Is foreign portfolio Investment beneficial to India's balance of Payments? : An Exploratory analysis

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Abstract

As oppose to the expectation, financing of BoP with foreign investment exerted huge cost on India's BoP. Dividend and capital gain are found to be the two cost of FPI on BoP, in which latter would considered as cost on BoP only if it is repatriated. FPI earns huge capital gain as compared to dividend and has significant evidence for repatriation.

Key words: BoP, FPI

Introduction

With the onset of liberalisation and consequent drastic change in the economic policies in the 1990's, there has been a shift in the BoP financing from debt flows to non-debt flows. The academicians and policy makers considered it as a positive sign since the non-debt creating flows are expected to remove vulnerabilities in BoP. The underlying logic is that more dependence on non-debt flows or foreign investment for financing BoP would reduce the cost of financing BoP and impart more stability to BoP. Moreover, in the long run foreign investment is expected to strengthen the BoP by way of additional foreign exchange earnings possibly through export of goods and services from the firm which received the Foreign Direct Investment (FDI). Foreign investment consists of two parts, one is FDI and other is Foreign Portfolio Investment (FPI). FDI actually received by different companies in India whereas most of the FPI goes to secondary market and acquire the shares of different companies through stock market. Unlike debt creating flows, both FDI and FPI have no fixed cost of amortisation. Due to distinct nature of operation of these two capital flows, their respective effect on BoP will be different. In this context, the major objective of this paper is to analyse the extent of Foreign Portfolio Investment(FPI) to finance BoP and its impact on BoP.

I) Foreign Portfolio Investment and its effect on Balance of Payments

Since liberalisation, major proportion of foreign investment in India is coming in the form of FPI. Therefore to a great extent, we used it for financing BoP. Thus it is worthwhile to assess its effect on BoP. FPI essentially consist of three element namely foreign institutional investment (FII), American depository receipts (ADR) and global depository receipts (GDR). In the entire post liberalisation period, FII mainly dominates in the FPI. From 2000 onwards government allowed the FII to invest in debt instruments. However, the investment of foreign institutional investors is mostly concentrating in equities of different companies through stock market. Because of its size and volume of transactions in stock market, here we consider only the FII part of FPI and its respective effect on BoP. FPI have no fixed cost of amortisation like debt flows, but dividend and capital gain are found to be two cost of FII on the BoP, in which latter would consider as cost only if it is repatriated from India.

For measuring the cost of financing BoP with FII; market capitalisation, capital gain and dividend of FII are calculated with the help of PROWESS data base (CMIE). Market capitalisation means total market value of FII. For getting FII's market capitalisation, we measured the market value of FII investment in Bombay stock exchange (BSE) listed companies. FII market capitalisation is measured at the end of every financial year and it is the average of every March month market capitalisation of FII. This method is adopted mainly to reduce the problem of volatility in the market capitalisation. Market capitalisation of FII is calculated through two variables such as total market capitalisation of each companies and FII share of equities in the respected companies. Market capitalisation of FII in a particular company is arrived by multiplying above two variables. Then add all the companies for getting total market capitalisation of FII. Capital gain of FII is calculated by the difference between the cumulative net investments of FII from SEBI database (historical cost) and total market capitalisation of FII (March month average). FII's dividend is calculated by multiplying the variables dividend per share and FII's latest number of share holding in a company (closer to dividend date). In PROWESS database, FII share holdings are available only on quarterly basis. FII share holding are available in every quarter of financial year. Dividend earning of FII for a financial year is the sum of quarterly dividend earning in a

year. Quarterly dividend is calculated by multiplying dividend per share with FII's share holdings in that quarter[i]. Cumulative net investments of calculated with the help of SEBI database and we have used PROWESS database for calculating market capitalisation of FII. Due to the unavailability of relevant variable in PROWESS database we are not able to calculate market capitalisation, capital gain and dividend earning of FII before 2000.

