GLOBAL FINANCIAL CATASTROPHE ON MACRO ECONOMIC INDICATORS OF INDIAN ECONOMY

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ABSTRACT

Global financial meltdown has shacked the whole world in terms of huge holocaust (both economic and social). This paper made an attempt to examine the Global Financial Catastrophe (GFC) and its impact on macro economic indicators of Indian economy. This study has used time series data of selected macro -economic variables, namely real GDP growth rates in India, Sectoral wise growth rate, Rate of Inflation (WPI), Import-Export and Trade Balance, Trends in Foreign Institutional Investments (FIIs), Trends in Foreign Direct Investment (FDI), India's Overall Balance of Payment, Foreign Exchange Reserves in India and other variables. The study period is 15 years from 1st April 2000 to 31st March 2015. The study period is divided into 3 sub periods based on pre crisis (2000-2007), during a crisis (2007-2009), and post crisis (2009-2015). Hence, the main aim of this research paper is to capture the macroeconomic variables and its major impact on Indian economy. The present study has found that Indian economy is affected by the massive global financial recession. Finally, concluded that the Indian economy would be able to withstand the global financial turmoil.

KEYWORDS: *Global Financial Catastrophe, Market Capitalisation, Exchange Rate, Balance of Payment*

INTRODUCTION

The debt bubble busted out in US in the year 2007-08 has become global financial catastrophe by shaking the whole world. It is imperative for every economy to make a deep introspection to look into the pros and cons of Global Financial Catastrophe (GFC) and take measures to nullify the efforts. It is generally believed that security markets reflect what is expected to go on in the economy because the value of an investment is determined by its expected cash flows and its expected required rate of return (i.e., its discount rate). Clearly, both of these valuation factors are influenced by the aggregate economic environment. Fluctuations in the security markets are related to changes in expectations for the aggregate

economy. Aggregate stock prices reflect investor expectations about corporate performance in terms of earnings, cash flows and the required rate of return by investors. In fact, all these expectations are heavily impacted by the economic outlook.

A few empirical studies undertaken to diagnosis the implications on macroeconomic indicators of Indian economy are the base for this study also. Fama and Kenneth French (1981) "Stock returns, Inflation and money supply" they analyzed the relationship between stock returns, inflation and money supply using macroeconomic data. Chen Roll and Ross (1986) who analyzed whether innovations in the macroeconomic variables are risks that the awarded in the stock markets. They found that macroeconomic variables like, spread between long and short interest rates, expected and unexpected inflation, Industrial Production are some of the factors that are awarded by the markets, such a study will help us to find the relation between stock market and macroeconomic indicators and give a new insight to foreign investors, traders, and domestic investors.

REVIEW OF LITERATURE

Sarah Razack and NavithaThimmaiah (2014) attempted to analyze the impact of the global economic slowdown on the Indian economy in terms of growth rates of real GDP. The sector-wise impact of the crisis on the economy has also been analyzed. Techniques like Tables and Trend graphs have been used to present the impact. Time series data for almost 10 years has been used to analyze the impact. Finally, they concluded appropriate measures should be put into practice so that there can be weakening in the magnitude of the crisis.

Sweety shah and Shubhra Aanand (2013) examined the impact of the recent global financial crisis on Indian economy and challenges that our economy faced and opportunities arisen from this financial global crisis. In India, policymakers reacted in proactive manner and introduced the host of measures to reduce the impact of the crisis but it was apparent India has been affected by the global crisis with the reason being a relationship with other parts of the world economics.

Natarajan, et.al (2013) in this paper an attempt has been made to measure the impact and recovery of the global financial crisis on Indian economy in general and on the Indian stock market in especially. Their study intends to discuss the role of RBI in the present context.

Srinivas et.al (2013) in their study entitled "Global financial crisis and its impact on India's external trade and Indian economy" their study examined the trend in export, import, foreign remittance, Earning from business, overall Balance of Payment position, and GDP growth rate. They witnessed there are some reasons to believe that the financial crisis affected Indian economy adversely by showing foreign remittances, foreign investment, adverse BoP. However, Indian economy shows the symptoms of rapid recovery from the sudden set back it had to undergo during 2008.

Muthu kumar, et.al (2012) analyzed the impact and perception of Indian economy the data for this study has been collected from secondary sources of information are mainly from the websites and newspapers besides from the publications they pointed to use a popular aphorism, the Chinese character for crisis represents two symbols danger and opportunity but the choice is ours.

