Stock market is a main pillar finance essay

Finance

The purpose of this study is to examine impact of macroeconomic variables on stock market performance by using the Stock Exchange of Mauritius as a case study. The study has made use of time series quarterly data spanning from 1999 to 2007 and techniques like co-integration and error correction model are used to find both short run and long run relationships. These analyses were carried out using Eview 7 econometric software. The finding of the study indicates that lending rates and Treasury bill rate have positive impact on the stock market performance. The exchange rate is negatively related to stock market performance, which indicates that investors are affected from the exchange rate losses, as a consequence of Mauritian rupee depreciation. The most significant contribution of this study is, it concentrated on stock market performance and macroeconomic indicators in a small island like Mauritius, as major studies have focused on advanced countries. Keywords: Macroeconomic variables; Stock Market; Time series analysis; Unit Root; Econometric Model; Mauritius.

CHAPTER 1: BACKGROUND AND OBJECTIVES

1. 1 Introduction

In the recent economic setup, the part of financial system is significant to the economic planning and development of an economy. The economic growth of any nation mainly depends on the growth of its financial system (Butt, 2010). Stock market is a main pillar of the financial sector of any nation as it aids to route savings from deficit sector to surplus sector. They are often termed as barometer of any nation's economy since they act as a mirror and reflect the change and pressure of the economy (Aman, 2010). Stock market of any nation is a true reflector of its economy (Khalid, 2012). A developed

and efficient equity market aids in the development of economy and it offers investors with an array of securities with varying amount of risk, return and liquidity apart from encouraging and enhancing savings and capital generation (Mohanasundarum and Karithikeyan, 2012). Gurley and Shaw (1967) emphasized the significance of financial system in channeling savings to investment. In line of this, Shaw (1973) also stressed on the job of financial relaxation in encouraging national savings and investment, through proficient distribution of resources, and accordingly promoting economic prosperity and development. There is general agreement among the intellectuals that stock market plays a pivotal role in the progress of an economy (Levine and Zervos, 1998; Adjasi and Biekpe, 2006; Hearn and Piesse, 2010). For example, it speeds up economic development by improving mobilization of local and international resources and encouraging investment (Bencivenga et al., 1996), aides assistance for growth oriented firms to generate capital at low rate (Marone, 2003) and decreases dependency on institutions like bank which is prone to interest rate variance as well as providing platform to channelize foreign investments (Yartey, 2008). It even provides an opportunity for venture capital companies to exit out of the business and liquidate their shares in local start-up ventures (Black and Gilson, 1999). It is considered as a vital institution of a nation and is of enormous concern to investors, shareholders and the government (Olweny and Omondi, 2011). A sustainable progression and development of an economy is possible through effective and efficient resource mobilization, hence funds should be efficiently mobilized and distributed to allow the economy to obtain optimal output and stock market plays a significant role over here (Osinubi, 2010). Raee and Talangi (2005) stressed that, presence

of an efficient financial market in allocation of human resources and capitals has an important function in a prosperous economy. By tradition, globally share market has been regarded as one of the main avenues of capital attraction and investment. It enables taking action in dynamic and developing industries with regard to cooperation, gaining of more earnings from liquidity (Sajadi, 2007). As the national economy develop capital investment of self-financed offer place to intermediated finance of banking institutions and after that for raising capital the establishment of stock markets becomes an additional source (Gurley and Shaw, 1955, 1960). Demirguekunt & Levin (1996) have inferred that stock markets, development & successfulness of particular financial intermediaries add on to the development and growth of an economy. Individuals are motivated or perceive incentive to raise their current savings in the stock markets because capital market provides different & changing risk characteristics maturity periods and return. Stock Market is the foundation of modern finance. They are the sources by which share values are ascertained to the equity capital of listed company. Share value provides shareholders with a measure of their capital and earnings, while the management of the listed companies is able to notice the outcome of their decisions as revealed in share price. The supposition that share markets efficiently generate price equilibrium creates the foundation of the concepts that trigger much of the discipline of financial economies. At a basic level, this market plays two main roles. The primary role is to offer large scale direct capital to productive divisions within a nation's economy. The second is to offer a platform, enabling stockholders to obtain liquidity when required, or to purchase stocks without having to subscribe to fresh issues. The two roles are closely

