



ISSN: 0976-3031

Available Online at <http://www.recentscientific.com>

CODEN: IJRSFP (USA)

International Journal of Recent Scientific Research
Vol. 8, Issue, 9, pp. 19735-19740, September, 2017

**International Journal of
Recent Scientific
Research**

DOI: 10.24327/IJRSR

Research Article

CAUSAL RELATIONSHIP BETWEEN SELECTED MACRO-ECONOMIC VARIABLES AND STOCK MARKET: A CASE STUDY FOR BANGLADESH

Mohammed JashimUddin*

Department of Economics & Banking International Islamic University Chittagong

DOI: <http://dx.doi.org/10.24327/ijrsr.2017.0809.0751>

ARTICLE INFO

Article History:

Received 11th June, 2017
Received in revised form 14th
July, 2017
Accepted 22nd August, 2017
Published online 28th September, 2017

Key Words:

Macroeconomic Variables, Stock Prices,
Unit Root Test, Granger Causality Test,
Correlation matrix.

ABSTRACT

Establishing the relationship between stock prices and macroeconomic variables is very significant for formulating current economic stabilization policies. This paper investigates the causal relationship between three macroeconomic variables and stock prices of Bangladesh using unit root test and Granger causality test. This paper has tried to find out the relationship of selected macroeconomic variables, viz., inflation, money supply and exchange rate with the share price index of Bangladesh, using yearly data for the period 1988 to 2013. The result shows casual linkage between the stock prices with Exchange Rate except two other variables under consideration. In spite of good macroeconomic condition in sample period, no relationship with stock prices suggests that the market is not informatively efficient.

Copyright © Mohammed JashimUddin, 2017, this is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

Knowledge of the factors that influence the behavior of stock prices and macroeconomic factors has attracted the attention of economists, policy makers, and the investment community for a long time. The knowledge of these inter-relationships between the stock market and the macroeconomic factors are of critical importance, not merely to the industry players, but to the macroeconomic policy makers as well. Economic theory and empirical studies consider stock prices and thus, market index to be one of the best indicators of changes in economic activity. This intellectual curiosity gained ascendancy in the last two decades due to the increasing belief that real economic activities often impact on stock prices. Rapidly growing economies of emerging markets have attracted the accumulated funds of developed economies that are in search of diversification benefits or eagerly look for higher returns, as named "return chasers" by Bohn and Tesar (1996). The forms of capital flows are known as foreign direct investment (FDI) and foreign portfolio investment (FPI). As assumed and also empirically proven by several researches (e.g., Calvo, Leiderman, & Reinhart, 1993), FPI appears to be short-term generally and its benefit to developing economies is doubtful. Assuming that macroeconomic fluctuations pose influence on stock prices through their effect on future cash flows and the

rate at which these cash flows are discounted, the relationship between stock prices and macroeconomic variables has been widely investigated. The arbitrage pricing theory (Ross, 1976) has been the primary motive of earlier studies and may be considered as global asset pricing models. Among macroeconomic factors included in the models are either monetary ones such as inflation, interest rate, exchange rate, etc. or real economic ones such as production, oil prices, etc. The studies aim to explain expected returns over time. Therefore, the motive and methodologies employed are based upon the understanding that expected returns are associated with these variables. And, the direction of the relationship is assumed to be unidirectional, and from macroeconomic variables to stock returns. We are interested in investigating the relationship between stock prices and macroeconomic variables because individual investors can earn abnormal profits by exploiting this relationship and the existence of this utilizable opportunity would then dangerously distort the market's ability to proficiently allocate scarce resources. Globalization and financial sector reforms in Bangladesh have strong influence in the changing scenario of financial system of the country. In the contemporary scenario, the activities in the financial markets and their relationships with the real sector have assumed significant importance. Since the inception of the financial sector reforms in the beginning of 1990s, the implementation of

