



Rupee Depreciation: Pain or Gain for Indian Firms

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Abstract

Rupee in current economic scenario experiences a tough time with rupee depreciation every day. Current economic context created fretful moments to various industrial sectors in India. Rupee depreciation, no doubt will affect the upper and lower sectors of the economy. Depreciating rupee is good news for the industry. The depreciating rupee to the US dollar has a positive impact of at least three per cent on Indian revenue for the top four Indian information technology (IT) services company. Currently IT industry contributes 7.5 percent to India's GDP. It has provided direct employment to 2.8 million people and indirect employment to 8.9 million people. The main objective of this paper was to analyze the performance of selected IT companies by relating it with exchange rate for which data for one year (2013) share price of top three IT companies in India was selected. For the given data, the relationship between IT company's Stock price and exchange rate is analyzed and accordingly policy suggestions are given.

Keywords: Rupee depreciation, economic slowdown ,Exchange rate, Indian IT sectors



I. Introduction

Depreciation refers to a fall in the value of the domestic currency which is caused by the demand for foreign currency exceeding its supply in the market. India, one of the emerging major economies of the world, is now in the verge of an economic slowdown created by the depreciation of rupee. The Indian currency has witnessed a slippery journey since Independence. Many geopolitical and economic developments have affected its movement in the last 66 years.

There were no foreign borrowings on India's balance sheet in 1947, To finance welfare and development activities, especially with the introduction of the Five-Year Plan in 1951, the government started external borrowings. This required the devaluation of the rupee. After independence, India had chosen to adopt a fixed rate currency regime. The rupee was pegged at 4.79 against a dollar between 1948 and 1966. In 1975, value of the Indian rupee was pegged at 8.39 against a dollar. In 1985, it was further devalued to 12 against a dollar. In 1991, India faced a serious balance of payment crisis and was forced to sharply devalue its currency. The country was in the grip of high inflation, low growth and the foreign reserves were not even worth to meet three weeks of imports. Under these situations, the currency was devalued to 17.90 against a dollar. In 1993 currency was let free to flow with the market sentiments. The exchange rate was freed to be determined by the market, with provisions of intervention by the central bank under the situation of extreme volatility. This year, the currency was devalued to 31.37 against a dollar. The rupee traded in the range of 40-50 between 2000 and 2010. It was mostly at around 45 against a dollar. It touched a high of 39 in 2007. The Indian currency has gradually depreciated since the global 2008 economic crisis. Graph 1 reveals the monthly inflation and rupee price change from April 2006 till March 2013.

Liberalising the currency regime led to a sharp jump in foreign investment inflows and boosted the economic growth. Indian currency i.e. rupee has been in news because of recent fall against the dollar. Rupee has fallen more than 15% in just 3 months time against dollar. India rupee has been depreciating against dollar for long time now. Post liberalization, the fall in the rupee against dollar has been rather steep. It is important to note that rupee has started falling against dollar more frequently after partial convertibility of rupee was introduced. The partial convertibility gave it more elbow room to automatically adjust against the dollar.

It is very clear that rupee has fallen down against dollar substantially during last forty years, barring some exceptions. The factors responsible for fall of rupee were getting built over a period



of time. Rising current account deficit, high inflation¹, balance of trade position², flow of dollars in India in form of FDIs and FIIs³, and policy paralysis were the factors that triggered fall in the value rupee all on a sudden, though they got built gradually over a period of time. The market needs a trigger for a value to appreciate and depreciate and traders often provide this trigger.

India which is imports higher petroleum products and gold are the major causes of this depreciation. Due to this rupee depreciation, a negative impact is experienced by most of the sectors, since their major income comes in the form of rupee. But there are some sectors in India, which may be benefited from this rupee depreciation, especially IT sectors. And this is because their major share of profit comes from the overseas, in the form of dollar.

The depreciating rupee to the US dollar has a positive impact of at least three per cent on Indian revenue for the top four Indian information technology (IT) services company. Every one per cent change in rupee-dollar has a 40 basis points impact on the margins and, at least, 2 to 3.5 per cent on the net profit numbers of IT services firm. The main reason for rupee depreciation may be due to delayed economic growth rate, weakening capital inflow higher burden of Debt for Companies and Government, Slowdown of Unemployment, RBI's monetary policy and widening current account deficit. It benefits the export oriented IT sector. It will be positive for the IT industry in the short-term, as the foreign investments in the industry will increase and making them more cost competitive. In the long run depreciation in currency fuels inflation, affects market sentiments and it will affect signing of new contracts by domestic IT firms. Three months down the line, the decline in rupee will transform into some gains in terms of top line of the companies. The impact of the depreciating rupee on the bottom line will vary for each company as it would largely also depend on the hedging positions taken by these firms. The real problem is that companies and even customers do not know where to hedge, and don't know where to hedge. Three months down the line, the decline in rupee will transform into some gains in terms of top line of the companies.

