



e-ISSN: 2455-7013

**Asian Journal of Management, Engineering & Computer Sciences
(AJMECS)**

Vol. 2(2), April 2017: 14-19

URL: <http://www.crsdindia.com/ajmeecs.html>

Email: crsdindia@gmail.com

RESEARCH PAPER

Impact of Stock Exchange with Other Variable on Economic Growth of Pakistan

Kamran Khan, Majid Ali, Irfan Yousaf, Ghulam Mohayuddin, Munim Bashir, Junaid Irfan, Abubakar Chand and Bilal Aziz

I.B.M. University of Engineering and Technology (UET), Lahore

Email: biilal@live.com

ABSTRACT

In this paper we examine that Pakistan stock exchange is act as the true predictor of economic activities. Economic growth is dependent variable. As independent variable are inflation rate (INF), interest rate (IR), and exchange rate (ER), this study design to investigate the association between stock price and inflation, exchange rate and interest rate has positive impact on economic growth of Pakistan. The secondary data used for the period ranging from 2006 to 2015. This research is based on past ten year's data of Pakistan stock exchange. The increase and decrease the stock prices will affect the performance of the economy. The SPSS software used and apply Liner Regression and Correlation models were used which show dependent variable, and independent variable have positive relationship. The significant relation between Pakistan stock exchange and Economic growth. High money supply and increase in interest rate raises the price level (inflation) which leads to increase in exchange rate volatility.

Key word: Stock Exchange, Economic Growth, Other Variables, Exchange Rate, Interest Rate

Received: 10th Jan. 2017, Revised: 30th Jan. 2017, Accepted: 12th Feb. 2017

©2017 Council of Research & Sustainable Development, India

How to cite this article:

Khan K., Ali M., Yousaf I., Mohayuddin G., Bashir M., Irfan J., Chand A. and Aziz B. (2017): Impact of stock Exchange with other variable on Economic Growth of Pakistan. AJMECS, Vol. 2[2]: April, 2017: 14-19.

INTRODUCTION

The Pakistan stock exchange will grow and cross the 50,000 index. Pakistan stock exchange plays a critical role in economic growth and fostering capital formation in Pakistan. Pakistan stock exchange is main rule for the healthy economy of the country. Stock exchange is place where we can trade securities. PSX is member of SAFE (south Asia federation exchange (PSX) on January 11, 2016 the three stock exchange of Pakistan (Karachi stock exchanges, Lahore stock exchange, Islamabad stock exchanges) were merge to become the name of Pakistan stock exchange (PSX) at present there are 555 companies listed. On theses exchange with a total market capitalization of us \$67 million in December 2015 as an amalgamation of all these invaluable Attributes the PSX represent a quantum leap forward for the country capital market. The Pakistan Stock Exchange Limited (PSX) has been one of the best performing stock exchanges in Asia in the last few years and this year so far, it is the best performing market in Asia. The Exchange was incorporated in 1949 as a company limited by Guarantee. PSX provides a reliable, orderly, liquid and efficient digitized market place where investors can buy and sell listed companies' common stocks and other securities. For over 60 years, the Exchange has facilitated capital formation, serving a wide spectrum of participants, including individual and institutional investors, The unification of these three entities is made possible through the combined efforts of my myriad stakeholder, like Govt. of

Pakistan, SECP, the central depository company of Pakistan, National clearing company, the commercial bank, IT, teams of stock exchange are played an important role in this process then trading in single platform for equity and debt securities.

The integration of the three exchange is an essential step in that direction with three separate stock market, and with one of these dominate, search of a private investor was complicated because it was hard to find an interested party for the Lahore and Islamabad. Exchanges given their tiny size the private investor was very wary for acquiring ownership of one exchange in Karachi while the other two remained in government hands. At the stock exchange market share prices rise and fall depending largely on the market forces as well as on political stability share prices tend to rise or remain stable when companies and the economy in general show signs of stability there former the movement of share prices can be an indicator of general trend in the economical activities or economic growth.

Pakistan stock exchanges market has delivered health returns over the last 15 years. The benchmark KSE 100 index has risen by nearly threefold from 22173 levels as on June 30 2016 to around 51430 points at present, translating in to an average annualized return 33.5% offailing this good performance as the index level is near all-time high level many investors ponder whether the stocks market is overvalued enough to deliver any gains going forward. Pakistan stock market (KSE100) fell 165 points or 3.34% to 49039 on Monday January 9 from 49038 in the previous trading session. Historically, the Pakistan stock market (KSE100) reached an all-time high of 49039.41 in January of 2017 and a record low of 538.89 in January of 1990.

The stock exchange is a pivotal institution in the capital market. It absorbs savings and provides liquidity for investments; Economic development requires commitment to long-term investment. The stock exchange provides long-term capital for major sectors of the economy including businesses and the government. Stock exchange indexes are often used as an indicator of economic health.

