Chapter 1
Introduction
1.1 Background

Trading has been the legacy of all the developed countries and continuously has been followed by developing and under developed countries. The umbrella of international trade has encompassed one and all and to add further it has bolstered the relationship between countries. As late as 1770s, a Professor of Philosophy at Glasgow University revolutionised the idea of economic nations under his titled work “Wealth of Nations” now known as Father of Economics- “Adam Smith”. A Professor coming from a background of Philosophy and Law, was the one to initiate discussions that ultimately turned up into a full and separate discipline known as Economics. Adam Smith has written Wealth of Nations (full name is An Enquiry into the Nature and Causes of Wealth of Nations) in 1774 which was published in 1776. He propounded economics to be a science of wealth that was later on criticised by some and modified by few, the process that is still continuing (Smith, 2001). The other prominent economists who added to the development of economics as a distinct branch through their own fundamental definition of Economics were Alfred Marshall (material well-being definition, 1920), Lionel Robbins (scarcity definition; Robbins, 1932), Paul A Samuelson (growth and development definition; Barnett, Samuelson & Weintraub, 2005) etc. All the prominent economists from classical to neo-classical and eventually to modern, have highlighted the importance of domestic investment for the growth of an economy. Under the same proposition Adam Smith has highlighted the need of acquiring through earning more and more gold. All that is suffice to say that domestic investment is an important component for a country’s growth on which a country can rely for accelerating the pace of growth and development in an economy. If any country does not have appropriate measures for domestic investment, the country has to rely on foreign investment. However, practically there is always a need for combination of both, that is, domestic investment and foreign investment which is used by all the countries for reaching a higher level in the international economic environment. But the quantum of dependency on foreign funds decides the dependency of a country on others for achieving economic growth. Another point to be noted is that in present international competitive environment, the dependency between countries has increased and it is impossible for a country to remain isolated from the global economic environment. Therefore, foreign investment is now an important component in the income of the countries. Among the different sources of
foreign investment, foreign direct investment is a widely discussed and researched macroeconomic concept relevant for the developing economies. While on one hand, economics was developing both theoretically and empirically, Luca Pacioli on the other hand contributed by developing another distinct branch known as Accounting. Primarily, it is difficult to decide whether accounting was developed for individuals or for organisations or for countries. However, presently accounting is used by all. Even the history of the development of accounting is long that starts from single entry accounting system and culminates at double entry accounting system. The double entry accounting system has been widely used by individuals and organisations throughout the world. The same double entry accounting technique has been adopted by economies to prepare their respective position statement i.e. balance sheet. Technically, it is known as Balance of Payments of a country.

1.1.1 Balance of Payments (BOP)

According to Kindleberger (2002), “The balance of payments of a country is systematic record of all economic transactions between the residents of the reporting country and the residents of foreign countries during a given period of time”. According to the latest Balance of Payments Manual of IMF (Manual 6th Edition) “The balance of payments is a statement that summarizes economic transactions between residents and non-residents during a specific time period for a particular country”. In order to know what is happening to the international payments, governments keep track of the transactions between countries. The record of such transactions is made in the balance of payments accounts (Lipsey & Chrystal, 2007). BOP is further divided into two parts, namely:

The current account (CA), that consists of all transactions relating to trade in goods and services and unilateral transfers. Service transactions include travel and transportation, income and payments on foreign investments, etc. Transfer Payments relate to gifts, foreign aids, pensions, private remittances, charitable donations, etc. received from foreign individuals and governments.

