

Impact of Macroeconomics variable on the Stock Market index; A Study from Pakistan

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Abstract

The focal point of this research article is to examine the possible impact of macroeconomic variable like fiscal policies and monetary policies (interest rate) and inflation rates on stock market performance in Pakistan. The Pearson correlation and regression analysis techniques were applied. For this purpose monthly data have been used. The paper finds that the Pakistan stock market index is significantly affected by the fiscal policy, monetary policy and inflation. The results have shown that the interest rate and government revenue have a significant negative relationship with the stock market index in Pakistan, whereas the inflation rate and the government expenditures have a significant positive relationship with the stock market Index in Pakistan.

Keywords: Stock market index; Fiscal policy; Monetary policy; Inflation.

1. Introduction

As a result of the U.S. sub-prime crisis of 2007 has started around the middle of the advanced countries, economic slowdown, due to the economic crisis around the world, including India. The failure of Lehman Brothers in the global financial markets caused widespread fear and panic unmatched since the August 2007 financial crisis on the global economy was going through, experienced a setback in September 2008. Liquidity crisis that overcoming not only markets but also emerging markets, including India immediately, but was moving. Several innovative projects through the U.S. Federal Reserve's massive injection of liquidity in the local market plus with major foreign central banks through currency Swap Arrangements dollars in major financial centers responded by infusing liquidity.

The crises of the past few decades were characterized as a period of relative macroeconomic stability, especially in the United States and major European countries. According to Bernanke, (2004) the "Great Moderation" is the amalgamation of believable monetary policy through fast expansion of the monetary system appeared to have brought a unrelenting fall in the instability of inflation and productivity. The crises were likely, the key to managing the economic impact of the dot-com bubble (Blinder and Reis's, 2005) by the Federal Reserve engineer turned successful recovery, appeared to be well understood. However, the last two years (2008-2010) made it clear in the events that have made a very optimistic outlook. A major financial crisis in the United States and major European countries is a novelty for policymakers, other parts of the world regularly hit by the financial crisis (see Chapters 2 and 3) have been. Chile, Finland, and the Republic of Korea, for example, yield 14% (1982-1983) collapsed by 10 per cent (1991 and 1992) and 7% (1998) respectively - proved to be fairly constant losses (Cerra and Saxena, 2005, IMF 2009). The impact of the crisis on growth are often constantly EN. For example, after the 1990 banking crisis, Sweden's GDP with falling steadily for three years, went into a major recession, a 1991-3 a total of -5.1 percent, and the period private investment by 35 percent over plummeting. Furthermore, the unemployment rate is almost 12 per cent in 1993 to 3 percent in 1990, four times.

Fiscal policy of government revenue collections and government spending (Laopodis, 2011),

a tradeoff between the action. Governments price stability, unemployment, and economic growth targeting retention, overall domestic demand levels affect the implementation of monetary policy. The system of government is to control income and expenditure, as the two main instruments of fiscal policy are taxes and government spending. As a result, policy makers in the affected countries can potentially draw from the financial crisis is a strong modern literature. Existing literature on the crisis yet to fully account for the large size and long-term effects have to, but still in the context of the current crisis can help guide policy has a number of consequences. This chapter, the overall economic impact of the financial crisis, with a special focus, the literature is an attempt to draw important lessons.

This research article has analyzed the effect of financial strategy, monetary approach and other important macroeconomic variables like expansion on stock exchange execution in Pakistan. To begin with, applicable macroeconomic variables are incorporated in the paper so as to define the model legitimately. Second, the example incorporates month to month information July 2007 to finish in June 2009, recommending that exact results are more solid and appropriate in arrangement investigation.

