CHAPTER 2: REVIEW OF LITERATURE

The present chapter includes three strands of literature. First, studies which elaborate the problems of EMEs. Second is the literature on the relationship between the capital flows, exchange rate, GDP and stock prices. Third, voluminous literature which explains the relationship between the components of financial stability and capital flows, exchange rate, GDP and stock prices is presented. The studies have been reviewed which can provide a base to the present research and has given a direction to fill the gap identified from the done studies.

2.1 Emerging Market Economies (EMEs)

A nation is said to be emerging when it is progressing towards becoming advanced, as shown by some free funds flow in local debt and equity markets and the presence of some form of market exchange and controlling body. These generally do not have the level of market efficiency and strict standards in accounting and securities regulation to be on par with advanced economies (such as United States, Europe and Japan), but emerging markets will typically have a physical financial bodies including banks, a stock exchange and a unified currency. These are chosen by investors for the project of high returns, as they have faster economic growth in terms of GDP. But the investments are tend to have risk as they face political instability, domestic infrastructure problems, currency volatility and limited equity opportunities.

There are various aspects which can be studied. The review of some of the aspects has been done. Calvo and Mishrin (2003) in their study analyzed and explored the weakness of the exchange rate regime used by various nations especially the emerging market economies. They discussed the success features of EMEs, that in order to climb the success ladder, these nations are not required to follow any fixed regime, i.e. they can change according to the requirements which would essentially depend on the macroeconomic variables like fiscal stability, financial stability and monetary stability. The market characteristics define that it is emerging market or developed one (Belgrami, 1998).
2.2 Relationship between Capital Flows, Exchange Rates, GDP and Stock Prices

Capital Flows

Capital flows are found to play an important role in the economies (Aizenman et al, 2011). The foreign investment is a channel through which institutions affect long-run development (Alfaro, Kalemli-Ozcan and Volosovych, 2006). Further the reasons behind these flows were analyzed from literature. Mostly low interest rates developed nations tend people to invest in the alternatives where they see the prospects of incomes i.e. in developing nations (Calvo, Leiderman and Reinhart, 1996). Capital flows constitute FDI, FII and debts outstanding to the economy. The determinants of FDI were found by the researchers to be the government size, political stability, and openness towards the policies (Edwards, 1991 and Wei and Wu, 2002). Numerous studies were done using time series analysis of the capital flows. One of those is the study of Claessens, et al (1993) used time-series breakdown of balance of payments information for five industrial and five developing countries, they found that the labels "short-term" and "long-term" do not give any data about the time-series properties of the flow following more that long-term flows were often as volatile as short-term flows.

Furthermore, the urgency to read the nature of capital flows was felt when the structure and size of capital flows was heavily conditioned by development of local financial markets. This leads to the study of financial integration of EMEs with rest of the world. On the other hand researchers found that capital account liberalization impacts the growth only in more advanced stage of development (Arteta, Eichengreen and Wyplosz, 2003). It was found that if microeconomic imbalances are eradicated then development is seen by openness. But, this holds true in some studies only. Edison et al (2004) find that only three uncover an unambiguous positive effect of liberalization on growth. Similarly, Prasad et al (2003) survey 14 studies and find that only three of those studies classify a statistically noteworthy positive relationship between capital account liberalization and economic growth. This is reliable with the opinion by Eichengreen (2001) that the literature discoveries, at best, ambiguous evidence that liberalization has any impact on growth.

Further, when the studies were not able to find the unconditional positive growth effects of liberalization, many attempts were done to study that whether such effects were dependent on
other conditions and policies that accompany liberalization which the authors have called them as contingent effects. Kraay (1998) found that policy changes were not contingent with the growth effects of liberalization. The above statement was also supported with the study of Rodrik (1998) that developing nations are better affected by capital account liberalization and openness.

Therefore, it has been established that capital account liberalization works proper where there development prospects are present but provided if some macroeconomic imbalances are controlled. So, EMEs one of the constituent can be capital flows. But still this link cannot be established clearly. When review was done, it was seen that the author Henry (2007) presented two strong views. First, the IMF’s AREAR-based measure of capital account liberalization used in several studies is fraught with imperfections. Second, the common econometric specification and data used in previous studies test for permanent effects of capital account liberalization on growth, while theory only suggests a temporary growth effect and a permanent level effect. His research brought in focus some essential points that capital account liberalization effects growth which should be done for temporary duration of time. On the other hand effects should be permanent.

In the work of CGFS papers, one major aspect of capital flows was found. It was the span of time of capital account liberalization. Indeed if it done for long term, its effects on EMEs should be recast in terms of its effect on levels of aggregate economic variables and on welfare. In order to continue with the same attempt to study the effects of capital account liberalization on economic activity in EMEs, literature also introduced some collateral benefits of capital account liberalization. According to this literature, the benefits of capital account liberalization do not just operate through the cost of capital and investment. Opening capital accounts serves as an important catalyst for a number of indirect benefits. These indirect benefits include development of the domestic financial markets, improvements to local institutions, and better macroeconomic policies (Kose et al, 2006). Further, it had also been seen that capital account liberalization has increased total factor productivity which in turns increases output (Prasad, 2008).

Further in the report CGFS, macroeconomic factors which determine the volume and composition of capital flows, are regarded as volatile in nature, due to changing attitude of investors as they want to have the best returns. Mohan et al (2009) in his speech gave this
introduction that volatility of capital flows is due to the moving of people in heard for minimizing risks and maximizing returns.

In order to determine the nature of capital flows, it becomes necessary to study the factors which cause the capital to flow from one country to another. Ahmed and Zlate (2013) found in their study that growth and interest rate differentials are important determinants of capital flows between developed and developing economies. Even the role of 2008 global crises had been inevitable in causing volatility of capital flows. Singh (2007) brought another perspective towards the reason of investment of Indian corporates in foreign markets. He found that due to interest rate differential theory and credit conditions, Indian corporates were making investments. This was supporting the arbitrage theory of investments.

Also authors Fiess and Byrne (2011) in their recent study determined that US interest rates are causing the capital flows in EMEs. International body IMF in its panel data approach found that loose policy following made the flow of capital in the developing economies. Other determinants like risk protection, capital control measures were the determinants of capital flows. Some of the researchers have tried to see the impact of crises on the capital flows to the country and suggest solutions in order to fight that. Research by Suchanek et al (2010) looked at the same issue. They found that crises significantly influence macroeconomic outcomes: the crisis was preceded by appreciation pressures stemming from strong capital inflows and global liquidity, which in turn, culminated in higher asset prices. Authors Arteta, Eichengreen and Wyploz (2001), explained that capital account liberalization affects more than it helps. They focused on the relationship between capital account liberalization with development when the previous is measured in an economically meaningful way. Further they extended their study to know how strong this relationship remains and in what conditions to know that whether these are conditions specific. Their evidences also showed that capital account liberalization id strong and effective in high income countries. Also, the study of Quinn (1997) reports a positive correlation between capital account liberalization (the change in capital account openness) and economic growth. The causes of capital flows are US business cycle and shocks to foreign interest rates, in Korean and Mexican markets (Ying and Kim, 2001).

Several studies focused on identifying and analyzing the determinants of foreign investment. One of them, Agrawal (1997) examined the determinants of foreign investment (FPI) and its
influence on the country’s economy in six emerging Asian countries. He used regression which gave results that inflation rate, exchange rate, index of economic activity and the share of local capital market in the world stock market capitalization are four statistically noteworthy factors of FPI. He found mixed results where first variable had negative coefficient while the last three variables possessed positive coefficients.

Singh (2009) elaborated the various aspects of the capital inflows to India and their policy implications which were held in the literature review which said that the huge surge in international capital flows since early 1990s had created unprecedented opportunities for the developing countries like India to attain quicker economic growth. International financial institutions regularly advise emerging countries to accept policy regimes that inspire capital inflows. Since the introduction of the reform process in the early 1990s, India has witnessed a significant increase in capital inflows. The size of net capital inflows to India increased from US $ 7.1 billion in 1990-91 to US $ 108.0 billion in 2007-08. But this global market had posed dangers which give rise to global uncertainties and challenges to foreign and exchange rate management.

Mohan et al (2009) presented a detail analysis of Capital Flows in India. He explained various capital flows coming to India and their policy implications. FDI and FPI which comprises of equity flows, are main types of non-debt creating flows. Also, it has been observed that India has received more FPI than FDI in recent years. He elaborated the concept of external commercial borrowings (ECBs), trade credits as the part of debt creating flows. Furthermore, he has explained the exchange rate management through capital flows, where interest rate arithmetic has been explained. Fluctuations in the capital flows, impacts the exchange rate, monetary system, liquidity and financial stability of the economy (Mohan, 2007). Sterilization can be used as a tool to manage the impact of foreign flows on monetary system. Further, capital account liberalization being the important factor helps in managing the capital flows and hence maintain the financial stability (Mohan, 2008).

Capital flows and its impact

A very important aspect was studied by Korinek (2012) which talks about welfare-theoretic case. The author says that capital flows have many negative externalities as like environmental pollution if not regulated. The author studied different scenarios of capital flows which come in
different forms. The author also points out that policy measures for regulating capital inflows ought to be frequently adjusted to meet variations in the financial vulnerability of the particular economy. The author analysed that when the externalities of foreign capital rise during booms and when leverage increases and financial imbalances build up, and new capital inflows create smaller externalities after a crisis has occurred and economies have de-leveraged, optimum capital flow mandate should therefore be strongly procyclical. Furthermore, the study of Reddy (2004) explains that capital account management is an important function among the monetary tools of the central bank of an economy. It is important because these make the financial stability of the economy to dwindle. It is because of the volatile nature of capital flows, which causes a nation with various problems and in order to tackle these one is required to formulate and follow pricing and administrative measures. The author further says that the economy should check various conditions and then follow the regime of capital account liberalization.