linked to each other. A large secondary market noticeably assists the primary function (Naughton, 2000). Moreover, the effectiveness of stock market development on growth can be observed in three possible ways: The first one is to increase the percentage of savings really invested, which is depended on the competence of financial system in the economy. The impacts of stock market on investment, through changes in share prices that reveal the marginal productivity of capital, should be positively associated with investment upsurge. A rise in the marginal productivity of capital is straight away connected to a rise in investment activities. The second way is to influence the private saving proportion, which is possible by enhancing the distribution of funds through information or risk pooling (Bencivenga & Smith, 1991; Greenwood & Jovanovic, 1990). The final way is to generate the social marginal productivity, which is possible as saving may go either direction. From theoretical side, many concepts have been developed to demonstrate the passages through which the financial sector development is impacted by economic growth. While from the empirical side, rising bodies of studies at different levels - company level, industry level and national level - have revealed the robust correlation between the financial market and economic growth. The development of a financial system is very closely correlated to the complete development in a nation's economy. Properly operating financial market attains efficiencies that offer decent and easily accessible information, lesser transaction charges and effective resource distribution thus enhances economic growth. However, many macroeconomic factors have substantial impact on a share market and its functions, growth, and part in an economy. Whereas, on the other hand, the central bank role, governmental policies and investor behavior influences the

financial market development. For example, monetary policy connects with share market growth through influencing money supply, interest rates, and investment activities in shares along with the market values of shares. When an expansion monetary policy is introduced, it facilitates money supply, lowers interest rates, and increases investment in shares and market value of shares. Fiscal policy can bring out similar effect by directly through the help of interest rates and investment. At the end, the influence of individual behavior is taken through the saving percentage where the lack of financial markets in economically deprived parts, where population with low incomes simply do not save and invest at great levels (Abdelbaki, 2013). Over past decades, the significance of stock market around the globe opened new avenue of research, into the stock market development and economic growth (Khalid, 2012). The correlation between macro-economic factors and stock market performance has been of main concern in the academic and practitioners' literature since many decades (Adam and Tweneboah, 2008). Investors presume that economic variables and events have significant influence on stock market movement and it is evident that stock prices are derived on the basis of macroeconomic variables (Khalid, 2012). Particular important macroeconomic factors such as exchange rate, interest rate, industrial out and inflation have been debated to be the contributing factor for stock price movements (Adam and Tweneboah, 2008). It is generally believed that stock returns are somewhat predictable, by utilizing publicly accessible information about macro-economic fundamentals. However, the exact cause and impact relationship between macro-economic factors and stock market performance is arguable. The empirical research regarding impact of macro-economic variables and stock market performance is varied

due to different data sets and methodologies used (Al-Jafari, Salameh, and Habbash, 2011). The Stock Exchange of Mauritius (SEM) has been in operation for more than 24 years and it was incorporated in Mauritius on 30th March, 1989. It is regulated by Financial Services Commission (FSC) under the Stock Exchange Act 1988. It is a member of the World Federation of Exchanges (WFE) and today it is one the leading Exchanges in the African Continent. It operates two markets one being the Official Market and the other being the Development and Enterprise Market (DEM). SEMDEX represents the index of all the listed ordinary shares (SEM, n. d). It is very critical for all the stakeholders, of Stock Exchange of Mauritius, to understand the determinants of a stock market performance. This research will empirically study the impact of macro- economic variables on stock market performance for Small Island like Mauritius.

1. 2 Research Questions and Objectives

1. 2. 1 Research Questions

Certain questions may assist us to have an improved understanding of what we are expecting. Drawing from the empirical literature review and study, the dissertation will focus on the following vital questions: What is the impact of micro-economic variables on performance of Stock price index? What is the impact the impact of Inflation rates on performance of Stock price index? What is the impact the impact of Lending rates on performance of Stock price index? What is the impact the impact of Exchange rates on performance of Stock price index? What is the impact the impact of Treasury bill rates on performance of Stock price index?

