Chapter 7

Findings, Conclusion & Suggestions
7.1 Introduction

This is the final chapter of the thesis and is based on the description of findings, conclusion and suggestions. These ideas are drawn from the rest of the chapters along with econometric analysis and interpretation as the basis. Findings are explained in accordance with the objectives of the study and accordingly are divided into sub-sections. Conclusion of the study is the eventual outcome and summary of the thesis. Suggestions aims at identifying the areas that needs the attention of policy makers and a bit of elucidation of what could be done to benefit the country due to presence of causal relationship between FDI Inflows and components of Balance of Payments. Finally, limitations of the study and direction for future research are pounded.

7.2 Findings of the Study

After a thorough discussion on the theoretical foundation of FDI Inflows and Balance of Payments along with discussion on the trends in both macroeconomic variables certain findings are discussed. The econometric analysis and interpretation has also added important empirical dimensions. All these points are addressed in sub-sections under this section.

7.2.1 Findings Related to General Objective 1

The first objective of the study was to discuss the theoretical considerations related to FDI Inflows in India. In this regard, all the theories of FDI Inflows related to the existing body of literature and relevant to India has been discussed. It was identified that in one or the other way all theories are explaining the pattern of FDI Inflows in India. The Crowding In and Crowding Out effects theoretically apply to India and the regulatory framework is the testimony for the same. The regulatory framework is not liberalized in absolute term and still there are sectors in India where fully FDI Inflows are not allowed to an extent of 100% and in others there is the issue of government route. This has proved that keeping in view the Crowding In and Crowding Out effects as well as issues related to threat to sovereignty of the nation due to FDI inflows have been considered by the government of India. The types of FDI Inflows discussed under theoretical foundations are all present in the Indian economy, particularly, the types of FDI Inflows on the basis of ownership are quite popular in academic and policy circles. The consolidated FDI policy of 2015 has further
liberalized the FDI Inflows regime and that is expected in future to continue irrespective of the political party in power. It appears that due to lack of domestic investment and to achieve faster growth rates India has to rely on FDI Inflows in the Short as well as Long Run.

7.2.2 Findings Related to General Objective 2

The second objective of the study was to discuss the theoretical considerations related to components of India’s Balance of Payments. The theoretical considerations has identified that India still follows the two major classification of Balance of Payments Account, that is, Current Account and Capital Account apart from other minor sections such as Errors & Omissions and Reserve Account. However, it is to be noted that India as a signatory of IMF has time to time adopted the guidelines of IMF in preparation and presentation of Balance of Payments statement according to Balance of Payments Manual 4 or BPM5 or the latest one being BPM6. In spite of adhering to BPM6, the latest manual by IMF published in 2009, India has still taken liberty as its prerogative to report Current Account and Capital Account instead of using Current Account, Capital Account and Financial Account.

While reporting the merchandise goods under exports and imports India has adopted the guidelines of BPM5 and has adopted changes in the presentation as per the IMF guidelines. However, remaining within the framework of IMF, India has adopted certain practices that are unique while recording merchandise exports and imports of goods. The same applies to services. As India has not divided its capital account under Capital Account and Financial Account separately, India has still not adhered to the provisions of BPM6. The Statistical Discrepancies Account that is, Errors and Omissions Section of BOP have served the theoretical purpose of balancing the Balance of Payments statement in India.

7.2.3 Findings Related to General Objective 3

The general objective 3 relates to trends in FDI Inflows, Current Account Balance and Capital Account Balance of India’s BOP. The findings of the trends are discussed in following sub-sections:
7.2.3.1 Trends in FDI Inflows in India

Trends in FDI Inflows in India shows a rising pattern over the sample period and in the last five years (of the sample period) the growth rate in FDI Inflows was highest for India in comparison to World, Developed Economies and Developing Economies. It was 32% in 2011 while for Developing Economies it was 25% in 2010 followed by 23% for Developed Economies in 2011 and that of the World was 17% in 2011. While FDI Inflows of India has gradually increased in the recent years, in 2014 FDI Inflows has shown a decreasing trend in Developing Economies. Another comparison of India’s FDI Inflows was made with Developing Economies of Asia and Emerging Markets of Asia in the study. India is a member of both the groups. India’s FDI Inflows has overall increased with a steep fall in the aftermath of World Economic Crisis of 2008, but from 2013 it has again taken the path of increment. The maximum value of India’s FDI Inflows has been US$ 47102 million witnessed in the year 2008. In this grouping, FDI Inflows of India in the last five years (2010-2014) has shown the highest growth rate. It was 32% for India in 2011 while for Emerging Markets (Asia) the highest was 23% in 2010 and for Developing Economies (Asia) was 24% in 2010.