Suraj Walia (2012) investigated the impact of the global economic crisis on Indian economy he took secondary sources from 2006 to 2010. The study suggests that there is a rationale to protect the rural economy from adverse effects of global crisis by protecting agriculture, local business, and services so that projected growth rate would be maintained. The amount of

budget deficit should be increased in the field of infrastructure projects, to boost the overall performance of Indian economy.

Rajiv Kumar Bhatt (2011)attempted to analyzed the impact of recent global financial crisis on Indian economy this paper divided into three sections in the first introductory section, have to discussed features of recent global financial slowdown, section two deals with the impact of this crisis on Indian economy and conclusion and suggestions have been given in the third section he concluded that the new paradigm must entail infrastructure and food grain led growth strategy on the basis of peasant agriculture sustained through larger government spending towards the agriculture and rural sector, which can simultaneously sustain the growth and remove the food crisis in India.

Viswanathan (2010) in this research article examines the global financial crisis and its impact on India with the help of economic indicators from the study period of 2005 to 2010. The deterioration in the economic conditions is evident in all the indicators and in all markets

Prasad and Panduranga Reddy (2009) scrutinized the global financial crisis and its impact on India. They concluded that the Indian economy is being affected by the spillover effects of the global financial crisis and great saving habit among people strong fundamentals, strong conservative and regulatory regime have saved Indian economy.

Based on the reviews given above, the macro -economic indicators taken for this study are:

The impact of global financial Catastrophe crisis on Indian Economy as per the stated objective has been derived by selecting certain macroeconomic variables (selected variables) viz.,

1. Real GDP growth rates in India
2. Sectoral wise growth rate
3. Rate of Inflation (WPI)
4. Export - Import and Trade Balance
5. Foreign Institutional Investments (FIIs),
6. Foreign Direct Investment (FDI)
7. Foreign Exchange Reserves in India
8. India's Balance of Payment Position-Overall Balance
9. Stock Indices and Market Capitalisation
10. Exchange Rate of Rupee - on- Selected Foreign Currencies
11. Nominal and Real Effective Exchange Rate of Rupee

Objectives of the Study

The main objectives of the study are as follows:

1. To analyse the root causes of recent global economic recession
2. To analyse the global economic Catastrophe and its impact on Indian Econom

RESEARCH METHODOLOGY

It is an analytical research based on secondary data. The data has drawn for last fifteen years from 1st April 2000 to 31st March 2015.The total study period is subdivided into three sub-

periodsPre-crisis period (2000-01 to 2006-07), during crisis period (2007-08 to 2008-09), and Post-crisis period is (2009-10 to 2014-15).The secondary data collected for the study was extracted from the following sources: Reserve Bank of India and Government of India. Most of the data for the study were collected from the "Hand Book of Statistics on Indian Economy" for the year 2014-2015 and various issues of "Economic Survey", Government of India, RBI Bulletins, and Year Books of International Financial Statistics, published by IMF.

GFC on GDP, WPI (Inflation) and Economic growth of a country especially emerging economics could be perceived in terms of GDP, WPI (to decide about cost of living) inflationary effort. The volatility of these three indicators are discussed in table 1

Gross Domestic Product (GDP)is a monetary measure of the market value of all final goods and services produced in a period may be in the form of quarterly or yearly. Nominal GDP estimates are commonly used to determine the economic performance of whole a country, and make international comparisons, the below table and graphs clearly exhibited the trend of real GDP growth rates of India in the year from 2000-01 t o 2014-15.

Wholesale Price Index (WPI) is the price of a representative basket of wholesale goods, Some countries use the changes in this index to measure inflation in their economics, in particular India- The Indian WPI figures was released by weekly on every Thursday. But since 2009 it has been made monthly. It also influences stock and fixed price markets. The wholesale price index focuses on the price of goods traded between corporations.

