

Received : 30 July 2024, Accepted: 27 August 2024

DOI: <https://doi.org/10.5281/zenodo.13748343>

## **The Nexus between Merger and Acquisitions (M&A) and Market Performance of Banks operating in Pakistan**

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### **Abstract**

Mergers and Acquisitions are considered as one of the useful strategies for growth and expansion of businesses. The trend of M&A's started by the late nineteenth century. These strategies have widely been adopted in developed economies while are quite often practiced in developing countries like Pakistan. This study aims to explore the effect of Mergers and Acquisitions on market performance of banking sector in Pakistan by using event study analysis for the period of 2002 to 2022. Market Study Method was used to compute the abnormal and cumulative abnormal returns for analyzing pre and post events effect of the phenomenon on share prices. The objective is whether the purchased or merged bank will eventually enhance and maximize Market performance when banks are involved in M&A deals. The new study adds to the body of literature in three different ways. First this study examines the effect of M & A's announcement on shareholder's wealth of acquiring banks in Pakistan. The study uses event study to investigate the unusual returns for shareholders of the acquiring banks during M&A announcement. Secondly the present study examines the overall significant determinants that affect shareholder's wealth of the Acquiring banks during M & A's announcement period at Firm-level, economics-level, and country level in Pakistan. The current study utilizes descriptive statistics, diagnostics test, and regression analysis to estimate the relation between dependent and independent variables. The study found that the significant determinants based on OLS models are Capital adequacy, Inflation, Exchange rate, Regularity quality, Control of Corruption, Rule of law. This study support the information asymmetry and signaling hypothesis in explaining the shareholder's wealth of the Acquire banks at country-level. It is recommended that policy makers reconsider their merger decisions and create and execute efficient regulations aimed at enhancing the combined banks' performance in Pakistan.

**Key words:** Mergers and acquisitions, Capital adequacy ratio, Pakistan Stock Exchange, Inflation, Exchange rate.

## 1. Introduction

The corporations' principal goal is to perform better every year so they may increase shareholder wealth by giving them big dividends. Every business employs a distinct combination of tactics and tools to increase performance in instruction to succeed in the ever growing market (Nadeem & Ahmad, 2015). Businesses sometimes need to take swift action to make the most of certain circumstances. Examples include entering new markets, launching new items, increasing their product lines, and growing their product portfolios. To achieve their objective of gaining a market monopoly, the enterprises must then have the necessary financial resources. Smaller or less profit-driven businesses have little alternative except to quit the market, combine with reputable financial businesses, or be bought. Since merger and acquisition are generally straightforward and the only method for small or less lucrative businesses to survive and grow in the developing market (Krishna et al., 2012).

In fact, academic study and industry analysis have been interested in the performance of financial institution included in merger and acquisition (M&A) operations. Through numerous transactions, including mergers, acquisitions, and takeovers, M&A operations include the consolidation or combining of firms. Through the provision of finance, consulting services, and other financial services, banks play critical roles in supporting these transactions (Ramakrishnan, 2008).

Due to the fact that the trend of M&A's in Pakistan has only lately begun to gain traction, it is also less researched than other global markets. Empirically, very few studies have been done to determine if M&A's add value to the acquire businesses in Pakistan or detract from their worth. There are several outcomes. Some research (Haider et al., 2015; Kouser & Saba, 2011; ) showed a decline in performance as a result of M&A activity, however other studies showed an improvement (Ahmed, 2015; Ahmed & Ahmed, 2014; Nadia, 2014).

However, Pakistan has only employed mergers and acquisitions over the previous 20 years, making them a fairly new phenomenon. Between 2000 and 2009, Ahmed and Ahmed, 2019 investigated Pakistan's industrial sector and discovered that Pakistan's mergers and acquisitions findings were very comparable to those of studies done in other nations. Mehzabin et al. (2022) looked into Pakistan's banking and pharmaceutical industries and found a variety of findings. They claimed that the phenomena of mergers and acquisitions in the nation had good effects on certain firms' share prices while having negative, or even no, effects on other companies' share prices.

