Int. J. Manag. Bus. Res., 5 (2), 107-116, Spring 2015

Global Recession and Its Impact on Telecommunication Industry: An Empirical Dissection

[1]* *O. Gautam*, [2] *V. K. Singh*, [3] *R. Sharma*

[1,2,3] *Faculty of Management Studies (FMS), Gurukul Kangri University , Haridwar (Uttrakhand), India*

Received 16 January 2014, Accepted 6 August 2014

ABSTRACT:
India is much more integrated with the world economy. Both current and capital accounts are complementing to each other. The economic slowdown that appears to have begun in the USA in September, 2008 has some negative impact on Indian economy. The most immediate and adverse effect of this global financial crisis on India is an out flow of Foreign Institutional Investment (FII) from the capital market. This withdrawal by the FIIs led to an exponential depreciation of the rupee. The banking intermediaries and non-banking financial institutions have been suffering losses. The recession generated the economic crisis in USA and other developed economies have adversely affected India's exports of software, IT services and service industry.
For fighting this crisis, Government of India responded through the public expenditure and investment to face the recession. Government of India pumping the liquidity into the system through monetary policy and by using effective fiscal policy .India has revived to high growth, this new growth should have to come not from some new speculative bubble but from enlarged government expenditure that directly improves the livelihood of the people. The present paper is an attempt to analyze the impact of recent global financial crisis on Indian economy with special reference to telecom sector and also to analyze the level of economic crises on other sectors of economy, also this paper deals with effective determination of existence of relationship between GDP and telecom sector with respect to global recession.

Keywords: *Depreciation, Public expenditures, Foreign Institutional Investment (FII), Global financial crisis, Recession*

INTRODUCTION

In the era of globalization financial crisis seems to have been occurring with greater velocity. We have seen the economic crises had surmounted on developed economies in past years, economic crises of Latin America in the early 1980s and Mexico, Asia and Russia in the 1990s were the few examples of these crises. The recent global financial crisis has adverse impact on various nations either it is developed or developing. Fifteen year ago, financial crisis of the East Asia was observed, it was due to a real estate bubble in the Thailand burst, triggering the flight of international speculative capital, today, it is fallout of the real estate crisis in the USA which threatens the financial markets.

The global financial crisis of 2008-09 emerged in September 2008 with the failure merger of several large United States based financial firms and spread with the insolvency of additional companies, governments in Europe, recession and declining stock market prices around the globe. But the financial crisis really started to show its effects in the middle of 2007

***Corresponding Author, Email:** *Omvircool@gmail.com*

around the world, stock markets have diminishes, large financial institutions have collapsed or been sell out. Even, the governments of the wealthiest nations have had to come up with rescue packages to bail out their financial systems. The crisis has become one of the most radical reshaping of the global banking sector, as governments and the private entities battle to share up the financial system following the disappearance of Lehman Brothers and Merrill Lynch as independent entities. Actually, the collapse of Lehman Brothers was a symbol of the global financial crisis.

The real estate sector in many countries was already feeling the effects. Many developed and capitalist nations were sliding into recession. The crisis became so severe that after the failure and buyouts of major institutions, than the Bush administrations offered a Dollar700 billion bailout plan for the US financial system. Since these bail-outs have adverse impact on the various investors of the world and hence some of bailouts have also been accompanied with charges of hypocrisy due to the appearance of socializing the costs while privatizing the profits. Market liberalization and privatization in the commodity sector have also not resulted in greater stability of international commodity prices. There were wide spread dissatisfaction with the outcomes of unregulated financial and commodity markets, which fail to show reliable price signals for commodity producers.

For the developing countries like India, the rise in food prices as well as enlargement of telecommunication sector have knock on effects from the financial instability and uncertainty in the industrialized nations, are having compounding effect. The impact of the global crisis has been revealed to the Indian economy through three distinct channels, namely: the financial sector, exports and exchange rates. Here, the telecommunication sector is prioritized. The other significant aspect of impact is the fall in business and losing the confidence of consumer from the market which leads to decrease in investment and consumer demand. The Indian government, to boost the demand, has announced several stimulus packages for telecommunication sector, TRAI (Telecomm Regulatory Authority of India) has announced various eminent packages like decrease in call rates and even provided various tariffs to international as well as national consumers.