The capital account (KA), that consists of transactions in financial assets in the form of short term and long term lendings and borrowings and private and official investments. In other words, the capital account shows international flow of loans and investments, and represents a change in the country’s foreign assets and liabilities.
Long term capital transactions relate to international capital movements with maturity of one year or more and include direct investments like building of a foreign plant, portfolio investment like the purchase of foreign bonds and stocks, and international loans. On the other hand, short term international capital transactions are for a period ranging between three months and less than one year (Jhingam, 2008). As a replica of balance sheet, balance of payments has both Dr. and Cr. Column and both sides are equal. Countries signatories to multi-lateral organisations, prepare and maintain their balance of payments account on the basis of different balance of payments manual such as BOP Manual 1, BOP Manual 2, BOP Manual 3, BOP Manual 4, BOP Manual 5, BOP Manual 6; the latest being BOP Manual 6; published and monitored by International Monetary Fund (IMF).

1.1.2 Foreign Direct Investments (FDI)

FDI refers to the investment of funds by a foreign entity (particularly a Transnational or Multinational Company) by creating new equity base in host or home economy or vice versa. Several definitions of FDI, all giving same notion are found in the existing literature. FDI is investment that is made to acquire a lasting management interest (usually 10% of voting stock) in an enterprise and operating in a country other than that of the investors (Jhingam, 2008; World Bank, 1996; Sen, 1995). FDI is cross border investments in which a resident in one economy acquires a lasting interest in an enterprise in another economy. An FDI is established when the foreign investor acquires at least 10% or more of the ordinary shares or voting rights of an enterprise abroad. To qualify as an FDI, the investment must be made by one investor or by a “related group” of investors (IMF, 2003). FDI reflects the objective of obtaining a lasting interest by a resident entity in an economy other than that of the investor. The lasting interest implies the existence of a long term relationship between the direct investor and the enterprise and a significant degree of influence on the management of the enterprise. (OECD, 2008). FDI includes both inflows and outflows, the former referring to flow of equity funds into the host country and the latter referring to flow of funds from the host country. FDI Inflows comprises not only merger and acquisitions and new investment but also reinvested earnings and loans and similar capital transfer between parent companies and their affiliates. Foreign Direct Investment is a component under Balance of Payments. It is important to study the
impact of FDI on the balance of payments position of a country both in the short run and long run.

1.1.3 Indian Context

At the time of its independence in 1947, India was host to a significant stock of foreign direct investment (FDI) largely owed to her erstwhile colonial master: the UK. Soon after the independence, India embarked on a strategy of industrialization with active governmental intervention. Domestic enterprises accumulated considerable capability in the process of industrialization, which has influenced not only the pattern of inward FDI in the country in subsequent period but has also led to investments made by Indian enterprises abroad. The changes in government policy have also had an important bearing on the FDI position of India. The Indian government's attitude towards foreign investments has evolved over the post-independence period in four distinct phases. The period from independence up to the late 1960s was marked by a gradual liberalization of attitude. The period from the late 1960s through to the 1970s was characterized by a more selective stance. The 1980s were marked by a certain liberalization of policy. In 1991 India liberalized its policy regime further with respect to both inward and outward FDI as a part of reforms undertaken to increase the international competitiveness of Indian enterprises. In the aftermath of the 'debt crisis' of the early 1980s, the view that 'foreign direct investments' (FDI) have a more salutary effect on the balance of payments (BOP) of developing countries than debt finance has become widespread. This is quite apart from the other benefits of FDI, such as greater productivity, better quality, lower costs, etc. which are taken to be axiomatic. The obvious outcome of such a perception has been a sustained pressure by the multilateral aid agencies and OECD governments on developing countries to actively encourage FDI as an integral part of their BOP management strategy. Many countries and continents now see attracting FDI as an important element in their strategy for economic development. This is more probably because FDI is seen as an amalgamation of capital, technology, marketing and management (Egbo, 1998). Indian economy has witnessed booming FDI following the balance-of-payment crisis in 1991.

1.1.4 FDI Inflows in India in Post Reform Era

India’s economic reforms way back in 1991 has generated strong interest of foreign investors and turning India into one of the favourite destinations for global FDI flows.
According to A.T. Kearney, India ranks 11th in the world in terms of attractiveness for FDI. A.T. Kearney’s FDI Confidence Index ranks (Kearney, 2015) India as one of the most preferred destination in terms of financial attractiveness, people and skills availability and business environment. The positive perceptions among investors as a result of strong economic fundamentals driven by several years of reforms have helped FDI inflows grow significantly in India. The FDI inflows grew at about 20 times since the opening up of the economy to foreign investment. India received maximum amount of FDI from developing economies.