Management of capital flows

The study of Jones and Gallagher (2012) proposed a counter-cyclical approach to manage and tackle huge capital flows in the economies. They provided that the use of macro prudential measures would eliminate the systemic risk of volatility in capital flows. Some of these measures are capital control taxes, reserve requirements, and other capital account regulations. In fact, the work of Ostry et al (2012) provides the use of both prudential and macroeconomic policy to be suitable for the control of flight of capital flows. Furthermore the study of Braasch (2012) highlights the advantages of global checking of international capital flows. Global Monitoring ought to concentrate on all angles that add to a better appraisal of the stability of the financial framework all in all. This requires a superior comprehension of how the principle worldwide players and drivers of global capital flows carry on and how that conduct changes the structures of money related markets. The author calls for a more intensive investigation of the part and conduct of institutional financial specialists. In his view, this ought to wind up a noteworthy part of the observing of worldwide capital flows. Braasch (2012) contends that a enhanced knowledge of investors spread worldwide and their portfolio methodologies and rebalancing exercises will empower money related powers to better recognize the sources of capital flow volatility, contagion effect, and spillovers in the countries. This further will help the decision makers in the economy to better design the framework in response to these shocks and crises transmission channels.
Furthermore, the declarations in these markets regarding economic growth, capital accumulation, productivity growth, were found to affect the stock market liquidity (Levine & Zervos, 1998).

**Determinants of Exchange Rate**

**Exchange Rate and Oil Prices**

Moreover, Coudert et al (2008) aimed to test whether there is a stable long-term relationship between oil prices and the U.S. effective exchange rate, stated in real values. To this end, the author performed co-integration and causality tests between the two variables. His results showed that causality runs from oil prices to the exchange rate. Moreover, as he investigate the channels through which oil prices affect the dollar exchange rate, he found out that the link between the two variables were transmitted through the U.S. net foreign asset position. On the contrary, the study of Kaur and Nathani (2013) provided that oil prices do not impact the exchange rates in OPEC nations.

In addition to this, Aliyu (2009) examined the effect of oil price shock and real exchange rate impulsiveness on real economic development in Nigeria on the basis of quarterly data from 1986Q1 to 2007Q4. Findings showed that oil price shock and appreciation in the level of exchange rate exert positive impact on real economic growth in Nigeria.

Also Adetiloye, et al (2010) investigated the bilateral relationship among the official and parallel exchange rates and the consumer price index and finally to know the factors which motivated the imports in Nigeria. They found that there is advanced optimistic association among the ratio of imports and the index than exist among the parallel and official rates. Huang et al (2010) used the two-step regression approach to show that exchange rates could affect the crude oil price disturbance, and therefore equilibrium oil prices and found significant two-way causal relationship between such dynamics and the exchange rate.

Additionally, the study of Wang (2010), using daily data and time series method, showed that there exist co-integrations among fluctuations in oil price, gold price and exchange rates of the dollar vs. various currencies, and the stock markets in Germany, Japan, Taiwan and China indicating that there existed a long-term stable relationships among these variables but just reverse results in US context.

**Determinants of GDP**
Furthermore, other dimensions for understanding such relationship were looked into. One such effort was by Chen (1991), who identified the determinants of GDP, where production growth, term premium, short term interest rate and market dividend price ratio, were found to be correlated with the growth of the economy.

**Determinants of Stock Prices**

The beta of the stock markets is affected by the macroeconomic factors, which give risk to the market Clare et al (1994). This was proved in the US market where 840 stocks were taken as sample for the period of 1983-1990. This relationship was studied in Japanese markets also, where Mukherjee and Naka (1995), using VECM modeling, explained the co-integration between the variables and stock markets.

The study of Bailey et al (1996) examined the ability of a set of economic factors to describe cross-sections of regular Philippine stock returns. They included indicators from Philippine currency and money markets to proxy for currency and political risks. They used conventional tests and found that there existed no noteworthy premiums for market risk and three extra factors through the past decade. Further, In order to understand the stock market behavior one needs a model in which investors’ risk aversion is both high and varying, such as the “external habit-formation model” of Campbell and Cochrane (1995). A very fine evidence of the stock markets analysis was presented by Campbell (1996), where US stock markets was linked with ‘equilibrium asset pricing theory’. Lawrence (1997) used neural networks in forecasting stock market prices explained the factors which impact the stock market.

Further extended, Ahmed (1998) focused on the growth of Bangladesh stock market in terms of market capitalization, market fluidity, market awareness, number of programs, instability in the market index and foreign portfolio investment. The study found that key indicators were significantly correlated. The author analyzed concluded Bangladesh stock market was growing with a small market size relative to GDP and was characterized by poor liquidity and high market concentration. The evidence of long run co-movements between five national stock market indices and measures of combined real activity comprising the oil price, money, output and consumption, was found using Johansen co-integration technique (Cheung and Ng, 1998).

Bin (2010) had extended the studies of Faff and Oliver (1998) and Faff (1998) to study the empirical performance of a linearised version of the classic CCAPM in the Australian market by
employing more recent data and utilizing 25 size/BM portfolios as well as industry portfolios. The projected results displayed that there exists a statistically positive estimate of the market price of consumption risk, which suggests that an asset’s expected yields increase with its consumption risk.

The efficiency of market was a factor of stock prices determination. The study of Malkiel (2003) inspected the outbreaks on the efficient-market hypothesis and the connection among predictability and effectiveness. He established that the stock markets were more effective and less anticipated. Extending it further, Khan & Khan (2010) tested the efficiency of the Indian Capital Market in its Efficient Market Hypothesis (EMH) in relation to the impact of Foreign Institutional Investors (FII’s) largely on the Indian Capital Market. To extend the study they used National Stock Exchange (NSE) and Bombay Stock Exchange (BSE) monthly averaged prices and FII net investment data varying from 1st April 2000 to 30th April 2010 and used Karl-Pearsons’ Product Moment Correlation Coefficient (Simple Correlation) and linear regression to analyze to analyze and determine the degree and direction of the relationship between the variables involved. They found that the FII’s do have significant impact on Indian Capital Market, which lead to the conclusion that Indian Capital Market was semi-strong form efficient.

Driesprong et al (2004) analyzed that the certainty effect was less strong for oil linked sectors. In general, however, the predictability of stock returns using oil price changes was substantial: in his thirty-year sample of monthly data for developed stock markets, he found statistically and economically significant predictability. For this, shorter time series of emerging markets he obtained similar results. These results were robust with respect to different kind of oil prices he consider, well-known calendar effects and other economic variables that were known to forecast returns.

Also the fact of trading caused by investors’ speculative motives could help explain a significant fraction of the price difference between the dual-class shares was analysed by Mei et al (2009) who showed several implications of the joint effects of short sales constraints and heterogeneous beliefs on stock prices and trading volume theories using a unique data sample from a market with stringent short-sales constraints and perfectly segmented dual-class shares.

**Capital flows and stock prices**
The capital flow from foreign investors during the period of three months in 1997, when the Korean economic crises broke out, was seen to be negatively affecting the stock markets (Choe et al, 1994). Furthermore, Huang et al (1994) specified that the expected quote return was positively linked to the deviation among the transaction price and the price midpoint while the estimated transaction return was negatively related to the same indicators.

Likewise the study of Singh and Weisse (1998) examined stock market development and portfolio capital flows in the context of less developed countries. Their study included the analysis of role of stock market in financing growth along with the implications of stock market volatility and lastly on the interactions between the foreign exchange and stock markets and finally recommended that LDCs should promote bank-based systems.

Capital Flows are affected by the cyclical nature of the interest rates (Reinhart et al, 1996). This was true in Asia and Latin America, where policies and developments determined the capital inflows. Also, in the crisis period, the investor psychology derives the capital flows (Waknis, 1997). Furthermore, the information advantage influences the returns on foreign assets positively. This means the domestic investment can also derive the stock markets. Also, this leads to the decision making by the foreign direct investments and portfolio investments, towards the time to make investments (Brennan and Cao, 1997). In fact the commodity market impacts the stock market movements. Specifically, the oil prices changes were used to hedge risk of stock market (Faff et al, 1997). Further, the determinants of such flows were determined, where both domestic and global factors affect the portfolio flows in Latin America and Asian countries during 1988-92 (Taylor and Sarno, 1997).

Some studies analyzed the flows and their relationship with other economic variables and concluded that the flows were highly correlated with equity returns. The FIIs would help the local investors and also found that domestic equity returns were the sole driver of the above flows since crises (Chakrabarti, 2001).

A few studies examined the trend and alignment of capital inflows, moving pattern of financial markets in view of globalization, determined the influence of domestic financial policy indicators on international capital flows, in the same light Sethi, Patnaiek et al (2004) found that Foreign Direct Investment (FDI) affected the economic growth negatively. It was also revealed that Foreign Portfolio Investments affected inversely. Further studies inspected the nature of the
underlying relationship between stock returns, net foreign institutional investment (FII) and exchange rate in India.

Likewise Toda and Yamamoto (1995), had major findings were that (a) a bi-directional causality exists between stock return and the FII, (b) unidirectional causality turns from change in exchange rate to stock returns (at 10% level of significance), not vice versa, and (c) no causal relationship exist between exchange rate and net investment by FIIs.