TABLE 1 GFC ON GDP, SECTORAL GROWTH RATE AND INFLATION (WPI)

Period	Year	GDP[1]	Sectoral wise Growth Rate[2]			Rate of Inflation[3] (WPI)
			Agriculture	Manufacturing	Services	
Pre Crisis	2000-01	4.3	0.3	6.5	6.4	7.2
	2001-02	5.5	5.5	2.7	8.6	3.6
	2002-03	4	-4.9	7.1	8.3	3.4
	2003-04	8.1	8.2	7.9	11.2	5.5
	2004-05	7.1	1.1	10	9.5	6.5
	2005-06	9.5	4.6	10.7	12	4.4
	2006-07	9.6	4.6	12.7	11.6	6.5
Crisis	2007-08	9.3	5.5	10.3	10.9	4.8
	2008-09	**6.7**	**0.4**	**4.7**	**7.5**	**8.0**
Post Crisis	2009-10	8.6	1.5	9.5	10.4	3.6
	2010-11	8.9	8.3	7.6	12.2	9.6
	2011-12	6.7	4.4	8.5	4.3	8.8
	2012-13*	4.5	1.2	4	9.7	7.5
	2013-14*	4.7	4	5.3	7.8	5.9
	2014-15@	5.9	1.3	5.4	9.8	3.3

1. Source: Economic Survey-2014-15& 2015-16; GDP@FC= GDP Growth Rates at Factor Cost

2. Source: Central Statistics Office (CSO) *Second revised estimates; @First revised estimate

3. Source: Economic Survey 2015-16

The table 1vividly represents the real Gross Domestic Products of India from 2000-01 to 2014-15. The economy registered an average growth of 6.86% during the pre crisis period

(2000-2007), during the crisis period of 2008-2009 the GDP growth rate had fallen from the rate of 9.3 to 6.7 and during the post crisis period the economy registered an average growth rate of 6.55% which indicates that a healthy demonstration of its emerging strengths, In 2014-15, the Indian economy poised to overcome at the rate of 5.9% growth of GDP witnessed over the last two years affecting the manufacturing sector in particular.

The sector-wise annual growth rate of real GDP in India over the years has been presented in the above table. This table shows a steep fall in all annual growth rates during the year 2008-09, the contribution of agriculture and manufacturing sector has been unconvincing and the impact of the global financial crisis on these sectors is evident by their poor performance. This clearly implies that the prominent sectors of the Indian economy are not immune to the impact the global financial crisis. The estimates at disaggregated level indicate that agriculture and allied sectors including, livestock, forestry and fishing picked up the growth rate of 4.4% in 2013-14. The manufacturing sector registered a growth of 9.5 % and 8.5 % respectively in 2009-10 and 2011-12.

This table shows that an average inflation computed using the WPI during this period was a manageable i.e. 5.2%. Inflation (measured by Wholesale Price Index) had been falling from 6.5 % in a pre-crisis period of 2006-07 to 4.8% during the crisis period of 2007-08. In 2008-09, due to higher commodity prices, it claimed that the inflation was steeply increased to 8.0. On the whole, it appears that a mild level of inflation is good for the stock market. Currency depreciation also affected the consumer prices in the country. Inflation and higher cost of imported food impacted individuals and households to spend more of their income on food.

GFC on Export -Import&Trade Balance, FIIs, FDI, Foreign Reserves and Balance of Payments

Trade performance of a country can be measured from various perspectives – imports, exports, trade balance, total trade, etc. and its growth over the years.

Foreign Institutional Investment (FIIs) includes an investor or investment fundthat is from or registered in a country outside of the one in which it is currently investing. Institutional investors consist of hedge funds, insurance companies, pension funds and mutual funds. The term is used most commonly in India to refer to outside companies investing in the financial markets of India. International institutional investors must register with the Securities and Exchange Board of India to participate in the market. FII is allowed to enter into our country only through stock exchanges either in the form of equity or debt. Thus it makes an impact on the rise or fall of SENSEX, since FII is allowed to be purchased or sold daily. The daily transaction of FII is the reason behind the volatility in the stock markets movement to a greater extent. It has been observed that Sensex increases when there are positive inflows of FIIs & decreases when there are negative FII inflows.

Foreign Direct Investment (FDI) refers to international investment in which the investor obtains a lasting interest in an enterprise in another country. Most concretely, it may take the form of buying orconstructing a factory in a foreign country or adding improvements to such a facility, in the form of property, plants, or equipment. FDI is calculated to include all kinds of capital contributions, such as the purchases of stocks, as well as the reinvestment of earnings by a wholly owned company incorporated abroad (subsidiary) and the lending of funds to a foreign subsidiary or branch. The reinvestment of earnings and transfer of assets between a parent company and its subsidiary often constitutes a significant part of FDI calculations. FDI is more difficult to pull out or sell off. Consequently, direct investors may be more committed to managing their international investments and less likely to pull out at

the first sign of trouble.