From the table 1 it can be seen that, apart from capital gain, dividend earned by the FII's is more or less same throughout the study period. High dividend repatriation of $ 479.9 million have found only in 2000-01 and after that it suddenly fell down at $ 208.8 in 2001-02 and since then it is mildly fluctuating around $ 200 million.

Table 1: Foreign Portfolio Investment and its effect on Balance of Payments

(values are in millions of US $)

Year (1)	Gross purchase (2)	Gross sales (3)	Net investment (4)	Cumulative net investment (5)	FII's market capitalisation (market value) (6)	Capital gain (7)=(5- 6)	Dividend (8)
1992-93	6	1	4	4	NA	NA	NA
1993-94	1783	149	1635	1639	NA	NA	NA
1994-95	2430	903	1528	3166	NA	NA	NA
1995-96	2898	823	2075	5242	NA	NA	NA
1996-97	4381	1966	2416	7657	NA	NA	NA
1997-98	5030	3427	1603	9260	NA	NA	NA
1998-99	3831	4207	-377	8884	NA	NA	NA
1999-00	13121	10785	2336	11220	NA	NA	NA
2000-01	16209	14035	2175	13394	12785	-609	480
2001-02	10467	8631	1836	15230	12948	-2282	209
2002-03	9724	9169	555	15786	11930	-3856	215
2003-04	31524	21565	9959	25745	32975	7230	235
2004-05	48285	38074	10211	35956	51942	15986	233
2005-06	78372	69006	9366	45322	101906	56584	229
2006-07	114941	108130	6810	52132	121247	69114	234
2007-08	235586	219140	16445	68578	193002	124424	255
2008-09	132287	141957	-9671	58907	72868	13961	222

Source: Computed from SEBI database, PROWESS database (CMIE)
Note: First five columns are calculated from SEBI database and column six, seven, eight are calculated with the help of PROWESS data base database (CMIE). All the values in the tables are first calculated in Rupees and then converted into Dollar the using implicit exchange rate

According to RBI in 2008-09 total foreign investments (in India) repatriated dividend and profit worth $ 3168 million. As per our calculation FII account for around $ 222 million repatriation in the same year. Hence we can argue that FII cause around 14% in the total dividend repatriation from India in that particular year. In 2005-06, share of dividend by FII is only 10% which is increased to 14% in 2006-07. FII are active traders in the stock market for whom dividend matters little where as capital gain seems to be most important attraction for them.

From the table 1, it is clear that FII earns substantial capital gain from Indian stock market especially from 2003-04 onwards. However, between 2000-01 and 2002-03, it in was negative that means their total market value of shares was lower than the cumulative stock in those years. FII had only $ 7.2 billion worth of capital gain in 2003-04, but it is increased to very high at $ 124.4 billion in 2007-08 and suddenly declined to $ 13 billion in the end of 2008-09 due to global economic crisis. Whole of the capital gain of FII cannot be considered as a cost on BoP, because it would became cost in BoP only when it is repatriated from India. With the available data it is difficult to assess how much capital gain is repatriated from India. Increase in the amount of portfolio outflows in recent years may be a significant evidence for their repatriation of this huge amount of capital gain. For instance, the ratio of gross sales to gross purchase of FII was only about 0.68 in 2003-04. Since then, this ratio is dramatically increasing and it reached very high at 0.93 in 2007-08. Thus, large outflows of FII starting from 2003-04 might have reflecting the repatriation of high capital gain from India. However capital gain and its repatriation are not recorded in the current account, but it would affect only in the capital account and reserve account of BoP[ii]. Capital gain and its repatriation of FII could have reduced that much of capital account surplus through FII outflows, therefore it consequently reduce that much of foreign exchange reserve. However, it can be concluded that financing with these forms of foreign invest-

ment have not only made instable BoP[iii], but also they are exerting huge cost on BoP through capital gain repatriation. But interestingly, this repatriation is seems to be an 'invisible' element in BoP. Invisible element here means no one can measure the exact amount they repatriated from India.