Furthermore, Babu et al (2008) examined the dynamic interaction between FII flows and stock market returns in Indian stock market. They used daily data from January 2003 to February 2007 then applied VAR framework and Granger causality test, found the presence of bidirectional causality among FII flows and stock returns. Additional analysis over impulse reaction utility indicated that FII flows were more stock return driven. They also found support for information revelation hypothesis and momentum trading hypothesis.

Some other studies studied the role of FII, as by Jain et al (2012) also provided the evidence of the relationship between the stock markets and FPI. An important analysis was provided by the work of Sengupta and Sengupta (2012), which explained that every feel good factor of the economy was linked with the management of volatile capital flows. They explain the measures to minimize the risks, where capital account liberalization, sterilization processes can be adopted, in order to manage the capital flows volatility. Furthermore, asymmetric information represents the approach which can help in managing foreign exchange market mechanism. This is in lieu of avoiding the pressures of currency appreciation, and hence results in building and accumulation of the reserves. It was also provided that sterilization processes for this management, sometimes leads to improved monetary figures and hence resulting in grasping inflation. This helped them to conclude that selection of flexible exchange rate regime is fully dependent on the flow of monetary policy and the external environment shocks coming from the volatile exchange rate.

**Capital Flows and Economic Growth**

In addition to the above review Sethi et al (2007) found that Foreign Direct Investment (FDI) was definitely moving the economic growth direct influence, while Foreign Institutional Investment (FII) was adversely disturbing the growth. The pragmatic analysis by means of the time series data between April 1995 and December 2004 showed that FDI plays definite role in backing to economic growth. The study of Chakraborty (2007) provided the nature of FII flows
across national boundaries being volatile should be encouraged in narrow and shallow Indian market so for the same purpose he had studied direction of causality between FII flows and Indian stock market returns using data on both the variables from over the period April 1997-March 2005. The results came to be that there was strong positive effect of FII’s flows on Indian stock market and hence it was concluded that FII can be encouraged. Other studies supported the apprehension and confirmed it by analyzing the relationship of FII investment with economic growth of India, in addition to comparative analysis of preferred investment stock of FII.

Furthermore, the work of Sethi and Sanhita (2009) attempted to describe the effects of private foreign capital inflows (FINV) on some macroeconomic indicators in India by the time series data from April 1995 to Dec. 2007. The Granger causality test showed unidirectional causality from FINV to Exchange Rate (EXR) and bi-directional causality from FINV and growth (IIP) implying that Foreign Direct Investment (FDI) is positively affecting the economic growth, while Foreign Institutional Investment (FII) is adversely distressing the growth.

Bohra and Dutt (2011) focused on the flow of foreign portfolio investment in India and determined the fluctuations in BSE due to this. They found that there is positive relationship between the variables and the trend says as and when the FII are encouraged those have followed the capital flows and increased the economic growth of the country. Even the cross border investments were highlighted in review which stood as one of the major factor playing role in economic growth. Many empirical studies were done which determined the relationship between the macroeconomic variables. This relationship understanding helps the investor to take the decision regarding the investments (Sharma, 2011) studied the issue of co-movement between Asian emerging stock markets and developed economies using co-integration with the objective of finding out the potential for diversification in certain Asian countries and United States of America.

**Capital Flows and exchange rate**

Further, the study of Opoku-Afari et al (2004) explained the causal relationship existed in capital inflows and exchange rate. Also, they found that change in technology; terms of trade also cause the exchange rate fluctuations. In short run, exchange rate is affected by the trade between the nations. This implies the effect of the change in exports. Even policy ineffectiveness and rigidity, affects the exchange rate alignment with the equilibrium rate.
The work of Dua and Sen (2006) explained the relationship between real exchange rates and level of capital flows. They also examined the role of monetary and fiscal policy indicators for the period of 1993 to 2004. They used variance decomposers, which revealed the determinants of exchange rates. Also, government expenditure, current account surplus and money supply were found to be important determinants of the exchange rates. Chakrabarty (2006) analysed quarterly data for the period 1993 to 2003 which showed that net capital inflows had been volatile. The paper analyzed the Indian market keeping liberalization as a major reform and examined how capital inflows adjusted to changes in the real exchange rate and other macro-economic variables in India since 1993. The econometric consequences founded that an error-correction tool was operating between net inflows of capital and the real exchange rate and a co-integration relationship existed. It was found that co-movement in these variables was due to intervention of the Reserve bank of India in the foreign exchange market, which helped to prevent the volatility of the real exchange rate in spite of the volatility in net inflows of capital.

Furthermore, the study by Mishra and Pradhan (2010) looked at dynamics of such cross-border portfolio investment in the context of economic growth of the country. They had tested the causality between foreign institutional investments and the real economic growth in India over a period 1993:Q1 to 2009:Q2 using Granger Causality technique in the VAR framework and found that there exists a bilateral relationship between the two variables.

**Capital flows and macroeconomic variables**

Study of Prasad et al (2003) provided a candid, systematic, and critical review of recent evidence on this complex subject. He stated that unless a theoretical assumption, financial integration and economic growth cannot be linked. Further, financial integration explained that higher the consumption higher will be financial integration in developing economies especially. Also, there are other factors which are affecting such relationship, which are needed to be identified.

Authors Ahmed and Masood (2009) attempted to analyze the behavior of some macroeconomic indicators in reaction to Total Capital Inflows in India by means of quarterly data for the period 1994-2007 which was done in two sections comprising first one the analysis of trend behavior of macro variables except NEERX, NEERT and CAB and the second section included empirical analysis of behavior of some macroeconomic variables using Granger Causality and co-integration test.
The literature review also gave a light to the movements of the capital flows and discussed their implications for economic policy. Like, the study of Kohli, (2001) documented trends in movement and contents of capital flows into India, examined the impact of these flows upon key macroeconomic variables in the economy. The author found that inflow of foreign capital resulted in a real appreciation and had a significant impact on domestic money supply. Furthermore, these trends in capital flows were also related with some other macroeconomic variables. In the same light, Mody et al (2001) studied capital flow estimates of 32 emerging countries by means of a vector error correction framework built on underlying domestic (pull) basics and international (push) factors. His rigorous work over literature said that pull factors had a heavier weight in determining these capital flows. However, short-term dynamics of capital flows can be expressively influenced by peripheral developments. Simulations below many economic scenarios displayed that while monetary variables (such as the US interest rate and high-yield spread) were important, real US activity might be even more potent in influencing capital flow movements.

In addition to this, the study of Singla (2011) examined the determinants of Foreign Direct Investments (FDI) inflows in India for which they had considered several macro-economic variables such as stock market, foreign exchange rate, Index of Industrial Production (IIP), Foreign Institutional net Investment (FIIs), Industrial Production and foreign exchange reserves for the period April 1993 to March 2010 and try to make a link between these variables and FDI inflows by using correlation and multiple regression analysis which revealed the results that FDI inflows depend on all the above macroeconomic variables.

Some studies provided a depth insight of the relationship between oil prices and foreign exchange rate relationship, as the study of Gupta and Sirohi (2011) gave very important results. They had conducted their study in three scenarios, first, if oil prices continue to rise or if FII money “exits” because of a crisis of confidence. Based on past evidence, even a moderately orderly outflow of USD 15 billion of FII money over a year might effect in the INR belittling by 22–30%. This would suggest an exchange rate in the range of INR 55–60 to USD 1. This implied that capital outflows would seriously impact businesses and government, when import payments will be unaffordable. Furthermore, if FPI continued to flow in the country, rupee value will improve. An appreciating Rupee would make imports cheaper and lead to better managed deficits and inflation. This will result in positive exports, where other sectors like IT sector
would call for government intervention. Also, if exchange rate keeps growing, India will improve its position in global markets. The government’s efforts to improve agricultural infrastructure bore the fruit in the longer term and inflation declined. The rate volatility do not source any main interruption in the trade environment.

Kohli (2004) examined the impact of capital flows on the domestic financial sector in India. The author found that inflow of foreign capital had a important effect on domestic money source and stock market growth, fluidity and volatility. Also, the study of Bose (2004) explained that due to liberalization FPI has significantly increased during the period 1999 to 2004.

Nath and Reddy (2002) used last 13 years statistics to find out if there exists any long term process in the INR-US$ Exchange Rate. The results of variance ratio revealed the possibility of a random walk in 3 months’ time bucket whereas for other time periods have each mean reverting or persistent tendency and the array is also not evidently recognized.

**Relationship between exchange rate and stock prices**

Late research has revealed some insight into the worries of fund managers in regards to the effect of net flows of foreign financial specialists on domestic markets. Specifically, studies have analyzed the degree of transmission of economic stuns starting with one area then onto the next locale of the world. Analysts have likewise inspected whether the related value weight impacts are lasting or interim. These have been explaining the exchange price of the nations, along with moving the funds from one country to another. The stock markets flooded with foreign funds are sometimes found to be affected by such flows, in the recent scenario. But, in the preliminary phase of the liberalization and globalization, the study of Chen (1983) found no substantial effect of exchange rate (between further variables) on stock prices in a set of nine manufacturing countries. On the contrary, the study of Solnik (1987) found that stock market behaved according to the change in the macroeconomic variables. The changes in the interest rates, inflation rates, industrial production, were generating significant results in stock markets.

The study carried out by Soenen and Hennigan (1988) further explored the existence of the negative interaction between US dollar effective exchange rate and US stock market during the period of 1980-86. The reason for the existence of such relationship was explained by Lamoureux and Lastrapes (1990) that due to presence of Autoregressive Conditional Heteroskedasticity (ARCH) in the daily stock returns, the volume of the trade helps in knowing
the direction of the relationship stated above. Further it was observed that, interest rate changes and exchange rate information was reflected from the prices of the shares at the Hong Kong markets, for the period 1986-1991 (Mok, 1993). The above literature was supported with the evidence of the relationship between exchange rate and stock prices by the study of Abdalla and Murinde (1997). They found the existence of unidirectional causality from exchange rates to stock prices in India, Korea, Pakistan and the Philippines markets.

