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Indian Stock Market- Special Reference to Outward Foreign Direct Investment

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Abstract

Indian stock market marks to be one of the oldest stock market in Asia. Stock exchanges are an organized market place, either corporation or mutual organization where members of the organization gather to trade company stocks or other securities. India over the last decade had been witnessing foreign direct investments (FDI) over the share market upto 51 percent of the total market value. Equally significance is the outward foreign direct investment (OFDI) from India in the globalisation era. Literature has been reviewed to understand the OFDI status in India, as well as from Brazil, Russia, India and China (BRIC) countries. Stock price movement of three listed entities, with foreign investment as equity, viz, INFOSYS, STATE BANK OF INDIA and HUL is studied using Technical analysis. It is expected that the paper will instill more confidence to investors.

Keywords*: Indian stock market, FDI*

1. INTRODUCTION

India over the last decade had been witnessing foreign direct investments (FDI) over the share market upto 51 percent of the total market value. Traditionally, foreign investment is seen as a way of filling the gap between the domestically available supplies of savings, foreign exchange, government revenue and human capital skills and the desired level of these resources necessary to achieve growth and development targets. Equally significance is the outward foreign direct investment (OFDI) from India in the globalisation era. Literature has been reviewed to understand the OFDI status in India, as well as from Brazil, Russia, India and China (BRIC) countries. Stock price movement of three listed entities, with foreign investment as equity, viz, INFOSYS, STATE BANK OF INDIA and HUL is studied using Technical analysis.

1.1 Brief over view of Foreign Direct Investment (FDI)

Foreign direct Investment (FDI) refers to the purchase of a significant number of shares of a foreign company in order to gain certain degree of management control. Different countries set different threshold limits at which they classify an international capital flow- core of FDI- from 10 to 25 percent. In contrast, an investment which does not involve any degree of control in a foreign company is termed as portfolio investment.

According to UN's World Investment Report, FDI includes three components:

a) Equity capital
b) Reinvested earnings and
c) Intra-company loans

In India, FDI inflow is to include the following:

a) Reserve Bank of India's (RBI) automatic approval route for equity holding up to 51 percent,
b) Foreign Investment Board's discretionary approval route for larger projects with equity holding greater than 51 percent,
c) Acquisition of shares (since 1996),
d) RBI's non-resident Indian (NRI) schemes, and
e) External commercial borrowings(ADR/GDR route)

1.2 Brief of the Tools used by the investor – Fundamental analysis and Technical analysis:

Fundamental Analysis: Companies are a part of the industrial and business sector, which in turn is a part of overall economy. In the context of India, major factors being considered include the following:

a) Performance of agricultural sector – 60 % population and contribution to 18% towards GDP
b) Public investment and expenditure – being mixed economy , public sector plays a vital role; government is the biggest investor and spender
c) Monetary policies and trends in money supply- government budget policy, borrowing from the public and credit from banks and RBI
d) Business cycles – the level of business activity and its performance
e) Economic and political stability- stable and long term economic policies and a stable political system.

The following factors are to be considered which affect the performance of the company:

a) Product line- position of the industry in the life cycle of its growth
b) Raw material and other inputs- scarcity of raw materials, quality of materials, import etc
c) Capacity installed and utilised- utilised capacity indicates the quality, market share etc
d) Industry characteristics- seasonality, width of the market, scale of operations
e) Demand and Market- demand is income –elastic and price-elastic, competition
f) Government policy- may have powers of control over the industry in terms of output, price, distribution etc
g) Labour –whether industry is labour-intensive or capital- intensive
h) Management –promoters, their vision
i) Future prospects-scope for growth, diversification horizontally or vertically

Number of non-economic factors, psychological factors, expectation- these also play an important role in most of the time though intrinsic worth as reflected by Book value, Earnings per share of Gross profit margin are expected to play a role in the perception of market price of the share by investors.

Technical Analysis of the market is based on sentiment, psychology and emotions of traders. Normally used tools include:

a) Daily Fluctuation or volatility
b) Floating stock and volume of Trade
c) Price Trends and volume trends
d) Rate of change of Prices and Volumes
e) Dow Theory
f) Theory of Gaps

1.3 Technical Analysis used for the study

a) Exponential Moving Average (EMA)

b) Rate of Change Indicator (ROC)

c) Moving Average Convergence and Divergence (MACD)

1.3.1. Exponential Moving Average (EMA)

A moving average is a summary measure of price movements which reduces the distortions to minimum by evening out the fluctuations in prices. The underlying trend in prices is thus clearly discernible when moving averages are used. A weighted moving average is weighted in favour of the most observations and therefore, earns than simple moving average.

