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Research Article

Corporate restructuring and financials firms performance: Evidence from Pakistan

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ABSTRACT

Corporate restructuring is an essential part of the business and commonly occurred in Pakistan through mergers and acquisitions. The main purpose of this research paper is to examine the performance of financial firms (Banks) before and after corporate restructuring through merger and acquisition. The researcher also analyzes the impact of corporate tax as a moderating variable on the performance of financial firms (Banks). The researcher used a fixed-effect model in the panel data set with a sample of 18 sets of banks from the period of 2000 to 2019 (20 years). ROA and ROE use as performance indicators with other explanatory variables i.e. ATD, CR, DR, and EPS. Use dummy variables (1 use for pre and 0 use for post) for the pre and post-analysis of corporate restructuring. The study analyzes the financial firm's performance before and after corporate restructuring with and without moderating variable (CT). The researcher use Pearson Correlation to check the strength of the associations among variables. The results of this study reveal that the performance of financial firms (Banks) improved after corporate restructuring with and without corporate tax (moderating variable). The study further indicates that the corporate tax (moderating Variable) has a significant and positive affect on the performance of the financial firms (banks). The study of corporate restructuring provides comprehensive analysis which may useful for the strategic manager and investor to take effective decisions in the future.

Keywords: *Corporate Restructuring; Merger; Acquisition; Financial Firms; Banks; Performance; Corporate Tax*

1. INTRODUCTION

In developed and developing countries every financial and non-financial firm has the objective to increase market growth, improve performance and take a competitive advantage in the market (Muhammad et al., 2019) and (Zia & Khan, 2016). Today's modern world financial market is very competitive due advancement of technology & strategies and the increasing number of customer expectations. All these forces put pressure on the corporate firms to adopt these changes in the financial market to survive and compete locally and internationally. Most of organization does not survive or compete in the financial market due to lack of financial resources or not adopt the market changes. There is several others option with corporate firms to improve the financial performance of the firms and survive in the today competitive financial market. For instant corporate

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restructuring is the most popular and reliable strategy for corporate firms to improve their financial performance (Muhammad et al., 2019). Most financial corporations around the world use restructuring strategy to increase power in the financial market and create an opportunity to gain competitive advantage (Kumaraswamy et al, 2019) and (Ahmed et al., 2018).

Corporate restructuring is the process of reorganizing the ownership, operations, or change the other structure of the company to make the organization more profitable (Ingow & Oluoch 2020). There are various types of corporate restructure such as Takeover[1], Divestment[2], Merger, and Acquisition.

The most important type of Corporate restructuring through merger and acquisition is not a new development five periods of high merger activities occurred in the USA known as merger waves. Now in the recent decade merger and acquisition is the centerpiece of corporate restructuring (Aggarwal & Garg, 2019) and (Awan & Muhammad, 2015). Corporate restructuring through merger and acquisition strategy gives help to the financial firms to achieve the desired goal and adopt different strategies within the required time frame (Kulsum et al., 2019). Corporate restructuring through merger and acquisition is the most important factor to take a competitive advantage within the banking industry and these banking industries play a critical role in the economic development in different countries (Rashid & Naeem, 2016).

1.1. Merger and Acquisition

Merger refers to the combination of one company to another and making a single company. And also change the ownership or transfer the operating units to another company (Muhammad et al., 2019) and (Kumaraswamy et al., 2019).

While acquisition refers to when one company acquired another company and the acquired company loses its identity. The acquisition also comes through the buying of assets (tangible and intangible) and shares of another company (Kumaraswamy et al., 2019) and (Sahu & Agarwal, 2017). It could be a friendly acquisition or hostile acquisition; friendly acquisition means when both the target and acquirer companies agree for

[1]Take over: In the take over the one company (acquirer) purchase the other company (target) and the target company management may or may not agree with takeover), (Miras et al. 2016). There are three types of takeover such as; Friendly, Hostile and Reverse takeover. Friendly takeover: It is a welcome take over in which the management target company as well as the management of acquirer Company to agree for merger and acquisition without any difficulty, arguments and consider it's a positive situation for companies). Hostile takeover: It's an unwelcome take over in which the one company not agree to participate voluntarily and the acquirer company use unfavorable tactics to acquire or take control over the target company). Reverse takeover: In the reverse take over the also known as revers merger take over in which the private company acquire the public company or public shell and bypass the lengthy process to become public (Bai, 2018), (Kulsum et al, 2019).

[2]Divestment: Corporate divestment can take place through different ways i.e. Corporate sell off, Spin off and splits ups. Corporate sell off: It is types of divesture which refer to when a company sale a division of plant or other combination of fixed assets to another company. There are three parties involve in corporate sell off, vendor (seller of firm), the asset being sold and the acquirer (Tsirimpasi 2018). Spin off is also knows as splits off and demerger which refer to separate a division or business unit from a company (Aggarwal & Garg, 2019) and (Waltermann 2018). In the split up, the parent company converted all the division into a separated companies and the parent company cease to exist.

acquisition and consider it's a positive situation for us. In the friendly acquisition, the acquirer company gives an offer to the target company is known as "yellow knight". On the other hand, the hostile acquisition is an unwelcome acquisition in which the target company does not agree to participate voluntarily. The acquirer company uses unfavorable tactics to acquire the target company. The company makes a hostile acquisition offer to target company is known as "black knight".

The study aims to analyze the effect of a financial firm's performance on the fastest-growing of corporate restructuring through merger and acquisition activities in Pakistan. The trend of mergers and acquisitions increased in Pakistan in the last ten years (Rashid & Naeem, 2016) and (Zia & Khan, 2016). In Pakistan, a large number of mergers and acquisitions took place from 2009 to 2019 (competition commission of Pakistan). Corporate restructuring through merger and acquisition is an essential part of the business and commonly occurred in Pakistan in the banking sector (Ahmed et al., 2018).

1.2. Research Gap

This research study full fill the gap in academia by examining the effect of corporate restructuring on financial firms' performance in the banking sector of Pakistan. Fixed effect model is used in the study from the period of 2000 to 2019 (20years). Further, the researcher adds a moderating variable (Corporate tax) to check its impact on a financial firm's performance and the relationship between corporate restructuring and a financial firm's performance.

1.3. Objective of the Paper

The main objective of the research paper is to examine the effect of corporate restructuring on the financial firm's (Banks) performance which is registered in the PSX by using the fixed-effect model (FEM) from the period of 2000 to 2019 (20 years). The researcher add corporate tax as moderating variable to check its impact on financial firms' performance and the relationship between corporate restructuring and financial firms' performance. Further the researcher also use Karl Pearson Correlation to check the strength of the relationship between variables.

H_0: Corporate restructuring has significant impact on financial firm's performance with corporate tax.

H_1: Corporate restructuring does not significant impact on financial firm's performance with corporate tax.

H_0: Corporate tax has significant impact on firm's performance.

H_1: Corporate tax does not significant impact on firm's performance.

1.4. Statement of the Problem

In the financial sector banks turned into corporate restructuring to improve our performance. There are several empirical studies on corporate restructuring which have

focused on the impact of corporate restructuring through merger and acquisition on financial firm's performance.