*Corresponding author: Mohammed JashimUddin

Department of Economics & Banking International Islamic University Chittagong

various reforms measures including a number of structural and institutional changes in the different segments of the financial sector of the economy. Altogether, the whole gamut of institutional reforms concomitant to globalization program, introduction of new instruments, change in producers, widening of network and good macro-economic condition have created a scope for examining the relationship between the stock market and the selected macro economic variables of Bangladesh. Moreover, the stock market crash of 1996 in Bangladesh has renewed interest in investigating the dispute revolving around the significance of the changes in a stock market and their linkage with other macroeconomic factors. Interesting results emerge particularly for the developing countries like Bangladesh where the markets are experiencing new relationships which are not perceived earlier. The Efficient Markets Hypothesis (EMH), in its strong form, assumes that everyone has perfect knowledge of all information available in the market. Therefore, the current price of an individual stock portrays all available information at any point of time. Accordingly, if real economic activity affects stock prices, then an efficient stock market instantaneously digests and incorporates all available information about economic variables. The rational behavior of market participants ensures that past and current information is fully reflected in current stock prices. Stock market inefficiency with respect to information has important implications both at micro and macro levels. At micro level, this implies that the individual investor can earn considerably higher than normal rate of returns or incur abnormal rate of losses from the stock market. At the macro level, it raises serious doubts on the ability of the market to perform its fundamental role of channeling funds to the most productive sectors of the economy. In Bangladesh, certain quarters of the population believe that an improvement in the economy measured by the positive growth in macroeconomic aggregates will result the improvement in the performance of the stock markets. However, whether stock markets lead or lag real economic activity is an empirical question.

Objectives

To find out the stock market macro- economic nexus, whether macro-economic activities are the leading indicator for the performance of stock markets or not. Specifically, the study to find the casual linkage between selected macroeconomic variables and stock market prices of Bangladesh.

LITERATURE REVIEW

Studies on the relationship between macroeconomic variables and national stock market have been the cornerstone of most economic literature for quite some time. Many studies are done around the world to investigate the causal relationship between stock market and different macroeconomic variables. Theory explained that a change in the exchange rates would affect a firm's foreign operation and overall profits. During the last decade and a half, it has been recognized that external sector indicators like exchange rate, foreign exchange reserves and value of trade balance can have an impact on stock prices. This would affect its stock prices. Conversely, a general movement of the stock market will decrease the demand for money, pushing the interest rate down, causing further outflow of funds and hence depreciating the currency. Bahmani-Oskooee and

Sohrabian (1992) used monthly values of S&P 500 index and US dollar effective exchange rate for the period of 1973-88 and used cointegration and the Granger causality test to detect the relationship between the variables. They found bidirectional causality in the short run but no long-run relationship between the variables. Habibullah and Baharumshah (1996a) applied residual based cointegration tests for the Malaysian market and found no evidence for cointegration between various stock indices, the money supply and output using money supply and output using monthly data that span from January 1978 to September 1992. Based on these findings, they conclude that the Malaysian stock market is informationally efficient with respect to output and money supply. In another study, however, they found evidence of informational inefficiency in the Property Index with respect to money supply when an alternative test based on a restricted error-correction model is used (Habibullah and Baharumshah 1996b). Similarly, examining the relationship between money supply changes and stock prices in emerging markets using bivariate Granger causality tests, Cornelius (1993) documents evidence against the informational efficiency hypothesis in the Malaysian market. A few studies are done in Bangladesh so far to explore the causal link between stock prices and macroeconomic variables. Rahman and Uddin (2009) considered exchange rates of US dollar in terms of Bangladeshi Taka, Indian Rupee and Pakistani Rupee and monthly values of Dhaka Stock Exchange General Index, Bombay Stock Exchange Index and Karachi Stock Exchange for the period January 2003 to June 2008. Result showed that there is not cointegrating relationship between stock prices and exchange rates. By employing a bivariate error-correction model, Ajayi and Mougoue (1996) examine the relationship between stock prices and exchange rates. They study both the short-run and long-run relationships between the two variables in eight major industrial markets. Their results show that an increase in domestic stock prices has a negative short-run effect on the domestic currency value. However, sustained increases in the domestic stock prices in the long run cause an increase in the domestic currency, due to the increased demand for the currency. Hashemzadeh and Taylor (1998) investigate the direction of causality between the money supply, stock prices, and interest rates in the US. The relationship between money supply and stock prices is reflected by a feedback system, with money supply explaining some of the observed variation in stock price levels, and vice versa. Causality runs from interest rates to stock prices, but not the other way around. Bailey and Chung (1995) study the systematic influence of exchange rate fluctuations and political risk on stock returns in Mexico. Their major findings reflect consistency with time-varying equity market premium for exposure to the changes in free market dollar premium. Using Granger causality and monthly data, Abdalla and Murinde (1996) investigate the relationships between exchange rates and stock prices in India, Korea, Pakistan, and the Philippines. They find a unidirectional causality from exchange rates to stock prices in all countries except the Philippines, where stock prices Granger cause stock prices. Mookerjee and Yu (1997) report that not all macroeconomic variables are cointegrated with stock prices in Singapore. Investigating the effects of changes in the consumer price index on industrial production and stock market returns for China, Soenen and Johnson (2001) report a positive and significant association between stock

