Literature Review:

There have been several studies focusing on the extent of variables influencing the market index and their importance in including in the model. Some researchers resorted to classifying the variables depending on the relativity to the index taken for study. The selection of variables is different in each of the studies with varied time lines involving different countries. The study of impact of the macro-economic variables has been complex due the nature of interaction of different factors and the time lag to take effect. Due to the economic liberalization of countries, the cross border factors have been playing a significant role with contagion effects of economic conditions.

In the light of external factors gaining importance, some studies have been conducted to understand the relationship and quantify the impact. This would further add to the benefits of general investors and the governing bodies. Some of the findings from the previous studies on various aspects discussed have been listed below.

Sulaiman D. Mohammad et al. (2009) conducted the study on the Karachi stock exchange with influencing variables as foreign exchange reserve, foreign exchange rate, industrial production index, whole sale price index, broad money and gross fixed capital formation for the period of 1986 - 2008. It concluded that the foreign exchange rate and foreign exchange reserve significantly affect the stock prices while the others affect insignificantly.

Another study by Basabi Bhattacharya & Jaydeep Mukherjee (2002) explored the relationship between the stock market and Exchange rate, foreign exchange reserves and Value of trade balance in India. The researchers used unit-root tests, cointegration and the long-run Granger non-causality test to conclude that the BSE Index and the macro-economic variables exhibit no casual linkage.
The study that was conducted by T.P.Ghosh (2008) as a case analysis on NIFTY50 index attempted to predict the index using the bond index, future price of NYMEX light sweet crude, Nikkei 225, S&P500 and US$ / INR exchange rate. The study concluded that the appreciation of Indian Rupees has not affected the market growth and the Indian markets are influenced by the US market cues. Further, the study established that the crude prices and stock index are inversely related.

The study on Stock Exchange of Thailand by Sardar M.N Islam et al.(2004) concluded that the market indexes are determined by the interest rate, bond rate, foreign exchange rate, market capitalization, price to earnings ratio and consumer price index both in the short and long term.

In a research conducted by Jun Tu et al. (2011) to study the impact of US economic variables in predicting the Chinese stock market two conclusions were arrived depending period of study considered. The paper concluded that the economic variables of United States were not useful in predicting the Chinese stock market pre 2001 period. However, the results indicated that it provided significant predictability post 2001.

Dubravka Benaković & Petra Posedel (2010) analyzed the returns on fourteen stocks of the Croatian capital market taking inflation, industrial production, interest rates, market index and oil price as factors. The results indicated that the index was positively related to the stock returns and had the largest statistical significance for all the stocks. Further, interest rates, industrial production and oil price was positively related while the inflation was otherwise.

Khaled A.Al-Zubi and Hussain Salameh (2007) investigated the relationship between the macro-economic variables (Industrial production, expected inflation, unanticipated inflation, term structure) and its impact on the stock returns in the industrial sector in Jordan. The study concluded that the expected inflation and unanticipated inflation affect the stock returns while considering the returns without its dividends. However, unanticipated inflation is the only variable affecting the returns considering with dividends. Further, the evidence from the study suggests that there exists a long-run relationship between the variables but not short-term.
Randi Næs, Johannes A. Skjeltpor and Bernt Arne Odegaard (2009) analysed the return patterns of Oslo Stock exchange. The study concluded that the market, size factor and liquidity factor provided reasonable fit for the cross-section of Norwegian stock returns.

Alonso Gomez Alber (2006) studied the Mexican stock exchange with respect to the US markets. The variables were classified as local and foreign variables for the study. The empirical evidence from the paper suggested that the foreign factors were able to explain the cross-section returns in Mexico for both conditional and unconditional versions of the model. The paper concluded supporting the hypothesis of integration of the Mexican stock exchange to the US market.

Halil Tunali (2010) investigated the relationship between the macro-economic variables and stock returns in Turkish stock market using the Arbitrage Pricing theory framework. The study concluded that there exists a long run relationship between the basic macro-economic indicators of Turkish economy and the stock returns at different levels.

Further, the study conducted by Engsted and Tanggaard (2002) concluded a moderately positive relationship between expected stock returns and expected inflation for the US and a strong positive relationship for Denmark. Sharfe (2002) suggests that rise in expected inflation reduces equity prices in the US.

Bilson et al. (2001) tested the ability of the local macroeconomic variables (money supply, goods prices and real activity) in explaining the stock returns in 20 exchange emerging markets for the period 1985-1997. The results indicated that the exchange rate variable is clearly the most influential macroeconomic variable, and money supply has greater importance.

Griffin (2004), postulated that foreign inflows are significant predictors of stock returns for Korea, Taiwan, Thailand and India. This indicates that foreign investors are buying before market index increases. Further, the results indicated that contemporaneous flows are positive
and highly significant in India. FII and Stock Index show positive correlation, but fail to predict the future value.

Dr. Nishat (2004) studied the long term association among macroeconomic variables, stock prices and employed money supply, CPI, IPI, and foreign exchange rate as explanatory variable using Karachi stock exchange 100 index prices from 1974 to 2004. The result indicated that there exists a causal relationship among the stock price and macroeconomics variables. Most of the time series data is non-stationary hence unit root technique was employed to make data into stationary. Further, the result also indicates that industrial production significantly affects to macroeconomic variables. Granger causality test was used to find the correlation among the variables the results indicated that the interest rate is not granger cause by stock price.