The studies of corporate restructuring through merger and acquisition have varied results. It is critical to find out; what is the effect of corporate restructuring through mergers and acquisitions on a financial firm's performance. So therefore the researcher determines the effect of corporate restructuring through merger and acquisition on a financial firm's performance.

1.5. Research Questions

1. Does corporate restructuring affect the performance of financial firms?
2. Does the financial firm's performance improve after corporate restructuring with corporate tax (Moderating variable)?
3. Does corporate tax (Moderating variable) affect the performance of the financial firms of Pakistan?
4. Does corporate tax (Moderating variable) affect the relationship between corporate restructuring and a financial firm's performance?

1.6. Significance of the Study

The study of corporate restructuring may useful for the managers and strategic decision-makers in the organization. The study highlights the effect of corporate restructuring on a financial firm's performance. It has also revealed that how the corporate tax (moderating variable) has been impacted. This research thesis resolve the agency problem and gives direction to the management to make effective and clear decisions in the future.

This study is significant for scholars that provide literature about how corporate restructuring affects financial firms' performance. And what is the impact of corporate tax on financial firms performance. Scholars may also explore the gaps that have been left behind by the study which is briefly discussed in future directions.

This study also gives awareness to the investor that what is the effect of corporate restructuring on a financial firm's performance in terms of profitability. Profitability measure in terms of performance indicator; ROA and ROE with other explanatory variables i.e. ATD, CR, DR, EPS, and Moderating variable (CT). The study suggests that the banking sector's performance improves after corporate restructuring so the investors have the chance/opportunity to invest in the banking sector for a reliable and healthy return.

2. LITERATURE REVIEW

2.1. Introduction

In order to examine the performance of financial firms, two different methods are used i.e. performance studies and event studies (Marques-Ibanez & Altunbas, 2004). In the performance studies the researcher analyzes the performance before and M&A (Akpan et al., 2018; Pazarskis et al., 2014; Bhabra & Hung 2013; Correa, 2009; Cox, 2006). The event

study methodology examines the effect of M&A on stockholder wealth (Kolaric & Schiereck, 2014). Various studies have been conducted in many developed and developing countries to examine the possible synergies/gains after merger and acquisition (Shi et al., 2017; Gattoufi et al., 2014; Bogetoft & Wang, 2005).

2.2. Pakistani Context

2.2.1. Merger and Acquisition and Firms Performance

Muhammad et al., (2019) examine a study to analyze the firm performance before and after M&A of the financial sector in Pakistan. The panel data method was used to find out the effect of merger and acquisition on the Banks' financial performance from the period of 2004 to 2015. The financial firm's performance measures in terms of profitability (ROA & ROE), liquidity (CR) & investment ratios (EPS). The study found that there is a significant relationship between M&A and banks' financial performance. The research study provides comprehensive ratios analysis to analyze the impact of M&A and bank's financial performance.

Kishwari and Atta, (2019) empirically examine to check the effect of merger & acquisition on the performance of financial institutions. The research study provides a literature review to analyze the M&A and its effect on the financial and economic performance of the banks. The merger and acquisition occurred due to several economic factors i.e. GDP growth, interest rate, and financial analysis of the bank before and after merger and acquisition. Use 5 commercial banks as a sample to find the effect of merger and acquisition on financial performance. The firm's financial performance of the bank is measured in terms of profitability, liquidity, and solvency. The result of the study shows that there is a positive association between M&A and liquidity ratio and a negative association with profitability and solvency ratio. The value of the study is merger and acquisition increase the cash flow of financial firms to reduce the future uncertainty in the financial sector of Pakistan.

The foremost purpose of this research study is to investigate corporate restructuring through merger and acquisition and its impact on the performance of the GCC firms from the period of 2004 to 2017. 14 non-financial firms of GCC were involved in the merger and acquisition which is a sample of the study. OLS method was with a dummy variable to check the impact of corporate restructuring through merger and acquisition on GCC firms' performance. The result of the study indicates that profitability ratios ROA and NPM have a negative impact on corporate restructuring and the leverage ratio has a positive but statistically insignificant relationship with the corporate restructuring of GCC firms. The liquidity ratio has a statistically significant but negative impact on the corporate restructuring of GCC firms. The result of the study concludes that corporate restructuring through merger and acquisition does not always create synergy for the firm's managers need to take some effective decisions after corporate restructuring.

Ahmed et al., (2018) examine the association between M&A and firm's financial performance of the banking sector of Pakistan. The researcher used financial ratios to examine the performance of the financial firms after M&A. Secondary data was a use

which is taken from the Karachi Stock Exchange from the period of 2005 to 2016. After ratio analysis, the result revealed that the bank's financial performance is quite satisfactory before the M&A deal. The research study found that there is a negative association between M&A and the financial performance of the banks. The M&A deal did not improve the performance of the banks in the financial sector of Pakistan but only capture the market share. The originality of the study is the merger and acquisition deal captured the financial market of Pakistan.

Rashid and Naeem (2016) empirically examine the impact of merger & acquisition on bank's financial performance. The research study was conducted on the Pakistan banking sector from the period of 1995 to 2012. The Ordinary least square and empirically bayesian estimation model was used to empirically analyze the M&A and its effect on a firm's performance. The results of OLS regression revealed that the merger deal does not have any positive impact on liquidity (CR), profitability (ROA) & leverage (DR) position of the firms. The study indicates that there is a negative association between merger deals and financial firm performance but the quick ratio has a positive impact on merged/acquirer firms. The estimation of the study suggests that merged and acquirer firm's assets have the ability to meet the obligation of liabilities.

Awan and Muhammad, (2015) examine a study on M&A and the performance of banks in Pakistan. The main purpose of this paper is to analyze the effect of M&A on a bank's performance. The study was qualitative to give an understanding of increased trends of mergers and acquisitions in Pakistan. Use 7 commercial banks as a sample from the period of 2002 to 2011 and the data was collected from Karachi Stock Exchange to evaluate M&A and banks performance. The study revealed that merger and acquisition and financial firm's performance has positive relation. The value of the study is to give understanding that bank performances improve after merger and acquisition and there is a significant association between M&A and banks performance.

2.3. International Context

2.3.1. Merger and Acquisition and Firms Performance

Ingow and Oluoch, (2020) examine a study on corporate restructuring and financial performance of SACCO (Kenya). A core objective of a research paper is to examine the effect of corporate restructuring through capital restructuring, asset restructuring, and operational restructuring on the financial firm performance of SACCO. Primary and secondary data were used in the said study. The researcher uses descriptive statistics and correlation analysis to find out the relationship between capital restructuring, assets restructuring, and operational restructuring with the financial firm performance of SACCO in Kenya. The study reveals that capital restructuring has a positive associated but significant impact on firm financial performance. The study also reveals that asset restructuring has a negative association but a negative impact on financial performance. The study further indicates that operational restructuring has a significant impact on financial performance. The study recommends that corporate restructuring improve the financial performance of SACCO.

