IMPACT OF FOREIGN PORTFOLIO INVESTMENT ON INDIAN CAPITAL MARKETS
(Synopsis)

Thesis submitted to the Calicut University
in partial fulfilment of the requirements for the award of the
Degree of Doctor of Philosophy

By
THUSHARA GEORGE

Under the guidance of
Dr. D. PRABHAKARAN NAIR

DEPARTMENT OF ECONOMICS
UNIVERSITY OF CALICUT, DR. JOHN MATTHAI CENTRE
ARANATTUKARA, THRISSUR- 680618
INTRODUCTION

A large volume of the economic literature today focuses on the flow of capital from the capital rich to the capital poor countries. The crisis of 1991 and the New Economic Policy had metamorphosised the Indian economy. With the globalization and opening up policy the ripples of international events could be felt in our economy too. The capital inflows and outflows emerged as a strong factor determining the growth of the economy. Capital flows may be classified into Foreign Direct investment and Foreign Portfolio investment India allowed FPI in its domestic capital markets since 1993 and soon it emerged as a major source of private capital inflow in the country.

REVIEW OF LITERATURE

Large number of studies has been made about the capital flows and their impact on economic development. Based on the nature of the studies the reviews in this case are divided into three categories (i) studies on international capital flows, capital markets and crises (ii) studies on capital flows, stock market development and economic growth (iii) capital market studies in the Indian context

IMPORTANCE OF THE STUDY

An economy’s degree of global financial integration is a key determinant of many of its most important macroeconomic properties. The inflow of capital in the Indian economy is interesting when analyzed in two phases, the pre and post globalization periods. The inflow of capital comprises mainly of FDI, Aids and loans till FPI was allowed in 1993. FPI
affects the economy through its many linkage effects via the domestic capital markets. FPI leads to overall enhancement of efficiency of the capital market, raises the domestic savings rate as well as capital formation. It thus provides a non debt creating source of capital to the developing economies.

However despite all these celebrated virtues of FPI in 1997 the Southeast Asian crisis led to a rethinking on the major policy proposals with respect to FPI. Now the question arises is India vulnerable to such a crisis? Though the Indian economy moves congruent with the rest of the world it exhibits certain trends and patterns of its own. Hence it is important to understand the nature of the volatile FPI flows to India. The review of the existing literature shows that there exists research gap in analyzing the FPI inflows and their economic impact on the capital markets as well as on the real economy as most studies concentrate on the determinants of capital flows. As the policy makers challenge would be to prepare their economies to best absorb the potential benefits of capital flows while reducing the risks of sudden capital outflows it becomes essential to analyze the impact of these flows on the domestic capital markets and the real economic variables.

**STATEMENT OF THE PROBLEM**

During the late 80’s and early 90’s Foreign Portfolio Investment emerged as an important form of capital inflow into developing countries. After the East Asian crises of 1997 FPI’s importance declined in many developing economies. However this did not hold true in the case of India for the period 1993-2006 more than 50 percent of the foreign investment in India came in the form of FPI .This high dependence necessitates to assess whether and how FPI has contributed to the development of the capital market and the economy. These speculative capital flows can seriously disrupt the economic prospects of a developing country by
imposing huge fiscal costs and by reducing the policy options available to the policy makers in managing these flows. It needs to be investigated whether the benefits of FPI has trickled down to the real economy. It is also important to examine whether the supposedly beneficial aspects of a stock market based financial systems are actually being realized in India.

OBJECTIVES:

The objectives of the study which were framed to facilitate answers to the problem under study are

1) To analyze the trend and pattern of Foreign Investment from (a) 1984-85 to 1993-94 and (b) 1994-95 to 2005-06.

2) To examine the trend and pattern of FPI from 1994-95 to 2005-06.

3) To analyze the impact of FPI on Primary and Secondary capital markets as well as on selected Macroeconomic indicators of India from 1994-95 to 2005-06.

HYPOTHESIS

Pertaining to the statement of the problem and theoretical and methodological frameworks discussed in the review the main hypothesis and sub hypothesis of the study are as follows.

Main Hypothesis $H_0$: FPI has no impact on the Indian capital market.

$H_1$: FPI has an impact on Indian capital market.

