies ownership by large institutional investors as another potential mechanism in reducing agency costs. By actively monitoring management, large institutional investors mitigate potential agency problems. Shleifer and Vishny (1986) and Brickley and James (1987) explain that it is more economically efficient for the large institutional investors in which they have significant shareholdings to be actively monitoring management to enhance the value of the corporation such as preventing management entrenchment in takeover situations. First, shareholders can coordinate their concerted effort in effectively reducing information asymmetries by demanding from management access to information on their financial performance. Second, shareholders with substantial control can remove managers who fail to discharge their duties or facilitate a takeover by selling their shares to stronger parties who can better discipline management. Bathala and Rao (1995) contend that institutional investors are more likely to go for the less costly option of adding their own directors to the Board to ensure managerial accountability.

Based on a sample of companies in the Czech Republic, Claessens et al. (1999) also provides support that the presence of the government shareholders who behave more like institutional investors improves the share value of the corporations. In contrast, Xu and Wang (1997) find that the profitability of listed corporations in China decreases with higher government shareholding as the government's objective is to preserve its control and not long term growth. Hence,

Claessens et al (1999) argues that a second influential shareholder is desirable so as to prevent undue dominance of a single shareholder over the board.

Fama and Jensen (1983) hold that the board is the first line of defense against agency problems because it is vested with power to accept or reject strategic decisions and to hire, fire and reward top management. Initial empirical research assumes that boards with characteristics such as having more outside directors or dual leadership (where the roles of the chairman and chief executive officer are separated) are more interested in monitoring management and reduce agency costs.

Recent research has since refocused on the contingency approach. This approach is based on the premise that the board structures itself to achieve the required degree of independence to control agency problems created by its own unique ownership (Redibar and Seth 1995). Fama and Jensen (1983), and Jensen (1993) have identified board composition, board leadership structure and board size as the three main determinants of board effectiveness constituting corporate governance.

In its capacity as another external control mechanism, the market for corporate control acts as the discipline of last resort (Fama 1980). Fama and Jensen (1983) argue that top management whose self-interested acts diminish corporate value is subject to being replaced by other competing management teams who offer their services as alternatives. Brickley and James (1987) identify takeovers as the substitute mechanisms for monitoring managerial behavior. This external control can be activated following the failure of internal control mechanisms (Walsh and Seward 1990). Similarly, competition in the product and capital markets and legislation also serves as another broad external corporate governance mechanisms (Williamson 1985; Shleifer and Vishny 1997). In this respect, Jensen (1986) also concurs that the control function of debt can be an effective agency cost reducing mechanism in dealing with the problems of free cash flow where management acts to refrain from returning excess cash to shareholders by investing in available projects albeit with sub-optimal returns. However, there is also evidence of significant loan providers extracting excess value from their borrower corporations (Weinstein and Yafeh 1998).

A group of researchers puts forward the view that agency cost reducing mechanisms cannot be studied individually and in isolation to other mechanisms (Agrawal and Knoeber (1996), Bhagat and Bolton (2008), and Hu and Izumida (2008). Agrawal and Knoeber (1996) examine the effects of the seven most commonly used agency cost reducing mechanisms when the technology of production, the markets in which the corporation operates, and the CEO's characteristics are controlled for. They find that corporations use a combination of these mechanisms to address agency problems. Because of the interdependence among these mechanisms, "cross-sectional Ordinary Least Squares regressions of firm financial performance on single mechanisms may be misleading" and hence a system of simultaneous equations is to be used to investigate these complex relationships. In subsequent research, Bhagat and Bolton (2008) and Hu and Izumida (2008) independently confirm in their separate studies the importance of taking into account the endogenous nature of the interrelationships among ownership, corporate governance control variables and corporate financial performance.

3.2 Agency Problems and Financial Performance

Berle and Means (1932) wrote one of the first papers to examine the relationship between corporate ownership and financial performance. They claim that the diffused ownership of U.S. corporations breaks the link between the ownership and the control of corporate resources. With a lesser number of shares, an individual shareholder's control is diluted while the manager's control becomes total. With control firmly vested in managers who have differing interests, the maximization of corporate value may no longer be the managers' primary goal to pursue and this conflicting interest gives rise to agency problems.

Jensen and Meckling (1976) divide agency costs into monitoring, bonding and residual costs. Monitoring costs are incurred on the part of shareholders to make sure that management is acting in the best interest of shareholders. Bonding costs are incurred on the part of shareholders and management to make sure that the interest of shareholders is being pursued. Lastly, residual costs are dead-weight losses from the remaining divergence of interests between shareholders and management. Berle and Means (1932) and later Jensen and Meckling (1976) contend that agency

costs reduce corporate value. As long as agency costs are kept lower than the benefits accruing to these efficiencies, a lower market valuation of the corporation will not occur.

Holderness (2003) finds in a survey of the literature that shareholders might also take to expropriate corporate resources, even when they have incentives to monitor. For instance, Shleifer and Vishny (1997) and La Porta et al (1999) find empirically that expropriation of minority shareholders is prevalent in corporations controlled by large shareholders. Burkat, Gromb, and Panunzi (1997) in their study of the effect of large shareholders on the value of firms suggest that large shareholders' tight control reduces managerial effectiveness. Weinstein and Yafeh (1998) in their study of the effect of bank-corporation relationships on corporate financial performance in Japan find that bank-controlled keiretsus exceed their monitoring roles and charge their affiliated corporations higher interest rates.

In summary, diverse ownership could present distinct contingencies giving rise to different extent of agency problems in terms of its associated costs and the resulting corporate performance. The degree of agency problems measured by their associated costs in diffused owned corporations are likely to be different to those of majority-controlled corporations. Therefore, we will examine how the agency problems affect the financial performance under different types of ownership in the Pakistan banking system.

3.3 Theory of Ownership

Ownership is the corporate governance mechanism that has been studied most extensively in the U.S., U.K., Germany and Japan. Like ownership in the U.S. publicly listed corporations, those in the U.K. counterparts are also relatively diffused. Unlike the ownership in the U.S. and the U.K. publicly listed corporations, Kang and Shivdasani (1999), Morck and Nakamura (1999), and Lins and Servaes (1999) found that those in Germany and Japan are more concentrated with the banks as shareholders.

Most research on corporate governance divides corporate ownership into two main categories of diffused ownership and majority-controlled (or shareholder) ownership. However, Bebchuk,

Kraakman and Triantis (1999) identify another ownership, as found in dual-class share structures, stock pyramids and cross-ownership ties, in which a shareholder who owns a small shareholder exercises significant control over the company.

The third ownership is termed 'minority-controlled ownership'. Minority controlled ownership exhibits characteristics of both majorities-controlled and diffused ownership. As in the case of majority-controlled ownership, the controlling party is protected from the market for corporate control. In the other case, the controlling party is an insider who resembles the entrenched management. In order to elucidate the role played by the controlling minority, the technique introduced by La Porta, Lopez-de-Silanes, and Shleifer (1999) in tracing control to the ultimate ownership via control rights in lieu of cash flow rights is used to establish the ownership measure.