Literature Review

This section reviews the empirical studies on the relation between recession and economic activities in India. One school of thought contended that FDI has a negative effect on the development of India in light of the fact that FDI streams principally towards the essential area which essentially pushed the less market esteem. However, an alternate school of thought contended that FDI inflow into the center segments is expected to assume an imperative part as a wellspring of capital, administration and innovation in countries transaction economies. Dhameja and Saini (2014) explored the movement of macro-fiscal variables moreover consider some critical macroeconomic components which are the genuine building squares in the examination of stock trade compromise. Kannan et al. (2013) derived that recoveries for the cash related crises have been slower, associated with delicate nearby premium and tight credit conditions. These revelations were involved with distinctive studies urged by Abiad (2013), it was opposite reported that the disheartened method for yield is joined with persisting reductions of barbarously proportionate degrees in the business rate, the subsidizing to-work degree, and total variable benefit. Furcezi and Zdzienicka (2012) analyzed that the money emergencies are associated with liberal GDP. Obligation emergencies are more costly than keeping cash and coin crises and are usually associated with yield rots of 3-5 percent after one year and 6-12 percent was after 8 years. Huij et al. (2011) promoters the execution of the waiting vitality, additionally it was analyzed that the past execution of stocks centered around their remaining returns and stating that by using the extra terms improvement of conceivable supporting portfolio using ex danger available information prompts perfect execution rundown could be regulated. Krishna Reddy (2009) contemplated that the execution of sensex v/s Fiis and analyzed how Indian securities trade prompts certain conjectures about the improvements of the sensex. What's more, it was underscored that noncompulsory business division summary of each year uncovered the outside hypotheses in

BSE, which finally prompts liquidity furthermore flimsiness. Christensen et al. (2005) demonstrate that this is not generally the situation for stewardship. In any case, both experimental business sector based exploration and hypothetical examination demonstrate that there are significant covers between the stewardship and valuation parts (Bushman et al., 2006; Banker et al., 2009; Drymiotes and Hemmer, 2013).They utilizing the terms as they are ordinarily seen in the writing, the stewardship and choice handiness parts of fiscal explanations, now and then match, however don't generally, actually for the same class of financial specialist. Conservatism is regularly favored under stewardship and contracting, because of a hesitance to perceive awful news, though lack of bias is normally favored for valuation purposes (Bushman and Indjejikian, 1993; Dutta and Zhang, 2002; Wu and Zhang, 2009; Chen et al., 2010; Kothari et al., 2010). Dutta and Zhang (2002) likewise report that check to-market bookkeeping is attractive from a valuation point of view, yet not from a stewardship point of view as a result of its concentrate on foreseen managerial execution instead of conveyed execution for choice making. So, above propounded reviews are for the slowdowns of economy in various nations while present study is an attempt to analyze the flows of FDI and resaons for their consisitency in Telecom sector.

Impact of the Global Economic Crises on the Indian Economy

The Indian economy has shown negative impact of the recent global financial meltdown. Though the banking sector has performed as an insulator for this economic crise either by managing their funds accordingly or by some advance planning for the economic slowdown. The impact of the crisis was almost different for the developed and developing nations. Indian economy shows inverse paradigm as compared to western developed nations.

Table 1 shows that after a long spell of growth, the Indian economy was experiencing a down turn.

Figure 1 shows the graph between growth in percent with years from 2005 onwards to 2012.

It also reveals that in 2006-07 the GDP was 9.6% which became 9.3% in 2007-08 and due to the impact of recent global financial crisis and global recession, the growth rate of Indian economy became diminishing. In 2008-09, it reduced to 6.8%.

Table1: Trends in GDP at factor cost in millions

Year	GDP (at 2004-05 Price)	Growth in %
2005-06	325421.6	9.5
2006-07	356601.1	9.6
2007-08	389895.8	9.3
2008-09	416250.9	6.8
2009-10	449374.3	8.0
2010-11	487923.2	8.6
2011-12	528329.1	7.9

Source: Central Statistical Organization (SO), Government of India

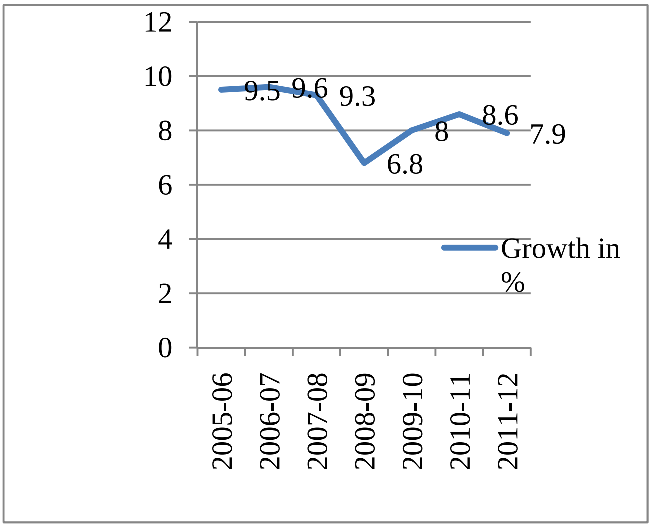

Figure 1: Trends in GDP (Growth rate in %)