1.1.5 Balance of Payments (BOP) Position

In the financial year 1990-91, India entered a period of severe balance of payments crisis and political uncertainty. A rapid increase in India's external debt coupled with the political uncertainty forced international credit rating agencies to lower India's rating both for short and long-term borrowings. This made borrowing in international commercial markets difficult and also led to outflow of foreign currency deposits kept in India by non-resident Indians. The situation was made worse by the Gulf war insofar as it led to rise in petroleum prices and caused virtual stoppage of remittances from Indian workers in the Gulf. These developments brought the country almost to the verge of default in respect of external payments liability which could only be averted by borrowing from IMF under standby arrangement and certain emergency measures taken by the government to restrict imports. After New Economic Policy (NEP) of 1991 there was substantial improvement in BOP position of India but yet it has not solved all the problems of BOP.

1.1.6 FDI Inflows and Balance of Payments

FDI inflows affect Balance of Payments and there is substantial evidence, both theoretical and empirical. Owing to this fact what needs to be assessed is the impact on specific parts of the BOP namely, Current Account Balance (CAB) and Capital Account Balance (KAB). It is not necessary that eventual impact may be same as the initial one. It is also to be noted that the relationship between (whether statistical or causal) FDI Inflows and the components of Balance of Payments may differ in long run and short run. It may also differ in post reform era and pre reform era. Thus, there is a need to identify these relationship and conclude this causal behaviour between the variables.
1.2 Motivation: Why This Topic?

The personal inclination and interest of the researcher towards macro level double entry book keeping led to the identification of Balance of Payments as a source of generating specific topic. A brief review of literature and articles motivated the researcher to involve into causal research or causal study. It was at this juncture that the researcher appreciated the difference between statistical significance and causality. Thus, the researcher started studying Balance of Payments as a whole and its components as fragments in order to identify the study that may be relevant and may also add to the existing body of knowledge.

After thorough study, in the light of causation studies, concepts regarding balance of payments, the researcher identified two important components to be studied, that is, Current account of Balance of Payments and Capital Account of Balance of Payments. On the other hand, a variable within the Capital Account of Balance of Payments that is FDI was picked up by the researcher. Thus, the researcher tried to develop the topic that considered FDI on one hand and Current Account Balance and Capital Account Balance on the other hand. Because Current Account and Capital Account are the major portions of Balance of Payments and it appeared difficult and lengthy to frame the topic with inclusion of the words “Current Account” and “Capital Account”, in order to simplify the topic, Balance of Payments was mentioned. Thus, at the level of researcher it was FDI impact on BOP which needed to be studied as a causal relationship.

But the researcher was not aware at the beginning about the flow and stock concept of FDI and even the direction of FDI was not specified. Thus, after discussing the issue with the supervisor, FDI inflows was selected to be an explanatory variable in the study. Eventually, the study emerged to check the impact of FDI Inflows on India’s Balance of Payments. Another motivation for taking this study was the popularity of Current Account Deficit in Indian scenario as well as the bone of economic and political contention on the use of FDI in India. The country’s political leadership unclear of FDI importance on one hand and the priority of the Indian government to curb or control the Current Account Deficit on the other hand, motivated the researcher to study the causal relationship between these two portions of BOP so as to
add to the existing body of literature on this issue that is of paramount importance to Indian economy.

1.3 Epistemological Considerations

In research, it is important to primarily identify what particular philosophy or approach is followed. This comes under the category of epistemological considerations. Epistemology concerns the question of what is (or should be) considered appropriate and acceptable knowledge in a discipline. Taking into consideration that the aim of researcher is to add to the existing knowledge, it is important that the outcomes are considered acceptable knowledge (Bulmer, 1979). For this it is important to build up a discussion on the epistemological considerations of this study.