Finance theory suggests that ownership whether it is concentrated or otherwise, is typically influenced by the characteristics of the company (Shleifer and Vishny 1997). Larger companies tend to have highly diffused ownership than smaller ones. The high cost of share ownership and the ease of securing control in larger companies both help to promote diffused ownership. Driven by the individual shareholder's limited risk appetite, companies with higher risk profiles will also tend to be widely held.

Similarly, companies that perform above average since incorporation tend to be the majority-controlled by the original shareholders. Empirical studies also find that lower ownership concentration is determined by increased instability of the company's environment, company size, industry regulation, a single class share and an outsider CEO when controlled for the industry and company's age. Shleifer and Vishny (1996, 1997) further suggest that concentrated ownership is more common in countries where the judicial enforcement of property rights is weak. Recent research across various countries revealed differences in the degree of ownership concentration and the identities of the shareholders.

 For instance, Xu and Wang (1997) note that highly concentrated shareholdings of government, institutions, and retail investors are common in China. Blass, Yafeh, and Yoshua (1998) noted that banks and affiliated institutional investors as the biggest non-insider shareholders in Israel

while Faccio and Lang (2001) further document that most of the publicly listed companies in Western Europe, excluding the U.K. and Ireland, are family owned.

3.4 Foreign Banks Ownership

Foreign bank ownership in emerging economies like Pakistan has been rising rapidly since the 1990s. This thesis examines its effects on host macroeconomic stability, the transmission of monetary policy through the bank lending channel, and its effects on the output in the host countries. Foreign bank ownership in Pakistan has been rising since the late 1980s, and experienced a drastic increase in late the 1990s in emerging and transition economies. Although having access to international bond markets, economic agents depend on the privately operating banks (either private or foreign owned) for their consumption and production.

Households have to hold deposits to finance a part of their consumption, and firms have to use loans to finance their payment for production factors. Banks are costly in producing deposits and loans, and interest rates work as the mechanism to transfer internal and external monetary shocks into the real side of the economy.

Foreign banks differ from private banks in that they are more efficient in producing deposits and loans, which may enable them to provide higher deposit rate and the lower loan rate. In the presence of foreign banks, the private banking market is usually observed to be more competitive. A possible danger of foreign bank ownership is the transmission of foreign shocks to private agents through the credit channel by foreign banks. With the economy where foreign banks dominate, this is suspected to bring more fluctuation than when the financial sector is not open. In addition, central bankers may worry about the effectiveness of monetary policy in the case of dominant foreign bank ownership. Monetary policy is one of the most important policies in the government's arsenal used to reduce the short-term fluctuation and stabilize the economy. No government wants to lose the effectiveness of monetary instruments (Ramizur, 2010).

Finally, Pakistani governments expanded the scope of foreign ownership in private banks after the 1997 Southeastern Asian financial crisis. Foreign bank ownership grew in the victim

countries of the crisis. However, reliance on foreign banks has been much less in Pakistan, and the restrictions more or less remain in the presence of foreign capital in local banks.

Foreign banks may bring lots of benefits, one of the most important benefits is their ability to tap into external liquidity of their parent banks. This step reduces the risk associated with deposit is and improve banking performance in emerging market. However, this benefit may turn into a loss on the lending side. The parent bank provides liquidity insurance and also have a risk for its capital that is why provide the guarantee in the emerging markets (Ramizur, 2010).

Private banks lack this benefit in terms of access to external liquidity. This becomes a serious concern particularly in emerging markets where the regulations and legislations are weak. For this reason private domestic banks face crises and failures (Bhagat, 2009).

3.5 Foreign Banks Ownership in Different Countries

Foreign bank ownership, as the mainstream of financial sector foreign direct investment in developing countries, started in the 1980s and surged in the late 1990s. Most of the foreign ownership has taken place via cross-border mergers and acquisitions (M&A), which rose up from 320 cases during the 1978-1989 period to more than 2000 during the 1990-2001 period (Claessens and Lee, 2002).

3.6 Private Banks Ownership

Private Banks own significant market share in all over the world. Whereas the private banks and foreign banks have mix size in term of assets and age distribution, particularly in Pakistan. However, government banks are much bigger and much older than private and foreign banks. This sets a new era for Pakistan financial markets to open new banks with large government banks to start a competitive base banking market for its customer (Neuman, 2005).

The private banks have different behavior towards their foreign counterparts. Private banks act more aggressively in their lending compare to foreign banks. Private banks hold less liquid assets than foreign banks and have more assets in the form of loans. Moreover, private banks

earn more interest than foreign banks. Surprisingly, the default rate of foreign and private banks has no major differences (Cooper, 2006).

3.7 Resource Dependent Theory

Different external resources affect the performance of organizations and influence the decision making performance. "The basic concept of resource dependent theory was focused mainly on economic explanations including terms of trade, price volatility and resource dependency" (Carbonnier et al, 2011). The relationship of resource based view and the economy has been substantial (Lockett, A. & Thompson, S., 2001). The study of the impact of different external resources on the practices of the organization can be accessed by resource dependency theory. Companies are required different sort of resources to operationalise business activities like financial resources, technological resources and human resources. Without the utilization of these resource companies cannot progress in their respective field.

In order to interact with each other companies utilize these resources for multiple purposes. Sometime the resource dependency has an adverse effect and stops various developments. According to Will Martin (2002), the economic output should be restructured to avoid the adverse consequences of resource dependency within the organizational culture. The policy should involve the increasing accumulation of physical and human capital and the promotion of technological change in manufacturing and service sector. Different types of risks have associated with it hence companies' deals with multiple situations. Researchers indicate the resource dependent theory as the power for organizations.

Resource Dependent Theory characterizes the links among organizations as a set of power relations based on exchange resources. The concept of resource dependent theory in the inter organization relationship system is very simple, just get those resources from others in which you are lacking and give others those who have in excess. Evidences show that the banking sector mainly running on the basis of resource dependent theory. The lacking factor is essential for the establishment of relationships. Organizations develop and alter their existing structure, pattern and actions on the basis of dependencies on others, and this dependency was normally due to the resource dependency. Resource Dependent Theory and some assumptions:

1- Companies have internal and external relationships which appear from social transactions that are established to influence and management conducts.

2- Valuable and rare resources make the grounds of relationship is essential for the survival of the organizations.

3- Companies normally considered working for two objectives according to the resource dependent theory. Maximum the acquisition of resources which minimizes the dependency level and affecting the other organization's power by exchanging resources.

4- Companies normally considered working for two objectives according to the resource dependent theory. Maximum the acquisition of resources which minimizes the dependency level and affecting the other organization's power by exchanging the resources.

3.8 Conceptual Framework

In applying research a conceptual framework works as a map which provides the approach and possible course of actions to obtain the preferred results. It is usually constructed by affiliating and defining the relationships between the problem statement, purpose and concept of study. In this research study a conceptual framework can be constructed by defining the nature and scope of this study. It can be developed on the basis of theoretical issues and literature available. Lots of studies suggest that banking performance can be measured by studying the financial ratios. In this regard most of researchers recommend ROA.