LITERATURE REVIEW

There is huge size of literature on financial development and economic growth. The extensive work has been done to magnify the positive impact of stock exchange with other variables of economic growth of Pakistan. Since the 1900's economists like Schumpeter (1912), Goldsmith (1969), McKinnon (1973), Shaw (1973), Levine (1996) found and stressed that a stable and developed stock market runs the economy fast. But there was a little focus on the stock market performance and economic growth in the literature. The present study focuses to estimate the impact of stock exchange with other variables of economic growth of Pakistan.

The empirical studies that aimed to assess the relationship between stock market and economic growth can be divided in two groups. First group used cross country analyses of which key contributions are Sri Lanka stock exchange Sri Lanka December 2016 and Thailand stock exchange December 2016. Most of the cross country studies tend to confirm the importance of stock exchange yet there are some doubts concerning the importance of stock exchange and economic growth. The studies usually found a positive and significant relationship between stock exchange and economic growth.

The summary of current studies between stock market other variables of economic growth of Pakistan. The studies found mixed outcomes due to country or country groups. Some studies like Bayer, *et al.* (2014), Ikiiki and Nzomoi (2013), Zafar (2013) have found that stock market had a positive significant effect on economic growth while the Hague Enamul (2013) and Ake and Ognaligui (2010) found a negative or insignificant effect of stock market on economic growth.

STATEMENT OF THE PROBLEM

1. The purpose of this study is to investigate the relation between PSX and economic growth?
2. Is there any significant relation is between PSX and economic growth?
3. If so, is the relation is positive or negative?

OBJECTIVES

1. The main objective of this research is to examine the relation is negative or positive between stock exchange and economic growth.
2. To Investigate the Impact of Marker Capitalization (Key Variable of Stock exchange market) on economic growth of Pakistan

HYPOTHESIS

H₁ : Interest rate has positive impact on the economic growth of Pakistan

H₂ : Inflation rate has positive impact on the economic growth of Pakistan

H₃ : Exchange rate has positive impact on the economic growth of Pakistan

METHODOLOGY

This study entails a comparative analysis of macroeconomic three variables Inflation rate, Exchange rate, Interest rate in order to analyze the effect of stock market development on the economic growth of Pakistan. The secondary data used for the period ranging from 2006 to 2015. In this paper the SPSS software used to correlation and liner regression model used to find out the result between dependent and independent variables. The positive impact of stock market with other variables economic growth of Pakistan. The significant relation between Pakistan stock exchange and Economic growth.

VARIABLES

Dependent variable Economic Growth

In- dependable variable inflation, interest rate, and exchange rate are independent variable

Table 1: Relation between Dependent Variable and Independent Variable

Years	Dependent variable	Independent variable		
	Economic growth rate	Inflation rate	Interest rate	Exchange rate of U.S \$
2006	5.81%	7.9	9.0	60.07
2007	5.54%	7.6	9.5	60.46
2008	4.99%	20.3	14.5%	66.62
2009	3.36%	13.6	12.0%	80.07
2010	2.58%	13.9	13.5%	85.37
2011	3.62%	11.9	11.5%	88.17
2012	3.84%	9.7	9.0%	97.59
2013	3.65%	7.7	9.5%	107.88
2014	4.03%	7.2	9.0%	102.60
2015	4.24%	2.5	6.0%	104.80

METHODS AND DATA

In Pakistan stock exchange mostly investor used marked as a benchmark... Pakistan Growth is affected many variable independent variable like interest rate, inflation rate, exchange rate. The entire variable has influence but crucial variable like inflation, exchange rate, interest, rate, and act. Mostly investors focus on these variables. State bank of Pakistan has done solution about this matter they increase and deceases federal fund rat for the control on money supply.

ECONOMETRIC MODEL

To detriment the impact of stock exchange market on economic growth we used Correlation and liner Regression model for found out the result between dependent and independent variables.

$$EG = \alpha + \beta_0 ER + \beta_1 INF + \beta_2 IR + \mu t$$

EG=Economic Growth

ER=Exchange Rate

INF=Inflation Rate

IR=Interest Rate

μt =Error Term

I. EXCHANGE RATE:

In this study, for the evaluation of exchange rate we have taken Pakistani rupees to us \$. Most of investor invests their money in foreign currency and converted their profit in Pakistan rupees. So profit of investor change due to exchange rate therefore is important to find between exchange rate and stock exchange return.

II. INFLATION RATE:

CPI means consumer price index inflation indicator CPI is helpful to measure the prices of good and server's consumer price index is the indicator which is used measure of inflation rate Inflation in Pakistan and other countries is usually calculated as the percentage change in the Consumer Price Index (CPI) from one year to the next. The CPI represents the prices paid by the average urban consumer in each respective country. Inflation can also be calculated with other price indexes such as the Produce Price Index or the called GDP deflator.