1. 2. 2 Research Objectives

The research objectives are as follows: To critically examine how macro-economic variables affect the stock market performance by using the Stock Exchange of Mauritius as a case study. To analyze the impact of Inflation rates, Lending rates, Exchange rates and Treasury bill rates on Stock Exchange of Mauritius. To assist stakeholders of Stock Exchange of Mauritius in decision making, considering the Macro-economic variables. To review and analyze the performance of the Stock Exchange of Mauritius. To examine relationship between macro-economic variables and stock market performance in a small island like Mauritius.

1. 3 Structure of Dissertation

All the basic requirements a research study has, such as literature review, research plan, analysis and results are part of this dissertation. Bearing in mind the objectives and questions, the researcher has planned and organized the whole work. A brief description of all the chapters is mentioned below: Chapter 2: Literature ReviewThis chapter includes a detailed literature review on relationship between macroeconomic variables and the equity market. It also includes comprehensive empirical evidence on this relationship. Furthermore, it separately reviews the relationship between different variables like inflation rate, exchange rate, interest rates with the equity market. Finally, it gives an overview on performance of Stock Exchange of Mauritius. Chapter 3: Research PlanThis chapter explains the research plan which includes research criteria, research perspectives, research design, research methodology, type of data and research ethics. It mentions the econometric model used to study the impact of

macroeconomic variables on the stock market performance. Chapter 4: Analysis and ResultIn this chapter a quantitative analysis of the secondary data will be carried out and documented with the help of econometric model. Different tests like unit root test, co-integration test and error correction model will be conducted and presented with help of tables. The results will be analyzed and interpreted in this part of dissertation. It will also compare the findings with previous research work in this field. Chapter 5: Conclusion and RecommendationsIn this chapter a summary of the results will be mentioned. Recommendations for the stakeholders of the stock exchange of Mauritius will be proposed.

CHAPTER 2: LITERATURE REVIEW

2. 1 Introduction

Over the years, the importance of stock market around the world opened new avenue of research, into relationship between stock market performance and it macroeconomic determinants. The correlation between macro-economic factors and stock market performance has been of main concern in the academic and practitioners' literature since many decades. This chapter will introduce detailed literature review on relationship between macroeconomic variables and the equity market. It even gives overview on performance of Stock Exchange of Mauritius.

2. 2 Relationship between macroeconomic variables and the equity market

Extensive literature are now obtainable that study the relationship between equity market returns and numerous macro-economic and industry factors in several equity markets and intervals. The relationship between stock market

performance and macro-economic variables has become very significant over a period of time. Importance for this study is mostly because share market has been regarded to have a significant role in a nation's macroeconomic development (Zakaria and Shamsuddin, 2012). Theories on finance and development have critiqued the leading neo-classical monetary theories and the counter arguments by Keynesian (McKinnon-Shaw, 1973). The neoclassical monetary growth models assume that bigger positive interest rate have a direct relation with the savings and investments. Over here, money is considered as a replacement for productive investments and real assets. While Pro Keynesian economists believes that low interest rates facilitates larger investment, income and eventually savings. McKinnon (1973) progresses a debate in favor of a harmonizing relationship between financial and physical assets contrasting to the substitutability concept by the neo-classicals in a criticism of the Keynesian theory. Paddy (1992) asserts that macro-economic and fiscal environment have an impact on securities market. Favorable macro-economic surroundings encourage the prosperity of business which drives them to a level where they can acquire securities for sustained growth. In general, performance of an economy is measured through real GDP growth rate, inflation rate, the exchange rate and fiscal position. The earnings on shares are majorly sensitive to future expectations and fundamentals. It is evident through studies that as an outcome of financial liberalization, the equity market becomes more sensitive to both internal and external environment. The major external variables influencing the share market return would be share prices in the global economy, interest and exchange rate. It has been observed from previous literature that the relationship between share returns and macro-