The International Monetary Fund (IMF) had also projected the growth prospects for Indian economy to 5.1 % in next year. And the RBI annual policy statement 2009 presented on July 28, 2009, projected GDP growth at 6 % for 2009-10. This downward trend has affected adversely the industrial activity, especially, in the agriculture, infrastructure, manufacturing and in service sectors mainly in the real estate, transport and mining, trade, hotels etc. Service growth rate was also likely to slow as the recession deepens and financial services firms, traditionally large users of out-sourcing services were restructured. The financial crisis in the western developed economies and likely to slow down in developing economies could have adverse impact on the telecom sector.

About 18 to 21 percent of the business coming to Indian out-sources includes projects from insurance, banking and the financial services sector which was uncertain at that time and more prone towards drastic withdrawal intentions of institutional investors at global level.

Telecommunication Sector

In present era Telecommunications has evolved as a basic infrastructure like electricity, roads, water etc., and has also contributed as an important and indispensable component of economic growth. The Indian telecom sector has registered a phenomenal growth during the past few years and has become second largest telephone network in the world, only after China .A series of wireless reform and other facilities from Government of India has achieved exponential growth in past few years. National Telecom Policy-2012 (NTP-2012) has been announced during the current year with the primary objective of maximizing public good by making available affordable, reliable and secure telecommunication and broadband services across the entire country.

Telecommunication Sector: Investment Policy at Present Scenario

As telecom sector has undergone through various phases, it accelerates after liberalization very rapidly. Here, present Foreign Direct Investment (FDI) policy for the Telecom sector, subject to licensing and security requirements notified by the Department of Telecommunications, is as under:

- ✓ Indian telecom network is second largest in the world after China.
- ✓ The country has 899.51 million telephone connections.

- ✓ Overall telephone-density in the country is 76.34%.
- ✓ Urban telephone-density is 149.55%, whereas rural telephone-density is 41.90%.
- ✓ The share of wireless telephones in total telephones is 98.56%.
- ✓ The share of private sector in total telephones is 88.51%.
- ✓ Number of Broadband connections is 16.98 million.

As table 2 shows the respective sectors and their modes of entry with respect to investment policies in telecom sector. Although infrastructure and telecom sector has 100 percent FDI cap but other sectors like Basic and cellular, PMRTS etc are also equally strategic as they are, hence table presents a framework for those issues with respect to FDI.

Table 3 shows the actual Inflow of FDI in Telecom sector from April 2000 to November 2012 is 12,623 million US dollar. The cumulative FDI data for last five years and current year is as under:

Table 2: Showing FDI and its investment policy in telecom services

S. No.	Sector/Activity	FDI Cap/Equity (Direct + Indirect)	Entry route
1.	Basic and cellular, Unified Access Services, National/International Long Distance, V-SAT, Public Mobile Radio Trunked Services (PMRTS), Global Mobile Personal Communications Services (GMPCS) and other value added telecom services	74%	Automatic up to 49% FIPB beyond 49%.
2.	ISP with gateways, *ISP without gateway, Radio-paging, End-to-End Bandwidth provider.	74%	Automatic up to 49% FIPB beyond 49%
3.	a)** Infrastructure Provider providing dark fibre, right of way, duct space, tower (Category –I); b)** Electronic Mail and Voice Mail	100%	Automatic up to 49% FIPB beyond 49%
4.	Manufacture of Telecom Equipments	100%	Automatic

* The government has revised guidelines for ISP's on 24-8-2007 and new guidelines provide for ISP licenses with 74% composite FDI only.

** Subject to the conditions that such companies will divest 26% of their equity in favor of Indian public in 5 years, if these companies are listed in other parts of the world.

Source: Annual telecom report 2012-13

Table 3: Showing cumulative FDI in telecom sector

Year	Cumulative FDI in Telecom sector US Dollar million)
March,08	3782
March,09	6392
March,10	8924
March,11	10555
March,12	12552
November,12	12623

Source: DIPP web-site

As it is proved from table 3 that the FDI investment in telecom sector has increased remarkably from year 2008 to till now this was due to upliftment modules from Government of India, it also liberalize the policies for foreign investors to invest in India, so various corporate equity giants come up in Indian market to inculcate the profits from telecom sector.