When banks are involved in M&A transactions, the question of whether the acquired or merged bank would ultimately improve and maximize Market performance and shareholder value increases or not. By utilizing the event study approach, the current study seeks to provide solutions to these questions. Earlier M and A research has looked at how M and A affect Market performance. Therefore, the study acknowledges the necessity to take into account firm-level, economic-level, and country-level characteristics to adequately classify the M and A problem. As a result, our study adds something special to the existing literature. Given the relative

significance of whole-level variables, we pay attention to them (firm, economic and country). Only a few studies, according to the literature, have concentrated on the banking sector in emerging countries like Pakistan. The current analysis addresses this gap by examining the result of Mergers & Acquisition on the financial performance of Pakistani Acquiring banks. The current research measures the impact of M and A's thought firm-level, economic-level and country level. Firm-level determinants are capital adequacy non-performing loan and method of payment, Economic Level determinants are (GDP Inflation Exchange rate), while Country Level determinants are Control of Corruption(COC), Regulatory Quality(RQ), Rule of Law(ROL). This study highlight the importance for each level of factors, firm-level,Economic-level and country-level that explain financial performance in M and A's.

## 2. Literature Review

Both mergers and acquisitions can modify the functions of business entities and pave the way for business transformation (Eliasson & Melander, 2011). The acquisition procedure involves buying the company's all significant assets (Okonkwo, 2004), which entitles the acquiring company to oversee all business-related activities from then onward. Literature elaborates that the consolidation achieved through acquisition implies that another party now purchases the company in exchange for money, and the shareholders of the procured company will not be able to exercise any power (Ahmed et al., 2022).

The acquisition can result in two possible scenarios; a merger of a newly acquired company with the already established one, or it is permitted to work as an independent entity under the supervision of a new hierarchy(Das & Mariappan, 2021). Company's owner's decision to merge may result in asset sharing. In contrast, the shareholders of both the involved companies can still exercise some power on the matters of their respective companies.

However, acquisition causes a greater change in ownership, or the new entity takes full control of the company's (Shah & Khan, 2017). The acquisition also comes with more critical changes, and such as changing the entity's structure and readjustment of the personnel on duty. "*Organizational Justice Theory*" provides the necessary theoretical sensitivity about the impact of this decision on the morale and work ability of the remaining workers(Yousif & Mohammed, 2022). Workers get cautious during mergers to assess the effectiveness of the decisions in addressing technical and distributive malpractices Usually, it is only the hierarchy and the top management of the involved companies which oversee negotiations, but sometimes, the organizational hierarchy allows the flow of information to other employees (Fiza et al., 2021).

### 2.1 Hypothesis Development

#### 2.1.1 Capital Adequacy (CA) and Market Performance

An indicator of a bank's capacity to bear the risk involved with any credit or profitable transaction is the Capital Adequacy Ratio (CAR).The greater the CAR, the more risk that bank can accept the more dangerous an asset. Buffer Theory of Capital Adequacy states that banks might decide to hold back on surplus capital to lessen the likelihood of falling short of legal capital requirements, particularly if their capital adequacy ratio is very high and sends a positive signal to investors (Chandrasegaran, 2020). Examples of research studies which have demonstrated a positive relationship between capital adequacy and performance of banks, (Ani, Ugwunta & Imo (2012);

Adeusi, Kolapo & Aluko (2014); Hafez (2018), while (Ayaydin & Karakaya, 2014; Oladeji, Ikpefan & Olokoyo, 2015; Ugwuanyi & Ewah, 2015) have reported a negative association among bank performance & its capital adequacy Ratio.

The current analysis suggests that capital adequacy has a negative (-) effect on Acquire banks' Market performance in Pakistan based on the conversation and findings of historical literature. Pakistan's banking sector was established as a result of the state bank of Pakistan's legislative mandate that commercial banks uphold a specific level of capital adequacy ratio. Banks need to keep their financial assets at a healthy level.

**H1:** The performance of a bank is Negative impacted by capital adequacy.

### **2.1.2 Non-Performing Loans and Market Performance**

Non-Performing Loans, or NPLs, are a sign of how well a financial institution is managing its assets. The NPL has a parameter in the form of a fundamental financial ratio that can give information about the capital condition evaluation. Non-performing loans are impacted by three variables: bank internal factors, debtor internal factors, non-bank and debtor external factors, and provisions are viewed as a control measure for expected loan losses.

Previous practices have shown that loan default circumstances result in provisions, and higher provisioning rates are associated with higher levels of nonperforming loans Hasan and Wall, (2004). According to the present estimate, non-performing loans will have a negative financial influence on Pakistan's. Political upheaval and poor administration have had a significant role in lowering investor trust in the nation and encouraging corruption and unethical business activities that are bad for the country's finances.

