



[Academic Script]

Payment System Part - 3

Subject:	Business Economics
Course:	B. A. (Hons.), 6 th Semester, Undergraduate
Paper No. & Title:	Paper – 611 International Finance
Unit No. & Title:	Unit – 5 Payment Systems
Lecture No. & Title:	Lecture – 3 Payment System Part - 3

Academic Script

1. Introduction

For a developing country like India, the total capital requirements cannot be met with internal sources alone, so foreign investments become an important part in supplying capital. The two most common forms of foreign investments are **FDI and FII**.

Foreign Direct Investment (FDI) is often confused with Foreign Institutional Investment (FII) because both are the forms of investment made in a foreign country. FDI is made to acquire controlling ownership in an enterprise but FII tends to invest in the foreign financial market. In most cases, the former is given preference over the latter because it benefits the whole economy. There are stark differences between FDI and FII which have been presented in this session.

2. Definition of FDI

Foreign Direct Investment shortly known as FDI refers to the investment in which foreign funds are brought into a company based in a different country from the investor company's country. In general, the investment is made to gain a long lasting interest in the investee enterprise. It is termed as a direct investment because the investor company looks for a substantial amount of management control or influence over the foreign company.

FDI is considered as one of the primary means of acquiring external assistance. The countries where the availability of finance is quite low can get finance from developed countries having the good financial condition. There are a number of ways through which a foreign investor can get controlling ownership

like by way of merger or acquisition, by purchasing shares, by participating in a joint venture or by incorporating a wholly owned subsidiary.

Foreign Direct Investment (FDI) as the name suggests is investing directly in another country. A foreign company which is based in some other country like France invests in India either by setting up a wholly owned subsidiary or getting into a joint venture with some company based in India and then conducts its business in India.

Examples: Various software companies like IBM India which is initially based in United States but has opened its subsidiaries in different parts of India; Maruti Suzuki is yet another example in which Suzuki of Japan had joint ventured with Maruti Udyog Ltd. SBI life insurance is a joint venture life insurance company between State Bank of India (SBI) and BNP Paribas Assurance of France and there are many other examples

Foreign Portfolio Investment (FPI) is similar to FDI in a way that this is also direct investment but investment in only financial assets such as stocks, bonds etc. of a company located in another country. In contrast to FDI, a portfolio investment is an investment made by an investor who is not involved in the management and day-to-day business of a company.

Example: Any foreign company invests in the shares of Infosys (based in India).

Definition of FII

FIIs, an abbreviation used for Foreign Institutional Investors, are the investors that pool their money to invest in the assets of the country situated abroad. It is a tool for making quick money for the investors. Institutional investors are companies that invest money in the financial markets in the country based outside the

investor country. It needs to get itself registered with the securities exchange board of the respective country for making the investment. It includes banks, mutual funds, insurance companies, hedge funds, etc.

FII are the source through which FPI happens.

3. Key Differences between FDI and FPI

The significant differences between FDI and FPI are explained below:

1. Foreign Direct Investment or FDI is defined as the investment made by a company in the company situated outside the country. Foreign Institutional Investor or FPI is when investors, most commonly in the form of institutions that invest in the country's financial market.
2. FPI is a way to to make quick money, the entry and exit to the stock market are very easy. On the other hand, the entry and exit are not easy in FDI.
3. FDI brings long-term capital in the investee company whereas FPI may bring long or short term capital in the country.
4. In the case of FDI, there is the transfer of funds, resources, technology, strategies, know-how. Conversely, FPI involves the transfer of funds only.
5. FDI increases job opportunities, infrastructural development in the investee country and thus leads to economic growth, which is not in the case of FPI.
6. FDI results in the increase in the country's productivity. As opposed to FPI that results in the increase in the country's capital.
7. FDI targets a particular company, but FPI does not target a particular company.