2. Literature Review:

The crisis began in 2007, the bankruptcy of Lehman Brothers in September 2008 was amplified by. The two main reasons the current crisis is different from a general downturn. This sudden and unexpected, the major economic variables are concerned, especially with the results were the first, it was a crisis. Second, the financial sector triggered or amplified by an obstacle that was meant was financial in nature, the Great Depression and the current crisis in the real variable track how see (Zingales and Eichenbaum, 2008; Lehman Brothers bankruptcy, Lehman Brothers at the end of 2008). In some parts of the proposed definition of literature directly or indirectly to fit many crisis episodes, different criteria used for identification. This exercise requires a counter-factual and uncontroversial since a complete identification is difficult: the financial sector remained so during a special event happened? Instead, the literature of the obstacle symptom casual claims without a strong economic variables or some combination of them, the financial variables, which are contained in the financial system has identified episodes. For example, a large-scale disruptions in the financial markets are a direct sign of large-scale bank runs, bank failures, or the presence of bank insolvencies. It runs a bank or a bank failure is easy to determine, insolvencies are very hard to spot. For this reason, the identification of the banking crisis, most experts (Laeven and Valencia, 2008; Caprio and Klingebiel, 1999) relies on studies.

The exchange rate crisis triggered or financial institutions in foreign currency liabilities (Diaz-Alejandro 1984; Calvo and Talvi 2008) can raise the financial crisis. However, the change in the exchange rate crisis financial crisis. The collapse of the European exchange rate mechanism in the 90s at the time, while some policy makers, for example, in most cases there was no game on the broader financial system, there was a desire. In this regard, Kaminsky and Reinhart (2000) that the exchange rate and banking crises episodes take place simultaneously is useful to focus on the proposal. The combination of the quality of the ERM crisis, banking crisis, as well as episodes in which no real effect on the filter out episodes.

There has been a striking amount of agreement on the relevant events, irrespective of the different definitions. Most of the studies have been considered from the Latin American sovereign debt crisis of the early 80s, Japan throughout the 90s, the Scandinavian collapse in the early 90s, Argentina in 1998-2001 and the late 90's Asian crisis. The presumption has been strengthened by the coincidence that financial crisis well-defines the economic problem, that is controlled through data collection and systematic research.

2.1. Fiscal Policy

Fiscal policy affects the domestic economy through its effect on aggregate demand, government capital formulation and incentives. Since public spending is part of the aggregate demand, increasing government spending on goods and services boost the aggregate demand. Government capital formulation contributes to the productive capacity of the economy. Incentives refer to the effect of fiscal policy upon economic behavior; for instance, tax policies can affect economic behavior by changing the financial rewards to various activities (Abel et al. 2005, 573-576). During a crisis, monetary and fiscal policies can be countercyclical or procyclical. Countercyclical policies refer to policies that can stabilize the business cycle by reining in economic activity during booms and bolstering it during downturns. As for fiscal policy, it reflects cutting government deficit during booms and widening it during recessions. On the other hand, procyclical policies refer to policies that are positively correlated with business cycles, they actually accelerate business cycles. A procyclical fiscal policy refers to rising deficits during booms while narrowing it during recessions (Takáts 2012). (Monetary and Fiscal Policies Post 25th January Revolution: Fighters against Windmills)

Fiscal policy may be used as an interventionist policy to influence interest rates. A significant increase in fiscal expenditure implies that the state competes with the private sector for borrowing funds in domestic financial markets. This widens the interest rate spread, thereby crowding out the private sector. Alternatively, a very high tax rate restricts consumer spending and investment expenditure. The domestic demand for debt financing will decrease. To compensate for this, suppliers of credit facilities will significantly decrease the lending rate. This narrows the spread. Another transmission mechanism between fiscal policy and interest rates is public sector transfers. However, such transfers are significantly low in SSA. Therefore, they have little or no effect on the interest margin.

Claessens, Kose, and Terrones (2008) and IMF (2009b) find that both monetary and fiscal policies tend to be countercyclical during recessions, credit contractions, and asset price declines. In these episodes, fiscal policy appears to be more accommodating, suggesting a more aggressive countercyclical fiscal stance. They also find that expansionary fiscal policy (proxies by discretionary government consumption) tends to shorten the duration of recessions. Spilimbergo et. al, (2008) argues that an optimal fiscal package to mitigate the adverse consequences of financial crises should be large, lasting, diversified, contingent, collective, and sustainable. Perotti (2011) and De Long and Summers (2012) also find that in periods of stagnation fiscal policy stimulus can help sustain private sector growth and remove the negative effects on the economy of private sector deleveraging. However, fundamental

matter: Cottarelli and Jaramillo (2012) and Kumar and Woo (2011) show that high debt levels hamper growth; a result confirmed by Panizza and Presbitero (2012). Baldacci and Kumar (2010) highlight that the main channel through which fiscal deficits may reduce long-term growth is via higher interest rates, as economic agents anticipate the effect of future taxes to compensate current deficits and become less confident about debt sustainability. However, fiscal contractions during recessions can harm growth as fiscal multipliers tend to be positive and high during periods of output decline and financial crises (Baum, Poplawski-Ribeiro and Weber, 2012; IMF, 2012).