EMA= (closing price-previous EMA) x factor + previous EMA where, Factor = 2/ (n+1)

The EMA for the first day is taken the closing price of that day itself. A 10 day average would indicate the short trends; a 50 day average would indicate medium term trend; and a 200 day average would represent the long-term trend. The moving average is plotted on the charts. The curved line joining these moving average represent the trend line, it may be taken as the first sign of trend reversal.

1.3.2. Rate of Change Indicator (ROC)

It is a very popular oscillator which measures the rate of change of the current price as compared to the price in a certain number of days back. To calculate a 30 day rate of change each day's price is divided by the price which prevailed 30 days ago and then 1 is subtracted from this.

ROC= (Current Price / price 'n' period ago) - 1

The ROC values may be positive or negative or zero. The ROC values are plotted on an XY graph where the X-axis represents the time and the Y-axis represents the values of the ROC. The ROC values oscillate across the zero line. When the ROC line is above the zero line, the price is rising and when it is below the zero line, the price is falling.

1.3.3 Moving Average Convergence and Divergence (MACD)

MACD is an oscillator that measures the convergence and divergence between two exponential moving averages. It is called so as it continuously converge and diverge away from the horizontal reference line. The reference line represents the points, where the two EMAs have identical values. A short term exponential moving average and long term exponential moving average are calculated with the help of the closing price data. 10 day and 50 day exponential moving average constitute a popular combination. The ratio between short term exponential moving averages and long term exponential moving averages represents the MACD. If the MACD line crosses the zero line from above, the trend can be considered to have bearish, signalling a selling opportunity. On the other hand, if the MACD line moves from above the zero line from below, the trend can be said to have turned bullish and indicates a buying opportunity.

2. OBJECTIVES OF THE STUDY

- 2.1 To study the movement of prices of selective stocks (Infosys, State Bank of India, Hindustan Unilever Ltd) during the last 4 years
- 2.2 To study the status of outward Foreign Direct Investment of India and selective other countries (US, BRIC, China).

3. REVIEW OF LITERATURE - OUTWARD FDI

3.1 International Trading

MNCs and domestic firms commonly obtain long term funding by issuing stock locally. Yet MNCs can attract funds from foreign investors by issuing stock in international markets. Issuance of stock in a foreign country can enhance the firm's name there. International investing by individual and institutional investors can indirectly affect the performance of an MNC. The international trading of stocks has grown over time; the same has been facilitated by overcoming by three barriers:

a) Reduction in Transaction costs- Stock exchanges have been have consolidated in most countries to increase the efficiency and to reduce transaction costs. Now days, trades are effected through electronic communication networks (ECN) which do not have a visible trading floor. Several stock exchanges have created international alliances with stock exchanges of other countries to enable firms to cross-list their shares and to enable investors to have easier and quicker access.

b) Reduction in Information costs- The internet provides investors with access to much information about foreign stocks to enable them to make more informed decision. Differences in accounting rules limit the interpretation of financial data till such time accounting standards are made uniform across countries

c) Reducing Exchange Rate Risk- One method of reducing exchange rate risk is to take short positions in the foreign currencies dominating the foreign stocks. However there are limitations, which investor should overcome.

3.2 Methods used to invest internationally

Five common approaches are available for investors attempting in international stock trading:

a) Direct purchase of foreign stocks- Investors can purchase foreign stocks on foreign stock exchanges with the services of brokerage firms

b) Investment in MNC stocks- MNC stocks provide reduced risk by diversified sales not only among industries but also among countries

c) American Depository Receipts(ADR)- An investment in ADRs may be an adequate substitute for direct investment in foreign stocks; ADRs are certificates representing ownership of foreign stocks and are primarily traded on the over-the- counter(OTC) stock market.

d) Exchange- Traded Funds(ETFs)- These represent indexes that reflect composites of stocks for particular countries; they were created to allow investors to invest directly in a stock index representing any one of several countries; also referred to as world equity benchmark shares(WEBS) or as iShares.

e) International Mutual Funds (IMFs) – These represent portfolios of stocks from various countries. Many investors believe an IMF can better reduce risk than a purely domestic mutual fund. An IMF represents a pre-packaged portfolio, so investors need not construct their own portfolios.