John P. et al. (2005) used ROA (Return on Asset) as a dependant variable in order to measure the bank's performance. Similarly Xiaochi Lin and Yi Zhang (2009) utilized ROA and ROE to measure the bank performance to conduct the study on bank ownership reforms and its subsequent impact on bank performance in China. This shows that a conceptual framework for this typical study can be constructed on the basis of the foundation and development of concept of measuring the impact of banking ownership structure on banking performance.

So, on the basis of available literature and the problem statement I have selected three key ratios covering the profitability and liquidity of a bank because the performance of a bank more concerned with its profitability and liquidity. ROA, ROE and Dividend Payout Ratios have been used in this study as the purpose of measuring the performance of a bank. Bank ownership is

being taken as an independent variable. Ownership is being classified in two types i.e. domestic and foreign.
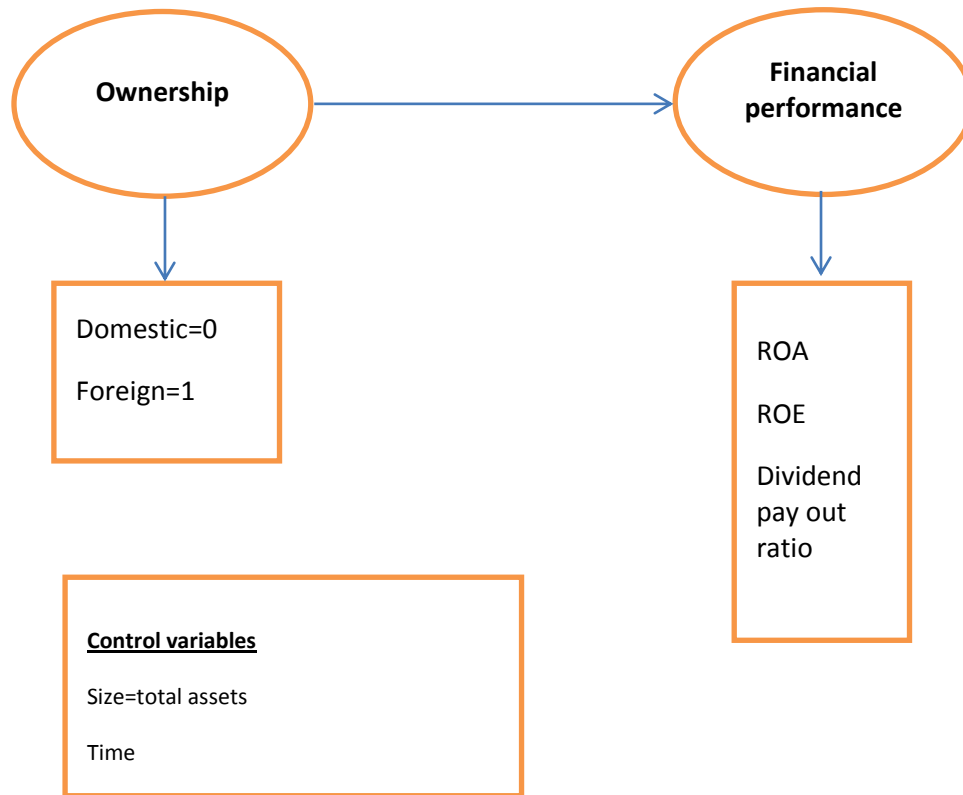
Summary of Variables

Variables	Definitions
Dependent Variable	
Financial performance	
ROA	Net profit\Total assets
ROE	Net profit\Total Equity
Dividend payout ratio	Dividend\profit
Independent Variable	
Ownership	
Domestic Bank	"The banks incorporated in Pakistan and controlled by the private sector are termed

	As domestic private banks."
Foreign Bank	"A bank, not incorporated in Pakistan, which has a branch or branches doing banking business in Pakistan under a license issued by the State Bank in this behalf."
Control variable	
Size	Total asset of the bank
Time	No of the years

3.9.1 Construction of variables

Variable is the characteristics which we can measure or observe in our conceptual model. Variables are linked to values which can be measured or verified, thus the variables directly measure the single value. (Hair, 2007, p. 145).

According to Zikmund (2010, p. 119) "A variable is anything that varies or changes from one instance to another". The opposite of the variable is called, constant which is fixed value and does not change its value. Different types of variables are used by researchers.

For this study we will use the following variable.

3.9.2 Dependent variable

A variable that depends on the other variable is called the dependent variable. The dependent variable is represented by letter "Y", if the study involves more than one dependent variable than it will be represented as Y1, Y2 and so on. (Zikmund et al. 2010, p.120)

For this study we have taken one variable that is financial performance.

3.9.2.1 Financial Performance

For this study we have one dependent variable that is financial performance. We will measure the financial performance with the help of ROA, ROE and Dividend payout.

John P. et al. (2005) use the ROA as the dependent variable to measure the performance where as Yi Zhang (2009) in his study use the ROA and ROE to investigate the performance. However, I cannot find any study in which dividend payout is used to measure the performance. Therefore, it would be interesting to see the effect of dividend payout in relation to the performance of the banks.

3.9.3 Independent variable

A variable that has an effect on the dependent variable or that affects the dependent variable by some way is known as independent variable.the independent variables are not influenced by the dependent variable due to the impression they are studying outside the process of being studied.the independent variable is represented by letter "X" (Zikmund et al. 2010, p.120).

3.9.3.1 Ownership

Randall Morck et al (1999) uses "ownership" as independent variables to see the different structures of the ownership on the firm values.

3.9.4 Control Variable

The variable which can affect the independent variable and can affect the result of statistical experiments is known as a control variable. In empirical research, the control variables are used to purify the relationship between dependent and independent variable (Schindler, 2001). For this study, we will use two control variables i.e. size (Total assets) and time.

Abid A. Burki et al (2006) used total assets and time of different reform periods as control variable. In this current study we will also control the total assets as size and time period to purify the relationship between dependent and independent variable.

3.10 Construction of Hypothesis

Construction of the hypothesis is a process of identifying the problem statement, identifying the possible causes and realizing the effects by reviewing the available literature on your proposed research study. The impact of ownership structure on bank performance in Pakistan is the problem statement in this study. In this study we have an ownership structure as a cause which have an impact on bank performance. A number of studies have been done on this typical study in different part of the world. Muhammet Mercan et al (2003) determines that the private and foreign banks performed better than state owned banks in turkey during 1989 to 1999. According to the Marcia Millon Cornett et al, (2010) domestic (private) banks in Asia have better performance rather than foreign banks. The above are the literature evidences which elaborate the basic concept of this study.

3.11 Problem Statement and Main Research Question:

The main research question of this study was the impact of ownership structure of the bank's performance operating in Pakistan. This helps us to identify the dependent and independent variable, the cause and effect. The hypothesis is basically a technique to show the cause and effect relationship. Again we are bound to get evidences from literature and literature tells us that banking performance can be measured by analyzing the some financial key ratios. Financial ratios provide the insight picture of profitability and liquidity of a firm.