The effect of policies on the stock market is a widely discussed topic. Many previous studies investigate the responses or relationships between the policy settings and stock movement in one particular country or a pool of representative countries. Both Ozdagli and Yu (2012) and Evers (2012) give a general sketch of the correlation between monetary policy and stock market. This is mainly because fiscal announcements are uneasy to collect comprehensively. Moreover, it is not straightforward to assess the influence of such policy. Andersen (2008) addresses how policy coordination problems between fiscal authorities depend on the type of shocks and the objectives of the monetary authority. It is shown that non-coordinated fiscal policies tend to be too counter-cyclical in the case of aggregate shocks, and that this bias can be reduced by lowering the weight to output stability in monetary policy. Counter-cyclical fiscal policies are identified by government budget deficits and surpluses in periods of low and high economic growth, respectively. Da, et al. (2009) examines whether government fiscal policies lower equity returns by smoothing consumption.

2.2. Monetary Policy

Regardless of the cost of credit to Mali to force climbed to families and organizations of such arrangements amount is insufficient in the current financial crisis that mean? The answer is no. To see this, consider the counterfactual: Fed rate reduction in force throughout the emergency did not imagine a scenario where are not as high as in the light. Then, arrangements of tight money doubtlessly will encourage high economic risk.

Using and business control speculation through the purchase through its normal channels of strict money management, the most probable enough about property values can bring about the most spectacular object, possibly leading to financial crisis that could be more serious. The rapid withdrawal of monetary action, can make the most objectionable thing: Part features more ghastly object to the motion to bring more investment contract, which may increase the credit spread strategy of tight money a range of negative criticism can make a more potential budget crisis, the movement to bring more investment and contract.

A Fed rate cut was not forced at times, bearing Treasury securities with high credit spreads and economic development as an important risk securities without default might have both high interest rates. Using selection applied to family and business investment rates than we see now as can be. Using the overall results may be easier and current retreat may be significantly more severe. Be sure to tighten financial management can be overwhelming. Top Turkish financially viable in view of the current financial crisis demonstrates that there has not been, until now, only without the default rate of investment securities not taken in

light of the fact that certain than during times that were strong enough to support the easy credit spreads. The controversy here, as it can, the amount of strategy that has been encountered in the credit markets contractionary effect of a huge budget balance constraint cannot say. The emergency monetary extortion strategy is not enough to run an organized, tight credit spreads and credit standards have encouraged an increase. Keeping in mind the financial framework of national banks to hold liquidity crushed specific parts will eventually cause liquidity is supported.

The Federal Reserve, in particular, loaning them once to try to get the credit markets has executed a wide liquidity infusions Beginning in mid-August 2007, the Fed discount rate based on only 50 brought down the rate of 100 selected stores from the base is more focused attention (after the 25 Foundation is focused) inadequate. During an emergency, the Fed increased the Fed's actions, as described by Paul Volcker, former chairman of the Federal Reserve, grow, store organizations as well as loaning him out accepted this acquisition expanded liquidity budget framework "inferred that the forces of law and precise edge." During the period of the emergency to the Feed Program funds the production of a whole new set of abbreviations, TAF, TSLF, PDCF, AMLF, CPFF, and MMIFF and TALF, code-named Pentagon with activities and weapons make it sound like the Fed. Like the Pentagon, rather than feed her arms firearms, tanks, or in spite of the fact that the ship was financed, a supposedly suffers from a destructive war against the enemy.

In spite of well over a trillion dollars, which is enhanced by the Fed's asset-fed infusions of liquidity, limit the negative impact of the emergency budget has been active in the amazing fact is accepted, it will not be enough. Live up to expectations once again to get the fiscal framework, budget considerations recapitalized enough to bring them the benefit will be required, so they go out and returns with the fate of financing for households and organizations to develop is the impetuses. Moreover, economists (and lawmakers) wide financial promotion bundle as far and wide as possible all dark retreats or even to keep the economy from entering melancholies may be necessary to see come around. Of course, \$ 500 billion or more in monetary bundle that leaves the most extreme effect in the short term could be right out, yet unstable that future tax rates is not immediate.