Evidence also recommended more influential long-run as well as short-run causative associations in the period 1993-2003 than during 1970-1992. Causalities appear to be primarily unidirectional with a direction running from stock prices to exchange rates in EU-member nations using co integration and granger causality analysis (Stavárek, 2004). The study of Tahir and Keung (2004) analyzed the relationship between four stock indices and exchange rate in Karachi Stock Exchange (KSE). After checking the stationarity of the data Johanson’s co-integration technique was applied. The results obtained provided no co-integrating relationship among the variables which meant that stock indices and exchange do not move together in the long run. Further it was known that causality run from general stock prices to exchange rate and vice versa by applying Granger causality test. In addition to this, Zia and Rahman (2011) examined the dynamic connection among stock market index and exchange rate by using Engle-Granger Co-integration test for the data varying from Jan 1995 to Jan 2010. The results indicated no causal relationship.

Also, the study of Dimitrova (2005) tried to explain the bilateral causal relationship between the foreign exchange rate and stock prices. He found that it was positive when equity prices were the first to fluctuate and negative when currency prices were shocked first. He concluded that because of the joint causality, a collapse in the stock market would trigger exchange rate appreciation.

In the same light Abdel et al (2008), considered the linkage among stock prices and exchange rates in four Middle East emerging markets. They found that for the countries of the sample oil prices emerge as the dominant factor in the above relationship. When we focus on the extended sample we do not detect evidence of co-integration between stock prices and real exchange rates, or of co-integration among stock prices, real exchange rates and other exogenous variables such as the US stock price or the oil price. The study by Hye et al (2009)
used the robust time series tools in order to estimate Pakistan’s money demand function for
the period 1971:1-2006:4. He found that there were four co-integrating vectors in money
demand, interest rate, economic activity, inflation, stock prices and exchange rate. Important
findings of this paper i.e. stock price have positively and statistically significant wealth effect and exchange
rate insignificantly effect on money demand in the long run. But in the short run the inflation has
negative and significant effect on money demand.

Similarly the relationship between macro-economic indicators and stock market prices in
Pakistan using the data from June 1990 to December 2008 was conducted by Ali et al (2010)
who found co-integration between industrial production index and stock exchange prices.

Also the study of Rahman (2009) deduced that exchange rates and stock prices data series were
non-stationary and integrated of order one. The Johansen and co-integration results showed that
there was no co-integrating relationship between stock prices and exchange rates. Also by
application of Granger causality test they found out that there is no way causal relationship
between stock prices and exchange rates in the countries.

The study of Olugbenga (2012) investigated the effects of exchange rate fluctuations on stock
prices in Nigeria. This was done using Johansen Cointegration Test. They also used bi-variate
causality analysis which also represented the positive relationship between stock market
performance and exchange rate. The results of Granger Causality explained that the causality ran
from the exchange rate to stock market performance, indicating the fluctuations in Nigerian
Stock Market were also due to the performance of the exchange rate.

Also, Akar (2011) investigated the relationships between the stock exchange, gold, and foreign
exchange returns in Turkey. The monthly data of the Istanbul Stock Exchange (ISE), foreign
exchange and gold prices for the period 1990-2010, were used for the analysis by means of the
dynamic conditional correlations GARCH (DCC-GARCH) model. The results showed that the
conditional correlations between investments were time varying, and the 2001 crisis was a
significant turning point in the dynamic relationships between various investments.

To strengthen the review the study of Banerjee and Adhikary (2009), investigated that exchange
rate revealed a short term net negative feedback from the exchange rate to stock market with
insignificant associated T-values of the coefficients of the contemporaneous and lagged
variables. This was because foreign portfolio investment was very limited in Bangladeshi stock
markets, particularly after 1996, which resulted in little impact of changes in foreign exchange rates on stock market returns in Bangladesh. Also, Kumar (2009) found no long-run relationship between stock returns and exchange rate; on the contrary he found that there is bidirectional causality between stock index and exchange rates. The outcomes of the causality checks strongly sustained the portfolio or macroeconomic method on the relationship among ex-change rates and stock prices using Vector auto regression (VAR) model. In the same light Singh (2010) concluded that, Indian stock market is affected by the fluctuations in the statistics of exchange rate and inflation (WPI).

**Relationship of GDP and other macro-economic factors**

Also, Wongbangpo et al (2002) observed long term and short relationship between selected macroeconomic variables, i.e., GNP, the consumer price index, the money supply, the interest rate, exchange rate and stock prices in five ASEAN countries (Indonesia, Malaysia, Philippines, Singapore, and Thailand).

Using the studies of Granger and Newbold, (1974), which delivered an analytical study of spurious regressions including the levels of economic time series, Falnnery et al (2002) establish relationship between stock returns and GNP. It was revealed that the typical t ratio consequence tests do not possess restrictive scatterings but in fact converge as the sample size T reaches infinity. The Durbin-Watson statistic, on the other hand, united in chance to zero. They also found that there existed six candidates for valued elements: three nominal (CPI, PPI, and a Monetary Aggregate) and three real (Balance of Trade, Employment Report, and Housing Starts). Popular procedures of overall economic movement, such as Industrial Production or GNP were not represented.

Additionally the work by Ghalayini (2011) investigated whether economic world growth could be explained by changes in the oil price by considering if there were any differences in oil price effects on economic growth between different countries and group of countries and covered the data of G-7 group, OPEC countries in addition to Russia, China and India which assisted him to accomplish that the relations between oil price changes and economic growth was not proved for the most nations but for the G-7 group where, Granger causality test proved that lies a relation among the gross domestic product and oil price

**Relationship between stock prices and macroeconomic variables**
The dynamic relationship between the macroeconomic variables and stock prices was examined by Ibrahim (1999). The author explained that Malaysian Stock Market behaves inefficiently due to money supply, credit aggregate, total reserves, price level and the industrial production. The study examined the relationship between credit aggregate, total reserves and short run relationship. It was found from the estimations of Granger Causality Test that prior to financial crises, credit aggregate and reserves were found to be associated with each other.

Also the study of Gjerdr and Saettem (1999) explained the triangular relationship between interest rates, stock prices and inflation. Also, they found that stock markets behave in response to oil prices. Even it was found that the stock market responded to the changes in real GDP. The work of Maysami et al (2004) found in their study that the Singapore’s stock market and the property index form co-integrating relationship with changes in the short and long-term interest rates, industrial production, price levels, exchange rate and money supply and therefore examined the long run relationships.

Stock Market is considered a leading indicator of the economy’s monetary policy and the real economic activity (Darrat and Dichens, 1999). They used co-integration analysis and error correction models. Even these results were found in Japanese and Thailand markets (Granger et al, 2000). The author used impulse responses for explaining this relationship. Similarly, the work of Husain and Mahmood (2001) provided the existence of causal relationship between stock prices and other macro economic variables. The results explained that causality lies from both the sides. Furthermore, co-integration analysis and error correction mechanism helped in concluding the existence of long term relationship.

This relationship was also observed by the work of Menike (2006). The author examined the variables in Sri Lankan Market for the period ranging from September 1991 to December 2002, using multivariate regression. The results found that high value of R square implied higher explanatory power for the dependent variables which was stock market of Sri Lanka. These results were in congruence with such relationships in ACs and EMEs, where inflation rate and exchange rate influenced stock markets negatively.

On the other hand, the work of Ahmed and Osman, (2007) examined the explanatory power of various macro-factors such as inflation rate, exchange rate, interest rate, money supply and production index on the variability of the stock price in Bangladesh, using multiple regression
between the factors. The share price index was the evaluated for the share prices. The results found explained no relationship between the stock prices and other macroeconomic factors. To strengthen this literature, Oguzhan and Erdal (2009) analyzed that the relationship between the macroeconomic variables such as interest rate, inflation, exchange rates, money supply and stock prices and further focusing on the causal relationship between stock prices and exchange rates, using data from eight years about Turkey. The results of empirical study indicated that there is bidirectional causal relationship between exchange rate and all stock market indices.

Also the study of Gallegati (2008) used the wavelet analysis to examine the relationship between stock market returns and economic activity. The author made use of MODWT (Maximum Overlap Discrete Wavelet Transform for the analysis of the relationship between DJIA and industrial production index. Specifically, wavelet variance and cross correlation analysis were utilized to find the scaling properties of the series and also to locate the lead/lag relationship among the series at different time scales. The results enumerate that the level of economic activity was lead by stock market returns, especially at highest values or scales, (lowest frequencies) corresponding to periods of 16 months and longer, and that the leading period increases as the wavelet time scale increases.

Eryigit (2009) extended market model market return, oil prices (in Turkish Lira), oil price in dollars and exchange rate between dollar and Turkish Lira (TL) and used it to determine the effects of the oil price in dollars changes on market indexes in Istanbul Stock Exchange (ISE) for the period of eight years and found that oil price (USD) changes have a significant positive effect on Wood, Paper & Printing, Insurance and Electricity sub-sector indices.

Additionally Ologunde et al (2006), Khrawish et al (2010) examined the relationships between stock market capitalization rate and interest rate using time series data obtained from Central Bank of Nigeria (CBN) and Nigeria Stock Exchange (NSE) using regression. Their results showed that the prevailing interest rate exerts positive influence on stock market capitalization rate. They also found that government development stock rate exerted negative influence on stock market capitalization rate and prevailing interest rate exerted negative influence on government development stock rate.