II) Capital Gain of FII in India, a recent experience

Though there are evidences of repatriating capital gain of FII, but it is difficult to measure the exact amount repatriated and remains as 'invisible' in BoP. Foreign investors cause around $ 15 billion net outflow in financial year 2008-09 and it is one of the major factors responsible for the low capital account surplus in that year whereas in the previous financial year they created net inflows worth $ 20 billion. Why this much of net FII outflows occurred in the year 2008-09?

Quarterly data shows that FII had been continuously showing net outflows in the five successive quarters, in which occurrence of net outflows started from the last quarter of 2007-08 and continues in the entire quarter of 2008-09. The global economic crisis severely affected the third and fourth quarter of 2008-09. Nevertheless, the cumulative sum of net outflows in the fourth quarter of 2007-08 and the first quarters of 2008-09 is at $ 9.3 billion. This is slightly higher than the sum of cumulative net outflows of FII in the last two quarters of 2008-09, in which it caused only at $ 8.4 billion. Sum of net outflows of FII in the last two quarters of 2008-09 occurred in the peak stage of global economic crisis[iv] but this period's net outflow seems to be low when we compare sum of net outflows in the last quarter of 2007-08 and the first quarter of 2008-09.

Table 2 : Share holding of FII in Bombay Stock Exchange

(Number of shares are in Crores)

Last quarter of financial year	A	B	T	S	TS	Z	Total
2000-01	181.2	33.2	8.4	0.5	0.3	2.3	225.9
2001-02	196.2	31.7	6.2	0.5	0.1	2.7	237.3
2002-03	223.5	34.7	11	0.8	0.2	2.4	272.5
2003-04	360.3	67.5	10.8	1.6	0.3	2.2	442.7

2004-05	566.6	102	12	6	0.6	1.8	688.9
2005-06	961.4	216.6	18.5	17	2	2.1	1217.6
2006-07	1130.7	341.4	35.6	28.5	5.5	1.2	1542.8
2007-08	1341.5	438.5	46.4	50.2	8.3	0.6	1885.5
2008-09	1188.1	382.7	38.2	51.9	38.1	0.4	1699.6

Source: Computed from PROWESS database (CMIE)
Note: share holding of FII measured in the last quarter of every financial (Jan to Mar) year

In India, there has been high amount of net investment of FII occurred during the first three quarter of 2007-08 which helped the SENSEX to rise above magical figure of 20000 Points[v]. Definitely, capital gain of FII could be very higher in that period. Since then, due to world economic slowdown, FII became a net seller in the market for the five successive quarters (from fourth quarter of 2007-08 and all the quarters of 2008-09) and expect that they repatriated a miniscule amount of huge capital gain they had in the stock market.

Certainly one can ask the question why this much of outflow in the entire quarter of 2008-09 and the last quarters of 2007-08. The heavy capital gain of FII could be the main reason for such heavy outflows. When there is an uncertainty especially at the time of having high capital gain, they probably have the mentality to sell their share and if they do so, they would get more amount per share than it purchased. Consequently, at the time of having high capital gain of FII, outflow would be more than expected.

Interestingly, most of the FII investment has been concentrating in blue chip shares[vi]. For instance, in Bombay Stock Exchange there are six categories of shares namely A, B, T, S, TS, and Z[vii]. However, FII investment mostly concentrating around A group shares, in which A group consist of 200 companies. Not only the FII investment is concentrated on A group shares, but also most of their significant market capitalisation are also belong to this group (See Table 3)

Table 3: FII market capitalisation in different company categories in BSE

(Values are in Rs Crores)