In recent years, several economic blocs have been formed with the objective of both economic utility and political multi polarity. The example of such an act is the formation of G-20 as well as BRICS. During the sample period in 2013, there was a fall in FDI Inflows in G-20 as well as BRICS but an increase in the FDI Inflows of India. This shows a positive development in the FDI Inflows of India. The Standard deviation as a measure of variation was highest for G-20 and lowest for India. The trends in the Growth Rate of FDI Inflows for India, G-20 and BRICS are interesting to highlight. The highest fluctuation in the Growth Rate of FDI Inflows is for India and its growth rate was highest in 1984 and 1985 with a rate of 241% and 451%. In the last five years (of the sample period), India has the highest growth rate with a value of 32% while for G-20 it was 24% in 2013 and for BRICS it was 20% in 2011.

In every country, there are ranking of the home countries that are increasingly involving with the host countries for FDI Inflows. Several countries across different categorization are increasingly becoming interested in investing in India due to huge consumer base and cheap availability of labour. Between April, 2000 to September,
2015 Mauritius has remained the highest investor in India and accounts for 34% of FDI Inflows followed by Singapore and UK. Though, Singapore (with 15% share) is at rank two, its share is even less than 50% of Mauritius. Mauritius has taken its place due to low capital gains tax (about 3%) along with presence of Double Taxation Avoidance Agreement. For a short span of time during 2013-14 Singapore has replaced Mauritius but was not able to retain its position. It is also important to understand the Sectoral Distribution of FDI Inflows in India and to appreciate the top sector in India that is heavily receiving FDI Inflows. Services sector in India attract the highest FDI Inflows and account for 17% of the total FDI Inflows in India. Services sector is followed by Construction and Development with ranking two and Computer Software and Hardware with ranking three.

7.2.3.2 Trends in Current Account of India’s BOP

During most of the year for the sample study, India has witnessed a Current Account Deficit and it was merely for six fiscal years that it was surplus (1973-74, 1976-77, 1977-78, 2001-02, 2002-03 and 2003-04). From the fiscal year 2004-05 there is a continuous trend of Current Account Deficit. The mean value of Current Account Balance is also negative denoting an average Current Account Deficit with a value of (-) US$ 9898.17 million. On the other hand, the maximum Current Account Surplus was witnessed in the fiscal year 2003-04 with a value of US$ 14083 million. Additionally, the highest Current Account Deficit was witnessed in the fiscal year 2012-13 with a value of US$ 88163 million. This clearly indicates that the highest surplus achieved by India in the sample period is far less than the witnessed Current Account Deficit.

During the sample period for the study merchandise exports and imports have been increasing. The merchandise imports are reported above the merchandise exports which results in negative balance of trade. The mean value of merchandise imports (US$ 100649 million) have been above the mean value of merchandise exports (US$ 66877). It is also to be noted that maximum value reported of Imports was higher than maximum value of exports. It was US$ 502237 million for merchandise imports and US$ 318607 million for merchandise exports. The takeaway is clear that during the sample period, imports have always remained more than exports. Due to these variations, Trade Balance has the highest variation in terms of growth rates.
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The other component of Current Account comprises of services, transfers and incomes under the head Invisibles. The classification of services is done on the basis of product based system. The Product Based System focuses on type of service rather than type of units. The Indian economy’s Net Invisibles shows an increasing trend which has remained positive meaning thereby that India is receiving more in terms of services, transfers and incomes. This highlights the strength of services sector in India. In the last two fiscal years (of the sample period) the growth rate has remained positive while in the beginning of sample period the growth rate of Net Invisibles was negative as well as highly fluctuating.