Kajirwa and Martin, (2019) examine the impact of financial restructuring on the non-financial performance of Pan Africa Insurance Holding Company. Stratified sampling and random sampling techniques are used for the collection of samples from the population and the sample size was 20 out of 60 respondents' population. The study analyzes the relationship between financial restructuring and non-financial performance of PAIH company through Linear Regression and Karl Pearson product-moment correlation. The study found that financial restructuring has been significantly associated with non-financial firm performance. The study also indicates that financial restructuring improves liquidity and increases cash flow and reduces the cost of capital of non-financial firms (Insurance companies).

Hassan et al., (2018) examine the effect of dynamic effects of merger and acquisition on bank performance. The researcher used the panel data method from the period of 2005 to 2013 to examine the effect of merger and acquisition and bank's performance. The empirical study shows that the value of the dummy merger and acquisition variable has a positive effect on bank performance while the time had a negative effect on the efficiency of the bank. The value of the study is the merger and acquisition operations are necessary for the development of the banks and improve the performance.

Aggarwal and Garg (2019) analyze the impact of corporate restructuring through spin-off on the parent firm share prices. The Indian spin-off announcement occurred in a specific period and the researcher examines its impact on parent firm share prices. 76 Indian companies were used as a sample from the period of 2010 to 2011 and 2015 to 2016. The researcher was used event study methodology to check the effect of share prices of parent firms also found the average abnormal return (AAR) and cumulative AAR of all 76 companies. The study found that the corporate restructure through spin-off has significantly influenced the parent firm share prices and the average abnormal return (AAR) is highest on day 0 and cumulative AAR is on highest on day +1. The value of the is first comprehensive analysis of Indian spin-off and its impact on parent firm share prices. Further, the study suggests that the share prices of parent firms improve through a spin-off.

Banauaka et al., (2017) examine the relationship between M&A and financial firms' performance in East Africa. Use event study methodology calculates CAR (cumulative abnormal return) to measure merger and acquisition performance and shareholder wealth. The researcher uses financial ratios i.e Return on equity to measure the firm performance. Use secondary data which is collected from East Africa Stock Exchange markets from the period of 2005 to 2015. The study revealed that M&A is a significant relationship with a firm's performance. The study also indicates that merger and acquisition are significantly related to share prices. There is a positive relationship between the cross-border and domestic border M&A deal and firm performance. But the domestic border merger and acquisition deal is better than cross-border M&A. The study gives an understanding of how the cross-border and domestic border M&A relative with firms performance and how the firms performance improves after these merger and acquisition deals.

2.4. Theoretical Framework

In this section the relevant theories which influence the relationship between corporate restructuring and financial firms performance are discussed.

2.5. Agency Theory

In the new form of corporation, ownership is divorce from management. Management acts on behalf of the investor. This separation between management and ownership in modern corporations suggest that managers are in better position to protect its own interest. They control corporate resources and information and use it for its own benefits. While, investor can reduce information irregularly but it is costly. Management pursues their own interest like salaries, gratuities and offices and investor want to increase its wealth.

2.6. Agency Problems in Merger & Acquisitions

There is asymmetry of information between managers and investor. Management might create the imaginative synergies of M&A transaction and consequently managers overpay for target in order to promote their own interest. The negative return of the acquiring companies in M&A transactions is due to managers self-interest that motivated the transaction. Mangers control resources and are likely to use it for personal interest instead of using to increase the investor wealth.

2.6.1. MM-II Theorem

Conversely, the second version of the M&M Theorem was developed to better suit real world conditions. The Assumptions of the newer version imply that companies pay taxes; there are transaction, bankruptcy, and agency costs; and information is not symmetrical.

$$VL = VU + Tc \times D$$

Where:

Tc = Tax rate
D = Debt
The first proposition states that tax shields that result from the tax deductible interest payments make the value of a levered company higher than the value of an unlevered company. The main rationale behind the theorem is the tax- deductible interest payments positively affect a company's cash flows. Since a company's value is determine as the present value of the future cash flows the value of a levered company increases.

3. METHODOLOGY

3.1. Research Methodology and Technique

In the research methodology, the researcher use the best tool and techniques as we critically reviewed in past studies which also analyzed the role of a merger and acquisition firm's financial performance. For example, Kishwari and Atta, (2019) used financial ratios to

examine the impact of merger and acquisition on banks' financial performance. Rashid and Naeem, (2016) use the Ordinary Least Square method and an empirically Bayesian estimation model was used to empirically analyze the merge and acquisition and how its impact on firm performance. Hassan et al., (2018) use the panel data method to investigate how merger and acquisition affect bank's performance. Ahmed et al., (2018) used ratio analysis to analyze the bank performance after merger and acquisition.

So it concludes that ratio analysis comparison and panel data method is the most common techniques are used in a similar context of the study. The researcher used the fixed-effect model to determine the effect of corporate restructuring through M&A on a financial firm's performance.

3.2. Estimation technique

The data is analyzed using the following estimation techniques

3.2.1. Descriptive Analysis

In the descriptive analysis, the descriptive statistics of all the variables are calculated and linked to the study. In table 3 the distribution of all variables i.e Advance to deposit, Capital ratio, Debt ratio, Earning per share and Corporate tax is presented. The mean value and the standard deviation of Advance to deposit, Capital ratio, Debt ratio, Earning per share, and Corporate tax were analyzed.

3.2.2. Correlation Analysis

Pearson correlation is used to find the strength of the relationship between variables. Muhammad et al., (2019) also use Pearson correlation to find the strength of the relationship between variables. In correlation, the value of the coefficient is 0.4 or greater than 0.4 it specifies that there is a positive and strong association between variables. And the coefficient value is greater than 0.00 or less than 0.4 it shows that there is a moderate association between variables Muhammad et al., (2019), Schober et al., (2018) & Yamane (1973). According to Schober et al., (2018) & Hahs-Vaughn & Lomax (2013) when the correlation coefficient value between 0 and -1 its specifies that there is a negative association between variables. And when the correlation coefficient value between 0 & -0.4 indicates that there is a strong negative association between variables and there is a moderately negative relationship when the correlation coefficient value is from -0.4 to -1.

3.2.3. Regression Analysis

Fixed effect model is being used to estimate the model to remove the problem of endogeneity. The researcher applied OLS regression analysis to analyze the impact of corporate restructuring on performance in terms of Return on Assets and Return on equity. According to Muhammad et al., (2019) OLS regression is used to check the strength of the relationship between dependent and independent variables. Zia and Khan, (2016) use regression analysis to check the impact of merger and acquisition on firm performance.

3.2.4. Regression equations is as follows:

Using ROA as indicator for financial performance

$$\text{Profitability (ROA)} = \beta o + \beta_1 ATD + \beta_2 CR + \beta_4 DR + \beta_5 EPS + \beta_6 CT + \beta_7 DM + e \quad (1)$$

Using ROA as indicator for financial performance

$$\text{Profitability (ROA)} = \beta o + \beta_1 ATD + \beta_2 CR + \beta_4 DR + \beta_5 EPS + \beta_6 CT + \beta_7 DM\, e \quad (2)$$

Where,

ROE = Return on equity
ROA = Return on Assets
βo = Constant term
ATD = Advance to deposits
DR = Debt ratio
CR= Capital ratio
EPS = Earning per share
CT = Corporate tax.
DM = Dummy Variable

3.3. Research population

All the financial firms listed at PSX 100 index will be the population of the research.