Shahid Ahmed (2003) empirically investigated on SENSEX index price affects and concluded that the real and financial sector performance in Indian economy has influence in performance of the index using the data from the period 1997 to 2007. The study considered export, foreign exchange rate and foreign direct investment as variables. Granger causality test is used to find out the causal relationship between the variables. All the variables are Granger cause to stock prices.

Roa & Radjeswari (2000) conducted study incorporating a big number of macro variables in order to predict the asset returns. The study concluded that the factors that influence the returns of assets are industrial production, agricultural production, money supply, interest rate, exchange reserves and inflation.

Mukherjee et al. (2002) conducted a study on impact of FIIs in Indian equity market. The evidence suggested that the FIIs activities had a strong demonstration effect. The study concluded that FII flows tend to be caused by the return in the equity market. Gallagher & Taylor (2002) suggested based on the empirical study that the stock returns are negatively impacted by both the expected and unexpected inflation.
Lambrick (2005) examined the relationship between sixteen macroeconomic variables and the equity returns in Australian stock market. The sixteen variables were classified under five different heads namely real, monetary, labour variables, price level variables and external variables. The US dollar exchange rate and the composite leading indicator possibly decide the prices in stock market. Further, the impact of variables retail sales and industrial production hold true for the entire period of the study.

The study conducted by Chinzara and Aziakpono (2009) concluded that the stock returns and volatility in South African are linked to major world stock markets with US, China and Australia having greater impacts. Further, the volatility exhibits asymmetry pattern and stability over the period of time. However, they observed that there was a lack of evidence for risk premium hypothesis for the period of study.

The study conducted by Yu Hsing (2011) examined the relationship between stock market index of Hungary and relevant macro-economic variables. The study concluded that the stock market index of Hungary has a positive relationship with the real GDP, ratio of government debt to GDP, nominal effective exchange rate and German stock market index. Further, the evidence showed that the market index of Hungary was negatively related to real interest rate, expected inflation rate and government bond yield in Euro region.

Flannery and Protopapadakis (2001) studied seventeen macroeconomic risk factors by analysing the impact of those economic variable announcements on the level and the conditional volatility of the daily stock returns. They identified that six of them for price factors in nominal and real terms. The nominal category included three elements CPI, PPI and money aggregate while real category included the employment report, housing starts and the balance trade.

Chinzara (2011) investigated the relationship between the macroeconomic uncertainty and stock market volatility for South Africa. The study concluded that that the stock market volatility is significantly affected by the macroeconomic uncertainty. The volatilities in foreign exchange rates and short-term interest rates have significant impact while volatilities in oil price and inflation play a minor role in influencing the stock market volatility.
In the paper by Johansson (2009), the evidence showed that China has been experiencing increased level of integration with the major financial markets in the period overlapping with the period after China became member of World Trade Organisation. The study postulated that the impact of developed markets like US may increase over time on the emerging markets. Hence, the economic variables of the US may be useful in predicting the Chinese stock market.

The study conducted by Robert D. Gay (2008) examined the relationship between the stock prices and macroeconomic variables in Brazil, China, India and Russia using Oil price, exchange rate and moving average lag values as independent variables. The study concluded that the domestic factors have significant influence on the in emerging economies than the external factors.

Ramin Cooper Maysami, Lee Chuin Howe & Mohamad Atkin Hamzah (2004) examined the relationship between the macroeconomic variables and sector stock market indexes in Singapore stock exchange. The study concluded that the stock market in Singapore and the property index form cointegrating relationship with the changes in short and long term interest rates, industrial production, price levels, exchange rate and money supply.

Valeriano Garcia & Lin Liu (1999) examined the pooled data of fifteen developing and industrial countries to study the macroeconomic determinants of stock market development and market capitalization in particular. The paper concluded that the real income, saving rate, financial intermediary development and stock market liquidity are important determinants of stock market capitalization.

The study conducted by Emmanuel E Daferighe. & Samuel O Aje (2009) examined the impact of real domestic product, interest rate and inflation rate on the stock market value index of Nigeria. The study concluded that the reduction in interest rate and inflation rate resulted in increase of stock prices. Further, an increase in real gross domestic product impacts positively.
N’dri. Konan Léon (2008) studied the effects of interest rate volatility on stock market returns and volatility of Korean stock market. The study concluded that the conditional market return has negative and significant relation with the interest rates while the conditional variance has a positive but not significant relationship with the interest rates.

The study undertaken by Nathan Taulbee (2000) concluded that the real gross domestic product is a major determinant of the performance of the stock market index S&P 500. Further, rising unemployment rates significantly reduce the performance of the overall stock market.

Desislava Dimintrova (2005) investigated the link between the stock prices, exchange rate, fiscal and monetary policy. The study concluded that the interest rate parity condition affects the stock prices significantly.

The study conducted by Rapach, Wohar and Rangvid (2003) examined the predicting ability of macroeconomic variables in twelve industrial countries and concluded that interest rate as the most consistent predictor across the geographies.

Another study conducted by Ratanapakorn and Sharma (2007) investigated the long-term and short-term relationship between the S&P500 index and selected macroeconomic variables in the US over a period from 1975 to 1999. The study concluded that the long-term interest rate negatively impacts the stock prices while money supply, inflation, exchange rate, industrial production, exchange rate and short-term interest rate positively impact the stock prices in the long run.

Therefore, most of literatures are available with different results depending on the markets and the period under the study. Under the Indian context, the study of the variables in the light of stock index performance is relatively limited. Further, the previous studies view the variables in a different parlance. This research gap coupled with the self inquisitiveness opens for the thesis in this area.