Objectives of Study

This paper poses the following research questions:

a) To study the impact of economic recession on telecom sector in India.

b) To analyze the flows of FDI's in telecomm sector during recession.

c) To study the reasons of consistency in FDI's during global financial crisis period.

Hypothesis

H_a: There is significant difference between Telecom sector and GDP in recession period.

H_0: There is no significant difference between Telecom sector and GDP in recession period.

RESEARCH METHOD

The study is based on the conceptual analysis and relied on secondary data. The study considers the economic indicator GDP as comparing tool with telecom sector to establish certain relationship.

Research Design

Exploratory research design is adopted for the present research paper. It is a form of conclusive research. In this framework relationship among stock market and telecom sector had been reflected. Hence, this design is adopted to deduce the futuristic avenues of stock market. For the purpose of research samples is taken from various sources like DIPP,CSO and bulletin of RBI.

Data Collection

For the study only secondary data has been used. The trends of the FDI's in telecomm sector are compared with the other sector in India. The data has been considered from 2005-2012.

RESULTS AND DISCUSSION

For analysis and treatment of data SPSS 20 is taken into consideration and various secondary sources are also considered for formulation of charts and tables.

The table 4 shows the variation of Indian rupee with US Dollar from time period 2012 to 2013.The trend is reflective as it is clear that rupee is depreciating with respect to US Dollar from April 2012 to Jun 2012.Then, from Jun to Oct it appreciate that is Indian currency is more stable than US Dollar. Finally it follows the negation pattern that is depreciate which leads to reduction of economic growth of India. Hence, it has adverse impacts on various sectors such as services sector, computer software, automobile sector and many more sectors of the economy.

Moreover, table 4 is supported by figure 2 by showing the movement of rupee with respect to US Dollar. The graph depicts that the Indian currency depreciate as compared to US currency and hence this is the indicator of slowness in Indian stock exchange.

Table 5 shows that India revived in all sectors of the economy, during this financial crisis, India was less affected as compared to others developed nations, it was possible due to domestic demands and continuous flow of FDI's in India .As mentioned in table 5 all the contributing sectors of economies from 2005 to 2012.Service sector and automobile shows promising growth while others are also performed up to mark.

Telecom sector has recorded remarkable growth in the recession period especially 2007 and 2008 with increment from 51,030 to 1, 17,270 millions respectively indicating almost double growth from previous period.

Table 4: Showing exchange rate USD/INR

S.No.	Date	Exchange rate
1	3 April 2012	50.63
2	2 May 2012	51.72
3	1 Jun 2012	55.68
4	2 Jul 2012	55.40
5	1 Aug 2012	55.30
6	3 Sep 2012	55.20
7	1 Oct 2012	52.81
8	1 Nov 2012	52.90
9	3 Dec 2012	53.88
10	1 Jan 2013	54.84
11	1 Feb 2013	53.42
12	1March 2013	54.55
13	30 March 2013	54.40

Source: Annual report of 2012-2013, FEDAI

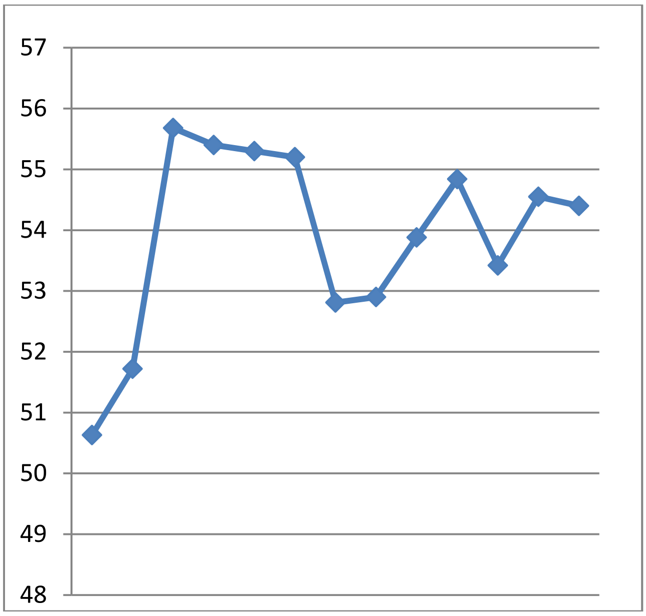

Figure 2: Movement of Rupee against
US Dollar –April 2012 to March 2013

Table 5: Sectors attracting highest FDI (in millions) equity inflows in India 2005-2012