3.4. Sample size and Sampling Technique

The researcher used the purposive sampling technique and the sample is consisting of 18 sets of banks drawn from the population of the study.

3.5. Source of the study

Panel data set from the PSX 100 index to analyze the effect of corporate restructuring on the financial firm's performance. The researcher extracts the data from the Pakistan Stock Exchange (PSX) website from 2000 to 2019 (20 years).

3.6. Theoretical Framework

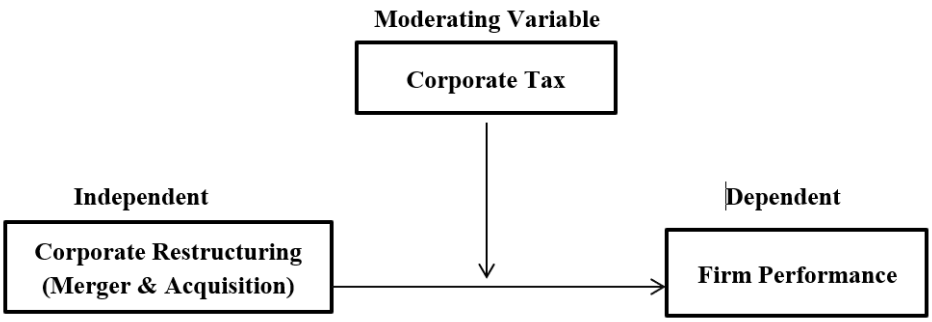

Fig. 1. Theoretical framework

Table 1. Acquisitions of Banks

NIB Acquire the shares of GSBL	2008
SCBL Acquire the shares ROAE bank Ltd.	2008
HBL Acquire the financial assets portfolio of FHBM	2009
BIPL Acquire CHFBP	2010
FBL Acquire shares of Capital of RBS Ltd.	2008
NBP, SCB, KASB, NIB, ABL, UBL, SB, AB, HBL, ABB, BAF, and SBL Acquire 80% shares of Agritech Ltd.	2012
HBL Acquire 51% share of First microfinance bank	2011
JS Bank Ltd Acquire 35867417 shares of JSGC Ltd.	2009
HBL Acquire 30% of the share of APL	2009
BAH Ltd Acquire 3million shares of HSM Ltd.	2011
NBP Acquire 27% Shares of NFAML	2012
BAF Ltd Acquire a 2.667 million share of KASB Securities Ltd.	2009
HBL Acquire a 17.78% share of S(Pvt) Ltd.	2011
KASB Finance (Pvt) Ltd Acquire KASB Finance (Pvt) Ltd.	2008
HBL Acquire 42.86% shares of DFT, DCMC, and DE Ltd	2008
AB Ltd Acquire FS(Pvt) Ltd.	2008
HBL Acquire SECMC Ltd.	2009
HBL Acquire 15% shares of DFT, DCMC, and DE Ltd.	2009
AB Ltd acquires FS(Pvt) Ltd.	2010
HBL Acquire 10% of shares of M/S Saif Power Ltd.	2012
MB Ltd Acquire 10% shares of M/S Haleeb foods Ltd.	2008
MCB Ltd acquires 100% shares of RBC Ltd.	2009
HBL Acquire 17% shares of NJLIC Ltd.	2011

Source: *Competition Commission of Pakistan*

Table 2. Mergers of Banks

MB Ltd merge with & into Pak: operations HSBCO	2011
MB Ltd with & into Pak: Branch operations of HSBCB Middle East Ltd.	2011
SBL merge with & into MB Ltd.	2010
SB ltd merge with & into AB Ltd.	2010
ABI Bank Ltd merge with & into EGIB Ltd.	2012409
AB Ltd merge with and into AL Ltd.	2012
KASB merge with & into NLC Ltd	2011
AB Ltd merge with & into KASB Capital and KASB Bank Ltd.	2011
NIB merge with & into PICIC Commercial Bank Ltd	2012
M/s NIB Ltd merge with & into M/s PCIC	2012

Source: *Competition Commission of Pakistan*

4. RESULTS AND DISCUSSION

4.1. Introduction

In this section, we discuss the results calculated through econometric techniques in detail.

4.2. Descriptive Statistics

The table below shows the descriptive statistics of the variables

Table 3. Descriptive Statistics

	ATD	CR	CT	DM	DR	EPS	ROA	ROE
Mean	55.858	48.086	34.379	0.500	85.849	663.300	5.658	13.638
Median	55.835	49.895	35.000	0.500	90.335	219.000	0.970	18.190
Maximum	99.360	99.500	43.000	1.000	97.760	56700.000	40.000	99.900
Minimum	9.080	0.290	30.000	0.000	36.200	-608.000	-56.700	-1474.270
Std. Dev.	17.258	24.717	2.622	0.500	12.950	348.008	2.531	8.032
Skewness	-0.556	-0.163	1.177	0.000	-2.380	17.436	-1.110	-15.127
Kurtosis	3.589	1.991	6.864	1.000	7.853	320.877	7.258	263.894
Jarque-Bera	2.652	1.766	3.571	3.666	1.387	1.986	3.013	2.433
Probability	0.320	0.190	0.2790	0.138	0.264	0.377	0.424	0.289
Sum	19997.380	17215.120	12307.700	179.000	30734.000	237461.600	2025.615	4882.570
Sum Sq. Dev.	106333.800	218107.800	2456.168	89.500	59877.340	3.320	56059.950	2580787.
Observations	358.000	358.000	358.000	358.000	358.000	358.000	358.000	358.000

Source: *Author's Own Calculation*

Table 3 explains that the mean value of Advance to deposit is 55.8586 while the standard deviation is 17.25844 which shows that there is less deviation in a variable, the P-value of Advance to Deposit is 0.3200 which is greater than 0.05. This shows that the variable is normally distributed. The mean value of the Capital Ratio is 48.08693 while the standard deviation is 24.7173 which shows that there is less deviation in a variable, the P-value of the Capital Ratio is 0.1902 which is greater than 0.05. This shows that the variable is normally distributed. The mean value of Corporate tax is 34.3790 while the standard deviation is 2.6229 which shows that there is less deviation in a variable the P-value of Corporate Tax 0.2790 which is greater than 0.05. This shows that the variable is normally distributed. The mean value of the Debt Ratio is 85.8491 while the standard deviation is 12.9508 which shows that there is less deviation in a variable the P-value of the Debt Ratio is 0.2640 which is greater than 0.05. This shows that the variable is normally distributed. The mean value of Earning per share is 663.3005 while the standard deviation is 348.0084 which shows that there is less deviation in a variable the P-value of the Debt Ratio is 0.2640 which is greater than 0.05. This shows that the variable is normally distributed. The mean value of ROA is 5.6581 while the standard deviation is 2.5310 which shows that there is less deviation in the variable the P-value of Return on Asset is 0.4244 which is greater than 0.05. This shows that the variable is normally distributed. The mean value of Return on Equity is 13.6384 while the standard deviation is 8.032408 which shows that there is less deviation in the variable the P-value of Return on Asset is 0.2898 which is greater than 0.05. This shows that the variable is normally distributed.