**H2:** The performance of the bank is negatively impacted by non-performing loans.

### **2.1.3 Method of Payment**

Due to the fact that the purchases are funded by cash, stock, or a mix of both. Investors will recognize the overvaluation of the purchasing firm if solely stock is used as payment (Travlos, 1987). According to Moeller et al. (2004) suggest that Method of payment have negative influence on market performance. Martynova & Renneboog (2011) are just a few more that provide evidence in favour of the acquirer experiencing materially negative anomalous returns in equity-related transactions during the announcement period. Based on the discussion and result of past literature, the current study assumes negative effect of method of payment on bidder bank financial performance in Pakistan. If a nation is unable to finance It must achieve this by using up reserves in order to pay for its purchases through capital exports.

**H3:** Method of payment have negative and substantial impact on bank's performance.

### **2.1.4 GDP and Market Performance**

In 1988, Pakistan introduced changes intended to design policies for economic stabilization and structural reforms as the country attempted to reduce its domestic financial imbalances and external deficits. Another objective of these initiatives was to encourage trade liberalization, fewer capital controls, more flexible investment policies, and the adoption of such monetary policies that are maker oriented (M. A. Hussain, 2014). However, the country could not achieve the growth targets as poor governance, corruption, and political instability paved the way for further chaos. Higher tax percentages on a shrinking tax base resulted in more contraction because of evasion and incredible growth in the underground economy which led to further tax hikes (Ahmed & Ahsan, 2011).

The economy of Pakistan is mired in a vicious circle of underdevelopment, slow growth, poor investment, and low savings (Sehrawat & Giri, 2016). The relationship between GDP growth and market performance remains complicated due to the complex interactions of numerous, varying, and time-varying factors, each of which affects countries differently. Based on the discussion and result of past literature, the current study assumes negative effect of GDP on bidder bank financial performance in Pakistan.

**H4:** The performance of banks is negatively impacted by GDP.

### **2.1.5 Inflation and Market Performance**

Scholars worldwide have documented a highly positive correlation between overall economic performance and measures of financial market development. As a whole, countries with extremely efficient financial systems have a higher level of growth as compared to countries with traditional financial markets. Development of equity markets and the banking sector demonstrate this extremely positive correlation with real performance (Howe, 1978). Simultaneously, studies have suggested an extremely negative correlation between inflation and overall market performance. Based on the discussion and result of past literature, the current assessment predicts that Pakistan's acquire banks' Market performance would be negatively impacted by inflation. The structural issues in Pakistan include: disproportionately higher government involvement in economic activities; a sizable informal economy; the continued importance of agriculture as a major employer of labor; a focus on activities related to the production of cotton; and policies that are biased toward import substitution. Pakistan's central bank has monetary policy tools at its disposal, such as regulating the money supply and interest rates, to combat inflation.

**H5:** Inflation has a negative impact on banks' performance.

### **2.1.6 Exchange Rate and Market Performance**

Several factors can significantly impact the market value of firms and stock prices. Among these factors, the primary change is in the currency rate. According to financial theory, the value of a firm should remain under interest rates and currency rates' impact. The stock prices of the firm may well be decided by the increase and decrease of the exchange rates. Investors at home are inclined to invest in the domestic market when asset prices increase which consequently increases local currency demand and the behavior of selling foreign assets. Demand for local currency will boost interest rates, which will encourage international investors to invest and increase profitability (Shaheen, 2013).

Pakistan has been operating under a market-based flexible exchange rate regime since May 1999. The local interbank foreign exchange market's supply and demand dynamics affect the exchange rate. Government supply side initiatives to boost competitiveness and lower manufacturing costs will need to be tested in order to increase the currency's long-term worth. For example, deregulation and privatized might increase the export industry's competitiveness in the long run. Exchange Rate at the bank is higher than Banks and other currency exchange businesses set different rates for buying and selling currency in order to make a profit. Banks naturally also charge a commission on the transaction to be safe. Based on discussion and result of past literature, the current study assumes negative effect of Exchange rate on Acquire bank market performance in Pakistan.