Foreign Exchange Reserves also called FOREX reserves in a strict sense are only the foreign currency deposits held by central banks and monetary authorities. However, the term foreign exchange reserves in popular usage commonly includes foreign exchange and gold, SDRs and IMF reserve position as this total figure is more readily available and it is accurately deemed as official reserves or international reserves.

Balance of Payments (BoP)can be defined as the statistical record of a countries international transactions over a certain period of time presented in the form of double entry bookkeeping. A country can run an overall BOP deficit or surplus by engaging in the official reserve transactions. For example, an overall BoP deficit can be supported by drawing down the central bank's reserve holding. Likewise, an overall BoP surplus can be absorbed by adding to the central bank's reserve holdings.

TABLE 2 GFC ON TRADE BALANCE, FIIS, FDI, FOREIGN RESERVES AND BALANCE OF PAYMENTS

Period	Year	(Rs.in Crores)			FIIs[2] (US $ millions)*	FDI[3] (US $ millions)	Foreign Exchange Reserves[4] (US $ in millions)	Balance of Payments[5] (US $ in millions)
		Exports[1]	Imports[1]	Trade Balance[1]				
Pre Crisis	2000-01	201356 (26.6)	228307 (5.9)	-26950	2160 -	4029 -	42281 -	5868 -
	2001-02	209018 (3.8)	245200 (7.4)	-36182	1846 **(-14.54)**	6130 (52.15)	54106 (27.97)	11757 (100.36)
	2002-03	254913 (22.0)	296360 (20.9)	-41446	562 **(-69.56)**	5035 **(-17.86)**	76100 (40.65)	16985 (44.47)
	2003-04	293367 (15.1)	359108 (21.2)	-65741	9949 (1670.28	4322 **(-14.16)**	112959 (48.43)	31421 (84.99)
	2004-05	375340 (27.9)	501065 (39.5)	-125725	10172 (2.24)	6051 (40.00)	141514 (25.28)	26159 **(-16.75)**
	2005-06	456418 (21.6)	660409 (31.8)	-203991	9332 **(-8.26)**	8961 (48.09)	151622 (7.14)	15052 **(-42.46)**
	2006-07	571779 (25.3)	881515 (27.3)	-309736	6708 **(-28.12)**	22826 (154.73)	199179 (31.37)	36606 (143.20)
Crisis	2007-08	655864 (14.7)	1012312 (14.8)	-356448	16040 (139.12)	34835 (52.61)	309723 (55.50)	92164 (151.77)
	2008-09	840755 (28.2)	1374436 (35.8)	**-533680**	**-8857 (-155.22)**	**35180 (0.99)**	**251985 (-18.64)**	**-20080 (-121.79)**
Post Crisis	2009-10	845534 (0.6)	1363736 (-0.8)	-518202	20518 **(-331.66)**	26506 **(-24.66)**	279057 (10.74)	13441 **(-166.94)**
	2010-11	1136764 (34.6)	1683467 (23.4)	-546503	32226 (57.06)	34847 (31.47)	304818 (9.23)	13050 **(-2.91)**
	2011-12	1465959 (28.9)	2345463 (39.3)	-879504	18923 **(-41.28)**	49007 (40.63)	294397 **(-3.42)**	(-12831) **(-198.32)**
	2012-13	1634318 (11.5)	2669162 (13.8)	-1034844	31047 (64.07	39786 **(-18.82)**	292047 **(-0.80)**	3826 **(-129.82)**
	2013-14	1905011	2715434	-810423	8876	43582	304224	15508

		(16.6)	(1.7)		**(-71.41)**	(9.54)	(4.17)	(305.33)
	2014-15	1896348 (-0.5)	2737087 (0.8)	-840738	45698 (414.85)	50939 (16.88)	320649 (5.40)	61406 (295.96)

1. Source:Directorate General of Commercial Intelligence & Statistics (DGCI&S), Kolkata.

2. Source: SEBI, NSDL, and CDSL; *Net Investment in the US $ million at the monthly exchange rate.

3. Source: SEBI Annual Reports, SEBI Handbook of Statistics. &RBI;Note: Includes FDI through SIA/FIPB and RBI routes only.