Table 4. Correlation analysis

Probability	ATD	CR	CT	DR	EPS	ROA	ROE
ATD	1.0000						

CR	0.2377	1.0000					
	4.6191	-----					
	0.0000	-----					
CT	0.0209	0.1123	1.0000				
	0.3950	2.13264	-----				
	0.6930	0.0336	-----				

Probability	ATD	CR	CT	DR	EPS	ROA	ROE
DR	0.0987	0.2005	-0.1941	1.0000			
	1.8728	3.8624	-3.7340	-----			
	0.0619	0.0001	0.0002	-----			
EPS	0.0207	0.0139	0.1542	0.0497	1.0000		
	0.3911	0.2623	2.9449	0.9400	-----		
	0.6960	0.7932	0.0034	0.3478	-----		
ROA	0.2282	0.1053	0.0325	0.1586	0.1684	1.0000	
	4.4228	1.9979	0.6151	3.0319	3.2237	-----	
	0.0000	0.0465	0.5388	0.0026	0.0014	-----	
ROE	0.1223	0.1556	0.0296	0.0168	0.0327	0.3546	1.0000
	2.3265	2.9737	0.5591	0.3179	0.6183	7.1565	-----
	0.0205	0.0031	0.5764	0.7507	0.5368	0.0000	-----
Observations: 358							
Balanced sample (listwise missing value deletion)							
Correlation							
t-Statistic							

Source: *Author's own Calculation*

Table 4 explains that the Capital ratio has a significant relationship with Advance to deposit. Corporate tax has a significant relationship with Capital ratio and insignificance with Advance to deposit. The Capital ratio has a significant relationship with corporate tax and no significant relationship with Advance to deposit. The Debt ratio has a significant relationship with the Capital ratio and corporate tax and no significant relationship with Advance to deposit. Similarly, the Earning per share has a significant relationship with corporate tax and no significant relationship with Advance to deposit, Capital ratio, and Debt ratio. The Return on the asset has a significant relationship with Advance to deposit, Capital ratio, Debt ratio, and Earning per share, and no significant relationship with corporate tax. The Return on equity has a significant relationship with Advance to deposit, Capital ratio, and Return on asset and insignificance relationship with corporate tax, Debt ratio, and Earning per share.

4.3. Unit-Root Test

The hypothesis of the URT is written as

H1: Unit root does not exist (non-Stationary)
Ha: Unit root does not exist (Stationary)

Table 5. Unit Root Test

Variable	Level	1st Difference	2nd Difference
ROA	0.4214	0.0053	----------
ROE	0.2384	0.0095	----------
ATD	0.6146	0.0000	----------
CR	0.1408	0.0000	----------
DR	0.0998	0.0000	----------
EPS	0.0529	0.0011	----------
CT	1.0000	0.0000	----------

Source: *Author's own Calculation*

Looking at the results of the unit root test the value of all variables is less than 0.05 at 1st difference. This means that we reject the null hypothesis and accept alternate.

Table 6. Cross-section dependency test for ROA

Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	358.8461	153	0.0000
Pesaran scaled LM	11.76744		0.0000
Pesaran CD	2.227109		0.0259
Null hypothesis: No cross-section dependence (correlation) in residuals			
Observations: 358			
Note: non-zero cross-section means detected in data			
The test employs centered correlations computed from pairwise samples			

Null hypothesis: No cross-section dependence (correlation) in residuals

Alternate hypothesis: Cross-section dependence (correlation) in residuals

Looking at the P-value we reject the null hypothesis and accept alternate, which means that cross-sectional dependency exists.

Table 7. Cross-section Dependency test for ROE

Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	300.5557	153	0.0000
Pesaran scaled LM	8.435200		0.0000
Pesaran CD	5.869754		0.0000
Null hypothesis: No cross-section dependence (correlation) in residuals			
Observations: 359			
Note: non-zero cross-section means detected in data			
The test employs centered correlations computed from pairwise samples			

Null hypothesis: No cross-section dependence (correlation) in residuals

Alternate hypothesis: Cross-section dependence (correlation) in residuals

Looking at the P-value we reject the null hypothesis and accept alternate, which means that cross-sectional dependency exists.

Table 8. Heteroskedasticity model for ROA

	Value	Df	Probability
Likelihood ratio	1.437834	180	0.63452
LR test summary:			
	Value	**Df**	
Restricted LogL	-1389.041	352	
Unrestricted LogL	-1276.150	352	
Panel Cross-section Heteroskedasticity LR Test			
Null hypothesis: Residuals are homoscedastic			
Specification: ROA C ATD CR DR EPS CT			

H_0: The variance is constant (No Heteroskedasticity)
H_1: The variance is not constant (Heteroskedasticity exists)

Looking at the P-value (0.63452) which is greater than 0.05, this means that we reject the null hypothesis and accept the alternate hypothesis. So there is no problem of heteroscedasticity in the model.

Table 9. Heteroskedasticity model for ROE

	Value	Df	Probability
Likelihood ratio	1.35644	18	0.40280
LR test summary:			
	Value	**Df**	
Restricted LogL	-2098.431	353	
Unrestricted LogL	-1527.259	353	
Panel Cross-section Heteroskedasticity LR Test			
Null hypothesis: Residuals are homoscedastic			
Specification: ROE C ATD CR DR EPS CT			

H_0: the variance is constant (No Heteroskedasticity)
H_1: the variance is not constant (Heteroskedasticity exists)

Looking at the p-value (0.40280) which is greater than 0.05, this means that we reject the null hypothesis and accept the alternate hypothesis. So there is no problem of heteroscedasticity in the model.

4.4. HAUSMAN-TEST:

As pooled OLS is based on a very strong assumption of heterogeneity, so the alternate method is to apply either the fixed-effect method or random effect method. Which method of these two is appropriate, the Hausman test is applied.

Table 10. Hausman-Test

Test Summary		**Chi-Sq. Statistic**	**Chi-Sq. d.f.**	**P-value.**
Cross-section random		23.014000	4	0.0001
Cross-section random effects test comparisons:				
Variable	**Fixed**	**Random**	**Var(Diff.)**	**Prob.**
D(ATD)	0.051405	0.003059	0.000210	0.0008
D(CR)	0.118114	0.102060	0.000098	0.1055
D(DR)	-0.038608	0.009202	0.000600	0.0510
D(EPS)	0.000072	0.000121	0.000000	0.0001
Correlated Random Effects Hausman Test				
Cross section random effects test				

Source: *Author's own Calculation*

The probability value of Hausman test is 0.0001 which means that the researcher accepts an alternate hypothesis and rejects null i.e. fixed effect model is appropriate.