Graph 2, reveals the output computed from historical rupee data (INR-USD:1973-2013).As per the data available from the forex market (01.01.2013 to 1.12.2013) the maximum rate of rupee against the dollar was 53.6671 on may 01, 2013 while minimum rate was 68.7949 on august 28, 2013. On 31December 2013 dollar was about 61.8212(graph 3). During devaluation Indian IT firms gained a huge profit because of rupee depreciation. Reasons for increasing the exports are

¹ Rising inflation makes our goods costlier. If the purchasing power parity has to hold good, which does hold good, the rupee has to adjust to the change in inflation against dollar.

² International trade of a country shows how it is positioned in terms of demand for its currency. The demand for dollar happens in India because of the fact that Indians need dollar to import goods from all over the world. Rising demand for dollar adversely impacts rupee as people convert rupee into dollar to meet foreign exchange requirements. This puts Indian currency under stress.

³ When the dollar flow increases in India, the value of Indian rupee appreciates.



that, Indian products are cheaper in international markets, US recovery as well as the financial services sector coming back strongly. The depreciating rupee to the US dollar will have a positive impact of at least three per cent on Indian revenue for the top four Indian information technology (IT) services company, said analyst. Every one per cent change in rupee-dollar has a 40 basis points impact on the margins and, at least, 2 to 3.5 per cent on the net profit numbers of IT services firm. (BS Reporter, [8]) The India's IT/BPO sector contributes 8% to India's gross domestic product. At about three million professionals being directly employed, this industry is the largest organized private sector employer in the country. According to industry grouping National Association of Software and Services Companies (Nasscom), India's information technology and business process outsourcing sector expanded 12 to 14 percent in fiscal 2014 i.e from \$84 billion to \$87 billion (Rs 4.5 lakh crore to 4.7 lakh crore) in exports. India's top software services firms reported wide deviations in growth during the current financial year. Tata Consultancy Services, closed the financial year with about 14 percent growth, where as Infosys and Wipro was at about 5% during the same period.

Based on the above theory, the main objective of this paper is to analyze the performance of selected IT companies by relating it with exchange rate for which data for one year (2013) share price of top three IT companies in India

was selected. For the given data, the relationship between IT company's Stock price and exchange rate is analyzed. One year daily share prices of Tata consultancy Services (TCS), INFOSYS, and WIPRO are used, and it is collected from the secondary source, i.e., BSE website and finance.yahoo.com website.[9]

Pros and Cons of currency appreciation and depreciation are studied as boon and bane for the economic growth. The Papers by Raithatha (2012,[4]), Raza et. al(2013,[1]) Deepa and Gireeshkumar (2014,[2]) , Hamdani Rizwana (2013 [3]) , Navleen and Robin (2013, [5]), Nikhil 9(2013, [6]), Bejjenki (2015, [7]) tries to explore the causes and impact of rupee depreciation on the Indian economy .

II. How the falling rupee helped the Indian IT companies like Infosys, TCS and Wipro

If the sharp fall in the rupee value against the dollar sustains, it will have a constructive impact on the profit margins of Indian IT companies. So each dollar earned abroad will now get them more rupees. Indian software companies such as Infosys, TCS and Wipro get most of their business from the developed economies. A significant part of their revenue is in dollars. Hence,



depreciating rupee would definitely be boosting their sales growth as well as margins. Graph 4 represents the USD graph for the year 2013.

TCS: India's largest IT services exporter that generates a bulk of its revenues from North America. Around 52 percent of Tata Consultancy Services' business is centered around North America. It is India's largest software services provider, a 35 percent rise in fiscal second-quarter profit, by the rupee's sharp depreciation against the dollar and robust volume growth. Company's main markets is in US and Europe. In dollar terms, revenue grew 17 percent from a year ago to \$3.34 billion, while profit rose 16.4 percent to \$748 million. Much of the benefit flowed from the rupee's depreciation, as IT companies earn a major portion of their revenue in dollars but spend most of it in rupees since they fulfill a significant part of the orders from India. In the September quarter, the rupee depreciated 5.15 percent against the dollar, boosting TCS's margin. Every percentage point drop in the rupee adds 25-35 basis points (bps) to the margin of IT services providers. One basis point is one hundredth of a percentage point. TCS's operating margin in the September quarter stood at 30.1percent while the company's volume growth was a robust 7.3 percent —highest in the last eight quarters.