**H6:** Exchange rate has a negative effect on bank's performance.

### **2.1.7 Regulatory Quality and Market Performance**

In market economies, economic theory explains the importance of state regulation where there are appreciable externalities, incomplete markets, or public benefit elements in economic businesses. The objective of regulation is to reduce the risks of market failures by ensuring growth and efficiency. In some cases, governments decide to intervene for correcting the functions where the wealth distribution by market transactions is unjustified (Kamran et al., 2019). Regulations are critical to the functioning of modern markets because regulations ensure to offer social, economic, and environmental benefits (Savari et al., 2022). Because organizations are accountable to stakeholders for their actions, institutionalisms argue that the function of institutions is vital without taking the market into account. (Campbell, 2007), et al. (2016) contend that the government's position, whose supervisory pressure influences the enterprises' positive point of view, has a significant impact on how businesses operate in economies.

The improved regulatory pressures, according to Berrone et al. (2013), increase a firm's incentive to engage in more ethical behavior. The performance of securities enterprises is examined in relation to government regulation and ownership structure by Chen et al. (2005) in Chinese. They contend that performance and government ownership have a negative relationship, but regulation and performance have a favorable one. They discovered that the requirements for company entrance improve security firm performance. It is also clear that regulatory restraint restricts business competition. Their findings demonstrated that governmental regulations permit businesses to be classified positively and raise qualifications for superior performance and competitive advantages over competitors.

**H7:** Regulatory Quality a negative effect on bank's performance.

### **2.1.8 Rule of Law (ROL) and Market Performance**

The concept of the rule of law revolves around the idea of the absolute supremacy of the ordinary law contrary to arbitrary power that the government possesses, making it mandatory for every citizen to respect the law and making it certain that the rights of the individuals are protected by the remedies of private laws instead of formal guarantees (Dicey, 1960; Marshall, 1971; Wade & Bradley, 1985). In relation to the situation in Pakistan, a good rule of law environment provides a better platform for investors and innovators to take part in profitable economic endeavors without constant worry of rent-seeking behavior's and to establish an environment of equality where no economic player benefits from special privileges.

The Global Justice Report (2022) stated that Pakistan has a low level of investment and innovative business activities because of Pakistan's weak rule of law, which causes investor mistrust and anxiety about their future earnings, which has an impact on the Market performance of the enterprises. According to the current value of the rule of law index, which was published by the global economy.com in 2021 using data from the World Bank, Pakistan's rule of law is (-2.5 weak; 2.5 strong). According to the 2022 Global Justice Report, Pakistan is placed 129th out of 140 nations for having an unsatisfactory state of the rule of law. By impeding creative activity, Pakistan's lax rule of law may have a negative impact on shareholder value there.

**H8:** Rule of Law has a negative effect on bank's performance.

### **2.1.9 Control of Corruption and Market Performance**

Corruption is an international phenomenon at the regional and micro levels affecting the performance of firms, industries, and other financial institutions. Corruption is prevalent in almost all developing and developed countries and it does not matter how

big the company is and what is the size of the country's economy, the intensity of corruption does not depend on these factors (Nam et al.,2020). Corruption harms the performance at the political, social, and economic fronts which subsequently affects people's trust in financial institutions and creates obstacles in the way of sustainable growth (Kazmi et al., 2022) distorts government spending's It also negatively influences the production process in a firm and investment decisions because of confusion and higher cost. Furthermore, it does not allow the investment to grow and limits the ability to innovate (Imran et al., 2019).

Countries' growth and development are hampered by the legal system's corruption and lax enforcement of the law Because of the rise in transaction costs and uncertainty, the misallocation of production components, and ineffective investment, corruption also lowers economic performance (Kaufmann & Wei,2000; Shleifer & Vishny,1993). Everything that can make Pakistan's access to accountability more real should be implemented, especially what other nations with similar socioeconomic structures have learned. Devolving authority to the Districts' local communities is one of the key goals of the current Pakistani government. A mechanism must be developed for ongoing monitoring of this system's performance and operations, as well as periodic evolution of the system's general functioning, in order to ensure the smooth operation of the devolution plan. Through better financial management and resource utilization at the district level, this will help to prevent the abuse of authority and power.