AL- Shubiri (2010) studied various factors and reviewed literature which suggested that stock price movement is the consequence of the movement of the micro and macroeconomic factors.
They took the sample of 14 commercial banks of Amman Stock Exchange for the period 2005 - 2008 and applied simple and multiple regression analysis. It is conducted to find out the relationship microeconomic factors with the stock price and found highly positive significant relationship between market price of stock and net asset value per share; market price of stock dividend percentage, gross domestic product, and negative significant relationship on inflation and lending interest rate but not always significant on some years of Amman Stock Exchange in Jordan.

Even the study by Gençtürk, Çelik et al (2012) found that there is no long-run relationship between ISE stock prices and macroeconomic variables such as interest rates, exchange rate and consumer price index by using Johansen-Juselius Co-integration test, Vector Error Correction Model (VECM) and the impulse-response analysis on the monthly data of the period January 2005 to July 2011.

Moreover the study of Bhattacharya (2001) investigated the nature of the causal relationship between stock prices and macroeconomic aggregates in the foreign sector in India by applying the techniques of unit-root tests, co-integration and the long-run Granger non-causality test recently proposed by Toda and Yamamoto (1995) and found suggest that there is no causal linkage between stock prices and the three variables under consideration.
2.3 Relationship between Capital Flows, Exchange Rate, GDP, Stock Prices and Financial Stability and its components

This strand of literature includes the review of the papers and work done on financial stability subject. Also it helps in understanding the relationship between financial stability and its components and variables under the study, namely, capital flows, and exchange rate, GDP and stock prices.

Financial Stability is a broad concept, which entails the risk management of various aspects, like international environment, domestic environment and banking institutions (Hawkins and Mihalijek). Basically, challenges faced by emerging market economies are to manage these risks and hence can ensure financial stability in the nation. One such factor is financial unrest. Author Verma (1998), explained the reasons for the financial unrest broke out in 1997-98 was majorly due to policies failure.

The work of Verma (1998) provided a deep analysis of the reasons behind the financial unrest broke out in 1997-98. The various policies of government, like bailout package, positive incentive packages too much optimism in the market created the financial and credit risk in the economies. Also the high interest rates in domestic markets and deposit accounts in Asian economies like Thailand, affected mostly the financial institutions and financial management. The failure to measure risk and to avoid it led the financial institutions to plunge in the crisis. The author specified that the large credit risk faced in exchange rate, along with this impacts the prices largely. The work provided that the economies should try to avoid moral hazard in the economies facing risks. Also the short term borrowing was identified to be the major factor. The author concluded that a nation should also boundary line the exposure of credit exposed to FOREX.

Financial Development and Growth

The empirical literature provides the investigation about the relationship between financial development and economic growth, but the conclusions are very vague and dubious due to
varied econometrics models and data collection. The seminal work of King and Levine (1998), revealed the positive relationship between stock market development, financial development and economic growth. The work of Deidda and Fattouh (2005), explained that banking and stock markets have positive relationship with growth. They suggested that the transition of the economy from bank based, keeping the banks and stock market closely related and other things constant, can adversely affect the growth of the economy.

On the other hand, the work of Kar et al (2011) provides that the clarity of direction of relationship is still a question specifically in MENA nations. The study of Al-Yousuf (2002) claims the relationship between both financial development and economic growth. Shan et al (2001), by using granger causality provided the evidences of this relationship varied in countries of OECD. Shan (2005) provides the weak relationship between financial development and GDP in some developing nations of Asia. Hassan et al (2011) also provided that the causality between GDP and financial development varies from nation to nation. The work of Blanco (2009) also revealed that causality runs from growth to financial development, but not vice versa in eighteen Latin America groups of nations. Also it is argued that financial development and GDP relationship varies due to different incomes and economic conditions of the nations. The work of Lee and Wong (2005) reveal that inflation also acts as a deciding factor for the relationship between financial development and GDP. Other side of the association was observed by Kose et al (2003), between financial development and GDP, which was the co-movement between the variables. He used Bayesian dynamic factor model and found significant co-movement between the factors.

The work of Pan and Wong (2013) provided a detail insight on the relationship between these two variables by using Bayesian dynamic factor model. The results of the study revealed that common trends and factors were observed during the periods of boom and recession. Pan and Wong (2013) also provided that co-movement in financial development and GDP was due to output changes in emerging market economies. IMF survey (April 4, 2016) provide that the spillovers of emerging market economies are caused by the advanced economies, as integrations among them rises. Moreover it is found from the work of La Porta et al, (1997) that there is positive relationship between financial development and economic growth.
Allen and Gale (1997) provided that banks can be agents, who can pacify the risk than the financial markets. These are institutions because they mobilize saving and invest. This enhances the productivity and financial investment. This makes strong the preposition that the financial development is strongly related to the process of economic growth, which may differ depending on the influencing and country specific factors (Barro, 1992). The study of Verma (2009) provided that Indian reforms brought and helped largely in the financial development by the way of managing the risks involved in both micro and macro nature transactions.

There have been large and implicit examples of relationship between financial development and economy growth. But what matter is that the changes in financial development and trade process impact the growth of the economy. Also, it has been observed that the financial intermediations also involve in fostering the economic growth of the nation (Blackburn and Hung, 1998). The study of Kaur et al (2013) explained that money supply and quasi money growth rate affect the economic growth of the economy, measured with GDP. Also, they provided that the causal relationship between the two is positive. They even tried to find the co-integration between the variables, but did not find any. They concluded that in order to enhance the economic growth, one must consider money supply as an intrinsic factor.

The work of Blackburn and Hung (1998), explained the determination of real and financial development. Financial development imitates the evidences of ill effects of moral hazard. They also provided that there is a two-way causality between financial development and economic growth. Also financial liberalization affects financial development and certainly not the growth directly, but trade liberalization influences growth and enhances financial development. Furthermore the models given by Bencivenga and Smith, (1991) provided the role of financial intermediaries. Furthermore, it was observed that financial intermediation and integration is the result of liberalization. Financial liberalization has no impact on growth, it is because as it does not changes the cost of monitoring designers. Liberalizations benefits, as it provides private credit to the activities which further enhances the financial development. In fact the trade liberalizations influence the economy growth and economy growth facilitates financial development (Nwosu et al, 2015).

Also financial institutions are regarded as the information disseminators that try to avoid moral hazards (King and Levine, 1994), specifically it can be said that financial development involves
improvement in allocation of financial resources which can diversify risk and foster growth. Also the development of financial institutions means the development of financial arrangements in the economy. The results imply that a country should focus on financial intermediations at national level and in fact the government should try to inculcate the avoidance of barriers to trade. They took direct lending, financial institutions for asymmetric information. The study of Adnan (2011) presented financial development index based on principle component matrix. Even it has been very strongly proved that asymmetric information in the market influences the financial development of the economy (Antzoulatos, 2008). Gupta (1986) provides that financial development and economic growth share a positive bi-variate causal relationship.

**Determinants of Financial Development**

The work of Levine (1997), found that the banking sector concentration is a major factors which determines the financial development liquidity risk, moral hazard are curtailed by the banks. The competition between the banks and non-banking financial institutions can help in the development of financial system. Herger et al, (2007) found the dysfunctional institutions are one of the main hurdles in financial development. Furthermore the work of Barth et al, (2007) revealed the importance of monitoring process of banks. He explained that banks rating should be on international standards and by international rating agencies. Basel rules are used to measure the performance of the banks to foster financial development. The work of Da La Torre et al, (2008) defined contract enforcement to be important for financial development. Beck (2006), explained the importance of interest rate spread to enhance financial development. International Monetary Fund (IMF) reports asserted that the standard measures of financial development same as the real interest rates and composites ratios like broad money to GDP are measures of financial development.

Financial Development is the development of financial markets too (Adnan, 2011). He explained by proving this by using principal component analysis, which forms a strong Index. Furthermore, the depth can be measured by the composite ratios keeping it with GDP. Adnan(2011) used Bayesian Model of Averaging (BMA) and econometrics tools to locate the determinants of financial development. The finding suggested that the level of financial development is determined by the quality of its institutions, government policies, geographic condition, and
income level and finally by its cultural characteristics. The study of Ang et al (2005) has divided the financial development factors in 3 categories i.e. institutions, policy and geography.

Furthermore, Demeriades (1996) used bank deposit to GDP in sixteen nations and found that “currency in circulations” should not be a part of Broad money to GDP, in order to develop the financial system of the economy. Rousseau and Wachtel (1998) used assets and liabilities of various financial institutions including banks and non-banks.

The study of Saciand Holder (2008), explained the determinants, which he found using PCA. These were credit issued to private sector to liquid liabilities, domestic credit to private, credit to GDP, Bank deposits to GDP, stock market capitalizations, broad money to GDP and market of listed companies. The work of Beckart et al (2005) provided that equity market liberalization enhances the economic growth by single percent. In fact the openers to trade would determine the movement of funds also affects the financial development. Goldsmith (1969), used M3 to GDP, to measure the size of financial institutions.

The work of Gambacorta et al (2004), revealed that financial structure determines the responsiveness to the conditions in the market. Also too much financial institutions can make the growth lower.