First quarter fiscal year 2013 has seen a sequential revenue growth of 3percent in USD terms along with a pricing decline of 1percent and a relatively impressive volume growth of 5.3percent. As per the rate of rupee against dollar mentioned above, during the period 1st May to 28th August 2013 the rupee depreciated steeply downward. So TCS earned a huge profit at this period by the currency depreciation. TCS, 65 to a dollar approximately gain an addition of 5700 crore. Graph 5 represents the share price of TCS for the year 2013 (January to December)

INFOSYS: India's second-largest IT services exporter that generates a bulk of its revenues from North America. Around 63percent of Infosys total revenue is from this region. This company has a greatest advantage from the currency depreciation, the major drivers for this is US recovery as well as the financial services sector coming back strongly. For Infosys every 1percent change in rupee value leads to an increase or decrease in EBIT (Earning Before Interest and tax) margins by 50 basis point. Infosys at 65 to a dollar approximately gains an addition of rupees 3600crore. In US dollar terms, its consolidated net profit has raised marginally by 0.5 percent to \$418 million in the April-June quarter this fiscal from \$416 million in the same quarter of 2012-2013. The company's total revenues for the first quarter stood at \$2 billion, registering an annual growth of 13.6 percent and a sequential growth of 2.7 percent. In the second quarter Infosys reported dollar revenues of \$2.06 billion, up 3.8percent sequentially. A favorable currency movement helped Infosys, the results of the last two quarters point to a turnaround in the company and potentially a return of discretionary spending in the market. As per the rate of



rupee against dollar mentioned above, during the period of 1st May to 28th August 2013 the rupee depreciated steeply downward. So Infosys earned a huge profit at this period by the currency movement. Graph 6 represents the share price of Infosys for the year 2013 (January to December).

WIPRO: Wipro the third largest IT service company in India. A weaker rupee helps India's exporters. As per the rupee depreciated steeply downward it benefits the IT companies like Wipro. At 65 a dollar, Wipro approximately gained an addition of rupees 2700crore. Its revenue stood at \$ 6.2 billion for the year ended 31 march2013. Wipro's total revenue rose 12 percent to \$ 2.02 billion in quarter 4 2012-2013. For the first quarter of 2013-2014 Wipro through its IT service earned revenue of \$1588.3 million, a sequential increase of 0.2 percent and year on year increase of 4.9 percent. In the second quarter Wipro earned \$ 1631.1 million, a sequential increase of 2.7 percent and year on year of 5.9 percent. By comparing the first and second quarters it can be observed that the revenue is increasing. As per the rate of rupee against dollar was depreciating steeply downward, so the revenue earned by the IT firms also increases. Graph 7 corresponds to the share price of Wipro for the year 2013 (January to December).

Weak Indian rupee could be used to gain share: Indian IT service companies will benefit from the steep depreciation of the rupee for the second year in a row. While rupee depreciation has a positive impact on the margins of the Indian vendors, importantly it also improves the competitiveness of the Indian IT service companies and can be used to gain market share. It reveals that even if Indian vendors endeavour to maintain operating margins, ceteris paribus, for every 1percent depreciation of the Indian rupee v_s US dollar the Indian vendors would save \$12-53million, which can be used to invest in sales with a lower margin profile. We assume it is currently possible to achieve cost savings of 40percent, which is approximately the mid-point of the range (30-60 percent) that we have come across in industry commentary. We estimate this would increase to 44-46 percent (from 40 percent assumed) if the rupee depreciated by 9-12 percent year-on-year in FY2014. This assumes that Indian vendors pass on all the gains from rupee depreciation to clients.

The Correlation matrix for Stock price and exchange rate is provided in table 1. Table reveals that there exist a positive correlation between the Stock price of TCS, INFOSYS , WIPRO, and exchange rate. The correlation is much higher with TCS than with INFOSYS and WIPRO.