economic factors have gained immense attention over recent years in specific nations and macro-economic environment. The degree of earnings expected or gained from the capital invested is reliant on numerous factors. The major factors are internal conditions of the company and external environment. The internal conditions can be efficiency of management, kind of investment, type of capital required and so on, while external environment can be inflation, interest, exchange rate, price controls and political events among others (Butt, 2010). During the valuation process, apart from the evaluation of individual firms or shares, the macro-economic and industry conditions should be taken into consideration. According to psychologists an individual's success or failure can be affected as much by social, economic and family conditions as by inherited gifts. Extending the same concept, during the valuation of shares, the company's economic and industry conditions should be considered (Reilly and Brown, 2006). Hence, unlike the bottom-up approach, much importance has been given to the economic and industry condition for the firm's valuation process in the top down approach. Bottom-up approach defends that it is likely to find shares to offer greater returns irrespective of the economic and industry conditions. On the other hand, the top down approach considers that macro-economic and industry conditions majorly influence the aggregate earnings for individual shares, irrespective of the internal conditions of a company. This approach has been supported by numerous academic studies examining the impact of macro-economic factors on equity market returns. The macro-economic variables and the firm's industry conditions affect the value of a stock and its rate of return, apart from the company's individual characteristics and profit making potentiality. Hence, economic conditions would be considered as a priori of

risk that are applicable to all firms (Ozbay, 2009). In all probability the relationship between the two is well explained by Miller and Modigliani in year 1961 by the Dividend Discount Model compared to other theoretical stock valuation methods. In the model it is explained that current prices of a share is equivalent to the present value of all future cash flow to the equity share. Hence any economic variables which affect the expected future cash flow and required rate of return also affect the share (Adam and Tweneboah, 2008). Likewise, the volatility of share prices should also be related to the volatility of anticipated future discount rates and cash flows. As the market value of firm equity at the aggregate level is subject to the state of economic activity, it is possible that any volatility in level of uncertainty of future macro-economic environment would effect a change in share return volatility. In other term, share markets could be volatile just because actual economic activities change (Zakaria and Shamsuddin, 2012). Numerous studies and researches are carried out to analyze the relationship of macro-economic factors on the stock market performance in US and other countries (Khalid, 2012; Humpe and Macmillan, 2009; Ratanapakorn and Sharma, 2007; Chaudhuri and Smiles, 2004; Kim, 2003; Nieh and Lee, 2001; Cheung and Ng, 1998; Fama, 1981, 1990; Nieh and Lee, 2001; Mayasmai and Koh, 2000; Kwon and Shin, 1999; Ajayi and Mougoue, 1996; Mukherjee and Naka, 1995; Dhakal, Kandil and Sharma, 1993; Abdullah and Hayworth, 1993; Bulmash and Trivoli, 1991; Chen, Roll and Ross, 1986; Fama and French, 1989; Campbell and Shiller, 1988;). High inflation rate, huge fiscal deficits and real exchange rate over valuation are normally key indicators of macro-economic volatility, which restricts private sector savings and investment and hence affects in inefficient distribution of funds on the stock exchange

and therefore resulting its performance (Agenor, 2000). Though individual share prices may be associated to company specific reasons, the normal share market index is assumed to be affected by the overall economic conditions (Hsing, 2011). Among these the interest rate and exchange rate are the ones which have impact on stock market performance as they affect directly the state of corporate activity in the nation (Kyereboah-Coleman and Agyire-Tettey, 2008). Flannery and Protopapadakis (2001) examined the impact of macro-economic factors on share market performance and they concluded that these factors remarkably measure market risk, since most changes affect cash flows and position of firms and may leave an effect on the interest rate. A series of studies have been conducted in many countries like U. S, Europe and Japan. Several researchers have found evidence that stock performance depends on macro-economic variables like inflation rate, oil price, exchange rate, money supply, employment rate, consumer price index and the interest rate. Many investors take decisions based on these factors as they believe that these factors have impact on stock market performance. Numerous methods, techniques and models researchers have used to examine the relationship between the two (Khalid, 2012).

2. 3 Empirical Evidence

SR. NO

Author

Year

Study

Country

Frequency

Period

Model of study

Findings

11. Wongbanpo2. Sharma2001Relationship of stock returns and macroeconomic variablesSingapore, Indonesia, Thailand, Malaysia and Philippines

–

1985-1996Hypothesized model checked through Granger, Causality, Unit root PP and ADF tests. The study observed alliance between market returns and macroeconomic indicators for long and short run. 21 Norli Ali2001Impact of variation of Macroeconomic determinants on performance of stock pricesMalaysiamonthly1987 -1999, 1987 -1996Arbitrage Pricing Theory and Error Correction ModelHigh impact of Macroeconomic determinants has been found31. Li2002Research on Macroeconomic determinants and the correlation between Stock and Bond returnsG-7 countriesmonthly1980-2001Affine model and co-integration testMacroeconomic variables showed an impact on major trends instead of monthly trends41. Nishat 2.