returns and real output. Inflation seems to have no impact on Chinese real stock returns. Ibrahim (2003) obtained results suggesting cointegration between returns and the money supply in the Malaysian stock market. Patra and Poshakwale (2006) examined the short-run dynamic adjustments and the long-run equilibrium relationships between selected macroeconomic variables, trading volume and stock returns in the Greek stock market during the period of 1990 to 1999. They reach results showing that short run and long run equilibrium relationship exists between inflation, money supply and trading volume and the stock prices in the Athens stock exchange. No short run or long run equilibrium relationship is found between the exchange rates and stock prices. Brahmasrene and Jiranyakul (2007) examined the relationship between stock market index and selected macroeconomic variables during the post financial liberalization (pre-financial crisis) and post-financial crisis in Thailand. In the empirical analysis, they perform unit root, cointegration and Granger causality tests. Their results show that money supply has a positive impact on the stock market index, while the industrial production index, the exchange rate and oil prices have a negative impact in the post-financial liberalization period. With respect to the post-financial crisis, money supply is reported to be the only variable positively affecting the stock market. Employing a six-variable VAR model, Abugri (2006) studies whether selected macroeconomic indicators like exchange rates, interest rates, industrial production and money supply in four Latin American countries significantly explain market returns. He reports that the global factors are consistently significant in explaining returns in all the markets. The country variables are found to impact the markets at varying significance and magnitudes. Maysami and Sims (2002, 2001a, 2001b) examine the relationship between macroeconomic variables and stock returns in Hong Kong and Singapore (Maysami and Sim, 2002b), Malaysia and Thailand (Maysami and Sim 2001a), and Japan and Korea (Maysami and Sim 2001b) by employing the "Error-Correction" Modeling technique. Having used the Hendry's (1986) approach which allows making inferences to the short-run relationship between macroeconomic variables and the long-run adjustment to equilibrium, they were able to analyze the inter-relation and influence of interest rate, inflation, money supply, exchange rate and real activity, to understand the impact of 1997 Asian financial crisis. Their findings clearly pointed towards the influence of macroeconomic variables on the stock market indices in each of the six countries under study, though the type and magnitude of the associations differ depending on the country's financial structure. Moreover, Granger causality showed there is no way causal relationship between stock prices and exchange rates in the countries. Later, Ali (2011a) investigated the long-run equilibrium relationship as well as causal relationships between the DSE all share price index (DSI) and the four microeconomic variables (i.e. market dividend yield, market price-earnings multiples, monthly average market capitalisation and monthly average trading volume) using monthly data from January 2000 to December 2010. Important findings include long-run equilibrium relationship among the variables under study. DSI has bi-directional causal relation with market price earnings multiples and the first lag of the monthly average trading volume and unidirectional causality to the first lag of monthly average market capitalisation. In the same year, he investigates the

impact of changes in selected microeconomic and macroeconomic variables on stock returns at Dhaka Stock Exchange using data from July 2002 to December, 2009 (Ali 2011b).