By reviewing the past literature we conclude that in most of the studies bank performance has been measured on the basis of ROA and ROE along with other suitable financial ratios. I will evaluate bank performance in the shape of ROA, ROE and Dividend Payout Ratio. The bank which has better ROA and ROE would have better performance. Similarly, Dividend Payout

Ratio tells us the story of the firm's ability to pay out its shareholders from net income. A company which has high income will have a high dividend payout ratio. It is a useful financial performance indicator. So on the basis of available literature I have drafted following hypothesis;

H₁: Domestic banks have better ROA as compared to foreign banks.

H₂: Domestic banks have better ROE as compared to foreign banks.

H₃: Domestic banks pay more dividends as compared to foreign banks.

Chapter 4: Research Methodology

4.1 Research Design, Approach and Sampling

Research is a systematic way of investigation to solve problems and research methodology is a process of getting solved. The main purpose of this research study was not to compute the performance of domestic and foreign banks operating in Pakistan, but to find out that either domestic banks are better in performance or foreign banks. This examination leads in the direction of analysis of data of different domestic and foreign banks operating in Pakistan. There are different approaches in research to deal different types of research problems; qualitative, quantitative and mixed approach. This study has been conducted on the basis of the positivism paradigm as Healy & Perry (2000) explain that positivism research approach dominates and widely used in scientific research studies because it measures the facts about a single apprehensible reality. Basically this research study has been conducted on the basis of pre-developed phenomena that domestic banks have better performance than foreign. Quantitative research methods have been used to collect and analyze the data because quantitative research approach is being widely used to test theory deductively from existing knowledge, by developing hypothesized relationships and anticipated results.

All the domestic and foreign banks operating in Pakistan where the anticipated population for this research study. To gauge the difference of the performance level of domestic and foreign banks stratified systematic sampling technique has been used. In stratified systematic sampling population can be alienated into identified groups, and each group sampled using a systematic approach. For this study we divided our population into two known groups on the basis of ownership i.e. foreign banks and domestic banks. 16 foreign banks and 27 domestic banks operating in Pakistan have been selected for this research study. Through quantitative data collection techniques, different types of secondary data have been collected from the annual financial statements of banks to analysis the research questions. There are two types of secondary data exists mainly on the basis of its use either internal or external.

A different sort of financial data from banks from 2001 to 2010 has been collected to study the performance variation of banks. Our data set has a significant year-by-year financial data along

with the type of ownership. It consists of 198 observations, each representing the selected variables for a specific financial year . Due to unavailability and irrelevancy of primary data for this type of research we can rely on secondary data. Research based on primary data has different type of nature of the investigation.

4.2 Tools and Procedures of Data Analysis

To scrutinize the impact of bank ownership structure on bank performance in terms of ROE, ROA and Dividend Payout Ratio I used the panel data set comprises of the balance sheet information about different banks categories on the basis of ownership. Ownership variable has been divided into two main groups i.e. domestic and foreign. Overall performance has been classified into three measures for this research study: the return on equity (ROE), return on assets (ROA) and dividend payout ratio (DPR). ROE is a ratio calculated by dividing the income over equity and ROA measures the profit per dollar. These ratios have been widely used in bank performance studies.

The panel data is such a data set in which units of observations diverges in two or more dimensions. Using panel data has several benefits along with certain limitations as well. According to BALTAGI (1995) using panel data in econometric research studies give more control for individual heterogeneity. He further explains that panel data has more information, more variability, less co-linearity among the variables, more degrees of freedom and more efficiency.

Panel data can be classified in balanced and unbalanced data sets. We have unbalanced panel data set for this typical course of study because some observations are missing. Panel data is a data set when we have two or more than same units of observation in a cross-sectional way. In this panel data set we have collected the same sort of data from different foreign and domestic banks from 2001-2010. Our panel data set have both cross sectional and time series dimensions. Analysis of panel data has become important in Econometrics along with panel data analysis techniques. As simple panel data form is;

$$X_{it} \ whereas \ i = 1, \dots, N \ and \ t = 1, \dots, T$$

Different regression models are being used for the analysis of panel data set. A general regression model equation is;

$$Y_{it} = X_{it}\beta + \alpha + \mu_{it}$$

To analyze our panel data set we have used Hausman test. Hausman test, tests whether random effects estimation would be good. Evidences show that the Hausman test has been used in most of bank performance studies in which bank performance has been evaluated on the basis of bank ownership. For this research, fixed effects as well as random effects models are considered. All the data handling and analysis is being done in STATA 12. STATA is complete, incorporated statistical software which provides an effective platform for data handling and analysis for research purposes. A Wooldridge Test has been used to perform the autocorrelation analysis of our panel data.

4.3 Managing Omitted Variable Bias

When we use the multivariate models, there is a possibility that the coefficient derived from regression analysis has some omitted variable bias (Boring, 2010). It happens when the models suffer from missing variable which has some impact on the depend variables and this may lead to affect the coefficients in the model which may create some biased and misleading results (Chamberlian, 1985). To prevent this,it requires to control the unobserved effects of these omitted variables. We can find several methods to omitt the variables from the econometric literature. Two of them are fixed effects model and random effects model (Kim and Frees, 2006).

4.4 Selection of Method

To select which method is suitable for managing the omitted variables we have to go through the random effect model and fixed effect model. The fixed effect model assumes the constant term differences can use the differences across cases such as Banks as used in this study. By this we can control the unobserved individual case effects to be controlled by correlating with predictor variable. This helps to remove the effects of unobserved effects of the predictor variable and changes in a variable over time can be utilized. This model is also suitable when we want to control the omitted variable over the time (Wooldridge, 2006).

Random effect includes the unobserved heterogeneity while the fixed effect is observed by intercept. This advantage of the random effects leads its assumption of uncorrelated relationship between the predictor variable with the unobserved effects. However, many researchers think this assumption is unrealistic (Kim and Frees, 2006).

According to (Sven and Daniel, 2007) fixed effect model is superior to the random effect as it does not include such assumption . However, it needs to take some precautions because there are different cases where random effect models are more suitable to use, especially when the omitted variable affect the difference across case but remain constant over the time.

In case if the assumptions hold, the random than the random effects estimator must be more efficient until it allows identification of intercept which is different in fixed effect. With this argument of fixed effect model and random effect model the researchers use the Hausman test to measure the each model assumption to determine which model is more appropriate for this study.

Chapter 5: Results and Analysis

5.1 The Econometric Analysis

This chapter belongs to the detailed results of panel data and econometric analysis. Different sort of analysis has been performed on given data and results have been calculated. The details are given below;

5.2 Descriptive Statistics:

Below table 2 shows, we have the summary of data defining the central tendency and dispersion of the data. The table exhibits the minimum and maximum value of each variable that actually tells about the date range of each variable. Mean and Std. Deviation of each variable also given below.