BSE							
Years	**A**	**B**	**T**	**S**	**TS**	**Z**	**Total**
2000-01	52099 (89)	5961(10)	322	20	6	1	58409
2001-02	56720 (92)	4826 (8)	168	14	1	21	61750
2002-03	53529 (93)	3973 (7)	171	44	2	16	57735
2003-04	140088 (93)	10712(7)	456	256	9	2	151524
2004-05	211469 (91)	20002(9)	950	901	59	0	233382
2005-06	393919 (87)	50849 (11)	2072	4048	286	2	451175
2006-07	478002 (87)	59278 (11)	2942	7883	959	1	549065
2007-08	687396 (89)	74447 (10)	3276	10545	994	1	776658
2008-09	312746 (94)	18397 (6)	555	2611	157	0	334465

Source: Computed from PROWESS database, (CMIE)
Notes: Values in the bracket Indicate Percentage share to the Total

In the case of FII, we have seen that gross sales were very higher than gross purchase in the five successive quarters, especially from the last quarters of 2007-08 to last quarters of 2008-09. Sum of the net outflows in all the five quarters is equal to $19 billion, out of which 2008-09 financial year alone contribute $15 billion. Thus one could probably expect that the total number of shares holded by FII in the end of 2008-09 would be probably very lower than the share they had hold in the end of 2007-08. This expectation is because for large FII outflows normally they have to sell large number of shares. We can test this hypothesis by analyzing share holding of FII in Bombay stock exchange.

FII hold 1699.5 Crores of shares in Bombay Stock Exchange at the end of 2008-09 financial years which shows only a marginal reduction worth 185.9 Crore of shares as compared to the end of previous financial year (2007-08), in which they hold 1885.5 Crores of shares. FII investments are concentrated in A group shares but this group also bears the substantial share in the market capitalisation of FII (See Table 3). But A group shares shows only a reduction in the holding of 153.3 Crores shares in 2008-09 as compare to the end of last financial year (See Table 2). Put it

differently, FII have 1188.1 Crores of A group shares in 2008-09 as compared to 1341.5 Crores of share in 2007-08. How the net sales of 153.3 Crores of A group shares can create that much of outflow? Definitely, high capital gain could be the main reason behind the heavy net outflow of FII. At the time of selling the shares, high capital gain allows the FII to get a higher price for every shares than it purchased. Therefore selling few number of A group share can also make huge outflow from India. Interestingly, other small categories like TS and S, they actually increase their share holding at the end of 2008-09 as compared to the end of previous financial year that again strengthen our argument (See Table 2).

III)FII share of market capitalisation in BSE

FII had $ 124.2 billion worth of capital gain at the end of 2007-08, due to the effect of global economic crisis it got reduced to only $ 13.9 billion in 2008-09. However FII net outflow in 2008-09 was $ 15 billion seems to be very low in relation to the large fall in the capital gain of FII. In other words they were not able to repatriate full amount of capital gain they had in the market. Despite a huge net outflow of FII in 2008-09, having $ 13 billion worth capital gain of FII in the end of 2008-09 found to be interesting. Thus we can argue that in 2008-09, they have had a further more potential for net outflows than they did in that year. Due to the heavy net sales of shares, market capitalisation of BSE is greatly reduced at the end of 2008-09. However, even after the heavy net sales of FII in Indian stock market in 2008-09, FII's share in the total market capitalisation of BSE was at 11% in the end of 2008-09 and this share of market capitalisation of FII is even higher than 2002-03 (See Table 4).

Table 4: FII share in the market capitalisation of BSE

(Values are in Rs Crore)

Year	FII market capitalisation	BSE market capitalisation (March end)	FII share of market capitalisation (%)
2000-01	58409	571553	10
2001-02	61750	612224	10
2002-03	57735	572198	10

2003-04	151524	1201207	13
2004-05	233382	1698428	14
2005-06	451175	3022191	15
2006-07	549065	3545041	15
2007-08	776658	5138015	15
2008-09	334465	3086076	11

Source: Computed from RBI (2009a), PROWESS database (CMIE)

Conclusion

To conclude with the available evidence, we can argue that capital gain and its repatriation of FII are very high in India. However high FII outflows as a result of capital gain can affect only the capital account and reserve account of BoP. But capital gains and its repatriation have any effect on current account of BoP because it is not recorded in the current account of BoP. Again the stock market started booming in the initial stage of 2009-10 and trend seems that it would go back to pre crisis levels. However the situation of uncertainty prevails at any time, in that occasion outflow would be many times higher than it were in the recent past.