Table 11. ROA Fixed effect model without moderating variable

Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	0.374016	5.233900	0.071460	0.9431
D(ATD)	0.051405	0.042635	1.205699	0.2288
D(CR)	0.118114	0.029550	3.997050	0.0001
D(DR)	-0.038608	0.062846	-0.614332	0.5394
D(EPS)	7.166405	0.000151	0.474683	0.6353
	Effects Specification			
Cross-section fixed (dummy variables)				
R-squared	0.588641	Mean dependent var		5.658142
Adjusted R-squared	0.562931	S.D. dependent var		12.53119
S.E. of regression	8.284514	Akaike info criterion		7.126136

Sum squared resid	23060.75	Schwarz criterion	7.364605
Log likelihood	-1253.578	Hannan-Quinn criter.	7.220976
F-statistic	22.89549	Durbin-Watson stat	1.370052
Prob(F-statistic)	0.000000		
D(ROA)			
Observations: 358			

Source: *Author's own Calculation*

Table 11 explains that the effect of Advance to Deposit is 0.05140 which means that there is one unit change in Advance to Deposit, the Return on Asset which changes by 0.05140. Looking at the T-statistics the P-value of Advance to deposit is 0.2288 which shows the coefficient is not significant at 5%. The result supported by the past literature Muhammad et al., (2019) also reveals that the coefficient of Advance to deposits is not significant at 5%. The effect of the Capital Ratio is 0.11811 which means that there is one unit change in the Capital ratio, the Return on Asset which changes by 0.11811. Looking at the T-statistics the P-value of the Capital Ratio is 0.0005 which shows the coefficient is significant at 5%. The effect of the Debt Ratio is -0.03860 which means that there is one unit change in the Debt ratio, the Return on Asset which changes by -0.03860. Looking at the T-statistics the P-value of the Debt ratio is 0.5394 which shows the coefficient is not significant at 5%. The effect of Earning per share is 7.166405 which means that there is one unit change in Earning per share, the Return on Asset which changes by 7.166405. Looking at the T-statistics the P-value of Earning per share is 0.6353 which shows the coefficient is not significant at 5%. The value of R square is 0.588641 which shows 58.8% variations on ROA are explained by the dependent variable.

Table 12. ROA Fixed effect model with moderating variable

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-11.61492	9.455640	-1.228359	0.2202
D(ATD)	0.150030	0.042561	3.751481	0.0096
D(CR)	0.120815	0.029546	4.089030	0.0001
D(DR)	0.098875	0.045699	1.935093	0.0226
D(EPS)	0.530038	0.046153	4.216491	0.0087
D(CT)	0.273680	0.179923	1.521100	0.0292
	Effects Specification			
Cross-section fixed (dummy variables)				
R-squared	0.691463	Mean dependent var		5.658142
Adjusted R-squared	0.664634	S.D. dependent var		12.53119
S.E. of regression	8.268366	Akaike info criterion		7.124840
Sum squared resid	22902.57	Schwarz criterion		7.374148
Log likelihood	-1252.346	Hannan-Quinn criter.		7.223990
(ROA)				
Observations: 358				

Source: *Author's own Calculation*

Table 12 explains that the effect of the Capital Ratio is 0.150030 which means that there is one unit change in the Capital ratio, the Return on Asset which changes by 0.150030. Looking at the T-statistics the P-value of the Capital Ratio is 0.0096 which shows the coefficient is significant at 5%. The effect of the Capital Ratio is 0.12081 which means that there is one unit change in the Capital ratio, the Return on Asset which changes by

0.12081. Looking at the T-statistics the P-value of the Capital Ratio is 0.0001 which shows the coefficient is significant at 5%. The effect of the Debt Ratio is 0.098875 which means that there is one unit change in the Debt ratio, the Return on Asset which changes by 0.098875. Looking at the T-statistics the P-value of the Debt ratio is 0.0226 which shows the coefficient is significant at 5%. The effect of Earning per share is 0.53003 which means that there is one unit change in Earning per share, the Return on Asset which changes by 0.53003. Looking at the T-statistics the P-value of Earning per share is 0.0087 which shows the coefficient is significant at 5%. The effect of corporate tax is 0.27368 which means that there is one unit change in Earning per share, the Return on Asset which changes by 0.27368. Looking at the T-statistics the P-value of the corporate tax is 0.0292 which shows the coefficient is significant at 5%.

The value of R square is 0.691463 which shows 69.1% variations on ROA are explained by the dependent variable.

Table 13. ROE Fixed effect model without moderating variable

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	31.82360	51.18132	0.621782	0.5345
D(ATD)	0.165848	0.416962	0.397754	0.6911
D(CR)	0.800633	0.288501	2.775149	0.0058
D(DR)	-0.767904	0.614608	-1.249419	0.2124
D(EPS)	0.000185	0.001475	0.125773	0.9000
D(ROE)				
Observations: 359				
	Effects Specification			
Cross-section fixed (dummy variables)				
R-squared	0.143031	Mean dependent var		13.71496
Adjusted R-squared	0.089630	S.D. dependent var		84.91762
S.E. of regression	81.02272	Akaike info criterion		11.68666
Sum squared resid	2212298.	Schwarz criterion		11.92463
Log likelihood	-2075.755	Hannan-Quinn criter.		11.78129
F-statistic	2.678412	Durbin-Watson stat		1.948109
Prob(F-statistic)	0.000118			

Source: *Author's own Calculation*

Table 13 explains that the effect of Advance to Deposit is 0.16584 which means that there is one unit change in Advance to Deposit, the Return on Equity which changes by 0.16584. Looking at the T-statistics the P-value of Advance to deposit is 0.6911 which shows the coefficient is insignificant at 5%. The effect of the Capital Ratio is 0.80063 which means that there is one unit change in the Capital ratio, the Return on Equity which changes by 0.80063. Looking at the T-statistics the P-value of the Capital Ratio is 0.0058 which shows the coefficient is significant at 5%. The effect of the Debt Ratio is -0.76790 which means that there is one unit change in the Debt ratio, the Return on Equity which changes by -0.76790. Looking at the T-statistics the probability value of the Debt ratio is 0.2124 which shows the coefficient is not significant at 5%. The effect of Earning per share is 0.00079 which means that there is one unit change in Earning per share, the Return on Equity which changes by 0.00079. Looking at the T-statistics the P-value of Earning per share is

0.5847 which shows the coefficient is insignificant at 5%. The value of R square is 0.143031 which shows 14.3% variations on ROA are explained by the dependent variable.

Table 14. ROE Fixed effect model with moderating variable

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	75.19590	92.74986	0.810739	0.4181
D(ATD)	0.170815	0.019480	9.409156	0.0000
D(CR)	0.790810	0.289325	2.733293	0.0066
D(DR)	0.875445	0.444409	1.968523	0.0172
D(EPS)	0.032500	0.013497	3.217026	0.0283
D(CT)	0.990045	0.464853	2.130979	0.0052
D(ROE)				
Observations: 359				
	Effects Specification			
Cross-section fixed (dummy variables)				
R-squared	0.643833	Mean dependent var		13.71496
Adjusted R-squared	0.587775	S.D. dependent var		84.91762
S.E. of regression	81.10523	Akaike info criterion		11.69129
Sum squared resid	2210228.	Schwarz criterion		11.94009
Log likelihood	-2075.587	Hannan-Quinn criter.		11.79023
F-statistic	2.565771	Durbin-Watson stat		1.949591
Prob(F-statistic)	0.000181			

Source: *Author's own Calculation*

Table 14 explains that the effect of Advance to Deposit is 0.17081 which means that there is one unit change in Advance to Deposit, the Return on Equity which changes by 0.17081. Looking at the T-statistics the P-value of Advance to deposit is 0.0000 which shows the coefficient is significant at 5%. The effect of the Capital Ratio is 0.79081 which means that there is one unit change in the Capital ratio, the Return on Equity which changes by 0.79081. Looking at the T-statistics the P-value of the Capital Ratio is 0.0066 which shows the coefficient is significant at 5%. The effect of the Debt Ratio is 0.87544 which means that there is one unit change in the Debt ratio, the Return on Equity which changes by 0.87544. Looking at the T-statistics the P-value of the Debt ratio is 0.0072 which shows the coefficient is significant at 5%. The effect of Earning per share is 0.032500 which means that there is one unit change in Earning per share, the Return on Equity which changes by 0.032500. Looking at the T-statistics the P-value of Earning per share is 0.0283 which shows the coefficient is significant at 5%. The effect of corporate tax is 0.99004 which means that there is one unit change in Earning per share, the Return on Asset which changes by 0.99004. Looking at the T-statistics the P-value of the corporate tax is 0.0052 which shows the coefficient is significant at 5%. The value of R square is 0.643833 which shows 64.3% variations on ROA are explained by the dependent variable.