3.3 Outward FDI

Outward foreign direct investment (FDI) of firms from Brazil, Russia, India and China has increased significantly during the last few years. Despite this trend, comprehensive research on the specific determinants and antecedents of outward FDI from BRIC countries is still underrepresented. According to the research by Dirk Holtbrügge, Heidi Kreppel, (2012), gaining access to new markets is of utmost importance for all firms. Additionally, most companies seek to obtain access to technological resources and management know-how, therefore emphasizing the availability of these resources in the target countries. While the internationalization of Brazilian and Indian companies is primarily driven by economic motives, many Chinese and Russian firms also receive substantial political support from their governments to invest abroad, especially in strategically important industries. On the firm-level, the strength of firm-specific resources is highlighted. BRIC country firms possess specific strengths that help them to enter both developing as well as developed countries and to pursue their internationalization strategy.

The decisions of foreign investors on technical cooperation versus equity engagements and on the degree of ownership in FDI projects are likely to depend on their relative bargaining position vis-à-vis the host country. Axel Dreher., Peter Nunnenkamp., and Chaitanya Vadlamannati (2011), found that India provides an interesting case for analyzing the interplay between country of-origin characteristics and host-country characteristics and their respective effects on ownership decisions since opening up its economy to FDI in the early 1990s.

Anowar Hossain ., and Mohammad Kamal Hossain (2012), examined co-integration and the causal relationship between Foreign Direct Investment (FDI) and the economic output or Gross Domestic Product (GDP) in the both short and long run of Bangladesh, Pakistan and India over the period of 1972-2008. The results suggest that there is no co-integration between FDI and GDP in the both long and short run in Bangladesh and India. However, authors found co-integration between them in the both short and long run in Pakistan.

Economic variables like FII, exchange rate, gold price, fiscal deficit, and inflation are the important factors which affect the Indian capital market. In addition to the Indian economic variable, the USA economic variables like interest rate, inflation and GDP also affect the Indian capital market. Manoj Kumar Manish and Priyanka Agarwal found that there is also a linkage between USA capital market movement and its effect on the Indian capital market. The monthly data between 1994 to 2010 has been taken to find that the Nifty 50 index is significantly affected by US GDP, S&P index, gold prices, Indian WPI, its fiscal deficit, IPI and exchange rate.

Jaya Praksh Pradhan (2011) studied the origin and growth of outward foreign direct investment (OFDI) by emerging Chinese and Indian multinationals and examined the location determinants of such investments. Both Chinese and Indian OFDI flows were observed to have surged after the adoption of economic openness policies by the home country in the late 1970s and the 1990s respectively and are now increasingly being driven by wholly-owned projects and acquisitions abroad. Indian and Chinese firms both started OFDI operations in developing countries and then they expanded into developed regions in the 1990s. Among location factors, both Chinese and Indian OFDI projects are attracted by host country imports from the sources, greater strength of host currencies, rising host prices and host status of being offshore financial centres. While the Chinese multinationals were found to have preference for hosts with location proximity, small size and high natural resource endowments, the Indian firms appear to choose countries with large size and that have bilateral investment treaty with India irrespective of their physical distance from India.

4. RESEARCH METHODOLOGY

The scope of the study is limited to three companies listed in NSE. The study was conducted for a short period during February 2012 to March 2012. The study is based on secondary data and is based on five year data analysis from 2005-2006 to 2010-2011. Securities are taken on the basis of market capitalization. Three companies chosen for the study are Infosys Limited , STATE BANK OF INDIA and Hindustan Unilever Limited

Geojit BNP Paribas has membership in and is listed on the National Stock Exchange (NSE) and the Bombay Stock Exchange (BSE). In 2008, global banking major BNP Paribas joined the company. Geojit BNP Paribas today is a leading retail financial services company in India with a growing presence in the Middle East. The gamut of value-added products and services offered ranges from equities and derivatives to Mutual Funds, Life and General Insurance and third party fixed deposits. The needs of over 495,000 clients are met via multichannel services - a country wide network of over 500 offices.