8. FDI obtains management control in the company. However, FPI does not enable such control.

Comparison Chart

Basis for Comparison	FDI	FPI
Meaning	When a company situated in one country makes an investment in a company situated abroad, it is known as FDI.	FPI is when foreign companies make investments in the stock market of a country.
Entry and Exit	Difficult	Easy
What it brings?	Long term capital	Long/Short term capital
Transfer of	Funds, resources, technology, strategies, know-how etc.	Funds only.
Economic Growth	Yes	No
Consequences	Increase in country's Gross Domestic Product (GDP).	Increase in capital of the country.
Target	Specific Company	No such target, investment flows into the financial market.
Control over a company	Yes	No

Now, let us understand FPIs in bit more detail. FPI plays a very crucial role in any country's economy. Market trend moves upward when any foreign company invests or buys securities,

and similarly, it goes down if it withdraws the investment made by it.

4. Strategies Adopted by FII

FII's are mostly adapting High Frequency Trading. It is a computational trading system that uses powerful super computers to place buy/sell orders in fraction of seconds. These super computers analyze gigabytes of data across various sectors and timeframe to arrive at the best possible trading decision. A pre-defined trading algorithm(s) needs to be fed into these computers before making it live. Some HFT systems also have artificial intelligence capabilities to learn and optimize the trading algorithms. Speed is a key factor for the success of HFT systems. Typically, the traders with the fastest execution speeds will be more profitable than traders with slower execution speeds.

High Frequency Trading Strategies

Although there are no pre-defined rules to select strategies for HFT, but there are few popular strategies which are more popular than others and used by most of the HFT trading firms. Below High frequency trading strategies are compiled from various sources:

- **Statistical Arbitrage:** This strategy exploits the temporary deviations of various statistical parameters among various securities. Statistical arbitrage at high frequencies is actively used in all liquid securities, including equities, bonds, futures, foreign exchange, etc. Even classical Arbitrage can be used by examining the price parity of securities in different exchanges or spot and future market. The TABB Group estimates that

annual aggregate profits of high-frequency arbitrage strategies exceeded US\$21 billion in 2009.