4.5. Pre and Post Analysis of Merger and Acquisition

For the pre and post-analysis of merger and acquisition the researcher use a dummy variable; 0 use for pre and 1 use for post-analysis. From the past literature Rashid & Naeem (2016) also use dummy variables for pre and post-analysis of merger and acquisition (0 use for pre and 1 use for post).

Table 15. Cross section dependency test for ROA

Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	290.4871	153	0.0000
Pesaran scaled LM	7.859617		0.0000
Bias-corrected scaled LM	7.385933		0.0000
Pesaran CD	3.480330		0.0005
Residual Cross-Section Dependence Test			
Null hypothesis: No cross-section dependence (correlation) in residuals			
The test employs centered correlations computed from pairwise samples			

H° hypothesis: No cross-section dependence (correlation) in residuals

Alternate hypothesis: Cross-section dependence (correlation) in residuals

Looking at the P-value we reject the null hypothesis and accept alternate, which means that cross-sectional dependency exists.

Table 16. Cross-section dependency test for ROE

Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	273.5913	153	0.0000
Pesaran scaled LM	6.893744		0.0000
Bias-corrected scaled LM	6.420060		0.0000
Pesaran CD	4.572547		0.0000
Residual Cross-Section Dependence Test			
Null hypothesis: No cross-section dependence (correlation) in residuals			
The test employs centered correlations computed from pairwise samples			

Null hypothesis: No cross-section dependence (correlation) in residuals

Alternate hypothesis: Cross-section dependence (correlation) in residuals

Looking at the P-value we reject the null hypothesis and accept alternate, which means that cross-sectional dependency exists.

Table 17. ROA Fixed effect model without moderating variable

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.869074	5.593486	0.334152	0.7385
D(ATD)	0.056452	0.043174	1.307551	0.1919
D(CR)	0.115821	0.029722	3.896784	0.0001
D(DR)	-0.062557	0.070319	-0.889614	0.3743
D(EPS)	7.49E-05	0.000151	0.496426	0.6199
DM	0.774041	1.017055	0.761061	0.4472
D(ROA)				
Observations: 358				
	Effects Specification			
Cross-section fixed (dummy variables)				
R-squared	0.589351	Mean dependent var		5.658142
Adjusted R-squared	0.562383	S.D. dependent var		12.53119
S.E. of regression	8.289707	Akaike info criterion		7.129995

Source: *Author's own Calculation*

In table 17 the coefficient of the Dummy variable is 0.774041 which reveals that there is a positive association between merger and acquisition and firm's financial performance without moderating variable (Corporate tax).

Table 18. ROA Fixed effect model with moderating variable

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-14.45852	9.594721	-1.506924	0.1328
D(ATD)	0.061256	0.043020	2.423901	0.0054
D(CR)	0.116819	0.029578	3.949556	0.0001
D(DR)	0.149779	0.070235	2.128748	0.0009
D(EPS)	0.054560	0.015226	3.554266	0.0003
DM	1.833928	0.132036	13.88626	0.0000
D(CT)	0.419454	0.200780	2.089119	0.0375
D(ROA)				
Observations: 358				
	Effects Specification			
Cross-section fixed (dummy variables)				
R-squared	0.694648	Mean dependent var		5.658142
Adjusted R-squared	0.666735	S.D. dependent var		12.53119
S.E. of regression	8.248391	Akaike info criterion		7.122600
Sum squared resid	22724.01	Schwarz criterion		7.382747
Log likelihood	-1250.945	Hannan-Quinn criter.		7.226061
F-statistic	21.30328	Durbin-Watson stat		1.369976
Prob(F-statistic)	0.000000			

Source: *Author's own Calculation*

In table 18 the coefficient of the dummy variable is 1.833928 which reveals that there is a positive and statistically significant association between merger and acquisition on firm's (banks) financial performance with moderating variable (Corporate tax).

Table 19. ROE Fixed-effect model without moderating variable

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	77.40277	54.24419	1.426932	0.1545
D(ATD)	0.320543	0.419008	0.765003	0.4448
D(CR)	0.733590	0.287831	2.548681	0.0113
D(DR)	-1.500970	0.682249	-2.200034	0.0285
D(EPS)	0.000288	0.001465	0.196859	0.8441
DM	23.65998	9.842698	2.403810	0.0168
D(ROE)				
Observations: 359				
	Effects Specification			
Cross-section fixed (dummy variables)				
R-squared	0.457520	Mean dependent var		13.71496
Adjusted R-squared	0.402357	S.D. dependent var		84.91762
S.E. of regression	80.45435	Akaike info criterion		11.67518
Sum squared resid	2174895.	Schwarz criterion		11.92397
Log likelihood	-2072.695	Hannan-Quinn criter.		11.77411
F-statistic	2.855567	Durbin-Watson stat		1.944966
Prob(F-statistic)	0.000029			

Source: *Author's own Calculation*

In table 19 the coefficient of the dummy variable is 23.65998 which reveals that there is a positive and statistically significant association between merger and acquisition on a firm's (banks) financial performance without moderating variable (Corporate tax).

Table 20. ROE Fixed effect model with moderating variable

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	34.13908	93.67154	0.364455	0.7157
D(ATD)	0.333193	0.420025	3.793268	0.0002
D(CR)	0.736709	0.288175	2.556463	0.0110
D(DR)	1.466722	0.685606	2.139306	0.0331
D(EPS)	0.000144	0.321488	4.096890	0.0000
DM	26.44644	11.01099	2.401821	0.0169
D(CT)	1.110097	0.958491	2.566813	0.0012
D(ROE)				
Observations: 359				
	Effects Specification			
Cross-section fixed (dummy variables)				
R-squared	0.658327	Mean dependent var		13.71496
Adjusted R-squared	0.600541	S.D. dependent var		84.91762
S.E. of regression	80.53573	Akaike info criterion		11.67979
Sum squared resid	2172811.	Schwarz criterion		11.93940
Log likelihood	-2072.523	Hannan-Quinn criter.		11.78303
F-statistic	2.739863	Durbin-Watson stat		1.944763
Prob(F-statistic)	0.000045			

Source: *Author's own Calculation*

In table 20 the coefficient of the Dummy variable is 26.44644 which shows that there is a positive and significant impact of merger and acquisition on a firm's performance with moderating variable (Corporate tax).