Shaheen2005Long run co-movement between macroeconomic factors and Stock Market indexPakistan

-

1973-2004Vector Error ModelThe result indicates that there is causal co-movement between the economy and the stock market51. Gan 2. Lee2006Relationship between stock market index and macroeconomic factorsNew-ZealandMonthly1990-2003Co-integration test, Accounting Innovation Test and Granger Causality testLong term relationship exists between stock market prices and macro-economic factors61. Brahmasrene 2. Jinanvakul2007Impact of Macroeconomic variables on stock returns. Developed economies

-

1992 - 2003Unit root, Granger Causality and integration testsCo-integration was found between Market returns and other Major economic indicators71. Anthony Kyereboah-Coleman 2. Kwame F. Agyire-Tettey2008Impact of macroeconomic indicators on stock marketperformanceGhanaQuarterly1991-2005Co-integration and the error correction model techniquesRelationship exists between these variables81. Torso 2. Rjoub2008Co-movement between the macroeconomic variables and Stock Market PriceIstanbulMonthly2001- 2007Arbitrage Pricing TheoryMacroeconomic variables have no significant impact on ISE91. Emrah Ozbay2009Causal relationship between macroeconomic variables and stock returnTurkeyMonthly1998- 2008Granger causality TestThe macroeconomic variables cause the stock prices101. Mohammad 2. Hussain2009Co-movement between the macroeconomic variables and Stock Market

PricePakistanQuarterly1986- 2008Asset valuation model and Unit root testInformation of Macroeconomic factors has effect on the stock prices111. Ahmet-Büyükşalvarcı2010Effect of Macroeconomic factors on Stock MarketTurkeyMonthly2003- 2010Arbitrage Pricing Theory and multi regression modelMacroeconomic variables can lead to stock market return121. Tobias Olweny 2. Kennedy Omondi2011THE EFFECT OF MACRO-ECONOMIC FACTORS ON STOCK RETURN VOLATILITYKenyamonthly2001- 2010Exponential Generalized Autoregressive Conditional Heteroscedasticity (EGARCH) and Threshold Generalized Conditional Heteroscedasticity (TGARCH)Macro-economic factors affects stock return volatility. 131. Mohamed Khaled Al-Jafari 2. Rashed Mohammed Salameh 3. Mohammad Rida Habbash2011Investigating the Relationship between Stock Market Returnsand Macroeconomic VariablesDeveloped countries and emerging marketsMonthly2002-2008Various models including Granger Causality test and Pedroni panelco-integration testsThe empirical results show a significant causalrelationship between macroeconomic variables and stock prices for developed and emerging markets141. Aima Khan 2. Hira Ahmad 3. Zaheer Abbas2011Impact of macroeconomic Factors on stock PricesPakistanMonthly2004-2009Co-integration, Vector Error Correction Model and Variance decompositionAll variables tested except for money supply have significant impact151. Muhammad Aamir 2. Muhammed Akram 3. Muhammad Shafique 4. Muhammad Atif2011Impact of macroeconomic indicators on stock marketperformancePakistanYearly1995-2010Unit root test, Co-integration and Error Correction ModelSignificant impact on stock market in the long and short term161. Yu hsing2011Effects of Macroeconomic Variables on the stock marketCzech RepublicQuarterly2002-