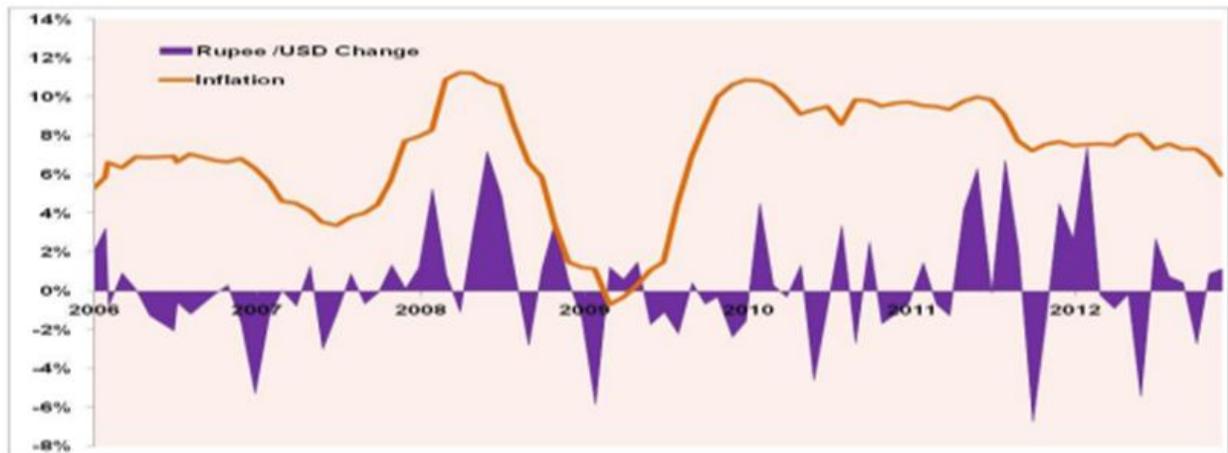


III. Conclusion

Volatility in the stock market, the continued decline of the rupee, and rising yields in government bonds reveal investors' lack of faith that the Indian government is in control of the situation due to which investment cycle is in its bottom stage which further put pressure on Indian currency. Depreciation impacts negatively to the sectors, those who concentrate in the domestic markets only. But there are some sectors which benefited from rupee depreciation. Since IT companies who exports software, earn most of their revenues in dollars, given that their big market is the US, and since their expenditures are mostly in rupees, given that they do their delivery mostly out of India, profit margins will widen in line with the rupee depreciation.

Hence the following policy suggestions are given: Companies may face more problem when they bid for next project, they find it hard to predict what the currency rate is going to be. The real problem is companies and even customers do not know where to hedge, and don't know where to hedge.

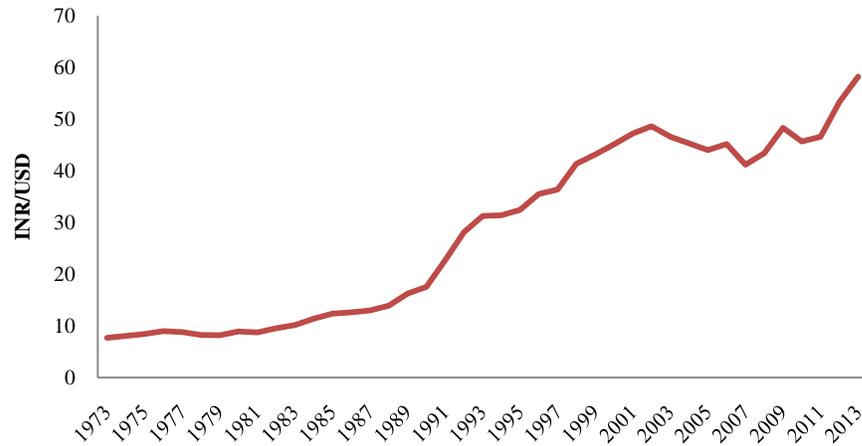
Graph 1: Monthly inflation and rupee price change from April 2006 till March 2013.