Data Sources and Methodology

To find out causal relationship between stock market and macroeconomic variables different researcher use different variables. Chen, Roll and Ross (1986) used industrial production, changes in risk premium and inflation whereas Bahmani-Osooe and sohrabian (1992) and Mok (1993) used exchange rate as a macroeconomic variables. Ajitkarmik tried to find out relationship between Indian stock market and three macroeconomic variables viz, exchange rate, prime lending rate, narrow money supply and index of Industrial production. Moreover, Ahmed examined the influences of consumption, investment, industrial production and GDP on stock prices of Bangladesh stock market. Literature review and above discussion convince that inflation (inf), Money Supply (MS) and Exchange (Ex) may influence the stock price in different countries. GDP is another important macroeconomic variable but Ahmed (1999) found a weak relationship between stock prices and GDP in case of Bangladesh. Finally, inflation, Money supply (ms), exchange rate (ex) are selected as explanatory variables and stock price index (SPI) of Bangladesh as the explained variable. Yearly data series for the period 1988 to 2013 have been used. The data have been compiled from various issues of Economic Trends published by Bangladesh Bank. To avoid a spurious regression situation the variables used in a regression model must be stationary. Unit root tests are being applied on these four variables to examine whether they are stationary or not. If the data series are not cointegrated then we apply Granger Causality Test.

Econometric Methodology

Step1. The Unit Root test

Macroeconomic time series data are generally characterized by a stochastic trend which can be removed by differencing. Some variables are stationary on levels, others become stationary after First difference, and some may become stationary by more than First difference. To test for the stationary of the variables, the Augmented Dickey-Fuller (ADF) technique was utilized.

It is assumed that the series has a unit root; hence failure to reject the null hypothesis implied the time series is non-stationary. If a time series is non-stationary but becomes stationary after first differencing, then it is said to be integrated of the order one i.e. $I(1)$. When the variables are found to have the same order of integration, then cointegration test is used to identify the number of cointegrating vectors and cointegrating equation among the variables. But if any variable doesn't have the same order of integration, it has not been incorporated in this investigation.

Step2. Johansen's Cointegration Test

Johansen's Cointegration methodology has been applied to identify the long run equilibrium relationship among the variables under study. In this case, after identifying the optimum lag length based on Schwarz Information Criterion (Schwarz, 1978), the level data has been used directly into the

cointegration test as it is not required to make the series into stationary data. At first, a trace statistic has been used to test the null hypothesis of r cointegrating vectors against the alternative of r or more cointegrating vectors. Another important test to identify the number of cointegrating vectors is testing the statistical significance of max eigen value statistics.

Step3. Granger Causality Test

According to the representation theorem, if two variables are cointegrated then Granger Causality must exist in at least one direction. Granger Causality is a statistical hypothesis test for determining whether or not one variable is useful to forecast another. According to Granger Causality, if a variable (x) Granger causes variable (y), then past values of variable (x) should contain information that helps to predict variable (y). Granger test assumes that appropriate information for the relevant variables and includes testing the following equations:

Pairwise Granger Causality Tests				
Date: 10/27/15 Time: 21:00				
Sample: 1988 2013				
Lags: 2				
Null Hypothesis:	Obs	F-Statistic	Prob.	
D(INF,2) does not Granger Cause D(ER)	22	0.68006	0.5198	
D(ER) does not Granger Cause D(INF,2)		0.44089	0.6506	
D(SP) does not Granger Cause D(ER)	23	2.88262	0.0820	
D(ER) does not Granger Cause D(SP)		7.72509	0.0038	
D(M2,2) does not Granger Cause D(ER)	22	0.74735	0.4886	
D(ER) does not Granger Cause D(M2,2)		0.09337	0.9113	
D(SP) does not Granger Cause D(INF,2)	22	0.11525	0.8918	
D(INF,2) does not Granger Cause D(SP)		0.05101	0.9504	
D(M2,2) does not Granger Cause D(INF,2)	22	0.77240	0.4774	
D(INF,2) does not Granger Cause D(M2,2)		0.08176	0.9219	
D(M2,2) does not Granger Cause D(SP)	22	1.98341	0.1682	
D(SP) does not Granger Cause D(M2,2)		18.7713	5.E-05	

Step4: Breusch-Pagan-Godfrey Test

If all observations come from probability density functions with the different variances, we say that heteroskedasticity exists, and y and e are heteroskedastic. To test the presence of heteroskedasticity the well-known method is BPG test.

Step5: The Breusch-Godfrey (BG) Test

To avoid some of the Durbin-Watson d test of autocorrelation, statistician Breusch and Godfrey have developed a test of autocorrelation that is general in the sense that it allows for (1) nonstochastic regressors, such as the lagged values of the regressand; (2) higher-order autoregressive scheme, such as AR (1), AR(2) etc. and (3) simple or higher-order moving averages of white noise error terms. It is also known as the LM test.

Step6: Correlation matrix

Multicollinearity refers to the situation where there is either an exact or approximately exact relationship among the regressors. The well known method of detecting multicollinearity is correlation matrix.

	D(ER)	D(INF,2)	D(SP)	D(M2,2)
D(ER)	1.000000	0.016637	-0.307961	-0.190278
D(INF,2)	0.016637	1.000000	0.093776	0.008584
D(SP)	-0.307961	0.093776	1.000000	0.316571
D(M2,2)	-0.190278	0.008584	0.316571	1.000000

Table 1 displays the correlation among money supply, inflation, exchange rate and stock price. This Correlation Matrix measures the two-way relation between the mentioned variables.

From table1, we observe that there is low correlation between variables pair wise. There is a positive correlation between inflation and exchange rate and negative correlation among stock price, money supply and exchange rate. The degree of correlation is relatively low.

Empirical result

Summary of Descriptive Statistics

Table 1 exhibits the descriptive statistics for the selected variables under under study. We have examined 25 yearly observations of all the variables to estimate the following statistics.

From table-1, we observe that the average value of $\ln gdp$ is higher than $\ln ms3$ and $\ln price$. Here, Std. Dev. measures the dispersion or spread of the series. The maximum and minimum statistics measure the upper and lower bounds of the variable under study. The skewness measures whether the distribution of all the data is symmetrical or asymmetrical. Here, negative skewness value of all the variables indicates that the data series have a left tail. Overall, calculations indicate that all the variables are not normally distributed and are characterized as leptokurtic and skewed. In appendix 1, we plot data series of broad money supply, gdp and the price level in during 1988-2013, which indicate an upward trend in each of the macro-economic variable.

Correlation Matrix

Test of stationary

Table 3 displays the estimates of the Augmented Dickey-Fuller (ADF) test in levels and in first differences of the data with an intercept. The tests have been performed using the Mackinnon Critical Values (Mackinnon, 1996) and assumed the identical null hypothesis of unit root in the data series. The lag length was determined using Akaike Information Criterion (AIC) (Akaike, 1974).

*indicates $\ln Ms2$, $\ln Ex$, $\ln Inf$ are non-stationary at their levels and indicates the variables becomes stationary at their first differences at 1%, 5%, and 10%.

The results indicate that all the variables are not stationary in their levels. On the other hand, all data are stationary at their first differences at 1%, 5% and 10% level of significance and therefore indicating that all variables are integrated of order 1. i.e., $I(1)$.