Infosys Limited, formerly Infosys Technologies Limited, is an Indian multinational provider of business consulting, technology, engineering, and outsourcing services. It is headquartered in Bangalore, Karnataka.

State Bank of India (SBI) (NSE: SBIN, BSE: 500112, LSE: SBID) is the largest banking and financial services company in India by revenue, assets and market capitalisation. It is a state-owned corporation with its headquarters in Mumbai, Maharashtra. As of March 2012, it had assets ofUS$360 billion and 14,119 branches, including 173 foreign offices in 37 countries across the globe. Including the branches that belong to its associate banks, SBI has 21,500 branches.

Hindustan Unilever Limited (HUL) (BSE: 500696) is India's largest consumer goods company based in Mumbai, Maharashtra. It is owned by the British-Dutch company Unilever which controls 52% majority stake in HUL. Its products include foods, beverages, cleaning agents and personal care products.HUL was formed in 1933 as Lever Brothers India Limited and came into being in 1956 as Hindustan Lever Limited through a merger of Lever Brothers, Hindustan Vanaspati Mfg. Co. Ltd. and United Traders Ltd. It is headquartered in Mumbai, India The company was renamed in June 2007 as Hindustan Unilever Limited.

5. ANALYSIS AND INTERPRETATION

5.1 Analysis and Interpretation of Infosys

Table No. 1
Share Holding Pattern of Infosys

Share Holding Pattern (as on Dec.2011)	**Shares**	**% Holding**
Indian Promoters	92085078.00	17.00
Financial Institutions	23832112.00	4.00
FII"s	210124296.00	38.00
Private corporate bodies	34698921.00	6.00
NRI"S	4777083.00	1.00
Others	107845572.00	20.00
General Public	76171731.00	14.00
Total	549534793.00	100

From the above table it is interpreted that the company is having 17% of Indian Promoter, 14% of general public , 20% of others and 38% of FII"s.

Chart No. 1

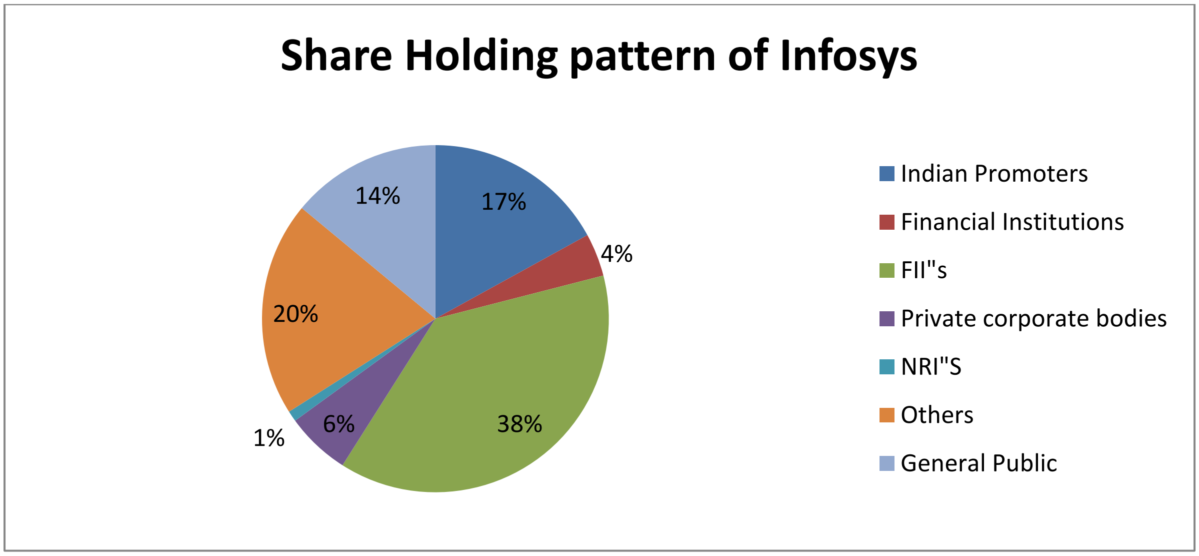
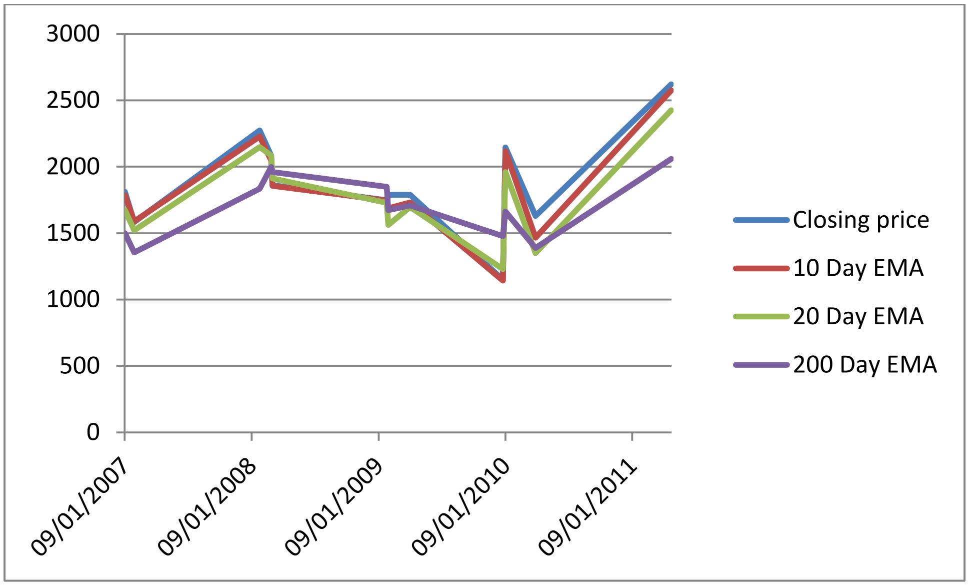