7.2.3.3 Trends in Capital Account of India’s BOP

In the sample period (1970-71 to 2014-15) the highest achieved balance of Capital Account was in the fiscal year 2007-08 and owing to the economic crisis the highest fall was in subsequent year, that is, 2008-09. Since then the Capital Account Balance has improved. The mean value of Capital Account Balance was witnessed as US$ 17584 million and the maximum value recorded was US$ 106585 million. However, the highest Growth Rate was in the fiscal year 2009-10 with a rate of 598% and in the last five fiscal years the Growth Rate of Capital Account Balance has remained positive except for 2013-14.

For the initial years of the sample period, Foreign Investment as a unified item was presented in the India’s Balance of Payments. The mean value of Foreign Investment was US$ 12703 million and the maximum value of US$ 75348 million was witnessed in the fiscal year 2014-15. The Foreign Investment improved in 2014-15 and 2013-14. The highest Growth Rate in the sample period was encountered in the fiscal year 1993-94 with a value of 659%. During the last few years, 2012-13 and 2014-15 has witnessed the positive Growth Rate with a value of 8% and 110%, respectively. External Assistance and Commercial Borrowings are other important components of Capital Account. The trend of Commercial Borrowings is more fluctuating than External Assistance. The mean value of the former was US$ 2790 million and for the latter it was US$ 1291 million. The remaining three components under Capital Account are Rupee Debt Service, Net NRI Deposits and Other Capital. The Rupee Debt Service has remained stable while there are fluctuations in Net NRI Deposits and Other Capital Flows.
7.2.4 Findings Related to Specific Objective 1

The specific objective of the study stated: “To identify the causal relationship between FDI Inflows and Current Account Balance of India’s BOP in the Long Run”. The total time period of the study has been considered as Long Run period. In the period there has been found a bi-directional causality between FDI Inflows and Current Account Balance meaning thereby both Granger cause each other with probability values of Granger Causality being 0.0011 and 0.0127, respectively. The two series were also Cointegrated with an order 1 as proved by Trace Test Statistic and Maximum Eigenvalues. This has bolstered the bi-directional causality. With the help of Quantile Regression, there was identified a significant impact of FDI Inflows on Current Account Balance with a probability value of 0.0004 for FDI Inflows. Quantile Process for 10 quantiles also suggests that every quantile is significant. The estimated equation suggests that FDI Inflows are inversely related to Current Account Balance. A 0.85 factor on FDI Inflows has a 1 factor impact on Current Account Balance but inversely.

7.2.5 Findings Related to Specific Objective 2

The Specific Objective 2 stated: “To identify the causal relationship between FDI Inflows and Current Account Balance of India’s BOP in the Short Run”. Jointly with the help of Bai-Perron Multiple Breakpoint Test for FDI Inflows and Current Account Balance, the Short Run Period was identified from fiscal year 1983-84 to 2003-04. In the Short Run, according to Toda and Yamamoto approach to Granger Causality there was found no causality between FDI Inflows and Current Account Balance. This is due to probability values being 0.7335 and 0.4760 that are more than 0.05. The results are not contradicted by Cointegration Test as both the Trace Test Statistic and Maximum Eigenvalues suggested that there is no Cointegration between FDI Inflows and Current Account Balance in the Short Run. Because no causality was found between FDI Inflows and Current Account Balance in the Short Run there was no point in measuring the impact of FDI Inflows on Current Account Balance in the Short Run. Any such impact would be in contradiction and conflict to the Granger Causality output.
7.2.6 Findings Related to Specific Objective 3

The Specific Objective 3 of the study stated: “To identify the causal relationship between FDI Inflows and Capital Account Balance of India’s BOP in the Long Run”. As was stated previously, the total time period of the study is taken to be the Long Run Period. In the stated period a bi-directional causality has been found between FDI Inflows and Capital Account Balance. This is due to the probability value of 0.0012 and 0.0007 which are less than 0.05. The causality results are confirmed by Cointegration Test as one Cointegration is found between FDI Inflows and Capital Account Balance in the Long Run. After finding the causality, the impact of FDI Inflows on Capital Account Balance is assessed with the help of Quantile Regression in the Long Run Period. The probability value of FDI Inflows comes out 0.0000 which shows that there is a significant impact of FDI Inflows on Capital Account Balance. The output shows that for every factor 1.74 the Capital Account increases by 1 factor thus suggesting a direct relationship. This is also a confirmation to the theoretical foundations of Balance of Payments. The Quantile Process estimates suggests that except for first quantile of FDI Inflows all the rest of 9 quantiles have a significant impact on Capital Account Balance. It is also to be noted that values of all quantiles are positive.