As the study concerns International Economics which is a branch under social sciences, it should be clear that there is no possibility of controlled experiments as in the case of study of natural sciences. Still as Milton Friedman (1953) has highlighted the important role of positivism in understanding economic relationships, the study follows the philosophical approach of positivism. The position that affirms the importance of imitating tools of natural sciences is invariably positivism. Though, it is to be noted that positivism in social sciences is not the exact replica of positivism under natural sciences. The justification of this lies in the fact that positivism as explained by Milton Friedman (1953) is nowhere close to the positivism followed in natural sciences, though the positivism in social sciences has similar objective as that of natural sciences. The following points will try to justify that study will use the positivism approach:

1. Principle of Deduction

The principle states that the purpose of theory is to generate hypotheses that can be tested and then will thereby allow explanations of the relationships. In simple words Figure 1 shows a deduction approach.
Figure 1.1. Deduction Approach*  
*Titled according to APA 6th edition  
Source: Prepared by the research scholar

Figure 1.1 clearly highlights the sequence of deduction. The same sequence will be followed in this thesis with the use of econometrics. Econometrics is the study that is a conglomeration of economic theory, mathematical economics and statistical economics to reach to conclusions. The approach of econometrics to be followed in the thesis will be of deduction and will be dealt in detail under research methodology.

2. Principle of Objectivity

The principle of objectivity states that the research must be conducted in a way that is “value free”. In other words, there should not be any involvement of normative issues in the manner research is being conducted. In this study, the issue is easily resolved in the way that the approach of positive economics would be used that is value free. Both FDI Inflows and Balance of Payments are taken value free concepts or for that matter of quantitative analysis as value free variables. The data collection on the parameters, FDI Inflows (FDII), Current Account Balance (CAB) and Capital Account Balance (KAB) are not guided by any value considerations but on the scientific methodology based on standard statistical methods of data collection. Another point is the use of secondary data which is value free at least for the
researcher as it is not collected by researcher. Thus, the question of selectivity biasness on the part of researcher stands nowhere.

1.4 Research Gap

The subject of Foreign Direct Investment and Balance of Payments has been an integral part of international economics and several studies have been conducted on both. However, a causal relationship between the two economic concepts from an Indian perspective has not been studied in terms of long run and short run. Keeping in mind that Long Run and Short Run as the important concepts in the area of research as the impacts and relationship may also vary in both time periods. Another point to be highlighted is that, more emphasis has been given by the researchers to Foreign Direct Investment and Current Account but studies have ignored Capital Account. Thus, overall study of Balance of Payments is taken to consider both.

1.5 Scope of the Study

The study focuses on India for both short run and long run periods. Foreign Direct Investment Inflows have played an important role in the economic status of India and continue to do so. FDI Inflows, as has been discussed earlier, is a part of BOP and thus it is deemed necessary to understand the theoretical as well as empirical relationship with BOP through its important components namely, Current Account Balance and Capital Account Balance. The study assesses the impact of FDI inflows, both positive and negative, on the elements of BOP. The study would be an enquiry into the recent impact which may prove previous results as outdated or may further bolster the previous conclusions. India still faces current account deficits, necessitating an explanation; the present study aims at filling this research gap. FDI Inflows have both positives and negatives but such notion stands to be tested for the latest data with respect to BOP position. Again the present study aims for the same. Specific impact of FDI Inflows on Current Account and Capital Account would be dealt in the study through analysis of national financial data with the help of relevant statistical and econometric tools. It would be unjustified to assert that the present study would not have any future impact on the policy of India towards FDI Inflows. It is presumed that FDI Inflows bring substantial benefits to the host country, the same is to be said about India and Indian policymakers have taken this stance to justify and allow FDI Inflows gradually in every sector; the latest being the relaxations in the
limit and route for various sectors. But, for a researcher this stance is merely a postulate unless supported by empirical evidence. In this regard, BOP is a statement showing the position of the country not theoretically but empirically. Thus, the present study is a search for the validity of the postulates regarding FDI Inflows specifically with respect to BOP and its components. It would be an uninvolved endeavour to search for the impact that too with the availability of disproportionate data on the subject.