Note: Rupee change is monthly price change and negative change means rupee has appreciated and positive change mean rupee has depreciated

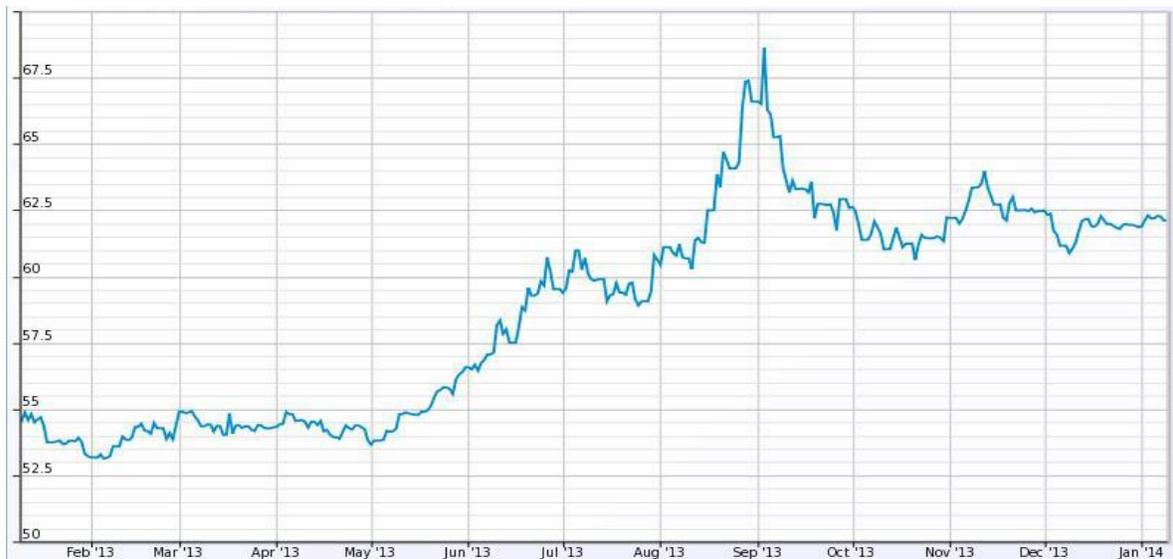


Graph 2: INR/USD

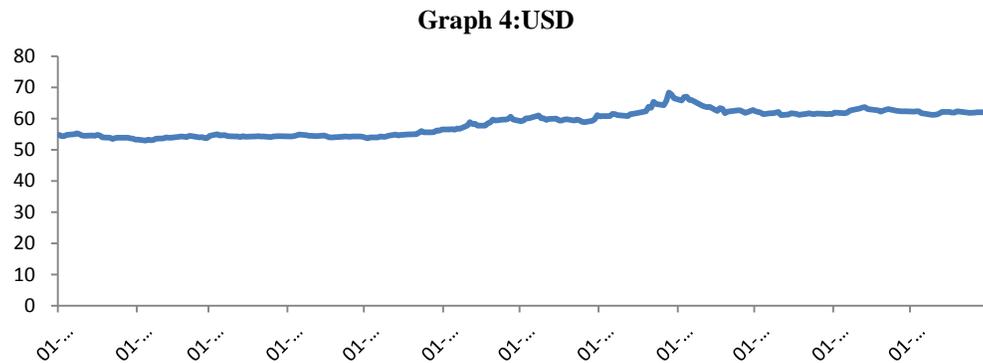


Source: computed from the historical data retrieved from www.rbi.org.in

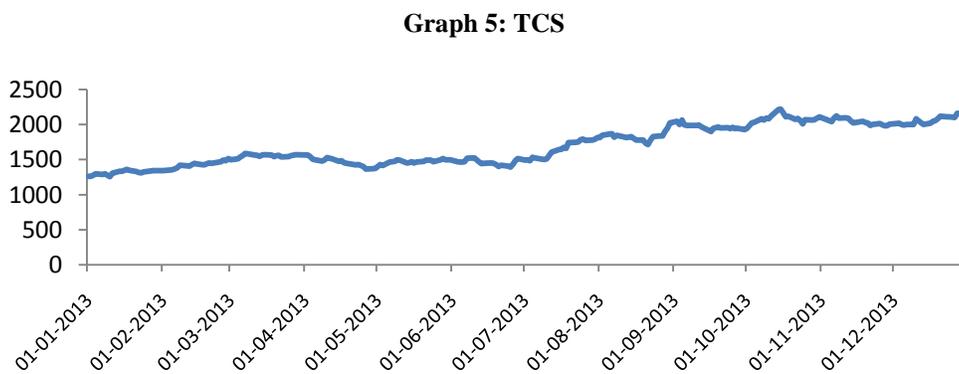
Graph 3: Exchange rate history:USD/INR



Source: computed from the historical data retrieved from www.rbi.org.in



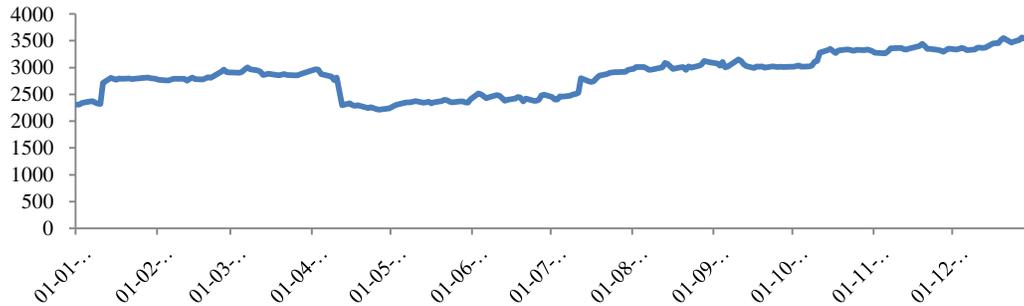
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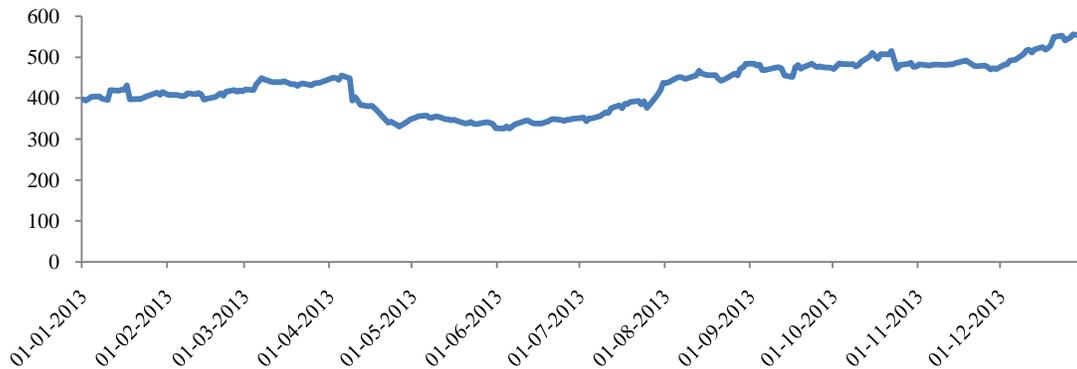


Graph: 6 INFOSYS



Source: computed from the historical data retrieved from www.rbi.org.in

Graph: 7 WIPRO



Source: computed from the historical data retrieved from www.rbi.org.in

Table 1: Correlation matrix for Stock price and exchange rate

	USD	TCS	INFOSYS	WIPRO
USD	1	0.845	0.630	0.600
TCS		1	0.854	0.826
INFOSYS			1	0.936
WIPRO				1



References

- [1] Alam Raza, Asadullah Larik, and Muhammad Tariq, “Effects of Currency Depreciation on Trade Balances of Developing Economies: A Comprehensive Study on South Asian Countries”, IOSR Journal Of Humanities And Social Science (IOSR-JHSS)Volume 14 , Issue 6, PP 101-106, 2013.