Table 1 Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
roe	198	-.0131572	1.109081	-14.74267	.595419
dividend_p~t	199	.0106281	.0447134	0	.4885198
total_assets	198	161015.2	205594.5	735.255	1035025
roa	198	.0049142	.0322094	-.2232203	.1518921

5.3 Correlation Analysis

Correlation analysis shows that whether the variables are correlated to each other or not. In STATA it is simple and can be generated with a single line command. The correlation analysis helps to determine the multicolinearity between variables. The table 3 below shows the correlation of the variables and it tells the correlation coefficient for ROA and ROE is 0.2665, the correlation coefficient between ROE and Ownership is -0.1265 and between ROA and Ownership is -0.1817 which shows the ROA and ROE both are negatively correlated with

Ownership. The Dividend Payout is positively correlated with Ownership and has a value of 0.0302.

Table 2 Correlation analysis

```
                |   roe       roa divide~t owners~p total_~s
----------------+--------------------------------------------
          roe   | 1.0000
          roa   | 0.2665   1.0000
    dividend_p~t| 0.0416   0.2366   1.0000
      ownership | -0.1265  -0.1817   0.0302   1.0000
    total_assets| 0.0902   0.1793  -0.1036  -0.0718   1.0000
```

Mutlicollinearity between the independent variables occurs when the variables are at high but with no perfect correlation within the multiple regression model. The findings of high multicollinearity are contradictory for the expectations of the independent variables to correlate between the dependent variable. This problem is due to sample but not with the model. This leads towards the decrease in the power of explanatory information of the independent variables to the dependent variable and may cause the wrong results that the independent variables are not related to the dependent variables. At what extent the correlation can cause the multicollinearity is not well described. However the scholars and Statistians have different view cut off in the correlation that harms the existence of multicollinearity. (Hair, 2010)

Hair (2010) has a view that the cut off point is 0.9 correlation coefficient of which lower that there is no effect of multicollinearity. Also Bagheri and midi (2009) has the same view about the cut off point of 0.9 correlation coefficients. In this study we will use the Hair (2010) approach to determine the multicollinearity. Hence the correlation coefficient between the moderate effect of ROA and ROE is lower than the cut off point of 0.9. This correlation coefficient provides a clear dimension that there is no problem of multicollinearity.

Multicollinearity can also be accessed by calculating variance of inflation factor (VIF) for each coefficient in the model. This statistic tool is used to observe the seriousness of multicollinearity problem. (Mansfield and Helms, 1982). However , there is no consensus for the cut off point to use VIF. In his study Hair (2010) has the view that VIF above 10.0 mean creates the problem for

multicollinearity. Hair (2010) also suggest how to solve the problem of multicollinearity in the dataset. He suggests that more data must try to obtain or just increase the sample size to correct the problem and also we can transform the variables to correct this problem in multicollinearity.

For this study we have calculated the VIF to check the multicollinearity problem by using the STATA.

Table 3 Variance of Inflation Factor

Variable	VIF	1/VIF
intercept	1.55	0.646465
ownership	1.55	0.646465
Mean VIF	1.55	

Table 4 shows VIF for ownership is 1.03 which is below the VIF value of 10 as according to Hair (2010) therefore, we can say there is no existence of the problem of multicolinearity in our model.

5.4 Regression Analysis

5.4.1 Linear Regression

To speculate the relationship between the ROA, ROE and Dividend payout with ownership we have used the linear regression model.

Outputs of results are given below;

```
Linear regression                                    Number of obs =      198
                                                     F(  1,   196) =     1.80
                                                     Prob > F      =   0.1810
                                                     R-squared     =   0.0160
                                                     Root MSE      =    1.103
```

roe	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
ownership	-.2926858	.2179988	-1.34	0.181	-.7226103	.1372386
_cons	.0903176	.0264156	3.42	0.001	.0382222	.1424129

```
Linear regression                                    Number of obs =      199
                                                     F(  1,   197) =     0.13
                                                     Prob > F      =   0.7144
                                                     R-squared     =   0.0009
                                                     Root MSE      =   .04481
```

dividend_p~t	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
ownership	.0028118	.007671	0.37	0.714	-.012316	.0179396
_cons	.009639	.0030772	3.13	0.002	.0035705	.0157076

```
Linear regression                                    Number of obs =      198
                                                     F(  1,   196) =     5.01
                                                     Prob > F      =   0.0264
                                                     R-squared     =   0.0330
                                                     Root MSE      =   .03175
```

roa	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
ownership	-.0122105	.0054567	-2.24	0.026	-.022972	-.001449
_cons	.009231	.0021633	4.27	0.000	.0049647	.0134974

Results show that the there is no significant ownership effect on ROA and ROE. But in our data model the ownership has a significant effect on Dividend Payout. This gives us the answer to our research question "Do the ownership has an impact on financial performance." So we can say ownership has no significant relationship with ROA and ROE.

5.4.2 Assumptions of Multiple Regression Analysis

Now we will focus to investigate the variables in our regression equation to check the assumptions. These assumptions are necessary in order to predict the actual relationship among the variables and also when the regression coefficients are estimated. These assumptions include the linearity of the relationship between the dependent and independent variables, constant variance of the error term, independence of the error terms and normality of the error term (Hair, 2010).

TO check the assumptions in model is vital because it exhibits the actual relationships between variables. We have used Breusch-Pagan test to test the Heteroscedasticity, which provide the facility to test the null hypothesis to observe Heteroscedasticity across the range of independent variables. Results show that ROA is not significant (P> .05) . But the ROE and dividend Payout are significant so we cannot reject the null hypothesis for ROA.

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of roa
chi2(1) = 0.96
Prob > chi2 = 0.3279

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of roe
chi2(1) = 271.44
Prob > chi2 = 0.0000

> **Breusch-Pagan / Cook-Weisberg test for heteroskedasticity**
> **Ho: Constant variance**
> **Variables: fitted values of dividend_pay_out**
> **chi2(1) = 184.34**
> **Prob > chi2 = 0.0000**

5.4.3 Normality

In this study we will use the normal probability plot to test the normality of the error term. The variable ROA was not normally distributed.so we use log transformation to compute it. However, the results are near the normality which is acceptable in statistical perspective and by increasing the number of banks normality can be increased. The results are shown below:

Figure 6: Normality
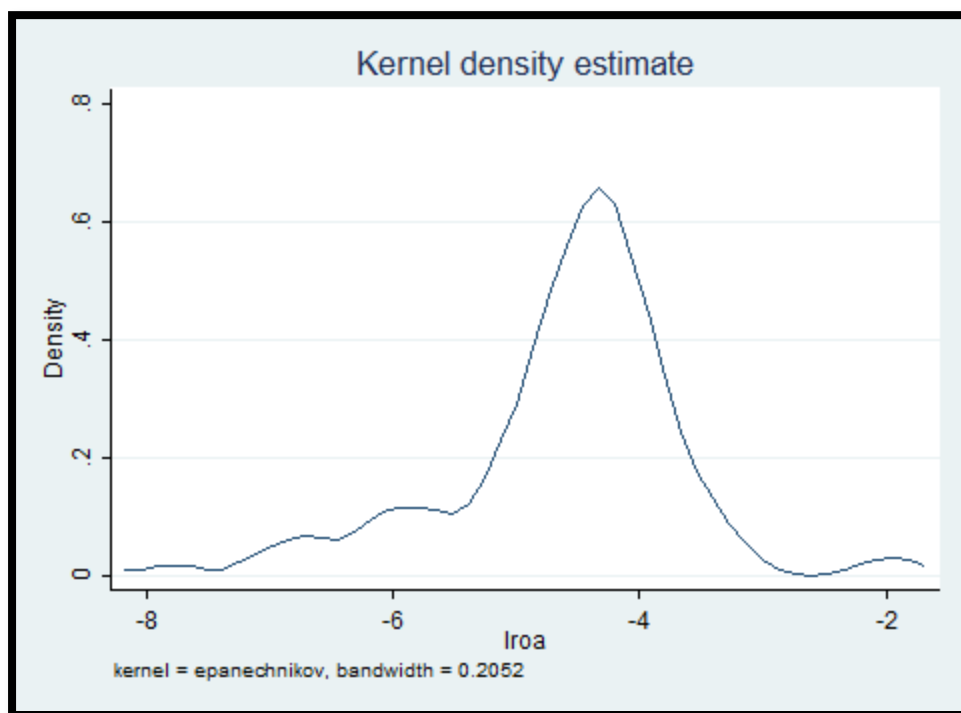
5.5 Auto Correlation