1.6 Research Design

![Figure 1.2. Research Design](source: Prepared by the research scholar)

Research design is a framework or a roadmap for conducting the research. In applied form it transforms into the systematic steps to be taken to reach to conclusion or findings in a particular research for a specific time period. As this study deals with causality and not just checking of significance, the research design followed is that of econometrics. Figure 1.2 highlights the systematic research steps to be followed.
Step 1: Economic Theory

Economic Theory related to the dependent and explanatory variables will be identified and would be studied properly. Propositions will include the division of the economic theory on the basis of Long Run and Short Run, as it provides sound theoretical basis in studying the relationship. The presence of competing theories will make the task exhaustive with the aim of selecting simple theoretical explanations for the sake of simplifying hypothesis to be developed in Step 2.

Step 2: Hypothesis

The development of hypothesis at initial level means developing a conjectural statement or a statement which stands to be tested. It is befitting to understand this stage with the help of an example. The law of consumption as given by Keynes (Keynes, 1936; Friedman, 1957) states that as income increases, consumption expenditure also increases but by a lesser degree or magnitude. This is an example of initial hypothesis that is in the form of a statement. The same will be tried in this study.

Step 3: Maintained/Mathematical Hypothesis

After developing a subjective statement that is to be tested, a mathematical equation including the explanatory and dependent variables would be developed along with the expected signs of the parameters (Cramer, 1998). The signs of the parameters will be determined after considering the theoretical relations between variables as stated in Step 2. It is to be noted that the idea of the parameters has to necessarily come from outside statistics as statistical relationship is no justification for a valid and acceptable causal relationship.

Step 4: Econometric Hypothesis

Econometric hypothesis is one that includes the error term or the stochastic variable for all other factors that may affect the dependent variable apart from the explanatory variable or variables. The inclusion of stochastic element is very important as it is the differentiating criteria between an econometric technique and statistical technique. The term $\varepsilon_t$ will be specifically used in maintained hypothesis as stochastic element. Alternatively, $\mu_t$ may also be used instead of $\varepsilon_t$. 
Step 5: Data Collection

The study is based on secondary data. The required data has been collected from various sources i.e. World Investment Reports, IMF Reports, various Bulletins of Reserve Bank of India, publications from Ministry of Commerce, Govt. of India, Economic Survey of India, Country Reports on Economic Policy and Trade Practice, and from websites of World Bank, IMF, RBI, UNCTAD etc. Time series data has been collected for the period 1970 to 2015. The data is further categorised into Short Run and Long Run on the basis of Bai-Perron Multiple Breakpoint Test (Bai & Perron, 1998; 2003a) applied in Chapter 6.

Step 6: Data Analysis using Econometric Techniques

Econometric techniques are employed for building the causal relationship between variables of the study. Stationarity test such as Augmented Dickey Fuller Test (Dickey & Fuller, 1981), KPSS Test (Kwiatkowski, Phillips, Schmidt, & Shin, 1992), Philip Perron Test (Perron, 1989) and Dickey Fuller-GLS Test are employed along with Granger causality approach by Toda and Yamamoto (Toda & Yamamoto, 1995). Classical Linear Regression has failed to give robust results and therefore Quantile regression is applied. For cross analysis of causality Johansen Cointegration (Johansen, 1991) is also used.

Step 7: Results

The results of the econometric technique applied are checked for causation and are analysed properly to draw inferences that can be bounced back towards accepting or rejecting the econometric hypothesis.

Step 8: Accepting/ Rejecting Hypothesis

The results have guided whether to accept the formulated hypothesis or to reject the formulated hypothesis. Type I and Type II errors have been cautiously considered while accepting or rejecting the hypothesis on the basis of the results.

