III. Abstract

In general, macroeconomic variables capture the business cycles of an economy and reflect behaviour of the economy with or without any interaction with the world. On the other hand, stock market the mirror of an economy, deals with the share of claims on firm's assets and largely depend and fluctuate sharply to the changes in any political, financial or economic policies, events and news. Scholars also argue that the prices of the individual shares change due to lots of shocks transmitted by several expected and unexpected financial, micro and macro-economic variables shaped by the economic policy measures. Again, the impacts of the variables in formation of prices are not equal. Scholars found that it takes at least three to five quarters to reflect the monetary policies. The influence may be immediate or gradual in nature. Portfolio theory posits that the investors can diversify the risk save the systematic component of the risk. This systematic risk is argued to be the major source of investment risk as the unsystematic one is diversifiable, can be reduced if not completely. Hence, an extra reward, may be long-term in nature, is required to be ushered whenever the particular price of the share is influenced by the systematic financial or economic variables. Conclusive answer about which economic variables, if any, changes asset prices have not yet determined. Moreover, the influence or the relationship varies across the economies, especially in developing and underdeveloped economies and behaviour of stock market in relatively less developed and developing economies is unclear. Investigations in Indian context, the economy which is a good 'subject' of study for various economic reasons and events, seem to have virtually escaped the proper and wide attention of researchers. Hence, we know little about how our stock market responds to the changes in the macroeconomic variables and whether it behaves systematically or the change in the asset prices is driven by some other factors which are unrelated to fundamentals.

Any answer ,unlikely to change, is important in the sense that it may help individual or institutional fund managers to estimate, monitor and manage financial risk, price derivatives and find more clear solutions to the problem of optimal portfolio solution. From the policy planners, it may help to develop a better understanding of the potential macroeconomic determinants of systematic financial risk. The issue is important and warrants settlement for sound policy prescriptions and to feed the need of the investors.

Shift in the regimes in India attracted us to study the issue in depth and objectively considering a long time horizon. The objectives of the study, very specifically, are to assess the relationship amongst the select macroeconomic variables and stock market in the pre-liberalization and post-liberalization period. This study attempted to attain the objectives by using some widely used but robust statistical and econometric tools on the data collected for 54 years (1966-2019).

This study transformed all the select time series process by taking natural logarithm and estimated the entire tests with this log-level data. The relationship is studied by dividing the entire time period under the scrutiny (1966-2019) in to three sub-periods-(i) January, 1966- April,1991,(ii) December,1995- November, 2009 and (iii) December, 2009-December, 2019. The stationarity tests for all the variables under all the three periods suggest that all the variables are significantly integrated to order one, i.e, I(1)) at at least five percent level of significance. With the I(1) time series process we assessed the relationship between the select macroeconomic variables and stock market based on the cointegration methodology.

In our six-variable system, this study found some unique variations in the relation, causality and flexibility in the select variables and stock market in India. Unlike the pre-liberalisation period, the relation between long term government bond and stock market turned positive indicating the impacts of the shift in the policy measures which virtually supports the arguments of neo-liberalists and ‘Cross-asset contagion' effect cannot be denied. Resulted of the Granger causality test indicate that the past and current values of index of industrial production cannot influence the present and future values of stock market indices and vice versa in the pre liberalization period. But the condition found improved in the post liberalization era. Taking the variables jointly, the old and present values of all the variables can influence the present and the future values of Stock Market Index (SNX) and vice versa in the post liberalization period, whereas the causality flows only from SNX to all only in the pre liberalisation period. It is also found that, in the pre liberalization period, only Yield on Long-term (10-years) Government Bonds (YLGB), Index of Industrial Production (IIP) and Whole Sale Price Index (WPI) are efficiently transmitting their shocks to stock market, but, in the post liberalization period we found all macroeconomic variables are efficiently transmitting the shock to the stock market and vice versa. Furthermore, according to the results obtained in forecast error variance decomposition, stock market found to be flexible and more integrated in the initial phase of liberalization than the pre liberalization period. But, the stock market gradually turned more rigid and became almost unexplainable by the select macroeconomic variables in the ‘recent' post liberalization period. Unlike stock market, rupee-dollar nominal rate (FX) turned to be more flexible in the post liberalization period giving more scope to select macroeconomic variables to integrate.

The results derived and observations made by the study should be accepted with caution due to the inevitable bias and technical limitations of statistical and econometric tools used in this study.

The unique oscillating movements in the levels of integration in the pre and early period of liberalisation observed is a good issue to research in depth in future.