Degree of similarity in time series data is essential to predict the perfect correlation between the variables. Fortunately we have a simple mathematical formula to calculate. Wooldridge test is a technique to calculate the autocorrelation in STATA. It is as same as calculating the correlation between two different time series, the only difference is that the same time series is used twice to test the data model for correlation. The second time series which is used to call the lagged

version of the original time series. (Wooldridge, 2006). In STATA a simple user written program called *xtserial* is being used to calculate the autocorrelation.

Below is the actual output of results to find out the existence of autocorrelation between independent and dependent variable. Results show that there is a relationship exists between the measures of dependent and independent variable. The test results for ROE and Dividend pay out are statistically significant (P< .05) while only ROA shows the opposite result.

```
. xtserial roa ownership

Wooldridge test for autocorrelation in panel data
H0: no first-order autocorrelation
     F(  1,       26) =      1.848
            Prob > F =      0.1857
```

```
. xtserial roe ownership

Wooldridge test for autocorrelation in panel data
H0: no first-order autocorrelation
     F(  1,       26) =      5.040
            Prob > F =      0.0335
```

```
. xtserial dividend_pay_out ownership

Wooldridge test for autocorrelation in panel data
H0: no first-order autocorrelation
     F(  1,       26) =      89.977
            Prob > F =      0.0000
```

5.6 Fixed versus Random Effect

To use the panel data model, we need to select the fixed effect model or random effect models in order to estimate the relationship of dependence among the variables in our model. the decision to go for the fixed effect model or random effect models can be made on the basis of Hausman test as it is suggested by the literature keeping the issue of omitted variables (Wooldridge, 2006).

The Hausman Test, tests the null hypothesis that the coefficients estimated by the efficient random effects estimator are the same as the ones estimated by the consistent fixed effects estimator. If they are, then it is safe to use random effects (Wooldridge, 2006).

For this purpose I have performed the Hausman Test to choose the appropriate model for our panel data. The results are given below;

Table 4: Hausmann fe re

```
               ──── Coefficients ────
                  (b)          (B)            (b-B)     sqrt(diag(V_b-V_B))
                  fe           re           Difference         S.E.

  ownership    -.0274984    -.0104253       -.0170731        .009004
total_assets    3.06e-08     3.96e-08       -8.92e-09        1.29e-08
       years   -.0018992     -.00243         .0005308        .000419

                          b = consistent under Ho and Ha; obtained from xtreg
            B = inconsistent under Ha, efficient under Ho; obtained from xtreg

   Test:  Ho:  difference in coefficients not systematic

               chi2(2) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                       =         3.88
               Prob>chi2 =       0.1438
```

Table 5: Hausmann fe1 re1

```
               ──── Coefficients ────
                  (b)          (B)            (b-B)     sqrt(diag(V_b-V_B))
                  fe1          re1          Difference         S.E.

  ownership     .093554     -.1888866        .2824406        .3099114
total_assets    8.48e-07     8.28e-07        1.97e-08        4.41e-07
       years   -.0915023    -.0755282       -.0159741        .0138136

                          b = consistent under Ho and Ha; obtained from xtreg
            B = inconsistent under Ha, efficient under Ho; obtained from xtreg

   Test:  Ho:  difference in coefficients not systematic

               chi2(2) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                       =         1.55
               Prob>chi2 =       0.4612
```

Table 6: Hausmann fe2 re2

```
            ——— Coefficients ———
                (b)          (B)          (b-B)      sqrt(diag(V_b-V_B))
                fe2          re2        Difference          S.E.
   ownership    -.0003256    .0035675    -.0038931          .012878
total_assets    1.35e-08    -3.44e-10     1.38e-08          1.86e-08
       years    -.0044292   -.0038375    -.0005917          .0006087

                        b = consistent under Ho and Ha; obtained from xtreg
            B = inconsistent under Ha, efficient under Ho; obtained from xtreg

   Test:  Ho:  difference in coefficients not systematic

              chi2(2) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                      =        1.53
              Prob>chi2 =      0.4658
```

Above table 5,6 and 7 clearly states that we are unable to reject the null hypothesis as "difference in coefficients not systematic" to determine the ROA, ROE and dividend payout therefore, these results inform us to use the random effect method for analysis of this study.

5.7 Ownership Structure Analysis

As we have an independent variable measure to test the effect of ownership structure on bank performance so now we will calculate the Hausman Test for measures of ownership i.e. Domestic and Foreign. It will actually tell us that either foreign bank has better performance in Pakistan or the domestic banks operating here. It will substantially reflect the true picture of panel data. We have an ownership structure to show the impact on the bank's performance in Pakistan. To do this we have used Hausman Test and the results for each measure of dependent and independent variable are given below;

For this purpose we used Hausman Test to test the null hypothesis and to choose the appropriate model. We perform the Hausman Test for each measure of the dependent variable with domestic ownership measure and take results.

5.7.1 Impact of Domestic Ownership on Bank Performance

Now we perform the "Hausman Test" for each measure of the dependent variable with domestic ownership measure independently and take results. The outputs of results are given below;

5.7.2.1 ROA and Domestic Ownership

Table 7:ROA in domestic ownership in random effect model

	Coefficients (b) fe	(B) re	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
dom	.0130746	.0106461	.0024285	.0037458
years	-.0017791	-.0021611	.000382	.0004539
total_assets	4.04e-08	4.07e-08	-2.63e-10	1.25e-08

```
                        b = consistent under Ho and Ha; obtained from xtreg
            B = inconsistent under Ha, efficient under Ho; obtained from xtreg

    Test:  Ho:  difference in coefficients not systematic

                chi2(2) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                        =          0.79
             Prob>chi2 =          0.6727
```

With the help of Hausman Test, we select between random effect model and fixed effect model. If the unobserved effect is uncorrelated with the explanatory variables then the RE estimator is more efficient than the FE estimator. The results do not deliver the enough information to reject the null hypothesis to determine the ROA. The results clearly suggest the random effect model to analyze the impact of domestic ownership on ROA of banks.