Granger Causality Test

According to the representation theorem, if two variables are cointegration then Granger Causality must exist in at least one direction. Therefore, we now test for the direction of causation between money supply, gdp and price level for the economy of Bangladesh during the period 1975-2012. The results of the Granger Causality are reported in Appendix-.

From the above Table-, we can infer the null hypothesis that $\ln Ms2$ does not Granger Cause price and price does not Granger cause $\ln Ms2$ are rejected, confirming a bi-directional causality runs from money supply to price level with feedback relationship. On the other hand, there is a unidirectional causality found between money supply and output as null hypothesis that $\ln Ms2$ does not Granger because $\ln gdp$ is

rejected. Again, from Appendix, we can conclude that there is no causality between gdp and the price level.

CONCLUSION

The main purpose of this study is to investigate the lead and lag relationship between the Bangladesh Stock Market and three selected macroeconomic variables: inflation, money supply and exchange rate. Theoretically, macroeconomic variables should have relationship with the stock market and various empirical studies support this view. In the context of Bangladesh, using data set for the period 1978-79 to 1996-97, Ahmed (1999) found relationship between stock prices and aggregate demand. However, in this paper instantaneous causality between stock price and selected three macroeconomic variables appears to be absent. In spite of good macroeconomic condition in sample period, no relationship with stock prices suggests that the market is not informational efficient. Non-existent of the relationship between stock market and selected macroeconomic variables may be due to almost new stock market and small market capitalization.