Sub Hypothesis $H_0$: FPI has no impact on the volatility and market capitalization of BSE and NSE.
H1: FPI has an impact on the volatility and market capitalization of BSE and NSE.

METHODOLOGY AND DATA

The study relies on secondary data (Time series) collected from various sources like RBI publications, SEBI publications, CMIE publications, as well as the data collected from the research and analysis wing of BSE. The period of analysis was taken as 1984-85 to 2005-06 with special thrust from 1994-95 to 2005-06.

For analyzing the first objective linear trend, graphs, pie charts averages, compound Growth rate and percentage analysis was used. This helped to reveal the trend and pattern of Total foreign investment, FPI and FDI during the pre and post liberalization period.

The second objective was investigated with the help of capital market ratios, simple linear regressions on FPI and selected Macroeconomic indicators, correlation matrix between FPI and selected macroeconomic indicators and Granger causality analysis of FPI and selected capital market indicators. As a precondition for testing the causality the tests for stationarity (unit root test) and tests for co integration was applied to the selected capital market variables and FPI.

PLAN OF THE STUDY

The study is divided into 7 chapters. Chapter one deals with introduction, review, importance of the study and research problem, objectives, methodology, abbreviations used in the study and limitations of the study. Chapter two analyses the theoretical frame works involved in international capital flows. The trend and pattern of international capital flows
are analyzed in chapter three. The impact of globalization and policy reforms in the Indian capital markets are discussed in chapter four. In chapter five and six the first and second objectives of the study are analyzed in detail using statistical and econometric models. Finally chapter seven summarizes the findings and conclusions of the study.

LIMITATIONS

One major difficulty encountered during the study was lack of availability of data segregations (only aggregate values were disclosed in the case of many variables). It is important to note that the general data on capital markets is available in plenty and is made use in the study as well. However certain information (data) which would have been more helpful in the study while analyzing the impact of FPI were either undisclosed or published irregularly. Many of these items like the sector specific analysis of funds, information on FII sub accounts etc which were initially provided by SEBI were soon withdrawn realizing their influence on volatility and capital flight. Hence even SEBI and RBI do not publish certain crucial information for reasons of nation’s financial security.

FINDINGS

1) The compound growth rate of FPI in India from 1990-91 to 2005-06 was 41.04 percent, for FDI the compound growth rate was 29.66 percent.

2) The pattern of FPI inflows showed that FII had the highest CGR (64.36 percent) followed by ADR/GDR (31.84 percent) and offshore funds (– 5.04 percent)
3) For the period 1985-06 BSE Sensex had a CGR of 13.77 percent. BSE market capitalization for the same period was 25.40 percent while all India market capitalization was only 13.22 percent.

4) The compound growth rate of absorption of private capital issues for 1985-06 was 1.46 percent.

5) All the components of FII have a positive growth rate except offshore funds.

6) Total Foreign investment showed a positive trend. TFI’s CGR for 1984-85 to 1993-94 was 7.65 percent while from 1994-95 to 2005-2006 it was 23.2 percent.

7) Market Capitalization to GDP ratio increased from 8.67 percent in 1985-86 to 116.4 percent in 2005-06. Average Market Capitalization to GDP ratio was 25.69 percent from 1985-86 to 1994-05 while it was 48.4 percent for 1995-96 – 2005-06.

8) The mean value of the structure size ratio from 1982-83 to 1993-94 was 170.28 while from 1993-94 to 2005-06 it was 614.19.

9) A comparison of resources raised by corporate sector showed that the corporate sector fared much better than the bonds issued by the public sector companies. The average amount raised by corporate sector was Rs.56180.75crore while that of public sector bonds was only Rs.9989.08cror. A difference of Rs.46191.67crore.

10) 74 percent of the new capital issues by non-government public limited companies were prospectus issues with right issues only 26 percent during 1994-2006. Among new issues and existing issues new issues
comprised of 27 percent while existing issues came to around 73 percent.

11) From 1984-85 to 1993-94 external funds were used much higher than the internal sources of funds for non government non financial public limited companies. From 1994-95 to 1998-99 the share of external funds started declining and from 1999-2000 to 2005-06 share of internal funds increased much higher than external sources of funds.

12) New capital issues as percentage of GDCF of private sector, as percentage of GDCF and as percentage of market capitalization of NSE all showed a declining trend.