2.3 Inflation

The investors, and businesses continue to follow the Federal Reserve and are concerned about the level of inflation. The Inflation of goods and purchasing power of each unit of currency can buy less than the increase in the price of services. Input prices are high, such as rising inflation is a dangerous effect, consumers purchase less equipment revenue and profit decline, and reaches a steady state for a time when the economy could slow wave. Much effort it costs to consumers as well as to be able to move it takes several years for companies because of the sudden increase inflation generally considered the most painful. The Goods and services will cost more as well, when users feel frustrated unexpected. However, at the end of businesses and consumers adjust to the new pricing environment and a new higher steady state is reached, it can be expected that the inflation rate than cash as a result, users can spend. It's time for consumers as well as its value decreases with inflation because it is less likely to

hold cash. For investors, stock prices and inflation affect the economy appears, since there is confusion, but can at the same rate.

This may encourage some progress, maybe as high inflation, could be good. But high inflation even higher input costs could force through the corporate profits. These corporations worry about the future and stop hiring, negatively affecting the quality of life for people, especially for those on fixed incomes causes. There are no good answers, individual investors to invest in times of inflation on how to make wise decisions must separate themselves through the confusion. Different groups of stocks during periods of high inflation seem to perform better.

During periods of high and low inflation examine historical return data can provide some clarity for investors. Several studies have looked at the impact of inflation on stock returns. The time and geography - several factors are taken into account when Unfortunately, these studies have produced conflicting results. The expected inflation can impact either positively or negatively stocks many studies conclude that freight capacity and depend on the government's monetary policy. But the unpredicted inflation most notable investors to determine the effect on stock returns, especially in the economic cycle is important to represent, for the return of the stock during the economic contraction having a strong positive correlation, more conclusive results displayed. The Association also unexpected inflation obtains new information about the future prices of the fact that it is supposed to prevent. Similarly, the movement of the stock volatility than the maximum inflation was integrated with.

Quality Stock Performance and Inflation

The growth and value stocks often are broken down into subcategories. The growth stocks today, but little or no cash flow value stocks over time will slow down while the strong current cash flow will increase gradually over time. Therefore, rising interest rates in the period of growth stocks, stocks worth the discounted cash flow method using a negative value stocks are more impressive. Together to move the inflation and interest rates is likely to impact more negatively than growth stocks will be affected in times of inflation. The yield on inflation and value stocks and growth stocks a negative to a positive connection between the shows. The high rate of inflation during 1973-74 as the strength of the stock price, and deflation occurred during the early 1930s to develop the strength of the stock, as well as inflation moved steadily downward was during the 1990s illustrates. Interestingly, changes in inflation rates than the absolute level of growth as compared to the stock price does not affect the return. Investors believed their expectations of future growth and development in the upwardly misprice stock may overshoot. In other words, growth stocks, value stocks as investors fail to recognize when, and development impact on the stock falling hard.

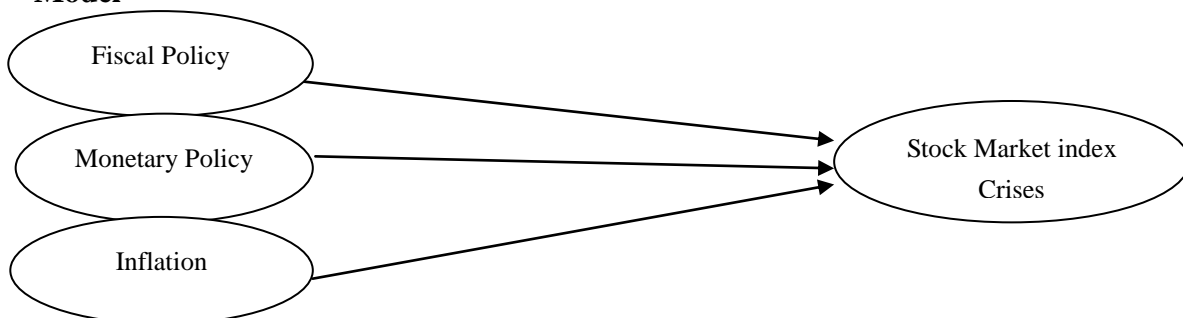
If inflation increases, consumers lack the purchasing power of each dollar can buy less goods and services. Profits do not keep up with inflation levels because income-generating stocks or those that pay dividends to those who are more interested in stock to investors, increasing the effects of inflation or low inflation the rate of inflation is less attractive than their stock. In addition, a double negative effect on profit tax, which causes low purchasing power. Not keep

up with the level of taxation and inflation, despite a partial hedge against inflation dividend yielding stocks provide.