Financial Development and Capital Flows

Some studies provide the insight of the relationship between the variables. Hagen and Zhang (2010) have classified the countries on the basis of level of financial development. They used neo-classical effect and credit demand effect of financial development, which explained the determination of interest rate and return on investment. This entails the explanation that the countries with better return on investment, i.e. emerging market economies as compared to advanced economies, will have large capital flows. This clearly shows that they share a positive relationship. Hazen and Zhang (2010) also provided that pattern of capital flows changes along the convergence process of less financially developed nation. This clearly means that the country should enhance its financial development, when liberalizing its capital account. Furthermore the work of Luca and Spartafora (2012) provided that capital inflows affect return on investment. They presented another view that before crisis i.e. 2001-2007, the developing economies were having huge capital inflows than the developed markets.
Another aspect of this relationship was brought in the work of Esteves and Khoudour-Casteras (2009), they analyzed the mass migration phenomenon which increased the flow of funds in the economies and increase the financial development of the economy. The study of Guilina and Ruiz-Arraz (2007) also provided that the remittances increase has helped in financial development of the nations. On the other hand, Terry and Wilson (2005) explained that there is positive causal relationship running from financial development to remittances. Also the study of Munadaca (2005) provided that financial development to capital flows to growth as the remittances enter the official financial markets specially banks, i.e. enhances the availability of capital fund and increases growth. Furthermore the study also provided the remittances brought in affect the interest rate structure.

The study of Bailliu (2000) focused on the issue of the problem of emerging market economies and developed economies. One of those is the capital mobility and capital flows in these nations. The advents of Asian crisis too led to the thinking of policymakers about the capitals flows in the country, which is highly volatile in the nature. Also Bailliu (2000) provided that the large flows involve intermediations, which therefore impact the capitals flows of the nation. Also Greenwood and Jovnovic (1990) explained that when financial intermediation rises banks get the opportunities to evaluate better projects and therefore resulting in better investing. These arguments was supported by Bencivenga and Smith (1991), who explained that banks also earn higher marginal product and thus resulting in enhancing risk sharing where investment is more productive to be investment can be done. On the other side of the coin, the relationship between capital flows and exchange rate could also determine the economic growth in the nation (Powell, 1998). The moral hazard was seen to be an important determinant to the financial crisis.

**Financial Development and Exchange Rate**

Another aspect of the financial development is the relationship with exchange rate. One of the problems addressed is the determination of the exchange rate. Deverensa and Lane (2003) presented that the exchange rate was driven by the financial linkages between the economies. Also the selection of the exchange rate, regime was dependent on political issue and financial factors which somewhere explain which should be adopted (Levy, Yetah et al, 2010). The study of Frankel (1999) provides that no single exchange rate regime fits all economies at same time. Harvey (1995) provides that local factors play an important in exchange rate management.
On the other hand, the level of financial development of a country determines appropriate exchange rate for that country (Aghion et al, 2009). An important observation was made by Aghion et al (2009) that exchange rate determination and its forecasting of the volatility can impede the growth in innovation, provided that the level of financial development is low. The study of Aghion et al (2006) reveals that the effect of exchange rate volatility largely depends on the financial development of the nation. They used 83 countries data series for 1960-2000 and applied panel data tools for estimation conclusion. The work of Bristy(2014) provides the evidence of exchange rate volatility in the result of poor financial development of the nation. The study of Han (2002), explain a negative relationship between exchange rate volatility and trade openness. One of the factors which lead to the exchange rate unstableness is the exchange rate risk faced by the foreign investor. The availability of well-developed financial markets should help the investor to hedge the exchange rate risk, which will result in avoiding the negative effect on trade.

Another purview of the exchange rate policy of the nation can be seen from the relationship between exchange rate and economic growth. Haussmann et al (2004) found that economic growth has a significant impact on exchange rate. Some political factors were also identified which affect the exchange rate. The studies of Sturzenegger and Reggio (2004), Demers (1991)andSomininguez and Tesar (2001), provide that exchange rate risk can be reduced by better financial development.

The work of Broda and Romalis (2011) provide the evidences of the implications of exchange rate volatility for financial market development. Also they found that rise in exchange rate flexibility is aligned with decrease vulnerabilities. Moreover they found that too much flexibility in exchange rate can create instability in the economy. But there study could not provide about a clear evidence of such relationship in emerging market economies. Although the determination of the relationship between exchange rate and real economy is affected by many factors, one of which is financial development.

The literature is contributing in the understanding of the exchange rate and financial development. It say that financial development contribute to exchange rate volatility, the thinking that exchange rate affects financial development is not true, because the financial developed economies would be able to have lesser effects of volatile exchange rates as the
investor would be able to hedge risk in a better financial developed economy. Therefore one can look the relationship in from financial development to exchange risk.

The present study is the in-depth analysis of the relationships between capital flows, exchange rates, stock prices GDP and parameters of financial stability. This attempt helps in understanding the mechanism of how each variable can contribute to a financially stable economy. The present case is of emerging market economies which are facing a great volatile capital flows, undetermined exchange rate regimes, high growth rates and fluctuating stock prices. The volatile capital flows lead the economies to get trapped in the vicious circle of financial crisis, when again the economies would not be financially stable. Also the famous “Impossible Trinity” can get the answer of each of the three objectives can be settled and in fact the relationship between capital flows and exchange rate will definitely help the emerging market economies to cadre the situation of financial instability. The literature provides that an economy with better financial development will foster capital flows, exchange rates and stock prices, which can set up two way relationship between GDP and financial development. Trade liberalization is seemed to impact GDP and hence financial development.

We present evidence that exchange rates determined whether by fixed regime or floating regime would foster financial development. This can be understood in the way that the risk associated with exchange rate would have to be managed by a well financially developed economy. This means that when the economy faces the risks, it start taking actions and finally ends up with two way relationship. The best understanding can be observed by the indicators like interest rate spread, broad money to GDP etc. will be better managed, when those are used as alternatives by the investors. Because ultimately, if there’s funds are not managed properly and there is no protections against the moral hazard they will pull back their investment, leading to volatility in the exchange rates whether it is floating or fixed. Fixed also because the reserves for the same will also deplete

The evidences of the relationship between financial development and exchange rates say that exchange rate flexibility can foster economic growth given well developed financial markets. Other way round the volatile economy could affect the investment prospects and hence growth. It can also impact the international trade, because huge exchange rate changes have compounding effects on the costs of intermediate inputs, which can cause dwindle the financial
structure of the market of the economies and hence can lead to adverse effects (Thorebecke, 2008). The factors like financial development and mismatched exchange rates impact the relationship between exchange rate and economic growth (Aghion et al, 2006). Rodrick(2008) provides that growth and exchange rate are aligned or not largely depends on the level of financially developed economies. The intervention in financial management by the economies is to curb the problem of volatile exchange rate; these create implications for economic growth and financial market development.

**Financial development and Stock prices**

It is argued that stock market become prone to externalities of financial development, because of increase complexity in the stock market (Dellas and Hess, 2002). Also they found that financial development is associated with greater sensitivity to foreign shocks. Also the study of Rouwenhorst(199), found that global risk factors are unable to explain the mean returns of the emerging market return factors. Also Beckart and Harvey (1997) showed that the correlation between stock return increases as a result of financial liberalization. Furthermore the assets diversification also contributes to the financial development (Helpman and Razin, 1978), when seen other way round. A healthy financial market is characterized by the protection against asymmetric information and moral hazard. This means that the investment in stock markets induces the development of financial markets in form of reforms introduced (Dellas and Hess, 2002).

Stock market liberalization is also another factor which fosters financial development. Bekart and Harney (2000) explained that stock market liberalization reduces the cost of equity. Also this leads to changes in the key macroeconomic indicators but these indicators may not move in tandem (Kim and Singhal, 2000).Lemine (2001) also presents the evidence that the relationship between financial development and growth is not due to potential simultaneity biases or omitted variables, but reflects the influence of stock markets and banks on GDP.

The work of Garbaravcitus and Dierick(2005) provided that hedge funds may impact the financial markets and institutions in both positive and negative way. These provide diversification benefits, which further introduces liquidity in the market. Also the trade-off between risk-return can be maintained resulting in the increase in the requirement fulfillment of financial markets.
The work of Razin, Sadka and Yen (1999) focused on the informational problems in stock markets. They argue that the information symmetry induces the healthy financial development which further affects the stock prices. Also the relationship between stock markets and financial development can be understood by understanding that the large degree of financial intermediation leads to financial development. This means development of stock markets and the changes in the stock prices are affected by financial development and vice versa (Dellas, 2000). This clear the point that stock market are highly influence by financial development of the markets provide diversification which helps to maintain risk-return trade off, and hence influencing the factors of financial development which can be related to competitiveness and size of the market.

**Relationship between Financial Vulnerability and Capital Flows, Exchange Rates, GDP and Stock Prices**

Vulnerability of the economy is affected by the management of the capital flows in the country (Akruz, 2009). The author explained that when the system starts facing financial contagion and shocks it has very limited options to deal with those, therefore capital flows management is of utmost importance. Also the management of FOREX market and accumulating reserves a country facing a surge in capital flows can reduce its vulnerability by appreciations and financial development.

Financially vulnerability arises from the business cycles and financial cycles which are volatile especially in-case of emerging market economies (Classens et al, 2011). Capital flow management is an important to manage the financial vulnerability. Also Ghosh et al (2012) provide that surges in capital flows have increased with significantly over last decade. Also capital flows were more of debt and they have claimed the debts to be more volatile. Capital flows also cause the systemic risks in the financial sector. Classen and Ghosh (2012) also presented that there are fine kinds of phenomenon which can cause the financial system vulnerable. They explain them to be the credit crunches, equity of house price bubbles, large capital outflows and financial crisis.