4. Source: RBI & Economic Survey 2015-16

5. Source: RBI, Note: Capital Account includes Errors and omissions.

Note: () figures are expressed in terms of %

The table 2 clearly indicates that during pre-crisis period (2006-07), India's exports and imports were at Rs.5,71,779 Crores and at Rs.8,81,515 Crores respectively, the balance of trade was Rs.-3,09,736 Croresand during the crisis period (2008-09), the export and import were at Rs.8, 40,755 Crores and at Rs.13,74,436 Crores respectively, the balance of trade stood at Rs.-5,33,680 crores. During the post crisis period (2009-10) the export and import further declined very much to Rs.8, 45,534 crores, and Rs.13, 63,736 crores respectively. The balance of trade was Rs.5, 18,202 crores. This shows that India's exports are adversely affected by the meltdown in global markets. Specifically, export-oriented sectors, such as textiles, gems and jewelry, leathers and information technology, experienced declines in export growth. At the same time when its exports were declining, India's imports were rising, primarily due to higher prices for oil and other commodities.

The most immediate effect of the crisis in India has been affected an outflow of foreign institutional investors from the equity market. Foreign Institutional Investment (FIIs), the net FIIs, which had been growing from theUS $ 1846 million in 2001-02 pre-crisis periods to US$ 16040 million in 2007-08, suddenly, become a deficit in 2008-09. In that year, foreign investors withdrew a net amount of US$ -8857 million from the equity market in India. This was a reflection of the heightened risk aversion on the part of the investor and the liquidity crunch in the credit markets.

This table shows the flow of external funds in India for 2000-01 to 2014-15. During this fifteen-year period, the foreign direct investment into India has been increasing and remained strong even during a crisis. The size of the FDI was US$ 4029 million in 2000-01. By 2008-09, it grewup to US$ 35180 million. This segment of the capital flows was not affected by the liquidity crisis. After the global financial turmoil, for the 1st time, India again broke in to the top 10 recipients of Foreign Direct Investment (FDI) during 2014, The UNCTAD World Investment Report 2015 in its analysis of the global trends and sustained growth of FDI inflows, has also reported that India today rated as one of the most attractive destinations across the world. India jumped to the 9th rank in 2014 with a 22% rise in FDI inflows to $34 billion. India was at the 15th position in the previous two years.

The foreign exchange market came under pressure because of reversal of capital flows as part of the global decelerating process. Foreign exchange reserves were depleting. It was US$ 309,723 million in 2007-08 and came down to US$ 251,985 million in 2008-09, which shows the direct impact of the financial crisis on India's foreign exchange reserves. India has been accumulating reserves in 2007-08. With the outflow of FIIs and depreciation of the rupee,

RBI tried to defend the rupee by selling dollars. This has resulted in a depletion of foreign exchange reserves.

This table clearly indicates that India's overall Balance of Payment (BOP) has been improving since 2005-06 is US$ 15052. But it was shocking that during the year 2008-09, the overall BOP balance turned negative (-20080) US$ million showing that global financial crisis severely hit the flow of capital into the country. However, the economy could recover from the sudden shock of the crisis thereby making positive balance in country's BOP account in the year 2009-10 is 13441 US$ million and onwards.

GFC on Stock Indices and Market Capitalisation

The Stock market indices are the most important indicator of the stock market and the country's economy also. The Bombay Stock Exchange (BSE) represents the S&P BSE-Sensex, and National Stock Exchange (NSE) represents S&P CNX Nifty 50. The above mentioned indices give a wide outline of the stockmarket movement and represent the market.

TABLE 3: GFC ON STOCK MARKET INDICES AND MARKET CAPITALISATION

riod	**ar**	**&P ;E Sensex**	**ıte of Change %**	**&P CNX Nifty 50**	**ıte of Change**	**arket Capitalisation (s.in Crores)**			
						;E	**ıte of Change**	**;E**	**ıte of Change**
Pre Crisis	2000-01	69.69		36.49		1553		7847	
	2001-02	31.95	**1.96)**	77.13	**9.41)**	2224	**2**	6861	**.19)**
	2002-03	06.29	**.77)**	36.10	**.81)**	2198	**.54)**	7133	**5.66)**
	2003-04	92.19	**.11**	28.13	**.84**	01207	**9.93**	20976	**8.70**
	2004-05	40.99	**.80**	05.26	**.41**	98428	**.39**	85585	**.45**
	2005-06	78.55	**.20**	13.40	**.23**	22191	**.94**	13201	**.42**
	2006-07	277.33	**.30**	72.44	**.14**	45041	**.30**	67350	**.70**
Crisis	2007-08	568.89	**.96**	96.60	**.07**	38015	**.94**	58122	**.27**
	2008-09	365.55	**5.37)**	31.03	**3.80)**	86076	**9.94)**	96194	**).38**
Post Crisis	2009-10	585.21	**.04**	58	**.84**	6562	**0.02)**	09173	**7.49**
	2010-11	605.18	**.38**	84	**.88**	39084	**09.23**	,02,616	**.54**