**H9:** Control of corruption has a negative effect on banks's performance.

## **2.2 Capital Adequacy Ratio**

To compute the AR using the market return model, Karamanos et al. (2015) analyse the wealth effect of 14 M&A banks in Greece from 1996 to 2013. With a 1% significance level, the study finds a positive cumulative abnormal return (CAR) of 2.91 percent. Similarly, Selcuk (2015) applies the event research technique to four separate event windows spread over 21 days surrounding the event to analyze 67 Merger and Acquisition announcements made by Turkish corporations between 2000 and 2014. Their research reveals a positive CAR of 5.25-8.53 percent with a 1 and 5% significant level using a sample of 218,957 agreements from 47 countries, Yilmaz and Tanyeri (2016) explore how the value created by mergers was allocated between bidder and target organizations. Their findings demonstrate the value addition of M&A activities. The results of the investigation showed that target CARs averaged 8.14%, whereas bidder CARs averaged 1.514%. They find that the bidder and target CAR magnitudes of mature market nations were higher than those of developing market nations. News of M&A transactions in Latin American nations denotes the development of wealth for shareholders (Simes et al. 2012). According to Pandey and Kumari (2020), news of M&A transactions in the banking industry caused some abnormally poor returns for the bidder around the time of the announcement. According to Yilmaz & Tanyeri (2018), their investigation of 263 461 transactions in 47 countries revealed favourable short-term CARs for both the target and the acquirer. According to Campa & Hernando (2004), takeovers in Europe benefit target company shareholders more than they benefit the bidders.

## **3. Methodology**

Data can be considered in the terms of numbers, numerical methods and can be analyze and interpret the results. Quantitative technique is greater in acquiring better

comprehension of the study subject using numerical data, according to Mertens (2003) and Puunch (2013). The current study used event study methodology.

### 3.1 Population and Sample

The following analysis is based on all M&A transactions disclosed in Pakistan's banking industry between the years of 2002 and 2022. From 2002 until 2022, PSE and CCP's websites provided information on merger and acquisition activities in Pakistan. The M&A activity that has place between 2002 and 2022 is used to gauge market performance. The current study employed 20 years of data. The first M and A deal was announced in the financial institution in 2002. For the event study technique, the present study considers 60 days event window to see any abnormal return during announcement of M & A.

### 3.2 Data and Sources of Data Collection

All the data of M and A's during 2002-2022 are taken from Competition commission of Pakistan and Pakistan Stock Exchange. The financial information is gathered from the annual reports and financial statements of chosen institutions. Data about country level factor is taken from the World Bank

### 3.3 Variables

The current study's independent variables are divided into firm-level, economic-level, and country-level variables. The firm-level include capital adequacy, Non-performing loan and Method of payment. The economic level includes GDP, Inflation and Exchange rate. The country level includes Control of Corruption, Rule of law and Regularity quality. TQs is the dependent variables for this study. The current study performs regression analysis against the CAR derived from the event window [30] on the sample period starting from 2002-2022.

### 3.4 Computation of Abnormal Returns

Remaining is the term used to describe the uncommon return in each business day during the M and A announcement. According to the formula, the uncommon return on equity "I" for the period "t" is determined.

$$AR = R_{i,t} - \alpha - \beta_{mt}$$

The market model coefficients are where, and. Each acquired firm's return is represented by R(it), and an abnormal return is shown by AR.

Remaining is the term used to describe the uncommon return in each business day

### 3.5 Cumulative Abnormal Return (CAR)

By averaging all anomalous returns over all acquire banks, the study derives cumulative abnormal returns for a range of -30 and 30 days.

$$CAR_{i,k,l} = \sum_{t=I}^{t=K} AR_{it}$$

Here, the term cumulative abnormal return (CAR) is employed. Days K and I are the beginning and closing days of the event time frame. As stated before, k denotes the thus -30 days prior to the announcement and I denote the thus 30 days after the announcement of M and A's. The atypical return for firm I on day t is referred to as the AR.

## 4. Data Analysis

### 4.1 Analysis of Market performance



This part of the thesis shed light on the detailed analysis of M&A on market performance in different ways. Firstly, this section highlights the descriptive statistics, then different diagnostic test for regression analysis.

Table 4.1 presented descriptive statistics of M&A period for Acquire banks. The current study calculated data from 60 banks for the period of 20 years.