Rank	Sector	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
1	Services sector	23,390	2,10,470	2,65,890	2,85,160	2,07,760	1,55,390	27,007
2	Computer software and hardware	61,720	1,17,860	56,230	73,270	45,350	24,380	1,07,230
3	Telecommunications	27,760	21,550	51,030	1,17,270	1,23,380	75,460	1,05,890
4	Constructions activities	6,670	44,240	69,890	87,920	1,35,160	15,230	91,780
5	Housing and Real estate	1,710	21,210	87,490	1,26,210	1,35,860	29,570	96,320
6	Automobile industry	6,300	12,540	26,970	52,120	51,540	8,250	59,270
7	Metallurgical Industry	65,400	78,660	46,860	41,570	19,350	41,700	42,350
8	Petroleum and natural gas	640	4,010	57,290	19,310	13,280	24,030	31,530
9	Power	3,860	7,130	38,750	43,820	69,080	33,570	59,000
10	Chemicals	17,310	9,300	9,200	34,270	17,070	7,740	28,920

Source: RBI's Bulletin www.rbi.ac.in

Table 6: Correlations between telecom and GDP

		Telecom	GDP
Telecom	Pearson Correlation	1	0.724
	Sig. (2-tailed)		0.066
	N	7	7
GDP	Pearson Correlation	0.724	1
	Sig. (2-tailed)	0.066	
	N	7	7

See the table 6 it reflects the Karl Pearson's correlation between GDP and telecom have associated with value of 0 .724 which shows GDP growth rate is significant with respect to telecom sector of India and P=.066 which is also more than standard value .05 so null hypothesis is to be accepted leads to rejection of alternative hypothesis, which shows there is no or minimum impact of economic recession is found with reference to telecom sector of India. Similarly, appendix 1 has correlations matrix of all the sectors with respect to GDP and establishes relationship, such as computer software sector has inverse relation with GDP and it is greatly affected by economic recession .So, much higher investments avenues are imparted by the telecom sectors which stimulus to government, also helps in declining the Balance of Payments to Dollar 55986 million from Dollar 161051.

Since P value is more than .05 which reflects that null hypothesis to be accepted, in order to establish that there is no impact of economic recession on telecommunication industry. With the analysis of table 3 and 5, we can say that the objective 1 and 2 respectively justified and objective 3 is justified through table no 6,this leads to acceptance of null hypothesis. Since p-value (p>.05) is more than .05 results in that there is no much impact of economic recession on telecom sector of India.

CONCLUSION

India has maintained the equilibrium between liquidity and profitability. Even due to current global recession India has witnessed a steady growth in the economy with the FDI's inflows. Surprisingly, telecom sector is not confined to this global crisis. Since 2006, various telecommunications projects have been working with an excellent pace and even certain factors such as economic condition of India is not so sound while in this time span.

The need of today is not just the pumping of liquidity in the Indian economy. But also to boost the demand by injecting some monetary and fiscal measures. In India a lot of emphasizes is given to telecommunication sector, the larger government expenditure has to be oriented towards real estate, power, services sector and human resources to make inclusive and substantial balanced growth .The biggest challenges before India are to ensure proper allocation of funds that is the cash flows should be optimal so that fiscal consolidation is achieved. No doubt, India has come back to high growth but this should by sustained only when government expenditure are regulated and do not be treated as speculative bubble. In short, the sustained economic growth will eradicate poverty crises in India and also brings prosperity to other sectors of economy.

In short, the new paradigm must entail infrastructure agriculture-led strategy on the basis of pleasant agriculture as well as telecom sector sustained through larger government spending towards these sectors, which can simultaneously sustain the growth and remove the various economical ailments from the economy.

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Appendix 1: Correlation

		Telecom	GDP	Services	Constructions	Real estate
Telecom	Pearson Correlation	1	0.724	0.533	0.769*	0.867*
	Sig. (2-tailed)		0.066	0.218	0.043	0.012
	N	7	7	7	7	7
GDP	Pearson Correlation	0.724	1	0.470	0.415	0.469
	Sig. (2-tailed)	0.066		0.287	0.355	0.288
	N	7	7	7	7	7
Services	Pearson Correlation	0.533	0.470	1	0.680	0.740
	Sig. (2-tailed)	0.218	0.287		0.093	0.057
	N	7	7	7	7	7
Constructions	Pearson Correlation	0.769*	0.415	0.680	1	0.936**
	Sig. (2-tailed)	0.043	0.355	0.093		0.002
	N	7	7	7	7	7
Real estate	Pearson Correlation	0.867*	0.469	0.740	0.936**	1
	Sig. (2-tailed)	0.012	0.288	0.057	0.002	
	N	7	7	7	7	7

* Correlation is significant at the .05 level (2-tailed)
** Correlation is significant at the .01 level (2-tailed)