	2011-12	422.88	**.35)**	43	**.11)**	14912	**.13)**	,96,518	**.04)**
	2012-13	202.1	**7**	57	**7**	87887	**8**	,39,035	**4**
	2013-14	120.12	**.54**	10	**.32**	15296	**.08**	,77,720	**.65**
	2014-15	556.53	**.99**	67	**.56**	14929	**6.31)**	,30,122	**.45**

Source: BSE, NSE, RBI's Handbook of Statistics on Indian Economy and SEBI

The table3 reveals that the change in equity index value of share indices of major Indian stock markets after the financial crisis. It may be observed that the downward pressure on the share values was severe in 2008. It had amajor impact on the world markets and witnessed major correlations of the bull markets ending 2007-08. So, the bull market which ended in Jan 2008 had its sharpest drop and one of the fastest bear markets of all time where Sensex fall from 21000 peak levels to 8000 levels in 2008 end or early 2009. So the market which recovered from 2009 from 8000 levels break through the 2008 prices of 21000 in 2014 where we saw that bull run to continue till early 2015 to the all-time high levels of 30000, this phase from 2009 till early 2015 seen a growth of 275% within these 6 years.

Exchange Rate of Rupee - on- Selected Foreign Currencies

Apart from factors such as interest rates and inflation, the exchange rate is one of the most important determinants of a country's relative level of economic health. Exchange rates play a vital role in a country's level of trade, which is critical to every free market economy in the world. For this reason, exchange rates are among the most watched analyzed and governmentally manipulated economic measures. A higher currency makes a country's export more expensive and imports cheaper in foreign markets; a lower currency makes a country's export cheaper and its imports more expensive in foreign markets. A higher exchange rate can be expected to lower the county's balance of trade, while a lower exchange rate would increase it.

TABLE 4GFC ON EXCHANGE RATE OF SELECTED FOREIGN CURRENCIES

Period	Year	US Dollar	Appreciation/ Depreciation	Pound Sterling	Appreciation/ Depreciation	Euro	Appreciation/ Depreciation	Yen	Appreciation/ Depreciation
		(Rupees per unit of foreign currency)							
Pre Crisis	2000-01	45.684	**-**	67.552	**-**	41.483	**-**	0.414	**-**
	2001-02	47.692	**-4.40**	68.319	**-1.14**	42.181	**-1.68**	0.382	**+7.73**
	2002-03	48.395	**-1.47**	74.819	**-9.51**	48.090	**-14.01**	0.397	**-3.93**
	2003-04	45.952	+**5.05**	77.739	**-3.90**	53.990	**-12.27**	0.407	**-2.52**
	2004-05	44.932	+**2.22**	82.864	**-6.59**	56.555	**-4.75**	0.418	**-2.70**
	2005-06	44.273	+**1.47**	79.047	+**4.61**	53.912	+**4.67**	0.391	**+6.46**
	2006-	45.285	**-2.29**	85.727	**-8.45**	58.111	**-7.79**	0.388	**+0.77**

	07								
Crisis	2007-08	40.241	+**11.14**	80.802	+**5.74**	56.991	+**1.93**	0.353	+**9.02**
	2008-09	45.917	**-14.11**	78.449	+**2.91**	65.135	**-14.29**	0.462	**-30.88**
Post Crisis	2009-10	47.417	**-3.27**	75.886	+**3.27**	67.084	**-2.99**	0.511	**-10.61**
	2010-11	45.577	+**3.88**	70.885	+**6.59**	60.218	+**10.23**	0.533	**-4.31**
	2011-12	47.923	**-5.15**	76.391	**-7.77**	65.894	**-9.43**	0.607	**-13.88**
	2012-13	54.410	**-13.54**	85.971	**-12.54**	70.069	**-6.34**	0.658	**-8.40**
	2013-14	60.502	**-11.20**	96.306	**-12.02**	81.175	**-15.85**	0.604	+**8.21**
	2014-15	61.144	**-1.06**	98.573	**-2.35**	77.521	+**4.50**	0.558	+**7.62**

Source: RBI and Economic Survey 2015-16

Note: Figures of US dollar, Pound sterling, Euro and Japanese yen from May 2012 onwards are RBI's reference rates.