However, the value of the stock dividend payment bonds is affected by the growth rate, the inflation rate is influenced by, and prices generally decline. If inflation increases when holding dividend paying stocks usually means a drop in stock prices. But pointing to a dividend yielding stock investors looking for inflation to provide entry points immeasurably increased when given the opportunity to buy them cheap. Investors factors impact the performance of the portfolio based on expectations, forecasts and their decision to try. Inflation affects a portfolio that is one of the reasons. A company's revenues and profits, inflation should increase at the same rate as the rule, stocks, after a period of adjustment, some hedge against inflation, should be. However, the unstable effects of inflation on the stock already held the positions of business to take on new positions or the puzzle.

Value and growth stocks are divided into categories, evidence at the stock price inflation to get better during periods of high inflation and growth stocks have better clarity. Potential investors can forecast inflation Another way is through the analysis of commodity markets. Trend after production companies, commodity prices are rising stocks increased so that it is to think. On the other hand, it often reduces subsequent stock returns, which is that high commodity prices squeeze profit is seen. Therefore, the following commodity markets in the future may provide insight into inflation.

Model



3. Data and methodology:

The research which we have used in this article was quantitative in a nature. The data had been collected from the secondary sources. In this research, the analysis is conducted based on monthly time series data from July 2007 to June 2009. The data are divided into two categories. The first data set consists of macroeconomic variables while the second data set consists of stock market data.

In this data set, three macroeconomic variables named Fiscal policy, monetary policy (interest

rate) and inflation have been used. The stock market is used as a dependent variable in this research. In fiscal policy we have measured the impact of government revenue and Government expenditure on the stock market. In this article we can also measure the impact of monetary policy and inflation on the stock market during the financial crises. For measuring the impact of these macroeconomic variables on the stock market data had obtained from the different sources. The data about interest rate has obtained from government monetary policy that has announced on a term basis. The data about fiscal policy means Government revenue and government expenditure was obtained from fiscal report that is issued by the ministry of finance on every year. Monthly data about inflation and lastly the monthly data about the stock market index has obtained website.

The descriptive statistics were used in this research. We have used Microsoft Excel and SPSS version 20 for arrangement of data and obtain the results of this research. We have used two methods to measuring the impact of these variables. In the first method, for measuring the relationship among these variables, we have used the Pearson Correlation method. This method shows that how much strong relationship among these variables. The second method for measuring the significance level of these macroeconomic variables, we have used linear regression analysis in this research. These methods demonstrate that weather is there any positive or negative relationship between these variables or not?

4. Findings and Discussions:

The main purpose of this research was to examine the impact of different macroeconomic variable which can affect the Pakistan stock market. For this purpose inflation, monetary policy (interest rate) and fiscal policy (government expenditures and government revenues) were used as independent variables. The data used in this study came from government fiscal policy, monetary policy issued by the government of Pakistan in term basis and data about inflation rate and stock market index has been obtained from the different websites. The monthly data have been collected for this research from being of convinces from July 2007 to June 2009. The Pearson Correlation and Linear Regression analysis were applied in this research. The stock market is used as a dependent variable in this research. The results and findings of this research are given below.

The estimated Pearson correlations and related statistics are presented in the Table 1. The Pearson correlation results show the all the variables have significant correlation with each other. The table 1 shows that interest rate has a strong positive correlation (0.756**) with the inflation rate in Pakistan. If inflation has increased in the Pakistan than the interest rate will also positively increased. The interest rate also has a strong negative correlation (-0.699**) with stock market index. It shows that if interest rate has increased then it had creative negative effect of the stock market. If the interest rate has increased than stock market index had to be decreased. Moreover the interest rate also had a strong positive relationship with the Government revenue (0.853**) and Government Expenditure (0.754**). It also shows that when the interest rates had increased, then it also had a strong positive impact on the government revenue also increased. If the revenue of the government of Pakistan had risen than the government expenditure also increased due to the increase of interest rate in

Pakistan.