**Table 4.1 Descriptive Summary for Market performance**

Variable	N	Mean	Std. Dev.	Median	Min	Max
TQ	60	.461	.597	0.291	-.353	1.493
CA	60	.102	.102	0.113	.014	.335
NPL	60	.173	.15	0.07	.03	.515
MOP	60	.567	.5	1	0	1
GDP	60	.197	.132	0.094	.006	.694
InR	60	.0.0081	.1531	0.3526	.1175	6.72
ExR	60	3.75	1.465	3.11	1.979	6.67
RQ	60	1.969	2.278	25.96	.474	7.729
ROL	60	21.95	3.083	20.62	19.231	28.23
COC	60	16.114	4.292	27.88	12.683	27.317

This Table presents the descriptive statistics of Market Performance for M&A in Pakistan for. Market performance is calculated by Tobin's Q (TQ). The firm-level include capital adequacy (CA), Non-performing loan (NPL) and Method of payment (MOP). The economic level includes GDP, Inflation rate (IR) and Exchange rate(ER). The country level includes Control of Corruption (COC), Rule of law (ROL) and Regularity quality (RQ).

#### 4.2 Collinearity

An important assumption for performing multiple regression analysis is no check for multicollinearity. Multicollinearity refers to linear relationships among the independent variables.in the case of perfect multicollinearity, the regression coefficients remain indeterminate and their standard errors are infinite (Gujrati and Porter 2009).the problem of multicollinearity can be detected by studying the pair-wise correlation among regressors. If zero-order correlation between two variables is high, then multicollinearity can be a problem. High correlation between the explanatory variables can lead to unstable coefficients and corresponding high p-values because it becomes difficult to identify which variables explaining what. in addition, if collinearity is high but not perfect, estimation of regression coefficients is possible, but their standard errors tend to be large (Gujrati and Porter 2009). Researchers have generally advised that the relationship across variables not go beyond 70% (Greene, 2003; Gujrati, 2012). Any result more than 70% should be cause for concern as it suggests a multicollinearity problem.

**Table 4.2 Correlation Matrix for Market Performance**

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) TQ	1.000									
(2) CA	0.401*** (0.002)	1.000								
(3) NPL	-0.297 (0.021)	0.135 (0.305)	1.000							

(4) MOP	0.197 (0.131)	0.174 (0.183)	0.184 (0.158)	1.000						
(5) GDP	-0.066 (0.615)	-0.108 (0.413)	-0.223 (0.087)	-0.218 (0.095)	1.000					
(6) InR	0.201 (0.124)	-0.040 (0.764)	- (0.039)	-0.002 (0.987)	0.150 (0.254)	1.000				
(7) ExR	-0.179* (0.101)	-0.040 (0.057)	- (0.715)	0.028 (0.832)	-0.065 (0.622)	0.313* (0.015)	1.000			
(8) RQ	-0.132 (0.316)	-0.132 (0.314)	0.160 (0.221)	-0.097 (0.462)	-0.082 (0.531)	-0.213* (0.102)	- (0.000)	0.487***	1.000	
(9) ROL	0.045 (0.734)	0.281 (0.030)	0.163 (0.213)	0.082 (0.532)	-0.052 (0.691)	-0.017 (0.895)	- (0.000)	0.475***	0.201 (0.123)	1.000
(10) COC	-0.355*** (0.005)	0.095 (0.468)	0.207 (0.103)	-0.085 (0.520)	0.051 (0.698)	-0.006 (0.964)	-0.223* (0.087)	0.293* (0.023)	0.240 (0.065)	1.000

This table presents the Pearson correlation coefficients among variables with their significance levels. Market performance is calculated by Tobin's Q (TQ). \*, \*\*, \*\*\* represents statistically significant at 10%, 5% and 1% respectively.

### 4.3 Regression Analysis for Market Performance

To investigate the linear association among market performance and its variables throughout the merger and acquisition era, a multivariate analysis is carried out in this present investigation.

$$TQ = \alpha + \beta_1 CA + \beta_2 NPL + \beta_3 MOP + \beta_4 GDP + \beta_5 InR + \beta_6 ExR + \beta_7 RQ + \beta_8 ROL + \beta_9 COC + \epsilon_{i,t} \quad (4.1)$$

Model 4.1 provides the association between dependent and independent variable for M&A period. Market performance is calculated by Tobin's Q (TQ). The firm-level include capital adequacy (CA), Non-performing loan (NPL) and Method of payment (MOP). The economic level includes GDP, Inflation rate (IR) and Exchange rate (ER). The country level includes Control of Corruption (COC), Rule of law (ROL) and Regularity quality (RQ).  $\alpha$  is intercept and  $\beta$  is slope while  $\epsilon$  is error term.