In addition to this removal by the FIIs and corporate were converting the funds raised locally into foreign currency to meet their external obligations led to thesharp depreciation of rupee. Between 2008-09 is (-14.11). The RBI reference rate for the rupee fell by nearly 25 %, rupee per unit of major foreign currency gone up from Rs.45.917us dollar,Rs.65.13 for Euro, and Rs.0.462 against Yen except Pound Sterling appreciate Rs.78.45. After Crisis rupee against US dollar, Pound Sterling and Euro continuously depreciated except Yen. The depreciation of the rupee Vis-a-Vis the dollar during 2014-15, with that of the Pound sterling, Euro and Yen it shows the rupee fell the least, just 4.2% a fraction much less than euro at 13.6%.

Nominal and Real Effective Exchange Rate of Rupee

The Nominal Effective Exchange Rate (NEER) is the weighted average of bilateral nominal exchange rates of the home currency in terms of foreign currencies. Real Effective Exchange Rate (REER) is a weighted average of nominal exchange rates adjusted for relative price differential between the domestic and foreign countries, it relates to the purchasing power parity (PPP) hypothesis. The data refers to the indices of REER and NEER of Indian Rupee (6 and 36- Currency Bilateral Weights) (Monthly Average).

TABLE 5 GFC ON NOMINAL AND REAL EFFECTIVE EXCHANGE RATE OF RUPEE

od	Year	Nominal effective exchange rate (NEER) 6-	Appreciation/ Depreciation	Real effective exchange rate (REER) 6-	Appreciation/ Depreciation	Nominal effective exchange rate (NEER) 36-	Appreciation/ Depreciation	Real effective exchange rate (REER) 36-	Appreciat Depreciat

		Currency Index		**Currency Index**		**Currency Index**		**Currency Index**	
		(Trade Based Weights)(Base Year: 1993-94=100)							
	2000-01	77.30	**-**	102.65	**-**	92.11	**-**	100.04	**-**
	2001-02	75.89	**+1.82**	102.49	**+0.16**	91.52	**+0.64**	100.87	**-0.83**
is	2002-03	71.09	**+6.32**	97.43	**+4.94**	89.22	**+2.51**	98.19	**+2.66**
	2003-04	69.75	**+1.88**	98.85	**-1.46**	87.15	**+2.32**	99.50	**-1.33**
	2004-05	69.26	**+0.70**	101.35	**-2.53**	87.28	**-0.15**	100.05	**-0.55**
		(Base Year: 2004-05=100)							
	2005-06	103.04	**-48.77**	104.45	**-3.06**	102.24	**-17.14**	102.38	**-2.33**
	2006-07	98.09	**+4.80**	103.82	**+0.60**	97.63	**+4.51**	100.76	**+1.58**
is	2007-08	104.62	**-6.66**	113.44	**-9.27**	104.75	**-7.29**	109.20	**-8.38**
	2008-09	90.42	**+13.57**	103.94	**+8.37**	93.34	**+10.89**	99.65	**+8.75**
	2009-10	87.07	**+3.70**	110.73	**-6.53**	90.94	**+2.57**	103.88	**-4.24**
is	2010-11	91.83	**-5.40**	124.50	**-12.44**	93.54	**-2.86**	112.68	**-8.47**
	2011-12	84.44	**+8.05**	121.17	**+2.67**	87.38	**+6.59**	110.27	**+2.14**
	2012-13	75.59	**+10.48**	117.15	**+3.32**	78.32	**+10.37**	105.57	**+4.26**
	2013-14	67.76	**+10.36**	112.79	**+3.72**	72.32	**+7.66**	103.27	**+2.18**
	2014-15	68.60	**-1.24**	119.92	**-6.32**	74.07	**-2.42**	108.96	**-5.51**

Source: Reserve Bank of India.

1. REER figures for the period 1994-95 to 2004-05 are based on Wholesale Price Index (WPI).
2. REER figures for the period 2005-06 to 2014-15 are based on Consumer Price Index (CPI).