Table No. 2
EMA of Infosys

DATE	CLOSING PRICE	10-DAY EMA	50-DAY EMA	200-DAY EMA
3/1/2007	1503.45	1503.45	1503.45	1503.45
2/5/2007	1582.13	1588.28	1521.21	1354.77
1/9/2007	1810.5	1784.94	1673.45	1499.65
2/1/2008	2272.65	2226.18	2148.07	1833.11
3/5/2008	2081.65	2047.43	2084.58	1998
3/9/2008	1860.65	1855.04	1911.74	1960.41
2/1/2009	1748.3	1745.37	1727.24	1847.71
2/5/2009	1787.45	1686.22	1561.68	1671.31
4/9/2009	1789.00	1730.93	1697.32	1708.87
1/1/2010	1148.15	1141.15	1227.90	1476.88
4/5/2010	1628.2	1466.05	1349.97	1386.86
1/9/2010	2144.9	2116.35	1959.03	1663.28
5/1/2011	2621.35	2575.13	2424.72	2057.97

From the above table it is interpreted that the companies 10 Day EMA (2575.13) is more than the 200 day EMA (2057.97). The company is showing a bullish trend.

Chart No. 2 EMA of Infosys



5.2 Analysis and Interpretation of SBI

Table No. 3
Share Holding Pattern of SBI

Share Holding Pattern (as on Dec.2011)	**Shares**	**% Holding**
Indian Promoters	377207200.00	65.00
Financial Institutions	72730210.00	12.00
FII"s	84862228.00	14.00
Private corporate bodies	17900653.00	3.00
NRI"S	912139.00	0.00
Others	1533460.00	0.00
General Public	35520678.00	6.00
TOTAL	**590666568.00**	**100**

From the above table it is interpreted that the company is having 65% of Indian Promoter, 12% of Financial Institutions and 14% of FII"s.