13) Ratio of new capital issues by non-government public limited companies and amount raised by private placements showed a declining trend from 1995-96 to 2002-03. However it has improved during 2004-06.

14) Among the industry-wise capital raised from the primary market services registered the highest with 46%. Among the institutions banks and FI’s accounted to 60 percent of the funds raised from the primary market.

15) A comparison of the new capital issues by non-government public limited companies and bank lending to small, medium and large industries showed that new capital issues showed a declining trend. For bank lending from 1989-2006 average value was 185534.5 rupees crore and average was 10212.94 crore for new capital issues.
16) In the household sector financial assets bank deposits registered the highest (39 percent) while shares and debentures accounted for only 4 percent.

17) FPI could explain 75 percent of variation in NSE index annual average, 67 percent of BSE Sensex annual average and 89 percent of total foreign investment.

18) FPI has a positive but insignificant impact on GFCF, export based REER & NEER, GDP, FOREX reserves.

19) FPI has a negative but insignificant impact on employment.

20) FPI thus does not have much impact on the real economic variables.

21) All the selected capital market variables were found to be stationary time series. Except in the case of BSE total number of scrips traded all other variables were found to be co-integrated with FPI.

22) Granger causality identifies the impact variables as the volatility and market capitalization of BSE and NSE.

23) The null hypothesis in both main and sub hypothesis in the study are rejected and we accept the alternate hypothesis. i.e.

Main $H_0$: FPI has an impact on Indian capital market.

Sub $H_1$: FPI has an impact on the volatility and market capitalization of BSE and NSE.

The findings listed above are eye-openers to many facts. They suggest that the FPI inflow has not benefited the Indian economy the way the mainstream model predicted. The impact of these flows has a secluded effect.
within the secondary segment of the capital market. The trickling down effect or to be more precise the transmission of these impacts to the real economy is sponged up by certain elements in the Indian economy. Hence it is imperative to enquire into the causes of these findings.

The theoretical concept of stock market boom leading to development of the real sectors of the economy becomes illusionary in the Indian context because of the following reasons the speculative booms, problem of adverse selection and the asymmetries of information, herd behavior and moral hazard.

POLICY IMPLICATIONS

The policy implications of the results of the study can be traced with regard to the (i) Capital account convertibility and the issue of full account convertibility of rupee. As the impact of capital flows are felt in the volatility of the BSE and NSE indices, full account convertibility once coupled with the volatile swings in the market exacerbates the chances of capital outflows in adverse times. (ii) Policies like abolishment of long term capital gains tax to ensure high returns from domestic stock market. These measures have increased the burden of the government exchequer and reduced the policy options available to the government. (iii) Policies to absorb the benefits of portfolio flows. The problems of market imperfection, asymmetric information, herd behavior and contagion attract the focus of the authorities on the methods to prevent capital flights rather than framing policies for successfully absorbing these flows into the real sectors of the economy. This drawback should be remedied through innovative policies.

CONTRIBUTION OF THE RESEARCHER

The contributions of the research on the impact of FPI flows are (i) Identifying the research gap in the studies on foreign portfolio investment in
India. Most of the studies tested for only the determinants of portfolio capital flows rather than the impact of these flows (ii) The impact variables were identified to be (a) Volatility of BSE Sensex and NSE S&P CNX Nifty and (b) Market capitalization of BSE and NSE (iii) It was also very interesting to find that the FPI flows did not have much trickling down effect in the real sectors of the economy.

AREAS FOR FUTURE RESEARCH

The areas for future research can be pointed out as (i) Portfolio flows and exchange rate regime (ii) Portfolio flows and foreign exchange reserves (iii) Portfolio flows and vulnerability to crises and (iv) Policies for increasing the trickling down effect of FPI into real macroeconomic variables.

CONCLUSION

Presenting the essence of this research one could say that the impact of Foreign Portfolio Investment pertains only to the secondary segment of the Indian capital market. Not much impact was found in the primary market. Among the capital market variables FPI’s impact was mostly felt in the volatility and market capitalization of the two major stock exchanges in India – BSE and NSE. Also the benefit of FPI has not trickled down much into the real variables as the mainstream model predicts. Hence careful planning and policy formulation is needed to avoid sudden capital flight as well as for optimum utilization of this much debated “Hot Money”.