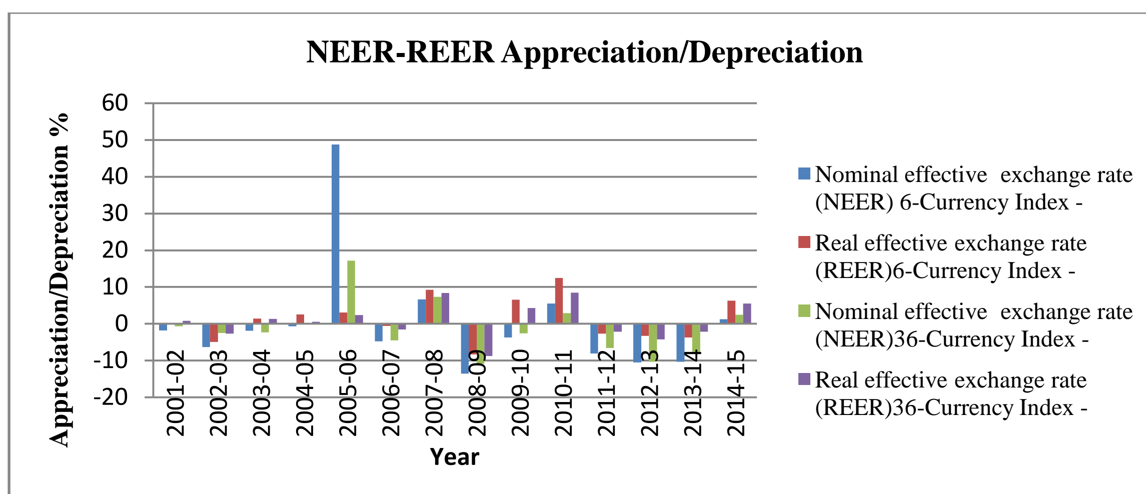

Fig: 1- Nominal and Real Effective Exchange Rate of Rupee

The table 5 shows the trends in Nominal and Real Effective Exchange Rates of Rupee since 2000-01 to 2014-15. Nominal Effective Exchange Rate (NEER) is the weighted average of bilateral nominal exchange rates of the home currency in terms of foreign currencies. Real Effective Exchange Rate (REER) is a weighted average of nominal exchange rates adjusted for relative price differential between the domestic and foreign counties. NEER and REER can be either export based with appropriate weights for currencies of countries that the major markets for our competitors in its exports. Export-based effective exchange rates for India, both NEER and REER, for every month from 2000-01 to 2014-15 are plotted. It shows that the NEER Index appreciated by 8% from 70 to 75.6 compared with 100 in 2004-05. In contrast, the REER Index appreciated by 14% from 101.2 to 115.2 compared with 100 in 2004-05. The REER for India depreciated from100 to 90 between the years 2007-2013. The withdrawal of FII investment from India has created other problems in its wake. India's stock markets have witnessed a major collapse; Indian rupee has been losing steadily against the US dollar since 2008. Notably, the Indian rupee was appreciating against the US dollar and other major currencies in 2007. The rupee's value fell from Rs.39 -40 to the dollar in 2008 to more than Rs.50 as per the current market rate.

Major Root causes of Global Financial slowdown

The major root causes of global financial recession identified by many eminent economists are as follows:Housing bubble, Speculation, High-risk mortgage credits and Lending practices, Securitization, Credit rating and Banking Regulations.

CONCLUSION

India has been affected by the global financial meltdown; due to India's rapid growing integration into the global economy. The strategy to counter these effects of the globalfinancial crisis on the Indian economy and prevent the latter from any further collapse would require an effective departure from the dominant economic philosophy of the neoliberalism. Though the Indian economy would be able to withstand the crisis without any major difficulty, the crisis is still causing confusion all over the world. Finally, the government of India has been expanding its investments in social safety nets to soften the impact on the most groups in risk to economic shocks and contagion in free markets.While the developed countries, including the U.S, Euro Zone, and Japan have plunged into recession, impact of the same on India comparatively less due to the savings habit of Indian, fiscal and monetary policies of RBI have been saved the Indian economy from the great

recessionIt is observed from the above analysis that the Indian economy was affected by the Global financial meltdown.The results obtained from the data analysis and the comparison reveals that the performance of each of these economic indicators has been performed atdifferenttime segment namely pre, during and post-crisis. The present study concluded that the Indian Economy is affected by the contagion effects of the massive global financial Catastrophe.

Still India suffers in very many aspects of growth due the GFC. aelruisible attitude, greedy mentality and higher degree of non compliance of rules and regulation should be curbed, though over hauling of IF system especially with respect to human side of the organisation is mandatory to ensure real economic growth of our country.

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