Chart No. 3 Share Holding Pattern of SBI

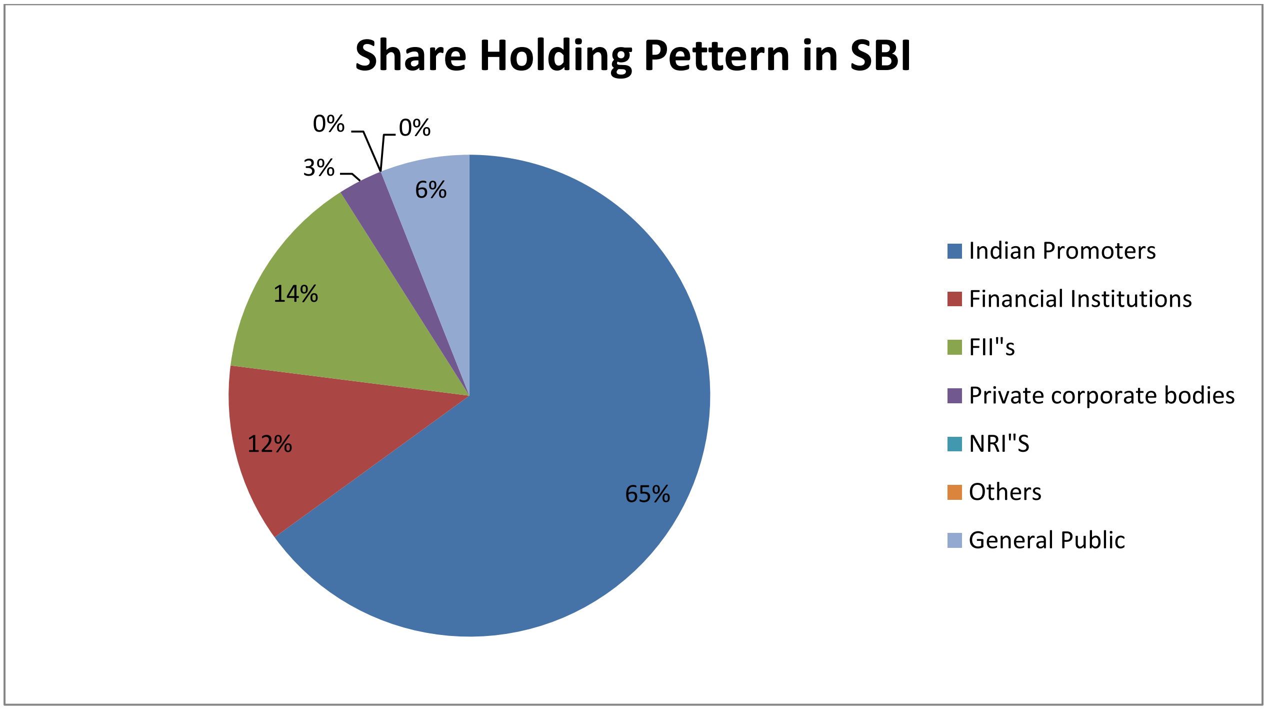


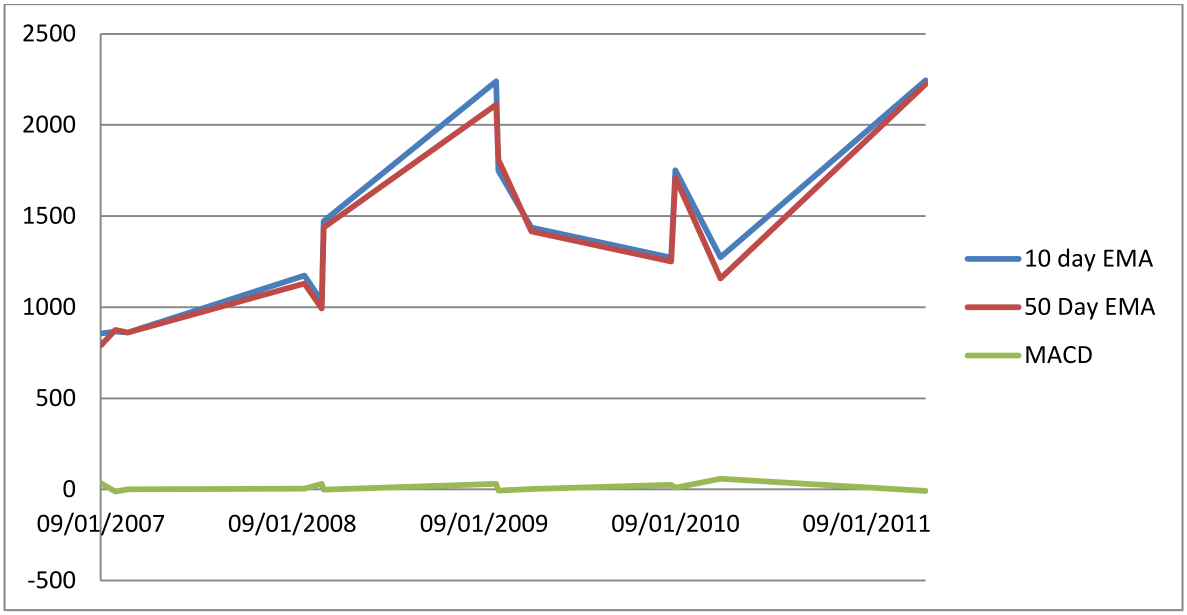
Table No.4

MACD of SBI

Date	10 Day EMA	50 Day EMA	MACD
3/1/2007	860.52	860.52	0
2/5/2007	866.3	874.96	-11.43
1/9/2007	856.41	790.74	34.75
2/1/2008	1173.78	1130.29	4.04
3/5/2008	1030.92	992.54	29.79
3/9/2008	1472.78	1437.01	-1.74
2/1/2009	2238.64	2111.43	30.74
2/5/2009	1749.2	1808.56	-6.4
4/9/2009	1436.6	1415.52	2.74
1/1/2010	1272.74	1250.05	25.26
4/5/2010	1274.07	1157.2	58.45
1/9/2010	1750.91	1711.61	9.83
5/1/2011	2243.83	2223.81	-7.49

From the above table it is interpreted that the companies MACD on 05-01-2011 is – 7.49 which is below zero. This shows a bearish trend.

Chart No. 4
MACD of SBI



5.3 Analysis and Interpretation of HUL

Table No. 5
Share Holding Pattern of HUL

Share Holding Pattern (as on Dec.2011)	**Shares**	**% Holding**
Foreign Promoters	1134849460.00	54.00
Financial Institutions	211179451.00	10.00
FII"s	381300464.00	18.00
Private corporate bodies	58051964.00	3.00
NRI"S	7081697.00	0.00
Others	3241152.00	0.00
General Public	320144521.00	15.00
TOTAL	**2115848709.00**	**100**

From the above table it is interpreted that the company is having 54% of Foreign Promoter, 10% of Financial Institutions and 18% of FII's and 15% general public.