Random Effect Model

Table 8: Random effect model for ROA in Domestic ownership

```
. xtreg roa dom years total_assets, re

Random-effects GLS regression            Number of obs      =        198
Group variable: id                       Number of groups   =         30

R-sq:  within  = 0.0786                   Obs per group: min =          2
       between = 0.2720                                  avg =        6.6
       overall = 0.1046                                  max =         10

                                          Wald chi2(3)       =      21.98
corr(u_i, X)   = 0 (assumed)              Prob > chi2        =     0.0001
```

roa	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
dom	.0106461	.0046945	2.27	0.023	.001445	.0198472
years	-.0021611	.0008688	-2.49	0.013	-.0038639	-.0004583
total_assets	4.07e-08	1.21e-08	3.36	0.001	1.69e-08	6.44e-08
_cons	4.327368	1.742567	2.48	0.013	.9119999	7.742737

sigma_u	.00624063	
sigma_e	.0304267	
rho	.04036935	(fraction of variance due to u_i)

The output of table 15 shows that the prediction equation for ROA = .0106461 (dorm) - .0021611 (years) + 4.07e-08 (total assets) + 4.327368. The positive value of coefficient of "dom" variable which specifies the domestic measure of ownership shows that domestic banks have better ROA when compared to foreign banks operating in Pakistan.

5.7.2.2 ROE and Domestic Ownership

Table 9:ROE in Domestic Ownership

```
          ―― Coefficients ――
              (b)           (B)           (b-B)      sqrt(diag(V_b-V_B))
              fe1           re1         Difference          S.E.

       dom  -.0452615     .1356015      -.180863          .1227173
     years  -.0919525    -.0734409     -.0185116          .0142345
total_assets  8.15e-07     8.62e-07     -4.67e-08          4.16e-07

            b = consistent under Ho and Ha; obtained from xtreg
   B = inconsistent under Ha, efficient under Ho; obtained from xtreg

  Test:  Ho:  difference in coefficients not systematic

          chi2(2) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                =        2.62
          Prob>chi2 =    0.2705
```

Table 16 above clearly shows that we cannot reject the null hypothesis to determine the ROE. The results clearly suggest the random effect model to analyze the impact of domestic ownership on ROE of banks.

Random Effect Model

Table 10: ROE in Random Effect Mod

```
. xtreg roe dom years total_assets, re

Random-effects GLS regression              Number of obs     =      198
Group variable: id                         Number of groups  =       30

R-sq:   within  = 0.0410                    Obs per group: min =        2
        between = 0.0650                                   avg =      6.6
        overall = 0.0480                                   max =       10

                                           wald chi2(3)      =     9.41
corr(u_i, X)   = 0 (assumed)               Prob > chi2       =   0.0243

-------------------------------------------------------------------------------
         roe |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+-----------------------------------------------------------------
         dom |   .1356015   .1665429     0.81   0.416    -.1908166    .4620196
       years |  -.0734409   .0306157    -2.40   0.016    -.1334465   -.0134352
total_assets |   8.62e-07   4.31e-07     2.00   0.046     1.63e-08    1.71e-06
       _cons |   147.0895   61.40859     2.40   0.017     26.73084    267.4481
-------------+-----------------------------------------------------------------
     sigma_u |  .24365378
     sigma_e |  1.0480631
         rho |  .05127568   (fraction of variance due to u_i)
-------------------------------------------------------------------------------
```

Table 17 results show that the prediction equation for ROE = 0.1356015 (dorm) - .0734409 (years) + 8.62e-07 (total assets) + 147.0895. The positive value of coefficient of "dom" variable which specifies the domestic measure of ownership shows that domestic banks have better ROE when compared to foreign banks operating in Pakistan. However, it does not show the significant relationship with domestic banks.

5.7.2.3 Dividend_pay_out and Domestic Ownership

Table 11: Dividend pay out in Domestic Ownership

```
              ──── Coefficients ────
                 (b)          (B)           (b-B)      sqrt(diag(V_b-V_B))
                 fe2          re2         Difference          S.E.

         dom  -.0005663    -.0029268      .0023605          .0052358
       years  -.004466     -.0038946     -.0005715          .0006302
total_assets  1.38e-08     -8.81e-10      1.46e-08          1.75e-08

                       b = consistent under Ho and Ha; obtained from xtreg
            B = inconsistent under Ha, efficient under Ho; obtained from xtreg

     Test:  Ho:  difference in coefficients not systematic

             chi2(2) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                     =          1.80
           Prob>chi2 =        0.4060
```

The above table 18 results clearly show that we cannot reject the null hypothesis to determine the Dividend Payout. The results clearly suggest the random effect model to analyze the impact of domestic ownership on Dividend Payout of banks.

Random Effect Model

Table 12: Dividend pay out in the random effect model

```
. xtreg dividend_pay_out dom years total_assets, re

Random-effects GLS regression              Number of obs      =        198
Group variable: id                         Number of groups   =         30

R-sq:   within  = 0.0651                    Obs per group: min =          2
        between = 0.0256                                   avg =        6.6
        overall = 0.0570                                   max =         10

                                            Wald chi2(3)       =      11.94
corr(u_i, X)   = 0 (assumed)                Prob > chi2        =     0.0076

 dividend_p~t |     Coef.    Std. Err.      z     P>|z|     [95% Conf. Interval]

          dom |  -.0029268   .0067192    -0.44   0.663    -.0160962    .0102426
        years |  -.0038946   .0012392    -3.14   0.002    -.0063234   -.0014658
 total_assets |  -8.81e-10   1.74e-08    -0.05   0.960    -3.49e-08    3.32e-08
        _cons |   7.824159   2.485549     3.15   0.002     2.952573    12.69575

      sigma_u |  .00946197
      sigma_e |   .0431558
          rho |  .04586632   (fraction of variance due to u_i)
```

The output of table 19 result shows that the prediction equation for dividend pay out = -.0029268 (dorm) - .00038946 (years) + 8.81e-10 (total assets) + 7.824159. The P value is less

than 0.5 so the results reject the null hypothesis. This shows that domestic banks have a better dividend payout ratio when compared to foreign banks operating in Pakistan.

The analysis of the results shows that the domestic banks operating in Pakistan have better performance than foreign banks. The performance of banks was being measured with the help of ROA, ROE and dividend Payout Ratio.

6.0 Discussion and Conclusion

6.1 Discussion

Financial performance is a well known topic when it comes with different types of ownership. Many Studies are available to show the results in different part of the world. As Berger et al (2007) discusses most of the debate and research about this topic has done in developed countries, particularly in the USA, the UK and some other parts of the European countries. I have also included the literature about this topic from Asia and other part of the world to find some interesting finding related to current issues in my study. However, it is interested to know not a single study cover all aspects of this study. This study is perhaps the first study in Pakistan which compare the performance of domestic and foreign banks of Pakistan during 2001 to 2010.