Step 9: Findings

The findings are presented in Chapter 7 in a manner linked to the existing body of literature. Whether the findings add to the existing body of literature or not have also
been considered upon. As the deduction approach ends, the induction approach starts, that will turn the findings again towards the theory (Bloor, 1978). Thus, in the end it is from outcomes to theory again.

1.7 Research Methodology

Research Methodology deals with the approach undertaken for conducting research identified by the conventional types of researches (Barley, Meyer & Gash, 1988). The research methodology adopted in this study is of causal nature as opposed to descriptive study. In descriptive study, the problem is described with the help of identified variables and the study limits to this. On the contrary, in causal research the cause and effect relationship is identified to solve the problem. Moving with the causal research methodology, techniques from mathematical economics, statistics and econometrics would be used to study the problem of this study (Bryman, 1992). The econometric techniques applied are Unit Root Tests, Johansen Cointegration, Toda and Yamamoto Granger Causality with VAR setup and Quantile Regression.

1.8 Objectives of the Study

The objectives of the study are divided into General Objectives and Specific Objectives.

1.8.1 General Objectives

1. To discuss the theoretical considerations related to FDI Inflows in India.
2. To discuss the theoretical considerations related to components of BOP in India.
3. To discuss trends in FDI Inflows, Current Account Balance and Capital Account Balance of India’s BOP.

1.8.2 Specific Objectives

1. To identify the causal relationship between FDI Inflows and Current Account Balance of India’s BOP in the Long Run.
2. To identify the causal relationship between FDI Inflows and Current Account Balance of India’s BOP in the Short Run.
3. To identify the causal relationship between FDI Inflows and Capital Account Balance of India’s BOP in the Long Run.
4. To identify the causal relationship between FDI Inflows and Capital Account Balance of India’s BOP in the Short Run.

**1.9 Hypotheses of the Study**

H\(_{01}\): FDII does not Granger cause CAB in the Long Run.

H\(_{02}\): CAB does not Granger cause FDII in the Long Run.

H\(_{03}\): There is no significant impact of FDII on CAB in the Long run.

H\(_{04}\): FDII does not Granger cause CAB in the Short run.

H\(_{05}\): CAB does not Granger cause FDII in the Short Run

H\(_{06}\): FDII does not Granger cause KAB in the Long Run.

H\(_{07}\): KAB does not Granger cause FDII in the Long Run.

H\(_{08}\): There is no significant impact of FDII on KAB in the Long Run.

H\(_{09}\): FDII does not Granger cause KAB in the Short Run.

H\(_{010}\): KAB does not Granger cause FDII in the Short Run.

H\(_{011}\): There is no significant impact of FDII on KAB in the Short Run.

**1.10 Limitations of the Study**

The study is focusing on the causal relationship between FDI Inflows and different components of India’s Balance of Payments but the study ignores FDI Stock and the Net FDI, that is, FDI Inflows less FDI Outflows. For the study, the short run period is assumed on the basis of Bai-Perron Multiple Breakpoint Test which is open to criticism and debate. The study is from Indian perspective and thus ignores the perspective of other countries or multi-lateral organisations such as IMF, World Bank, WTO, ADB etc.

**1.11 Tentative Outline of the Thesis**

The full thesis is divided into seven chapters including sub sections. Chapter 1 introduces the reader to the topic and describes the approach adopted for conducting the research. Chapter 2 deals with the conceptual framework related to the concepts relevant to the study. Chapter 3 is Review of Literature where the past research literature is elucidated to form the basis of analysis. Chapter 4 is the analysis of trends in FDI Inflows and Balance of Payments of India. Chapter 5 discusses in detail the
research methodology adopted. Chapter 6 is about the econometric analysis and interpretation. Chapter 7 concludes the study which is followed by annexures and bibliography. The referencing style attempted in the thesis is American Psychological Association (APA) Referencing Edition 6th.