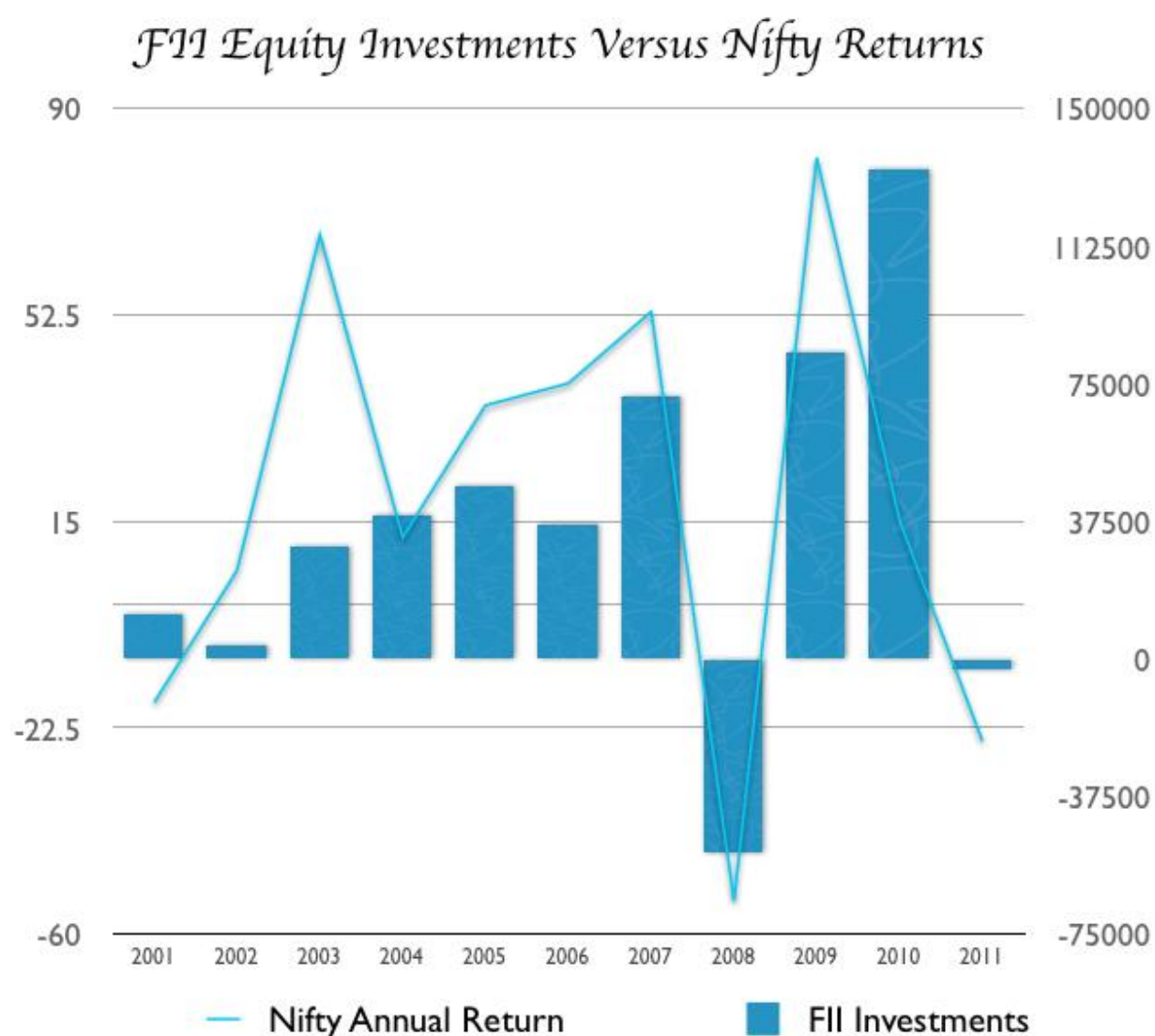
- Option pricing disparity: Generally, it takes some time for the price of an option to follow a stock and vice versa. Modern HFT systems are capable to precisely model these differences to arrive at a favorable trade. Read about options pricing and Black-Scholes model to understand this better.
- News based HFT systems: Company news in electronic text format is available from many sources including commercial providers like Bloomberg, public news websites, and Twitter feeds. Automated systems can identify company names, keywords and sometimes semantics to trade news before human traders can process it.
- Momentum Ignition: This strategy aims to cause a spike in the price of a stock by using a series of trades with the motive of attracting other algorithm traders to also trade that stock. The instigator of the whole process knows that after the somewhat “artificially created” rapid price movement, the price reverts to normal and thus the trader profits by taking a position early on and eventually trading out before it fizzles out.
- Pair Trading: Pair Trading is a market neutral strategy where two highly co-related instruments are bought and sold together when there is a certain degree of deviation in their co-relation. Usually the stock or commodities selected for Pair Trading are from the same sector and moves together during most of the market events. Pair trading in intraday timeframe through HFT systems have given impressive results.

How do FII Investments affect stock market?

The common wisdom is that the stock market goes up when FIIs pump money and it goes down when they take their money out. While this is true, looking at the FII investment data for the last decade shows that it is not a simple, straight relationship.

Here is a chart that shows how much money FIIs pumped into equities in each of the last 10 calendar years, and how much Nifty moved in that year. The FII investments are in Rupees Crores, and the Nifty movement is percentage change.

FII Investments and Effect on Stock Market Returns



This chart shows the following things about the effects of FII investments on the stock market:

FIIs pulling money from the market has resulted in a fall

There were only two instances in the last decade where FIIs pulled out money from the stock market and at both these times the stock market went down. The pullout was fairly severe in 2008, and the market fall was very bad as well. You may argue that just two years aren't enough to form a conclusion but I'd say that it is fairly safe to say that if FIIs were to pull out money then the stock market will go down.

Net positive investments by FIIs don't guarantee an up market

The market fell in 2001 and FIIs were actually net buyers in that year so that also shows that the market can fall even if FIIs pump in money, so just positive net investments from FIIs don't guarantee an up market.

Biggest up moves don't coincide with biggest FII inflows

One thing that struck me about this chart is that the biggest bars don't coincide with sharp up-movements in the line. The biggest percentage gains in the Nifty weren't always in the same year when FII investments were at a peak.

If you look at 2003 – the market went up quite a bit, and there were healthy inflows as well, but if you look at 2004, there were bigger inflows but the market didn't rise up as much that year.

Similarly, 2009 and 2010 follow the same pattern. I think this can be explained with the high base effect since the market rose so much in 2003 and 2009 that there wasn't as much room to grow in 2004 and 2010, but all the same this wasn't something that I understood intuitively before making this chart.