There has been an accepted view among the academicians and policy makers that, shift in BoP financing from debt to non debt flows is expected to remove the vulnerabilities in India's BoP. Due to the more dependence of non debt flows, cost of financing BoP is expected to be reduced in the liberalisation period. However the 'years of achievement' of financing BoP with foreign investment in post liberalisation period is mainly due to the contribution from FPI part of foreign investment.

As oppose to the expectation, financing BoP with foreign investment has exerted huge cost on BoP. For measuring the cost of financing BoP with non debt flows we looked for both FDI and FPI. Dividend and capital gain are found to be two cost of FPI on BoP, in which latter would considered as a cost in BoP only if it is repatriated from India. As oppose to dividend earning, FPI earns huge capital gain from India. For FPI, they are not only making huge capital gain from

India, moreover there is significant evidence for repatriation. However capital gain and its repatriation would not affect current account of BoP. But capital gain and its repatriation would increase FPI out flows and therefore it would reduce capital account surplus and in turn it would reduce our foreign exchange reserves. Evidence shows that high capital gain of FII would create high FII outflows from especially at the time of uncertainty. When there is an uncertainty at the time of having high capital gain, they probably have the mentality to sell their share and if they do so, they would get more amount per share than it was purchased. Consequently, at the time of having high capital gain of FII, outflow would be more than expected. And this is what happened in 2008-09 financial year, due to global economic crisis FPI created $ 15 billion worth net outflows.

End Notes

[i] FII share holdings are available only in quarters, so we use latest quarterly share holding of FII closer to dividend announcement date.

[ii] Balance of Payment manual 5th edition considered holding of capital gain and losses are not classified as income on investment. Hence it would not record in the current account of Balance of Payment. But all the realized holding gains and losses arising from the transaction are included in capital account

[iii] Instable BoP means, for any uncertainty it can go of the country and would make pressure in BoP. Two times it is happened. One situation is happened at the time of Asian Financial crisis and second is happened at the time of Global economic Crisis. In the second time management of BoP became a difficult task in India due to outflow of capital flows particularly FII

[iv] After the Lehman brother filed for bankruptcy

[v] BSE Sensex or Bombay Stock Exchange Sensitive Index (SENSEX) is a value weighted index composed of 30 stocks that started January 1, 1986. The Sensex is regarded as the pulse of the domestic markets. It consists of the 30 largest and most actively traded stocks, representative of various sectors, on the Bombay stock exchange. These companies account for around fifty per cent of the market capitalisation of the BSE. The base value of the sensex is 100 on April 1 1979, and the base year of SESEX is 1978-79. The index has increased by over ten times from June 1990 to the present. The Sensex on February 6, 2006 touched 10,003 and crossed 20,000 mark in October 29, 2007and reached its ever time peaks at 21078 in January 8, 2008.

[vi] A blue chip shares means shares of a well-established company having stable earnings, no extensive liabilities and having less chance of capital lose to the shareholders. Blue chip stocks pay regular dividends, even when business is faring worse than usual. In Bombay Stock Exchange, blue chips shares are belong to ‘A’ group categories of shares.

[vii] The Bombay Stock Exchange (BSE), India's leading stock exchange, has classified Equity scripts into categories A, B, S, T, TS, & Z to provide guidance to the investors. The classification is on the basis of several factors like market capitalisation, trading volumes and numbers, track records, profits, dividends, shareholding patterns, and some qualitative aspects. Group A is the most tracked class of scripts consisting of about 200 scripts. Market capitalisation is one key factor in deciding which scrip should be classified in Group A.

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