This study also shows that domestic banks perform better as compared to foreign banks. In this study we focus on overall ownership and then test the results by analyzing the domestic banks. All regression models are significant which provide the proof of better performance compare to foreign banks, also the auto correlation approve our hypothesis. However, we further extend our analysis to observe the impact of domestic banks on their performance

In our literature about the ownership and performance of banks, we have come across different results as Xiaochi Lin (2009) investigate the ownership impact on performance of domestic, public and foreign banks in China by using ROA and ROE and some other ratios and found that public banks perform poor as compared to domestic and foreign banks while the study in Ozkan Gurney et al (2006) investigate that domestic banks' performance decline.

However, Jensen and Meckling (1976) argue that ownership impact on the performance of firms is concerned with agency costs. These costs can be minimized depending upon how ownership is designed and organized to practice. Furthermore, the theory of Ownership enterprise written by Hansmann (1996) also relates the agency theory in relation to ownership and argue that different costs occur with the fact who owns the organization. In other words we understand that costs related to ownership and agency costs refers to the situation who owns the organization. The control mechanism can not create the agency cost as the State Bank Of Pakistan has strict regulations on the bank's performance.

Although we can't derive any strong relevancy about the ownership and agency theory to determine any specific relation to ownership and performance. However, resource dependency theory clearly visible in this study. The domestic banks have more deposits than foreign banks which in reality helps the domestic banks to invest more to get more returns.

As discussed in the literature, Domestic (private) ownership in the Pakistan banking sector, most of the banks are owned by family groups so we can drive from the theory, owners have an incentive to have a direct relationship with the investors and depositers in order to mitigate agency and ownership costs. Therefore, the domestic banks have a significant relationship with the financial performance in our study and foreign banks lacks these results . Another, contrast to foreign bank ownership consists of different groups who do not have a direct relationship in the local market.

 According to Demirug-count and Huizinga (2001) the foreign banks' entry in the local market, give a reason to the domestic banks to change their behavior in order to provide lower mark up rates on loans and pay more interest on deposits which in turn create tough competition for foreign banks to hold their position in the local market. However, the foreign banks consider the long term goal because this way foreign banks can develop their market and can get more benefits in the shape of the most profitable banks.

When we look at the relationship of ROA and ROE in domestic banks it provide us enough information to conclude our discussion with the previous studies. Our results support many studies examined in Pakistan which we have included in our literature. One reason could be the domestic banks have more market share as compared to foreign banks. Domestic banks have more branch network and other facilities to collect the deposits and to carry on the business in remote areas of Pakistan. Therefore, Domestic banks have more resources to invest the deposits in the form of loans and get the profit which in turn help the banks to earn more return on assets and equity. We cannot totally ignore the size of the banks although we have control the size of the banks in this study. But this is obvious big domestic banks don't depend on external resources to get more profitability where as the foreign banks are not so big in current time when it comes to the size of banks in Pakistan which gives us a point of understanding why ROA and

ROE is less than domestic banks. Moreover, ROE is not significant in domestic bank but shows the positive relationship. We are not sure but one reason we can define due to credit crunch which hit the world during 2006 and onwards, could be one reason for the domestic banks to face the equity problem.

Where as foreign banks mostly operates in urban cities of Pakistan and don't have a vast branch network to collect the deposit from household customers as well as from business customers. This could be another reason to have lower ROA and ROE compare to domestic banks.

Another interesting finding in our study is about the dividend payout. This dependent variable has a significant result in overall ownership which means both domestic and foreign banks pay dividends but domestic banks pay more as compared to foreign banks which support the results in turn as they have better ROA and ROE so automatically they are able to pay more from their profit to shareholders. The results becomes dramatic when we analyze the dividend pay out under the domestic ownership. The dividend payout is not significant but shows the positive relationship which means domestic banks tend to pay dividend. All the banks are listed on the stock exchange markets of Pakistan so by paying more dividends the domestic banks get more value from their shareholders.

Although we can't derive any strong relevancy about the ownership and agency theory to determine any specific relation to ownership and performance. However, resource dependency theory clearly visible in this study. The domestic banks have more deposits than foreign banks which in reality helps the domestic banks to invest more to get more returns.

As a whole we can argue due to the fact majority of the banks in Pakistan are domestic banks and established for decades and have their strong roots in the banking system of Pakistan and leave very narrow space for the foreign banks to get a higher return as compare to domestic banks. Although it would be interesting to investigate the results to control the Age factor of the banks with other control variables in order to show more reliable results.

6.2 Conclusion

This study has examined the effects of ownership structure on the performance of banks operating in Pakistan. On the basis of previous literature we have chosen the performance indicators and that were Return on Assets (ROA), Return on Equity (ROE) and Dividend Payout which reflects the liquidity and profitability of the banks in aspects of performance. The ownership structure was divided on the basis of two important measures and that was domestic and foreign. Other control variables have also been studied to test the outer factor effects on the performance of banks. The control variables were total assets and time. To analyze the panel data of different domestic and foreign banks we have implemented various statistical analyses. The correlation analysis has been done to test the relationships between the measures of dependent and independent variables. The correlation analysis shows that the ROA and ROE are negatively correlated with the ownership structure but the dividend payout is positively correlated with the ownership structure. The results of linear regression show that there is no significant ownership effect on ROA and ROE. But in our data model the ownership has a significant effect on Dividend Payout. The assumptions of multiple regression analysis results indicate that the ownership has no significant effect on ROA but in our data set but ROE and Dividend Payout has significance. To find out the perfect relationships between the measures of dependent and independent variables we have performed an autocorrelation analysis which indicates that there is a significant relationship between all the measures of dependent and independent variables. The Hausman Test analysis for domestic and foreign banks reflects that the domestic banks operating in Pakistan are performing better than foreign banks. The main reason of this would be the deposit of domestic banks. As all the domestic banks have a major proportion of deposit in Pakistan. According to the economic survey of 2012 the five major banks of Pakistan have the above 50% proportion of deposits. This automatically enhances the probability of having the better ROA and ROE. The other factor would be having the higher total assets and equity than foreign banks. To be at the level of domestic banks it would be the long run for foreign banks operating in Pakistan. The analysis can be extended in new horizons as well. This initiates the several discussions and research dimensions.

6.3 Future scope of research

Further area of research could use pool data and multiple regression model with more detailed data results to predict some strong policy for the banking industry in Pakistan. Another further recommendation of the research is to conduct an individual study on domestic and foreign banks to evaluate the ownership structure more in depth such as dividing the ownership in family groups of non family groups. This may provide the inside story to show the impact on financial performance of the banks.

6.4 Limitation of this study

This study has some limitations which can lead this study of less critical analysis. Due to the shortage of resources and time I was unable to collect more deep and sufficient data to analyze the subsequent impact of ownership on bank performance in the light of state owned policies and regulations which has an outer impact on banking sector of Pakistan. Due to insufficient data it would not be possible for me to generate highly reliable results but I can try to explore the relationship and the effects of different variables with respect to performance in the Pakistan banking sector. This research is limited to Pakistani Commercial banks, schedule with all the stock exchange of Pakistan and perform the commercial functions of the banks. It does not include the other kind of the banks as leasing banks, saving banks and house finance banks.

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