III. NTEREST RATE:

Interest rate have kinds which means cost of borrowing the benchmark interest rate in Pakistan was last recorded at 5.75 percent in 2016. Interest Rate in Pakistan averaged 11.55 percent from 1992 reaching an all-time high of 19.50 percent in October of 1996 and a record low of 5.75 percent in May of 2016.

RESULT AND DISCUSSION**Table 2:** Descriptive Statistics

	Mean	Std. Deviation	N
INTEREST RATE	10.3500	2.51716	10
INFLATION RATE	10.2300	4.91009	10
EXCHANGE RATE	85.3630	18.19193	10
ECONOMIC GROWTH	4.1660	1.00715	10

Table 3: Descriptive Statistics

	Mean	Std. Deviation	N
ECONOMIC GROWTH	4.1660	1.00715	10
INTEREST RATE	10.3500	2.51716	10
INFLATION RATE	10.2300	4.91009	10
EXCHANGE RATE	85.3630	18.19193	10

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.905 ^a	.819	.728	.52504	2.093
a. Predictors: (Constant), EXCHANGE RATE, INTEREST RATE, INFLATION RATE					
b. Dependent Variable: ECONOMIC GROWTH					

Table 5: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.475	3	2.492	9.039	.012 ^b
	Residual	1.654	6	.276		
	Total	9.129	9			
a. Dependent Variable: ECONOMIC GROWTH						
b. Predictors: (Constant), EXCHANGE RATE, INTEREST RATE, INFLATION RATE						

Table 6: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.667	1.772		7.147	.000
	INTEREST RATE	-.609	.249	-.1522	-2.449	.050
	INFLATION RATE	.189	.128	.924	1.478	.190
	EXCHANGE RATE	-.048	.011	-.875	-4.554	.004
a. Dependent Variable: ECONOMIC GROWTH						

Data Description and Analysis

In this paper we are trying to found out impact of exchange rate, inflation and interest rate on stock market secondly data is used for this purpose we obtain exchange rate, inflation rate, and interest rate from federal bureau and stat bank of Pakistan. The research study covers the data from 2006 to December 2015.

The correlation and liner regression model is used for research model. The regression model summary shows that r square is 81.9% which shows that 82% changes in stock market due to changes in inflation, interest rate and exchange rate.

The Durbin-Watson statistic should be between 1.5 and 2.5 Carry out simple liner regression through liner with Economic growth as the dependent variable and (inflation rate, interest rate and exchange rate) as the independent variables. The Durbin-Watson statistic is found in the statistics menu. The Durbin-Watson statistic is 2.093 which is between 1.5 and 2.5 and therefore the data is not auto correlated.

CONCLUSION

The purpose of this paper is to examine the impact of stock exchange the macro variables of economic growth of Pakistan such macro variables as inflation, interest rate and exchange rate. We use annual data from 2006 to 2015 and the SPSS software use the Correlation and liner Regression model which shows to investigate the dependent and independent variables has positive impact.

Pakistan stock exchange is one biggest stock exchange of Pakistan economy and it has capacity to capture 78% of the capital market of Pakistan stock exchange is backbone of our economy. There is a need to increase the number of listed companies in Pakistan stock exchange to increase the size of stock exchange market.

REFERENCE

1. Adajaski C.K.D. and Biekpe N.B. (2005): Stock Market Development and Economic Growth: The Case of Selected African Countries. Working Paper. African Development Bank.
2. Afza T. and Nazir MS (2007): Economic Competitiveness and Human Resource Development: An FDI Perspective, Pakistan Economic and Social Review. 45(2): 167-180.
3. Ahmed M.F. (1999): Stock Market, Macroeconomic Variables, and Causality: The Bangladesh Case. Savings and Development, 23(2): 109-129.
4. Ando A. and Modigliani F. (1963): The Life Cycle Hypothesis of Saving: Aggregate Implications and Tests. American Economic Review, 53(1): 55-84.

5. Atje R. and Jovanovich B. (1993). Stock Markets and Development. *Eur.Econ. Rev.*, 37(2-3): 632-640.
6. Bosworth B. (1975): The Stock Market and the Economy. *Brookings Papers on Economic Activity*, 2: 257-300.
7. Engle R. and Granger C. (1987): Cointegration and Error Correction: Representation, Estimation, and Testing. *Econometrical*, 55(2): 251-276.
8. Mukherjee R. (1988): the Stock Market and the Economy: The Indian Experience, 1949-81. *Indian Economic Journal* 36(2): 30-43.
9. Nishat M. and Saghir (1991): Yhe Stock Market and Pakistan Economy. *Savings and Development*, 15(2): 131-145.
10. Tobin J. (1969): A General Equilibrium Approach to Monetary Theory. *Journal of Money Credit and Banking*, 1(1): 15-29.