2010GARCH modelStrong relation between macroeconomic variables and stock market. 171. Naliniprava Tripathy2011Relationship between Macro-economic indicators and stock marketIndiaMonthly2005- 2011Ljung-Box Q test, Breusch-Godfrey LM test, Unit Root test, GrangerCausality testAuto correlation in the Indian stock market and macroeconomic variable181. Josphat Kipkorir Kemboi 2. Daniel Kipkirong Tarus2012Macroeconomic Determinants of Stock Market DevelopmentKenyaQuarterly2000- 2009Johansen-Julius co-integration techniqueMacro-economic factors are important determinants of thedevelopment of the Nairobi Stock market. 19Muhammad Khalid2012Long-Run Relationship Between Macroeconomic Variablesand Stock ReturnPakistanmonthly2000-2010Co-integrationThe result of correlation shows that there is no significant positive correlation among these variables201. Zukarnain Zakaria 2. Sofian Shamsuddin2012Relationship between StockMarket Volatility and Macroeconomics VolatilityMalaysiamonthly2000-2010Bi-variate and multivariateVAR Granger Causality tests as well as through regression analysisAs a group, all macroeconomic volatilities were found nor causally or significantly related with stockmarket volatility211. Hasan Mohammed El-Nader 2. Ahmad Diab Alraimony2012The Impact of Macroeconomic Factors on Stock MarketReturnsAmmanmonthly1991- 2010Unit root test, normality test, OLS and ARCH/ GARCH ModelApart from RDGP all other variables have a negative role on the ASE returns221. Hussain Ali Bekhet 2. Mohamed Ibrahim Mugableh2012Investigating Equilibrium Relationship between Macroeconomic Variables andStock Market IndexMalaysiaYearly1977-2011Ng and Perron (NP) bounds statisticsMacroeconomic variables are co-integrated with stock market index231. Yu hsing 2. Wen-jen

Hsieh2012IMPACTS OF MACROECONOMIC VARIABLES ON THE STOCKMARKET INDEXPolandQuarterly2001- 2010GARCH model and ARCH modelSignificant association between macroeconomic variable and stock market index. 241. Abdelbaki2013Causality relationship between Macroeconomic variables and stock market developmentBahrainYearly1990- 2007Autoregressive Distributed Lag modelThe paper support the theoretical and empirical literature on Macroeconomic variables and stock market development nexus251. Zeynep Iltuzer2. Oktay Tas2012The Analysis of Bidirectional Causality between Stock Market Volatility andMacroeconomic VolatilityTurkey, Czech Republic, Brazil and IndiaVaried frequencyVariedMultivariate GARCH modelit is not wrong to say that there exits causal relation between macroeconomic indicators ofthe countries and their stock markets, but they are specific to countries dynamics261. Anokye M. Adam 2. George Tweneboah2008Macroeconomic Factors and Stock Market MovementGhanaQuarterly1991-2006Johansen's multivariate co-integration testand innovation accounting techniquesThere is co-integration betweenmacroeconomic variables identified and Stock prices in Ghana indicating long runrelationship271. Bilson 2. Brailsford 3. Hooper2001Impact of Macroeconomic variables for emerging stock marketEmerging economies in Latin America, Asia, Europe, Middle East and Africamonthly1985-1997Principal component analysis and multifactor models including integration and correlationThe explanatory power of Macroeconomic variables for market returns is not high although they explain to some extentTable : Empirical EvidenceSource: Various sources specified in the table

2. 4 Relationship between inflation and Equity Market

The rate of increase in a price index is known as inflation rate (for instance, a consumer price index). It determines the rate of change in percentage for the price level over a period of time (Olweny and Omondi, 2011). Mishkin (2003) suggested that the rate of decline in the purchasing power of money and inflation rate is almost same. It has been observed that savings and investment has been majorly influenced by inflation rate, through different sources. Normally, unexpected inflation disturbs the planning prospect of economic divisions. It decreases the real interest rate keeping all other variables constant. From the saving perspective, inflation has adverse effect on savings since it decreases the real interest rate and the interest rates have a positive effect on savings. Highly volatile inflation rate increases uncertainties in regards to future pricing and investments. Individual choose to invest in physical assets, if they find high amount of uncertainty in investment due to pricing instruments. Moreover, it has the characteristics of changing investment portfolios to short term mechanism as the investors are not able to forecast the future. Investors prefer to participate in short term investment instead of long term due to the high uncertainty in the inflationary conditions. This will obviously influence the need for long term investments and the profitability of participating in long term ventures (Kyereboah-Coleman and Agyire-Tettey, 2008). Rising inflation rate tends to raise the cost of living and a need of investment decreases while the consumption needs increases. This certainly affects the need for market instruments which causes decline in the size of stock traded. Hence, inflation is expected to have a negative effect on the stock market performance (Adam and Tweneboah; Kyereboah-Coleman and Agyire-Tettey, 2008). Even