7.2.7 Findings Related to Specific Objective 4

The Specific Objective 4 stated: “To identify the causal relationship between FDI Inflows and Capital Account Balance of India’s BOP in the Short Run”. The Short Run period is identified with the help of Bai-Perron Multiple Breakpoint Test and the period selected is 1985-86 to 2003-04. With the help of Granger causality (Block Exogenity Wald Test), a uni-directional causality is found running from FDI Inflows to Capital Account Balance as the probability value is 0.0472 which is less than 0.05. There is no causality from Capital Account Balance to FDI Inflows as the probability value 0.4833 is more than 0.05. Next, the significant impact of FDI Inflows on Capital Account Balance is measured with the help of Quantile Regression but the output accepts the null of no significant impact. As the causality was not contradicted by Cointegration Test, the decision of significant impact cannot be taken solely on the basis of Quantile Regression. Thus, significant impact of FDI Inflows on Capital Account Balance in the Short Run is again measured with the help of Two Stage
Least Squares Regression where FDI Inflows is also considered as an instrumental variable. The output shows the probability value of FDI Inflows to be 0.0030 which is less than 0.05 thus indicating that FDI Inflows has a significant impact on Capital Account Balance in the Short Run. The normality tests of residuals as a necessary and sufficient condition for the model with the help of Jarque-Bera Statistics is conducted which shows that residuals are normal. The values show that FDI Inflows and Capital Account Balance are positively related in the Short Run and 1.09 unit increases in FDI Inflows causes 1 unit increase in Capital Account Balance in the Short Run.

7.3 Conclusion

This section sums up the outcome of the research in the view of researcher. The study has observed a rising trend in the FDI Inflows in the sample period with a fluctuating growth rate and highest growth rate globally in the last five fiscal years. FDI Inflows in India can be explained by multiple theories and with respect to ownership all types of investment such as Greenfield, Mergers & Acquisitions and Joint Ventures are promoted by the Indian Government. India significantly impacts the FDI Inflows rising trends in groups such as BRICS, G-20 and Emerging Markets of Asia. During the sample period India has liberalized its FDI policy and the trend is to continue in the view of researcher.

The bi-directional causality between FDI Inflows and Current Account Balance in the Long Run suggests the empirical relationship in confirmation of the theoretical foundations. This adds to the existing body of literature with respect to macroeconomic study for India. This indicates that while considering one variable for policy issues the other should not be ignored. This may help in understanding the latest trend of Current Account Deficit and controlling it to a possible extent. The significant impact of FDI Inflows on Current Account Balance highlights the need to consider the negative relationship between the two and to rethink on where FDI Inflows must be employed and where it should be restricted. As in the Short Run there is no causality between FDI Inflows and Current Account Balance, it does not mean that the result will become universal. Thus, time and again this causality must be checked. This shows that a policy focusing on controlling FDI Inflows and Current Account Balance must focus on a long period and not restrict to short one. However,
individually measures may be taken to affect FDI Inflows and Current Account Balance.

With respect to FDI Inflows and Capital Account Balance, there is bi-directional causality between the two in the Long Run. The prime factor is that FDI Inflows is a component of Capital Account. But consider it that not only FDI Inflows causes Capital Account Balance, it is also the Capital Account Balance which cause FDI Inflows. The influence drawn is that investors or multilateral organizations will surely consider the balance of Capital Account while deciding about the investment through FDI. Particularly, IMF which strongly follows the outcome of econometric methodology will consider the causality as a key factor in decision making for India. There is also found a significant impact of FDI Inflows on Capital Account Balance suggesting a direct relationship between the two. This confers to the theoretical foundation and adds to the existing body of knowledge as empirical evidence.