The work of Bruno and Shin(2011) explain that domestic bank lending interacts with capital flows sometimes. It means when the banks tend to increase liquidity in the market, the borrowing may fluctuate, which may further can credit crunch, making the economy financially vulnerable.
(an economy is said to be financial vulnerable on the basis on the basis of their capacity to deal with contagion effects and sudden stops). An economy faces lot of vulnerability due to capital flows (Kumar, 2003), because it is regarded as an important ingredient in the impossible “Impossible Trinity”. Even the current account deficit affects the financial vulnerability of the nation (Butzen et al, 2014). The study of Eichengren and Gupta (2014) revealed that the countries with higher ratio of portfolio stocks and other liabilities are hit harder than the countries with lower liquid debt. Mishra et al (2014) also stated that the countries with large capital flows are observed to be more vulnerable. Also the work of Alzeman et al(2014), explained why the economies with stronger position also came under the pressure. The reason was that the investors held larger positions in these markets and therefore faced high risks. They gave importance of gross position for the assessments of a country’s vulnerability. Also current accounts deficit is one of the determinants to financial vulnerability of the nations (Butzen et al, 2014). Also the countries with higher inflation and rapid credit expansion are prone to be financially vulnerable (Butzen et al, 2014).

The report of UNCTAD (2010) provides another major reason for financial vulnerable economy. It explained that volatility in markets is due to preferences of the fiscal policy, populations in Asian economies, debt in emerging market economies, the exports are geared with exchange rate. Interventions in supports of the export sector and the savings glut, with emerging markets economies, financial markets being insufficiently developed to absorb domestic savings. The literature also provides that growing availability of foreign capital inflows make these markets more sensitive. The liquidity flows of foreign origin tend to be high pro-cyclical, which means that in good times they are cheap and bad times they extinct, for e.g. in times of high interest rate(Arslanalp and Tsuda, 2014).

The work of Butzen (2014) also provided that large inflows of cheap liquidity to emerging economies helped to ease financial conditions, which in turn boost asset valuations and debt accumulations. Many emerging economics therefore faces macroeconomic and financial imbalances. This means that emerging market economies are responsive to interest rate and a reversal of capital flows could increase the cost of financings.

Furthermore the study of International Monetary Fund (IMF 2013c) provided the policy movements by advanced nations as evidenced from the decision of Bernanke, also created
turmoil in some emerging economies. The effects were observed in the exchange rate depreciation against dollars. This made clear that the external factors are one of the most important factors which make the country vulnerable. The studies argue that the reasons of vulnerability in emerging market economies are majorly volatility of the factors and these factors keep on changing from time to time. The analysis by Noeth and Sengupta (2014) claimed that apart from current account deficit, risk identification should be focused. Valuation of financial assets can be aligned more closely with the underlying fundamentals.

Mohanty and Turner (2006) provided that excessive reserve accumulation in order to intervene the FOREX market, may not yield good for emerging market economies, which are prove to be high risks, relationships between equity markets in Asia and exchange rates.

According to Chai-Anant and Ho(2008) returns are important for equity purchases. Also they found that “net equity purchases” can explain the near about changes in exchange rates. They also found that investors continue trading; this creates volatility and hence results in vulnerabilities in stock markets. Even, pro-cyclical behavior of assets result in vulnerabilities to the market (ADB, 2014).

The study of Ghosh et al (2003), explained the deciding the exchange rate regime is itself a great source of financial vulnerable to the economy. It is very difficult to draw a safe line to decide which regime should be followed. They took the sample of 50 Emerging market economies over 1980-2011, and tried to identify the macro economic and financial stability rises adhered to the management of exchange rate regime.

The studies exploded that pegged exchange rate are associated with credit to private sector (MagudandTirpak, 2008). Furthermore, those are observed to be connected with the credit booms (Rosenverg and Terrones, 2008). Even it has been observed that banks assets and liabilities specifically loans to deposit ratio determines the liquidity in the market (Kaminsky and Reinhert, 1999). This means that the changes in credit position hugely detrains a better exchange rate regime. According to Ostry (2012), capital controls are linked with lower liabilities of banking system especially the FOREX denominated liabilities. Ghosh et al (2014) found that free float is least prone to vulnerabilities, whereas fixed regime is prone to extend imbalances real exchange rate, overvaluation, foreign liabilities of banking system, domestic credit expansion and hence they are prone to ‘growth crises’. Also they stated that there is no safe border to
manage the exchange regime, it is the central bank that needs to intervene from time to time. This is possible when the bank assess that capital flows are likely to be temporary or persistent and in line with this what is the exchange rate. Specifically managed floats are the better regime to avoid the vulnerabilities occurring to the economy.

The study of Andreou and Zdienieicka (2009) revealed that indicators like short term capital inflows, interest rate volatility, commercial banks loans to deposits, external debt can be the predictors of vulnerabilities to the system. The reasons for these indicators have been the way they affect the economy. This can be understood in the way that the large macro-economic disequilibrium in the form of Current account deficit to GDP is a predictor of vulnerabilities to the economy. Furthermore, how the deficit is financed, i.e. external debt as through reserves, this problem is widened when the country faces the problem of currency fluctuation, i.e. changes in the Real Effective Exchange Rates (REER). The study to Reinhart (2002) provides that domestic and external debt should be constant; otherwise it gives problems to debt crisis or financial crisis.

The analysis by Clark and Wojcik (2003) used the qualitative measures to study vulnerabilities. Menegatti and Roubini (2006) used balance sheet approach. There has been numerous works which provide the essence of how the vulnerabilities can be dealt with. But the present study provides that the one can use Financial Stability Index and take connective actions towards these in order to keep the vulnerabilities least.

According to Edwards and Rigobon (2005), the method used to control capital flows by tools in excess, will depreciate exchange rate. Further they also provide that these controls make the nominal exchange rate less prone to external shocks. The IMF have provided the EWS or indicators of the vulnerability in which the size of the external debt, payment capacity have been observed to be important because of facing vulnerability.

The work of Riiser, (2012) revealed that indicators of house prices investment and credit are important to estimate the financial stability of the economy in Norway. Furthermore he provided that indicators when used GDP, helped in knowing how much the market is vulnerable.

**Relationship between Financial Soundness and Capital flows, Exchange Rate, GDP and Stock Prices**

The ill effects of global financial crisis, the dilemma of the emerging market economies about the exchange rate regime, has caused the slowdown of the growth rate after the crisis 2007-09
Fluctuating capital flows and the decreasing return on investment from markets have created the need for the financial structure of the economy to also focus on a large preview of the economy apart from just stabilizing and controlling the price levels. This larger view is the analysis of financial stability that the countries should strive to attain. The theoretical framework has already been discussed in the precious chapter. The some light on concept explained by scholars in their respective areas.

The seminal work of Kindleberger (1978) and Minsky (1977, 1982) established that when external shocks results in financial unrest in the economy, it can be said that the economy is facing ups and downs in financial institutions and markets, specifically financial markets. Furthermore the work revealed that when the crisis broke out the stock prices were at all times low, causing the other factors like GDP and exchange rate also to be low. According to Crockett (1997) the financial stability arises because of financial intermediation and liberalizations. The shocks of one market spread to other markets, which cause systemic risks in the financial structure and resulting in contagion effect in the economy. He provided a theoretical understanding of the basic reason of financial stability. The study of Akerlof (1970) pronounced that this concept emerges due to imperfect information. Diamond and Dybuig (1983) explained that the contagion effect of risk spread and cause financial stability. Basically financial stability is the result of stability in financial institutions and markets (Crockett 1997). The study of Diamond and Dybuig (1983) claims that due to loss of confidence of the customers, the banks faces ruins and this became contagious and finally a systematic risk which affect the return on assets of the financial institutions. Systematic risk occurs when the entire financial institutions specifically banks invest in correlated investments and hence results in huge risk to the financial (Archarya et al, 2009). Also Acharya (2009) explained that these systemic risks can be avoided only in case when correlated contracts are carefully scrutinized. The contagion effect is well explained by Rochet and Tirole (1996) where they have been given overview of source of contagion and financial fragility. Furthermore these contagions were found to be result of systemic risks which was defined by Rampini(1999) as presumed associations. The model of Rajan(1994) explained a very important point which said that the expansionary and contractionary lending regularities influence the asset classes of the system. This means the investments is non-quality projects by banks is due to the prevalent market conditions. He has also taken the agency problem to be the source of such decisions. The study of Froot and Stein
(1998) argue that instead of using capital to risk asset ratio (CRAR) as a measure of individual banks base, one should consider all the risks faced by the financial institutions as the hurdle rate for pondering over investment projects. This is important because a firm faces a contagion effect. These result in asset price bubbles (Acharya, 2009).

Furthermore, some empirical studies have also provided the measure of financial stability. Popouska (2014) presented an index of financial stability, which measures the stability of the saving sector of Macedonia. The author has used major determinants of CAMEL model to measure the stability of the banking sector; the author has also used principle components analysis to identify the factors which impacts the stability in the banking sector. Evans (2000) emphasized on the meaning of quantitative indicators for monitoring financial stability for forecasting the future movements.

Similar index was created by Iling and Liu (2003) for Canada state, to provide measurable tool to financial stress. They have included measures of risk and insecurity of banking, changes in FOREX rates, debt and capital market. Similarly, Vandeend (2006) provided financial stability index for Switzerland and for Netherland respectively.

In-fact the study of Evans (2000) provided that when the financial institutions dwindle in response to the macroeconomic shocks, then there comes the need for analyzing the factors and take corrective action. The study of Morris (2010) gave a measurable tool to forecast the financial instability in the economy in the economy. He developed an aggregator financial stability index (APSI) for Jamaica banking system by using Monte-Carlo simulation to enhance ahead forecast to banking sector stability. Vanden End (2006) developed a financial stability conditional index (FSCI). Furthermore the validity of the index could be understood and examined by the stochastic simulation method. Bailey (2007) provides that the components used in the index are linked with efficiency in the industry especially the HH index.