**Table 4.3 Regression Analysis for Market Performance**

TQ	Coef.	St.Err.	p-value
CA	2.346***	.677	.001
NPL	-.889*	.476	.068

MOP	.161**	.128	.015	
GDP	-.382	.492	.442	
InR	.996**	.457	.034	
ExR	-.114*	.062	.073	
RQ	.002	.034	.943	
ROL	.017*	.024	.083	
COC	.052***	.016	.002	
Constant	1.62**	.676	.02	
Mean dependent var	0.461		SD dependent var	0.597
R-squared	0.488		Number of obs	60.000
F-test	5.295***		Prob > F	0.000

This Table shows the OLS regression results for market performance. TQ is the dependent variable. In statistical analysis, significance levels are denoted by asterisk, with,\*\*\* representing significance at 1% level,\*\*at the 5% level, and \* at the 10% level.

## 5 Results and Discussion

Table 4.3 presents the regression result for M&A period. The number of observation is 60. R-squared and F-value are used to calculate the model's efficiency. The R-squared for pre M&A period is 0.488, representing that 48% of the total variation in the performance of Acquire banks is accounted for by independent variables. The total model is significant at 1%, according to the F-value data, and it may be utilized for more research. CA, MOP, InR, ROL and COC show significant and positive relationship with TQ. It means that CA, MOP, InR, COC and ROL increase the market performance in the post M&A period. NPL and ExR show a negative and significant relationship with TQ. It means these variable decreases the market performance of Acquire banks of Pakistan. GDP and RQ show insignificant results.

This empirical data is in line with earlier groundbreaking research carried out in several nations that revealed the similar outcomes of advantages to the acquire banks' shareholders throughout the M&A announcement phase Rani et al. (2010),Switzer (1996) Healy (1992), Ghosh (2001), Ramakrishnan (2008) Selvam (2009), Pawaskar (2001), Kumar Bansal (2008), Sinha (2010), Leepsa Mishra (2012), Kumar (2009). Additionally in accordance with the present investigation's claimed outcome with the outcomes of Pakistani studies that stated improvement in shareholder's wealth of the Acquire banks due to M&A's announcement (Aamir et al, 2016; Bashir, 2015; Bashir et al., 2012; Rafique & Muhammad, 2014; Sidra, 2018; Tauseef & Mohammed, 2011). The result of the current study also supports the efficient market hypothesis developed by Fama et al. (1969) and Fama (1970). This theory states that if prices accurately represent all available information, a market is efficient. Capital markets are assumed to be sufficiently efficient to respond to events (new information) as the foundational premise of the event research approach.

### 5.1 Conclusion

Among the best strategies for business growth and expansion are mergers and acquisitions. By the late 1800s, M&A activity had begun to trend. While these tactics are frequently used in underdeveloped nations like Pakistan, they have been widely embraced in industrialized economies. Although it's commonly believed that M&A transactions are mostly carried out in the hopes of generating financial advantage, scholarly research reveals otherwise. Therefore, the paper's objective was to ascertain

the impact of M&As on the market performance of acquire banks' shareholders in Pakistan as well as its drivers. First, using event study, the current study looks at any unusual returns for the shareholders of the acquired banks during the M&A announcement phase. The current study analyses 60 acquirer banks that are listed on the Pakistan Stock Exchange (PSX) between 2002 and 2022 using a census sample method. Additionally, to estimate the link among dependent and independent variables, the present investigation makes use of estimators such regression analysis, paired sample t-test, diagnostic tests. By using the event study approach, the study searched for any anomalous returns for the shareholders of the acquire banks during the announcement of the M&A, which helped to explain how M&As affected the financial performance of the acquire banks' in Pakistan. The study, which used a market model, discovered that the announcement of M&A deals significantly affects financial performance. During the M&A announcement phase, the shareholders of the acquired banks got considerable abnormal. This study found that the significant determinants based on OLS models are Capital adequacy, Inflation, Exchange rate, Regularity quality, Control of Corruption, Rule of law.

The current study's conclusions demonstrated that the country and economic conditions in which the banks operate have an impact on the acquirer banks' shareholders' wealth during the M&A announcement phase. The empirical evidence regarding the country-level variables (i.e. control of corruption, rule of law and Regularity quality) confirmed that country-level variables do influence the financial performance of the Acquire banks in Pakistan.

Besides, the study recognized information asymmetry and signaling hypothesis in explaining the market performance of the Acquire banks at country-level.

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