On the other hand, in Short Run there is only a uni-directional causality running from FDI Inflows to Capital Account Balance. This shows that in Short Run also both are relevant for decision making. However, there was no causality from Capital Account Balance to FDI Inflows in the short run suggesting that it is other factors that are important for the investors in the Short Run and not the balance of Capital Account. The simple reason that an investor has to take decision in a short period explains the issue. There is also a significant impact of FDI Inflows on Capital Account Balance in the Short Run and it suggests a positive relationship between the two macroeconomic variables.

7.4 Suggestions

This section highlights the suggestions by the researcher in line with objectives formulated in the study and the findings of the study.

7.4.1 General Suggestions

1. The theoretical considerations related to Foreign Direct Investment Inflows are not captured from the point of view of Indian Economy in the existing body of knowledge. Though there are theoretical framework for developing countries but there is a long list of countries and therefore a specific theory for India is required. Department of Industrial Policy and Promotion and Reserve
Bank of India must come up with a working paper on theoretical considerations on FDI Inflows and the same should be included in the textbooks.

2. The latest Balance of Payments Manual for India has been published by Reserve Bank of India in September 2010. This manual has remained the source of theoretical rules and regulations as followed while preparing India’s Balance of Payments. Since then there is no up gradation in the Balance of Payments Manual though the fact is that as per the guidelines of IMF India has to fully adhere to BPM6. Thus, RBI should come up with the latest Balance of Payments Manual and the step will benefit researchers as well as multilateral institutions.

3. The aim of Indian policy makers must be to bolster the positive trends in all the three macroeconomic variable, that is, FDI Inflows, Current Account Balance and Capital Account Balance. However, it should be noted that while formulating policy these variables should not be looked in isolation rather jointly. This will present case for better and sound policy. The Current Account Deficit faced by India should be controlled and the growth should not be augmented by foreign investment alone. India should also get rid of the debt burden in the present scenario of high volatility.

7.4.2 Specific Suggestions

1. As the causal relationship between FDI Inflows and Current Account Balance is bi-directional in the Long Run, both macroeconomic variables must be jointly considered for policy making. While assessing the impact of policy changes on any one of the two macroeconomic variables, while reaching to a conclusion the other should not be ignored. If ignored there may remain a possibility of spurious correlation. Any repetition of such study must aim at developing a parsimonious model in the Long Run.

2. The outcome of second objective has been no causality between FDI Inflows and Current Account Balance in the Short Run, there is a need for the policy makers to focus on qualitative parameters instead of just focusing on quantitative parameters to attract Foreign Direct Investment.
economy must be focused more by the policy makers instead of focusing on monetary economy in the Short Run.

3. A bi-directional causality exists between FDI Inflows and Capital Account Balance in the Long Run for India. In this regard, it is for the policy makers to separately study how the Capital Account Balance determines the FDI Inflows. The researcher strongly suggest to study qualitative factors as well as quantitative factors influencing the outcome in India.

4. The uni-directional causality from FDI Inflows to Capital Account Balance in the Short Run shows that the dynamics of FDI Inflows and Capital Account Balance are different. Thus, it is suggested that the macroeconomic studies by the researchers and working papers by the organizations/ monetary authorities must be divided on the basis of Short Run and Long Run period.

7.5 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 organizations such as IMF, World Bank, WTO, ADB etc. The FDI Inflows data was not available prior to 1970.

7.6 Direction for Future Research

1. If the data for all the three macroeconomic variables is available to any researcher from 1950-51, the study must be conducted considering the full period as long run. The output may be compared with present study.

2. The conventional approach to Granger Causality can be used to check whether the outcome of Toda and Yamamoto Granger causality is different from Granger Causality on differenced data for the macroeconomic variables. For the output of Toda and Yamamoto the output of present study may be used.

3. A study to assess the Granger Causality between FDI Inflows, Current Account Balance and Capital Account Balance should be collectively
conducted to identify the direction of causality between the three macroeconomic variables.

4. The techniques of Quantile Regression and Two Stages Least Squares Regression can be further explored in the study of such macroeconomic variables in the light of Applied Time Series Econometrics.

5. All the three variables in the present study were related to Flow concept. The concept of Stock is also important in international economics. Thus, a study can be taken up to identify the causal relationship between FDI Stock and components of International Investment Position (IIP) as per IMF latest guidelines.