The table 1 also shows that the inflation did not have a strong relationship with the stock market index, Government revenue and Government expenditure. The Pearson correlation results showing that inflation had weak negative (- 0.297) relationship with the stock market index. If the inflation had increased than it will create negative impact, but not as much impact on the stock index. The stock market index had to be dropped due increase of inflation. The government revenue had moderate but positive (0.513*) and government expenditures had weak but also positive (0.453) relationship with the inflation rate in Pakistan. It was shown that if the inflation rate had increased than the government expenditure also increased in Pakistan in 2007 to 2009. To meet that expenditure the government had need more funds and revenues. For this government should raise their revenue taxes and other sources.

Table 1. Pearson Correlations Results

		Interest Rate	Inflation	Index	Revenue	Expenditure
Interest Rate	Pearson Correlation	1	.756**	-.699**	.852**	.754**
Inflation	Pearson Correlation	.756**	1	-.297	.513**	.453**
Index	Pearson Correlation	-.699**	-.297	1	-.582**	-.364*
Revenue	Pearson Correlation	.852**	.513**	-.582**	1	.956**
Expenditure	Pearson Correlation	.754**	.453**	-.364*	.956**	1
**. Correlation is significant at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						

The Pearson correlation results are also showing that the stock market index had a negative relationship with government revenues and government expenditures. The stock market index had a negative, but moderate (- 0.582*) relationship with government revenues. The government expenditures had a weak negative (- 0.364) relationship with the stock market index. Lastly, the correlation table is showing that the government revenues also had very strong positive (0.956**) relationship with the government expenditures. It shows that if the

government revenues had increased than their expenditure was also increased in the 2007 to 2009. The government tries to increase their revenues through direct and indirect taxes. If the government had more funds in their accounts than the government expenditures was also increased in the shape of development expenditures.

The results of this research show the entire variables have a very strong significant impact on the stock market index. The table 2 shows that interest rate have very strong negative impact on the Pakistan stock market index ($\beta = -1240.995$, $t = -5.303$, $p = 0.000$), inflation rate has a positive relationship with the stock market index ($\beta = 211.413$, $t = 5.014$, $p = 0.000$), government revenues have a very strong significant negative impact on Pakistan stock market index ($\beta = -17.400$, $t = -6.212$, $p = 0.000$) and government expenditures also have very positive significant impact on the stock market index in Pakistan ($\beta = 11.199$, $t = 8.216$, $p = 0.000$).

Table 2. Coefficients of Regression Results

Model	Un-standardized Coefficients		Standardized Coefficients	t	Sig. (p)
	B	Std. Error	Beta		
(Constant)	24955.446	1083.572		23.031	.000
Interest Rate	-1240.995	234.035	-.917	-5.303	.000
Inflation	211.413	42.162	.493	5.014	.000
Revenue	-17.400	2.801	-1.782	-6.212	.000
Expenditure	11.199	1.363	1.808	8.216	.000

a. Dependent Variable: Index

The results of this study explained that the interest rate has significant negative impact on the stock market index of Pakistan. It's showing that if the interest rate is increased than it creates negative impact on the stock market index. In Pakistan the interest rate is changed firstly, after every six months and after that government decides to revise the monetary policy after every three months. That's why the investor can hesitate to invest in the stock market due to fluctuate of interest rate in Pakistan continuous basis. So, the interest rate is one of the essential elements that has a negative impact on the stock market index of Pakistan during

July 2007 to June 2009.

The inflation rate has a very strong positive impact on the stock market index at 5% significance level. It shows that if the inflation rate is rising in the Pakistan than the stock market index moves to the positive side. This result is inconsistent with previous studies that were showing that the inflation has negative impact on the stock market index. The inflation did not have a negative impact on the stock market because in Pakistan, the stock market is dominated by the major players like stock broker and other big investors who could not enter the general investors into the stock market. Therefore inflation did not have any negative impact on the Pakistan stock market index.