Chart No. 5 Share Holding Pattern of HUL

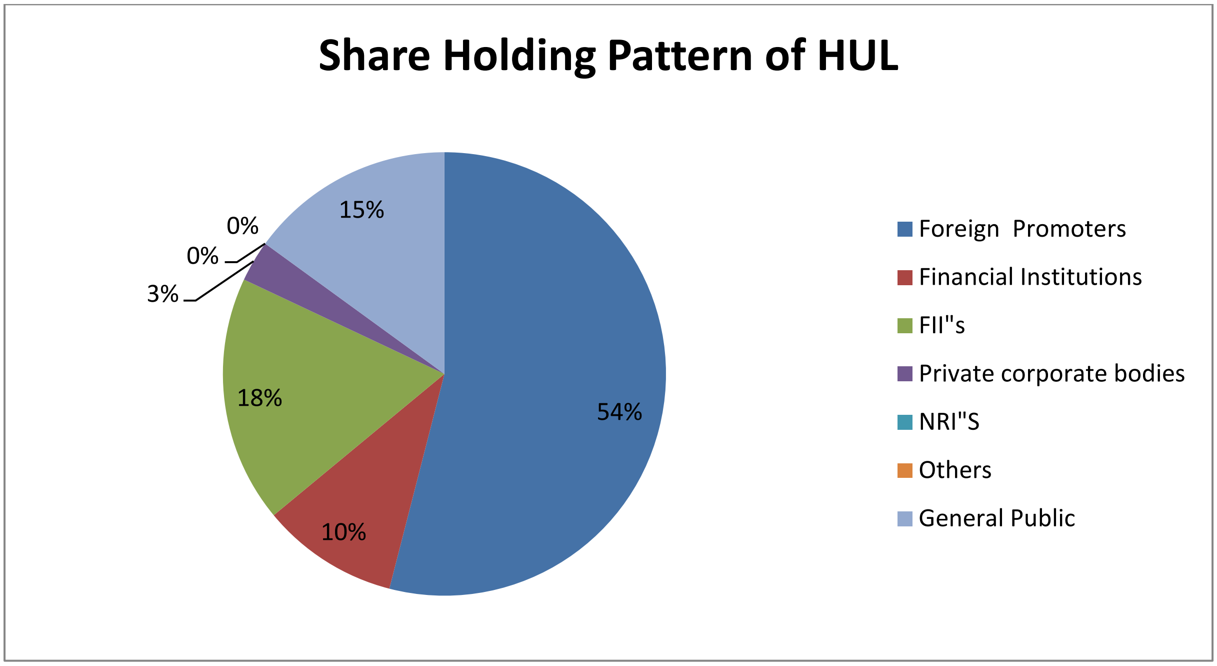
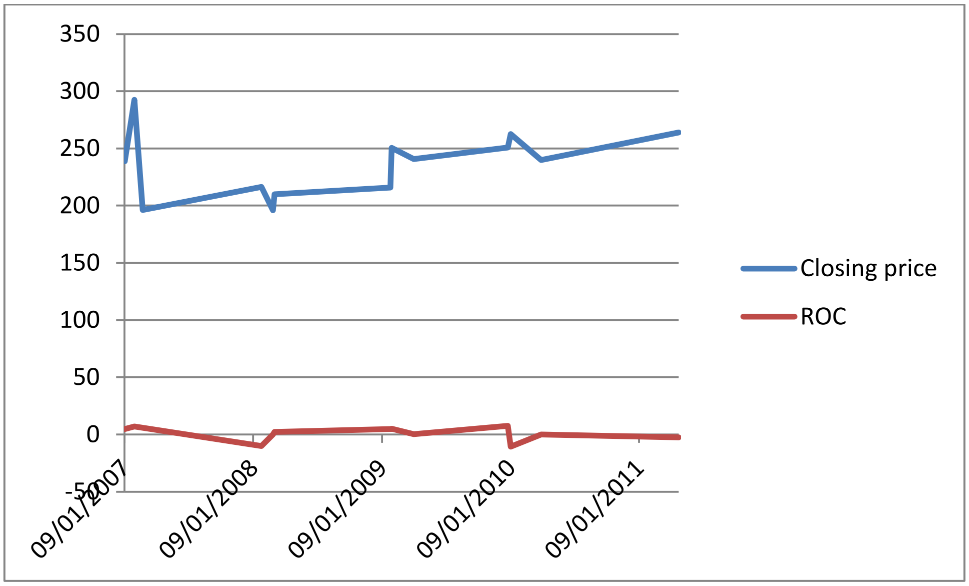


Table No. 6
ROC of HUL

Date	Closing Price	ROC
3/1/2007	196.25	5.71
2/5/2007	292.35	7.01
1/9/2007	238.85	4.69
2/1/2008	216.4	-10.02
3/5/2008	195.85	0.08
3/9/2008	209.8	2.14
2/1/2009	215.8	4.73
2/5/2009	250.45	5.05
4/9/2009	240.65	0.29
1/1/2010	250.75	7.55
4/5/2010	239.9	-0.04
1/9/2010	262.45	-10.73
5/1/2011	263.85	-2.51

From the above table it is interpreted that the companies ROC on 01-09-2010 is -10.73 and on 05-01-2011 is -2.51, which shows steep rise in prices. This shows a bullish trend.

Chart No. 6
ROC of HUL



4. IMPLICATIONS FOR INVESTORS

Technical Analysis is used to find out the trend in stock price movement in respect of three listed companies. In respect of three companies, three different tools are used. All the three companies have been analysed for their performance in the last four years.

In respect of Infosys Limited, EMA graph, showed bullish trend, where the shortest moving average crosses above the two longer moving average. In respect of State Bank of India, it shows bearish trend. This is a sign that the negative gap between the 10 day and 50 day EMA is widening. In respect of Hindustan Unilever Limited, sharp rise in ROC line shows a sharp price advance.

The analysis revealed that three companies have shown consistently good performance and is improving every year. In each of these companies, foreign investors have already invested. FIIs maintain 38 % in Infosys limited, 14% in State Bank of India and 18% in Hindustan Unilever Limited (besides 54% from foreign promoters in HUL). With the findings, global investors will get more confidence and will be able to take informed decision.

Further, from the literature review, it is discerned that outward FDI has got many advantages and that firms located in BRIC countries possess specific strengths that help them to enter both developing as well as developed countries and to pursue their internationalization strategy. In view of these, the entrepreneurial qualities of promoters in BRIC countries will get enhanced to seize the opportunities prevailing.

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