You hear and read a lot about FIIs dominating the stock market movements, and that led me to believe that each big bar will coincide with a sharp rise in the line as well, which is not the case.

5. Impact of FII's Volatility

Regarding the impact of FIIs on volatility of Indian stock market, studies have revealed a significant decrease in the volatility after introduction of the foreign institutional investment in India. But this can't be attributed exclusively to FIIs arrival since after their entry the Government of India and SEBI have initiated a number of reforms to ensure operational as well as informational efficiency

SUGGESTIONS TO GOVERNMENT FOR FII AND ITS IMPACT ON VOLITILITY

First, Indian equity market return is found as the prime mover of the FII net flows into India. Hence, the rate of FII flows into the country would be governed by the performance of the domestic equity market and/ or foreign investors expectations about this performance. A drop of return in the Indian equity market may result in sudden massive withdrawals of FII, which may result in quite disturbing consequence on the country's economy. Similarly, the rise in return would attract a lot of foreign capital to India. The above behavior of FIIs would cause variation in the country's foreign exchange reserve and to some extent, and then they may be outside the monetary authority's control as is being observed in the last quarter of the previous year. Policy implications of the findings just mentioned above are that a move towards a more liberalized regime in the emerging market economies like India should be accompanied by the further improvements in the regulatory system of the financial sector. For instance, the policy makers in India should stop justifying the need of capital account convertibility without considering its side effects. India could survive in the midst of

Asian crisis 1997 simply because of its proper foreign exchange regulations. The same need to be stressed in future too. While liberalizing capital account, they (policy makers) must come up with genuine grounds.

Second, concerning the impact of FIIs on volatility of stock market return, there prevails an opinion that they destabilize the market. But, this study provides contrary findings. It puts forward that FIIs are not 'villains' as our study suggested no impact of foreign institutional investors arrival on Indian stock market. In most of the market crashes which took place after arrival of FIIs, they were net buyers. For instance, in case of 17 May 2004 Black Monday episode, FIIs were not the culprits. Though there was a net outgo; there was also a comeback in the next month June as a net inflow. Thus, we argued that FIIs tend to support stock market purely to ensure stability and safety of their own investments and supports the broad base hypotheses. FIIs add liquidity to the local market and reduce volatility. So it would be beneficial for the India to promote FIIs.

Next, in order to stimulate FII flows, the government must set up FII investments caps over and above the FDI sectoral limits. In cases, where the limits have to be combined, they should be sufficiently at high levels. FII flows may be encouraged by greater volume of issuance of, good quality equities in the Indian market. This would be assisted by public sector units disinvestments. As it has been seen in the case of the initial public offering (IPOs) of Gas Authority of India Limited (GAIL), Oil and Natural Gas Corporation (ONGC) and National Thermal Power Corporation (NTPC), the response of institutional investors including FIIs registered with SEBI was extremely positive.

We further suggest that in order to attract the portfolio investment and retain the confidence of them, the Indian government must follow stable macro-economic policies. The fact is that developing countries such as India have their own compulsions arising out of the very state of their social, political and economic development. FIIs view the domestic situations from their own point of view. So both ruling and opposite parties, legislatures and other responsible leaders must refrain on their speech while talking about the issues of national importance like foreign capital, 123 nuclear treaty with US, inflationary scenario etc.

It is also suggested that The SEBI must follow the "Know your Client" principle and have information about the end-investors. So that proper implementation of policies can be ensured. Last suggestion is that the regulatory authority must look into alleged restrictive practices by FIIs like price rigging. Once this is achieved, a built-in –cushion against possible destabilizing effects of sudden reversal of foreign inflows might drop. Only then it would be possible to reap fully the benefits of capital market integration.

6. Summary

It is quite clear that the two forms of foreign investment are completely different. Both have its positive and negative aspects. However, foreign investment in the form of FDI is considered better than FPI because it does not just bring capital but also amounts to better management, governance, and transfer of technology and creates employment opportunities. Today we learnt about the difference between FDI and FPI, FII's strategies, its impact on volatility and stock market and lastly

some suggestions to government on their increasing concern about FIIs.