The results of above study show that government revenues had very strong significant negative impact on the stock market index of Pakistan. During July 2007 to June 2009, the Government of Pakistan tries to increase their revenues for meeting their needs. For this purpose the government of Pakistan has increased the tax rates and also imposed new taxes on different sectors and products. Like the government increase federal excise duty, increase sales taxes, increases the tax rate on every banking transactions like withdrawal of an amount from the bank and also many other direct and indirect taxes. From 2007 to 2009, the government also tries to impose capital gains tax on stock market. Therefore, the investor can hesitate to invest in the stock market and due to this the stock market index had dropped down to 2007 to 2009. The results of this research also showing that the government expenditures also had very strong significant positive relationship with the stock market index of Pakistan. This result had explained that when the government development expenditure had increased in the Pakistan, than the trust of investors on the government policies has increased. Therefore, the investor can invest their money in the stock market and due to this stock market index had risen during 2007 to 2009.

5. Conclusion

The paper has studied the impact of fiscal policy, monetary policy and other macroeconomic variable on Pakistan stock market performance. The secondary data have used in this research. The Pearson correlation and linear regression analysis were applied in this research. The fiscal policy is measured by government revenues and government expenditures. The government revenues have a significant negative impact on the stock market index, while the government expenditure has a strong significance positive impact on the stock market index. For measuring the impact of monetary policy on stock index, we have used policy interest rate. The results show that tightening monetary policy means higher policy interest rate has a strong significance negative impact on the stock index. The other macroeconomic variable that has used in this research was inflation. The result of this study has been shown that inflation has a positive relationship with the stock market index in Pakistan because the stock market was dominated by major players like stock brokers and big investors etc, therefore the inflation was not negative effect on the stock market index.

The findings of these have opened up the new area of research. There are many other macroeconomic variables must be considered that have a major impact on the stock market in Pakistan. The model may be expanded to consider potential substitution between domestic

and foreign currencies due to change in exchange rate. The political situation must be also an important factor that also has a strong impact on the stock market index during 2007 to 2009. Due to the assassination of a political leader Benzir Bhuto in December 27, 2007, the political situation was unstable in Pakistan that has created a strong negative impact on the stock index in Pakistan.

References:

- Abel, Andrew B and Ben S. Bernanke (2005), "Macroeconomics", Pearson Addison Wesley, Fifth Edition, 521-596.
- Andersen, T.M. 2008. The Macroeconomic Policy Mix in a Monetary Union with Flexible Inflation Targeting. *Journal of International Money and Finance* 27 (2008) 411e437
- Baldacci, E. and M. Kumar, (2010). "Fiscal Deficits, Public Debt, and Sovereign Bond Yields," IMF Working Paper No. 10/184.
- Baum, A., M. Poplawski-Ribeiro and Weber A. (2012). "Fiscal Multipliers and the State of the Economy," IMF Working Paper (forthcoming; Washington: International Monetary Fund).
- Bernanke, B. "Essays on The Great Depression", Princeton University Press, Princeton, 2004.
- Blinder A. and R. Reis "Understanding the Greenspan Standard", The Greenspan Era: Lessons for the Future, Federal Reserve Bank of Kansas City, 2005.
- Bordo, M. and O. Jeanne "Boom-Busts in Asset Prices, Economic Instability and Monetary Policy", NBER Working Paper Series W8966, 2002.
- Calvo, G. "Capital Flows and Capital-Market Crises: The Simple Economics of Sudden Stops", 1998.
- Calvo, G. and E. Talvi, "Sudden stop, financial factors and economic collapse in Latin America: learning from Argentina and Chile", in: *The Washington Consensus reconsidered: towards a new global governance* (Serra, N and Stiglitz J., eds.), Oxford University Press, Oxford, 2008.
- Caprio G. and D. Klingebiel, "Bank Insolvencies: Cross Country Experiences", World Bank Research Working Papers, 1999.
- Cerra V. and S. Saxena, "Growth Dynamics: The Myth of Economic Recovery", *American Economic Review*, 2008.
- Chirwa EW, Montfort M, 2004. Financial reforms and interest rate spreads in the commercial banking system in Malawi. *International Monetary Fund Staff Papers*, 51(1): 96–122.
- Claessens, S. Kose, A. and Terrones, M. E. (2008). "What Happens During Recessions, Crunches and Busts?" IMF Working Paper 08/274.
- Cottarelli, C. and Jaramillo, L. (2012). "Walking Hand in Hand: Fiscal Policy and Growth in

Advanced Economies” IMF Working Paper 12/137.