4.6.1. ROA (Performance indicator) after merger and acquisition

The results of table 17 show that the coefficient value of the dummy variable is positive so the performances of firms improve after merger and acquisition without moderating variable. The result of the study is also supported by past studies (Muhammad e al, 2019). The DR ratio has a negative impact on the performance of firms after merger and acquisition.

The result of table 18 shows that the coefficient value of the dummy variable is positive and statistically significant with moderating variable it indicates that the performance of firms improves after merger and acquisition with moderating variables. Muhammad et al., (2019) also reveal that the performance of firms improves after merger and acquisition.

4.6.2. ROE (Performance indicator) after merger and acquisition

The result of table 19 indicates that the coefficient value of the dummy variable is positive and statistically significant so it means that the performance of firms improves after merger and acquisition with moderating variables.

With moderating variable the table 20 shows that the coefficient value of the dummy variable is positive and statistically which means the performance of firms improves after merger and acquisition.

5. DISCUSSION

5.1. DISCUSSION

The study is conducted on corporate restructuring and its impact on firm's performance. Corporate restructuring is the process of reorganizing the ownership, operations, or change of the other structure of the company. Corporate restructure is consists of different types of restructuring i.e. is Merger, Acquisition, Take over, spinoff and divestment. In this study, the researcher uses merger and acquisition and its impact on firm's performance with and without moderating variable (Corporate tax) and also analyze the impact of corporate tax on firms financial performance from 2000 to 2019. The result of the study shows in the above tables. The probability value of Huasman test in table 10 reveals that the fixed effect model is appropriate for the study. Table 11 indicates that CR has a positive and significant effect on ROA. The consequences support by the past literature Rashid & Naeem (2016). The other explanatory variables ATD, CR, DR, and EPS have positive but statistically insignificant impacts on ROA. Muhammad et al., (2019), also indicate that ATD, CR, and EPS has positive but statistically insignificant impact on ROA. With moderating variable (Corporate tax) the ATD, CR, DR, EPS has a positive and statistically significant impact on the performance indicator ROA. When the moderating variable (Corporate tax) has applied the performance indicator ROA has a positive and statistically significant relationship with explanatory variables. The moderating variable (Corporate tax) has a positive and significant impact on ROA. Without moderating variable the result of table 12 reveals that CR has a positive and statistically significant impact on ROE and the explanatory variables ATD, DR and EPS have a positive but statistically insignificant impact on ROE. Bananuka and Musimenta., (2017) also found that the firm size and cross-border merger and acquisition have an insignificant impact on ROE. With moderating variable the result of table 13 ATD, CR, DR, and EPS has a positive and statistically significant impact on ROE. The moderating variable (Corporate tax) has a positive and significant impact on performance indicator ROE. For the pre and post-analysis of merger and acquisition the researcher use dummy variables. Rashid & Naeem, (2016) and Zia and Khan, (2016) also use dummy variables for pre and post-analysis (0 use for pre and 1 use for post). When the coefficient value of the dummy variable is positive so it means that the firm performance is improve after merger and acquisition Rashid & Naeem, (2016). The main results of the research thesis reveals that corporate restructuring through merger and acquisition has positive impact on firms financial performance. After adding corporate tax the results of research thesis further reveals that corporate restructuring through merger and acquisition statistically significant and positive impact on financial firms performance. The results of the thesis also resolve the agency problem in merger and acquisition. The study also found that corporate tax has significant impact on firms financial performance.

5.2. RECOMMENDATIONS

The study recommends that after experiencing corporate restructuring through merger and acquisition the performance indicator i.e. Return on asset, Return on equity, Advance

to deposits, Capital ratio, Debt ratio, and Earning per share is most important factors for the financial firms (banks) to take competitive advantage and survive in the financial sector while the firm merged or acquire other firms. The study found that the performance improves after merger and acquisition so the financial firms have a chance to efficiently utilize the financial resources to promote new products, maintain and expand market share, improve customer services and operational services to survive, and take a competitive advantage in the financial market. By improving the performance the financial firms take advantage of synergies and further invest them in different profitable portfolios.

5.3. Future research directions

The study is conducted on the banking industry of Pakistan therefore the results of the research paper are limited to the banking industry of Pakistan The finding of the study is not applicable to other sectors such as the Textile sector, Pharmaceutical sector, Chemical, and Cement sector which suggests that there is a great pool of samples is available in Pakistan and also in other countries on the said study.

Furthermore, the study is conducted in the banking sector but the uniqueness of this study is the researcher adds moderating variable (Corporate tax). So in the future, the researchers link moderating variable (Corporate tax) with the said study on other sectors such as Textile, Pharmaceutical and Cement and Chemical sectors in Pakistan and other countries.

There is also another moderating variable (Tariff) which is linkable to the said study on the Textile, Pharmaceutical, Chemical, and Cement sectors of Pakistan and other countries for future studies.

5.4. Limitation of the Study

This research thesis aims to examine the impact of corporate restructuring through merger and acquisition on firm's performance in the financial sector of Pakistan with and without moderating variables (Corporate tax). So the study is only limited to the said sector of Pakistan. Corporate restructuring consists of merger, acquisition, spin-offs, take over, and divestment. The study is only focused on corporate restructuring through merger and acquisition. The study is being conducted on 18 listed financial firms of Pakistan which is the scope of the study.

5.5. Conclusion

The study is conducted on corporate restructuring through merger and acquisition financial firms' performance in Pakistan. Corporate restructuring is the process of reorganizing the ownership, operations, or change of the other structure of the company. Corporate restructure is consists of different types of restructuring i.e. is Merger, Acquisition, Take over, spinoff and divestment. Corporate restructuring through mergers and acquisitions has commonly occurred in Pakistan. In this research paper, the researcher analyzes the impact of corporate tax on financial performance. The study

further analyzes that financial firm's performance after corporate restructuring through merger and acquisition. Fixed effect model is used in the panel data set with a sample of 18 sets of banks from the period of 2000 to 2019 (20years).

The results of the study conclude that corporate tax (Moderating variable) has a positive and statistically significant impact on the financial firm's performance. The study also concludes that without corporate tax (Moderating variable) corporate restructuring through merger and acquisition has a positive relationship with financial firm's performance but statistically insignificant. After adding corporate tax (Moderating variable) the corporate restructuring through merger and acquisition has a positive and statistically significant impact on financial firm's performance. It reveals that the Moderating Variable (Corporate tax) has a positive and significant impact on the study. Further, the study found that the firm's financial performance improves after corporate restructure with and without moderating variable. The results of the study are supported by the past literature that the financial firm's performance improves after corporate restructuring through merger and acquisition. The study also resolves the conflict of interest between management and investor.

In this area of study corporate tax (Moderating variable) has first-ever use and check its impact on financial firms performance and also check its impact on financial firms performance and corporate restructuring through merger and acquisition. There is no any study available on this topic with moderating variables. It's important to mention that corporate tax (Moderating variable) is a valuable addition to existing literature available on this topic. So the study also creates a great pool of samples on the said topic for future studies.

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