the monetary policy reacts to the rise in the inflation rate with stringent economic policies, as they affect the nominal risk free interest rate. DeFina (1991) contends that nominal agreements that prohibit the sudden adjustment of the company's sales and overall costs avert cash flow to grow at the similar pace as the inflation rate. Therefore, a negative correlation is expected inflation and stock market returns. On the contrary, Yartey (2008) found no significant relationship between these two. There has been great study on the relationship between inflation rate and equity market, which resulted into large number of literature on the connection between these two factors. From the economic point of view, theories advocates relationship between these variables. Even though there are numerous studies on the relation between these factors, no general consensus has been gained whether the link is positive or negative. The causal relation between equity market performance and inflation rate is also ambiguous. The study has no general consensus on whether the causality moves from inflation rate to equity market performance or from equity market performance to inflation rate or whether bi-directional causality exists (Eita, 2012). There was a general belief, until 1970s, that inflation rate affects equity market returns positively or at least non-negatively. This assumption was made on Fisher's (1930) theory that real returns on equity market are not affected by inflation expectations. Accordingly two factors were considered to be positively related, which lead to assumption that stocks are hedge against inflation rate. Only after the late 1970s, it was discovered and believed that this relationship can also be majorly negative. The negative relationship was well justified by Fama (1981). A negative correlation between equity market performance and inflation rate specify that equity market is not hedge

against inflationary conditions. It was reported that in USA, shares have been weak hedges against inflation (Jaffe and Mandelker, 1977; Linter, 1973; Oudet, 1973; Bodie, 1976; Nelson, 1976). Geske and Roll (1983) suggested a negative link between equity market return and inflation rate. Rise in inflation rate has been estimated to hike the nominal risk-free interest rate, which in turn will increase the discount rate used in stock valuation process. The impact of greater discount rate will be leveled, if cash flows rise at the same rate. On the other hand, a negative impact will be experienced, if contracts are nominal and cannot restore quickly. Even, the experimental evidence advocates that high and volatile inflation rates increase the uncertainty in inflationary conditions and hence lower stock value. Additional study also backs the hypothesis that equity returns are negatively associated to both unexpected and expected inflationary conditions. Caporale and Jung (1997) reported a non-existence of negative correlation between these two variables. On the other hand, Chatrath et al., (1997) and Adrangi et al., (1999) documented partial support to the hypothesis that inflation rate and equity market returns are negatively correlated in the developing countries like India, Chile and Peru. Further Salameh (1997) found that there is no relationship between inflation rate and share prices in Jordan. Another study by Joo (2000) tested whether monetary policy is responsible for the negative correlation between these two variables. His observation concluded that around thirty percent of the witnessed negative correlation is due to the monetary revolutions. Many researchers made use of consumer price index as substitute variable to inflation rate, in their studies. Consumer price index was frequently used to show the products and prices about the overall public. Furthermore, Patra and Poshakwale (2006) observed that short run

and long run equilibrium relationships prevailed between the inflation rate and equity market prices for shares listed at Stock exchange of Athens. While, Zoicas and Fat (2008) documented that inflationary conditions has headed to the estimation of considerable relationships to the volatility of equity market. Another research by Suliaman et al., (2009) also reported that entire sale price index is positively and majorly linked to equity prices. Likewise, Antonio and Francisco (2009) carried out a research on the short run reaction of everyday share prices on the Spanish stock market to the declaration of inflation related news at the industrial level. It was reported that a positive and drastic reaction of share returns was observed in the event of bad news (i. e. the overall inflation rate greater than estimated one) in crisis, and also in the event of good news (i. e. a negative inflation news) in non-economic crisis. Durai and Bhaduri (2009) examined the relation between equity returns, output and inflation rate for the post deregulation period in India with the help of wavelet method. Its result indicated that there is a significant negative correlation between real equity return and inflation rate in the short and medium run.