Furthermore, IMF (2003) has set up standard measures for monitoring the soundness of the financial sector of the markets. Nelson and Preti (2005) have made use of these measures which helps to identify the soundness and hence helps to know the financial stability. Meanwhile it was discovered from the work of White (2004), that some indicators non-linear relationship does not give accurate results, therefore the use of composite indicators is found to be appropriate.
A number of empirical works have provided the early warning signal methods which can be used by financial institutions. The work of Turner and Goldstein (1969), Frankel and Rose (1996) applied logit regression model in cross sectional and time series data. They found that slow growth, high inflation, large capital outflows, liquidity crunch, high external debt are some of the major indicators of fine health of the system. Goodhart et al (2006) explained that financial unrest can be monitored by analyzing the risk of banking sector.

Some of the studies in the literature provide that measuring financial stress would involve measuring financial stability. The study of Park and Mercado (2013), presented a financial stress index (FSI), which helped in understanding the risks of transmission mechanism in emerging market economies. The results explained the common factors of financial stress faced by emerging market economies in Asia and Europe.

Cardarelli, Elekdag and Lall (2009) provided that financial stress make the economic agents to bear losses. The author has proposed, financial stress index (FSI) because it provides a deep insight of macro level constituents for measuring the stress on the financial system (Roye, 2011). Fernandez (2007) focused on political reasons to be the major cause for financial turmoil in emerging market economies of Middle East.

The determinants of financial crisis have been identified to be unrest in banking currency and sovereign debt markets. There have been studies like that of Leaven and Valencia (2008), which worked on the indicators which lead to unrest in the above markets. The study of Rogoff and Reinhart (2008) found that the crisis usually emerge from the debt defaults which become contagion to the industry. The study of Danig and Hakkio (2010) found that US economy dwindles when it faces low financial turmoil and high economic activity and Vice-versa. It is provided by multiple studies that financial stress helps in understanding the factors of financial stability. The financial stability is outcome of close monitoring of the financial system. The study of Karanonic and Karanovic (2015) provided that the development of financial stability index which include the idiosyncrasies of the Balkan region. They used financial soundness to be the major constituent for determining the financial stress index.

The study of Dhal, Kumar and Ansari (2011), explained that financial stability and monetary stability go hand in hand. They explain this in the way that financial stability growth and CPI have a long run relationship. Further financial stability with better growth in accompanied with
neutral interest rates and lastly these interest rates help to provide price stability to the market. Also they argue that greater economic output result in financial stability. On the other hand higher inflation or price instability affects financial stability negatively.

Financial stability and capital flows management goes hand in hand. This can be analyzed by rigorous review of literature on the subject. The study of Unsal (2013) has been a great contribution to literature in the present context. The author evidenced that, macro prudential measures along with monetary policy in DGSE model can help to avoid the financial risks by contributing to economic stability. They have pronounced it to be welfare improving. These macro prudential measures are used to reduce systemic risks and asset price bubbles.

The study of Lindgren et al (1999) provided the reasons of financial instability which are, inadequate macroeconomic policies, structural weakness, and government interference. He has argued that high capital account liberalization can lead to higher financial risks. It can be managed along with maintaining the equilibrium in macroeconomic parameters. Also the need of financial system should be looked in order to maintain stability. As large capital inflows being lot of risks with them like that sudden stops and reversals, exchange rate risk.

Kaminsky (2005) has summarized over the effects of globalization on financial markets and growth. He found out that the capital flows my bring boom in the short run, in emerging market economies, but are required to managed in order to keep them stable in long-run. The author has also provided that financial institutional investors are main people to investment. Furthermore Kaminsky (1998), has noticed the fragilities in the financial sector during the times of crisis, whether Russian crisis or global financial crisis. The identified several indicators which define the financial imbalances constituents.

Borenzstein and Gelos (2003) who have also provided that neutral funds emerging market economies cause heading behavior causing a contagion effect in the economy. The study of Lakonishok et al (1992), provide a measure of herding which can help the policy makers to identify the move of the funds.

Looking at the banking sector for the effect of capital flows the evidence from Japanese banks can help to understand that pre-crisis of tiger economies. Advanced countries provided lending to emerging market economies in Asia, looking at their pace of growth, but when the crisis
triggered, they also pooled their money back which put pressure on exchange rates of Asian economies. Kaminsky (2005) referred this to a contagion effect.

One of the reasons for the financial instability is considered to see the financial liberalization (Kaminsky and Reinhart, 1999). The study of Calvo, Izquierdo, Meija (2004) revealed that large sudden stops and reversals of capital flows result in diminishing growth in emerging market economies. Also the large capital flows can provide shocks to ‘pro-cyclical’ macro policies. This can be understood in the way that expenditure of government is directly related with capital inflows. This means, that in times of huge capital inflows, expansionary policies are implemented and vice-versa. The work of Mihaljek (2013) provided the importance of both gross and net concept of capital flows for analyzing financial stability.

Due to surges in the capital flows, exchange rate gets impacted. Also since the Asian crisis majority of emerging market economies of Asia, switched themselves to flexible regime. This helps to curb the limitation of sudden capital flows. As a result a level of financial stability can be observed in the economy. The study of Filardo, Ma and Mihaljek (2011) provided that, managing the exchange rate to a stable position would help to maintain financial stability along with external competitiveness and resource allocations. Exchange rate is one of the major components of “Impossible Trinity” to be managed. Filardo and Genberg (2010) explain it to be a tool which can assist in managing inflation and output stabilization. They explain it in the way that when other things being constant, let the nominal exchange rate appreciate would lower domestic prices. Furthermore, Ball (1999) explains that the exchange rate role can be estimated by looking at the influence of the same on inflation and output level.

Advanced economies being at maturity stage have directed investments in emerging market economies, being the destinations of growth prospects. The flow of capital to emerging market economies brings vulnerabilities in the form of exchange rate fluctuation along with huge volatility in asset prices, causing huge implications for financial stability (Avdjier and Takats, 2014).

Furthermore, Chui et al (2014) explain the implications for developments on corporate sector. They measured the vulnerability occurring to this sector by looking at the debt to equity ratio. Also the financing structure has gone international, where the debts and equities are followed from foreign investors making it difficult for the corporates and causing slow growth and
stringent profit margins (Powell, 2014; Bank of America, Merill Lynch, 2014). The increased bond market financing can also affect the financial stability of the nation (Chiu et al, 2014). Furthermore, Chiu et al (2014) provided that the currency risk of foreign currency liabilities at the corporates are hedged or not, will definitely affect the financial stability of the economy. They have provided that a corporate can manage its foreign exchange risk by using derivatives. In contrast they have shed light on the issues of credit risks which give rise to fluctuating declining exchange rate and interest rate, making the economy more vulnerable.

Ostry, Ghosh et al (2012), have focused on the two instruments policy interest rate and foreign exchange market intervention. They have evaluated measures of maintaining a balance between the two.

**CONCLUSION**

The present work is the outcome of the rigorous review of literature on the subject. The present chapter was divided into sections which helped in understanding the relationship between the variables under study. Some key points were brought in focus through the review, which made the robust ideology for the present study. The following points are discussed:

The work of Cavusgil (1997) helped in understanding the term Emerging Markets. Also, the reports of IMF and Emerging Markets Directory helped in understanding the term emerging market economies. The definition given by Miller (1998) also cleared the parameters for defining emerging market economies. The study of Calvo and Mishkin (2003) explained about the importance of exchange rate regime for emerging economies.

The study Kochhar (2013) helped in identifying the challenges faced EMEs. The study of Bailliu (2000) focused on the issue of the problem of emerging market economies and developed economies. One of those is the capital mobility and capital flows in these nations. The work of Crockett (1997); Yadav (2009) helped in structuring the concept on the basis of theories of Financial Stability. Seminal works of Kindleberger and Minsky (1978) and Friedman and Schwartz (1963) formed the basis of FD-FV-FS model proposed in the present.

The study of Calvo, Leiderman and Reinhart (1996) provides the basic idea of capital flows to the economies. It is the interest rate differential which determines the capital flows in the emerging market economies. Furthermore the study of Rodrik (1998) provided that developing
nations are better affected by capital account liberalization and openness. Furthermore the study of Prasad et al (2006) provides the benefits of capital flows. They argue that opening of the capital account brings development to the economy, improvements in the processes of financial system, and better macroeconomic policies. The study of Classens et al (1995) enhanced the understanding of the properties of capital flows.

Financial Stability is derived from three words financial development, financial vulnerability and financial soundness. Financial Development is the major constituent as it is the development of Financial Institutions and Financial management, further it mobilize saving and induces growth (Morris, 2010; Illing and Liu, 2003, Van den End, 2006; Albulescu, 2009). The work of Blackburn and Hung (1998), explained the determination of real GDP and financial development. The study of King and Levine (1993) explained the relationship between financial development and economic growth. The work of Deverensa and Lane (2003), provide the understanding of the relationship between exchange rate and financial stability. The study of Classens and Ghosh (2011) were important contributors in understanding financial vulnerability of the economy. The studies of Akerlof (1970); Diamond and Dybuig (1983); Crockett (1997) provided the base of reasons of financial vulnerability. On the basis of scrupulous review the researcher identified research gap and decided modus operandi of the study. The output of this chapter was taken with care to develop model which was a long felt need in the society.