References

- Adam, A., & Tweneboah, G. (2008). Macroeconomic factors and stock market movement: Evidence from Ghana. <http://dx.doi.org/10.2139/ssrn.1289842>
- Ahmed, Md. Nehal, & Imam, M.O. (2007). Macroeconomic factors and Bangladesh stock market: Impact analysis through co integration approach. *International Review of Business Research Papers*, 3(5), 21-35.
- Ali, M. (2011). Impact of micro and macroeconomic variables on emerging stock market return: A case on Dhaka stock exchange (DSE). *Interdisciplinary Journal of Research in Business*, 1(5), 8-16.
- Amadi, S., & Odubo, T. (2002). Macroeconomic variables and stock prices: Causality analysis. *The Nigeria J of Economic and Management Studies*, 4(1&2), 29-41.
- Bhunia, A. (2012). A causal relationship between stock indices and exchange rates-empirical evidence from India. *Research Journal of Finance and Accounting*, 3(1), 47-54.
- Bilson, C., Brailsford, T., & Hooper, V. (2001). Selecting macroeconomic variables as explanatory factors of emerging stock market returns. *Pacific-Basin Finance Journal*, 9(4), 401-426. <http://dx.doi.org/10.2139/ssrn.201908>
- Buyuksalvarci, A. (2010). The effects of macroeconomic variables on stock returns: Evidence from Turkey. *European Journal of Social Sciences*, 14(3), 404-416.
- Chen, N., Roll, R., & Izedonmi, S. (1986) Economic forces and the stock market. *Journal of Business*, 59, 383-403. <http://dx.doi.org/10.1086/296344>
- Coleman, A., & Tettey, K. (2008). Impact of macroeconomic indicators on stock market performance: The case of the Ghana Stock Exchange. *Journal of Risk Finance*, 9(4), 365-378. <http://dx.doi.org/10.1108/15265940810895025k>
- El-Nader, H., & Alraimony, A. (2012). The impact of macroeconomic factors on Amman stock market returns. *International Journal of Economics & Finance*, 4(12), 202-213. <http://dx.doi.org/10.5539/ijef.v4n12p202>
- Gay, R.D. (2008). Effect of macroeconomic variables on stock market returns for four emerging economies: Brazil, Russia, India and China. *International Business and Economics Research Journal*, 7(3), 1-8.
- Horobet, A., & Dumitrescu, S. (2009). On the causal relationships between monetary, financial and real macroeconomic variables: Evidence from central and eastern Europe. *Economic Computation and Economic Cybernetics Studies and Research*, 43(3), 1-17.
- Ibrahim, H., & Aziz, H. (2003). Macroeconomic variables and the Malaysian equity market: A view through rolling subsamples. *Journal of Economic Studies*, 30(1), 6-27. <http://dx.doi.org/10.1108/01443580310455241>
- Kandir, Serkan Yilmaz. (2008). Macroeconomic variables, firm characteristics and stock returns: Evidence from Turkey. *International Research Journal of Finance and Economics*, 16, 35-45.
- Masduzzaman, M. (2012). Impact of the macroeconomic variables on the stock market returns: The case of Germany and the United Kingdom. *Global Journal of Management and Business Research*, 12(16), 22-34.
- Mohammad, S., Hussain, A., Jalil, M., & Ali, A. (2009). Impact of macroeconomic variables on stock prices: Empirical evidence in case of KSE (Karachi Stock Exchange). *European Journal of Scientific Research*, 38(1), 96-103.
- Mukherjee, T., & Naka, A. (1995). Dynamic relation between macroeconomic variables and the Japanese stock market: An application of a Vector Error Correction model. *Journal of Financial Research*, 18(2), 223-237. <http://dx.doi.org/10.1111/j.1475-6803.1995.tb00563.x>
- Musilek, P. (1997). Changes in the macroeconomic variable and the stock prices. *Czech Journal of Economics and Finance (Finance auver)*, 47(3), 150-162.
- Osamwonyi, I., & Evbayiro-Osagie, E. (2012). The relationship between macroeconomic variables and stock market index in Nigeria. *Journal of Economics*, 3(1), 55-63.
- Pal, K., & Mittal, R. (2011). The impact of macroeconomic indicators on Indian capital markets. *Journal of Risk Finance*, 12(2), 84-97. <http://dx.doi.org/10.1108/15265941111112811>
- Pramod-Kumar, N., & Puja, P. (2012). The impact of macroeconomic fundamentals on stock prices revisited: An evidence from Indian data. *Eurasian Journal of Business and Economics*, 5(10), 25-44.
- Rapach, D., Wohar, M., & Rangvid, J. (2005). Macro variables and international stock return predictability. *International Journal of Forecasting*, 21(1), 137-166. <http://dx.doi.org/10.1016/j.ijforecast.2004.05.004>
- Singh, T., Mehta, S., & Varsha, M. (2011). Macroeconomic factors and stock returns: Evidence from Taiwan. *Journal of Economics and International Finance*, 2(4), 217-227.
- Uddin, M., & Alam, M. (2007). The impacts of interest rate on stock market: Empirical evidence from Dhaka stock exchange. *South Asian Journal of Management and Sciences*, 1(2), 123-132. *Managerial Finance*,

29(4), 87-92. <http://dx.doi.org/10.1108/03074350310768300>

Vejzagic, M., & Zarafat, H. (2013). Relationship between macroeconomic variables and stock market index: Coinegration evidence from Ftse Bursa Malaysia Hijrah Shariah Index. *Asian Journal of Management Sciences & Education*, 2(4), 94-108.

Wongbangpo, P., & Subhash, C. (2002) Stock market and macroeconomic fundamental dynamic interaction: ASEAN-5 countries. *Journal of Asian Economics*, 13, 27-51. [http://dx.doi.org/10.1016/s1049-0078\(01\)00111-7](http://dx.doi.org/10.1016/s1049-0078(01)00111-7)

Yau, H., & Nieh, C. (2006). Interrelationships among stock prices of Taiwan and Japan and NTD/Yen exchange rate. *Journal of Asian Economics*, 17, 535-552. <http://dx.doi.org/10.1016/j.asieco.2006.04.006>

How to cite this article:

Mohammed JashimUddin.,*et al.*2017, Causal Relationship Between Selected Macro-Economic Variables And Stock Market: A Case Study For Bangladesh. *Int J Recent Sci Res.* 8(9), pp. 19735-19740. DOI: <http://dx.doi.org/10.24327/ijrsr.2017.0809.0751>