- [2] Deepa Divakaran.N and G.S.Gireeshkumar “Currency depreciation - causes and its impact on Indian economy”IRACST – International Journal of Commerce, Business and Management (IJCBM), Vol. 3, No. 1, pp. 64-71, 2014.
- [3] Hamdani Rizwana M.J. “Rupee Depreciation and Its Impact”, Volume. I, Issue.III, 2013 [IRMJCR Online,72]
- [4] Mehul Raithatha,“A Conceptual Study On Fluctuation Of Rupee In Relation To Dollar”, ZENITH International Journal of Business Economics & Management Research,Vol.2 Issue 3, pp.266-274, 2012.
- [5] Navleen Kaur and Robin Sirohi, “Effect of Rupee Depreciation on Common Man”, International Journal of Scientific and Research Publications, Volume 3, Issue 10, ISSN 2250-3153, 2013.
- [6] Nikhil Saket, “Rupee depreciation and its impact on the economy”, Socio-economic voices,2013.
- [7] Pruthvi Bejjenki, IIM Lucknow (1st year PGDM) “ Rupee depreciation positive for IT sector”, January 16, 2015
- [8] Rupee depreciation positive for IT sector , Business standard September 23, 2011 .

[9] E-references:

www.gamechangers.idfcmf.com

www.healthofmywealth.com

www.indiainfoline.com

www.nasscom.com

www.rbi.org.in

www.finance.yahoo.com