Daniel L. Thornton, what the Libor-OIS spread says, Economic SYNOPSES, Number 24, 2009, Available at: <http://research.stlouisfed.org/econ/thornton/>

DeLong, J.B., and Summers, L. (2012), “Fiscal Policy in a Depressed Economy,” Spring 2012 Conference on the Brookings Papers on Economic Activity (BPEA), http://www.brookings.edu/~media/Files/Programs/ES/BPEA/2012_spring_bpea_papers/2012_spring_BPEA_delongsummers.pdf

Diaz-Alejandro, C. “Good-Bye Financial Repression, Hello Financial Crisis”, Journal of Development Economics, 1985.

Eichengreen, B. “From Great Depression to Great Credit Crisis: Similarities, Differences and Lessons.” Presented at the 50th Economic Policy Panel Meeting, held in Tilburg on October 23-24, 2009.

Evers, M.P. 2012. Strategic Monetary Policy in Interdependent Economies: Gains From Coordination Reconsidered. *Journal of International Money and Finance* 32 (2013) 360–376

International Monetary Fund. (2009b). “From Recession to Recovery: How Soon and How Strong?” *World Economic Outlook 2009*, Chapter 3 (Washington, DC: International Monetary Fund).

Kaminsky G. and C. Reinhart “The Twin Crises: The Causes of Banking and Balance-of-Payments Problems”, *American Economic Review* 2000.

Karachi888.blogspot.com (2010). Top-30-kse-100-index-companies. Retrieved from: <http://karachi888.blogspot.com/2010/04/top-30-kse-100-index-companies-history.html>

Kehoe T. and E. Prescott (Eds.) “Great Depressions of the Twentieth Century”, Federal Reserve Bank of Minneapolis, Minneapolis, 2007.

King, R. and R. Levine “Finance and growth: Schumpeter might be right”, *The Quarterly Journal of Economics*, 1993.

Kumar, M., and Woo J. (2010). “Public Debt and Growth,” IMF Working Paper No. 10/174.

Laeven L. and F. Valencia “Systemic Banking Crises: A New Database”, IMF Working Paper No. 08/224, 2008.

Laopodis, N. 2011. Fiscal Policy, Monetary Policy, And The Stock Market. <http://economics.soc.uoc.gr/macro/11conf/docs/FiscalPolicy&StockMarket.pdf>

Mendoza, E. and M. Terrones, “An Anatomy of Credit Booms: Evidence from Micro and Aggregate Data”, NBER Working Paper W14049, 2008.

Ozdagli, A.K. And Yu, Y. 2012. Monetary Policy Shocks and Stock Returns: Identification Through Impossible Trinity. <http://www.bostonfed.org/economic/wp/wp2012/wp1218.pdf>

Panizza, U. and Presbitero, A., F. (2012). “Public debt and economic growth: Is there a causal

effect?” POLIS Working Papers 168, Institute of Public Policy and Public Choice. POLIS.

Perotti, R. (2011). “The ‘Austerity Myth’: Gain Without Pain?” NBER Working Paper No. 17571, November.

Rajan, R. and L. Zingales “Financial Dependence and Growth”, American Economic Review, 1998.

Reinhart C. and K. Rogoff “This Time is Different: Eight Centuries of Financial Folly”, Princeton University Press, Princeton, 2010.

Spilimbergo, A. Symansky, S. Blanchard, O. and Cottarelli, C. (2008). “Fiscal Policy for the Crisis,” *IMF Staff Position Note*, SPN/08/01.

Takáts, Elöd (2010), “Countercyclical Policies in Emerging Markets”, BIS Quarterly Review, June 2012.

Tradingeconomics (2006-2010). Pakistan Inflation Retrieved from:
<http://www.tradingeconomics.com/pakistan/inflation-cpi>

Zingales, L., “Causes and Effects of the Lehman Brothers Bankruptcy”, Written Testimony Before the Committee on Oversight and Government Reform, United States House of Representatives, October 6, 2008.