The Indian Response to the Global Financial Crisis

Sumanjeet Singh *

The effects of the global financial crisis have been more severe than initially forecast. By virtue of globalization, the moment of financial crisis hit the real economy and became a global economic crisis; it was rapidly transmitted to many developing countries. The crisis emerged in India at the time when Indian economy was already preoccupied with the adverse effects of inflationary pressures and depreciation of currency. The crisis confronted India with daunting macroeconomic challenges like a contraction in trade, a net outflow of foreign capital, fall in stock market, a large reduction in foreign reserves, slowdown in domestic demand, slowdown in exports, sudden fall in growth rate and rise in unemployment. The government of India has been highly proactive in managing this ongoing crisis with a slew of monetary and fiscal measures to stabilize the financial sector, ensure adequate liquidity and stimulate domestic demand. As a result of this combining with many several structural factors that have come to India's aid, India's economic slowdown unexpectedly eased in the first quarter of 2009. The present paper makes an attempt to assess the impact of global financial crisis on the Indian economy and discuss the various policy measures taken by government of India to reduce the intensity of impacts. The paper also highlights recovery of Indian economy from crisis and in the end of paper concluding remarks are given towards.

Keywords: Crisis, India, Impact, Policy, RBI

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* Assistant Professor, Department of Commerce, Ramjas College, University of Delhi, Delhi-7, India, (Tel) +91-92-1532-6126, (E-mail) sumanjeetsingh@gmail.com. While bearing full responsibility for any mistakes, I wish to thank Prof. L. N. Dahiya; Prof. S. D. Vashistha and Richard Nyangosi for reading the earlier versions of this paper and making a number of helpful comments and constructive criticisms. However, I am solely responsible for all the remaining errors and inadequacy.

"Our crisis is not a crisis of information; it is a crisis of decision of policy and action"
- George Walts

I. Introduction

The present financial crisis which has its deep roots in closing year of the 20th century became apparent in July 2007 in the citadel of global neoliberal capital, the United States, when a loss of confidence by investors in the value of securitized mortgages resulted in a liquidity crisis.[1] But the crisis came to the forefront of business world and media in September 2008, with the failure and merging of many financial institutions. The crisis's global effects differentiate it from the earlier crisis like Asian 1997-98 crisis,[2] which spread, only to Russia and Brazil or from the debt crisis of the early 1980s that affected the developing world. It is different from the recession of 1973-75 and 1979-81 because they did not propagate as fast and hardly affected Soviet Union, China, and India. Added to this, in previous times of financial turmoil, the pre-crisis period was characterized by surging asset prices that proved unsustainable; a prolonged credit expansion leading to accumulation of debt; the emergence of new types of financial instruments; and the inability of regulators to keep up (ADB 2008). The immediate cause or trigger of the present crisis was the bursting of United States housing bubble[3] (Also known as Sub-prime

[1] In 2006, the German Economist Max Otte published a book with the title "*The Crash Comes*," in which he pointed up the risks of present housing bubble in the U.S. and the fact that most of these houses sold on credit to people who actually could not afford such high debits. He also predicted an enormous fall in the value of U.S. dollar and a new world economic crisis in which all finally ended.

[2] The Asian Financial Crisis was a period of financial crisis that gripped much of Asia beginning in July 1997, and raised fears of a worldwide economic meltdown due to financial contagion. The crisis started in Thailand with the financial collapse of the Thai baht caused by the decision of the Thai government to float the baht, cutting its peg to the USD, after exhaustive efforts to support it in the face of a severe financial overextension that was in part real estate driven. At the time, Thailand had acquired a burden of foreign debt that made the country effectively bankrupt even before the collapse of its currency. As the crisis spread, most of Southeast Asia and Japan saw slumping currencies, devalued stock markets and other asset prices, and a precipitous rise in private debt.

[3] In the years leading up to the crisis, significant amounts of foreign money

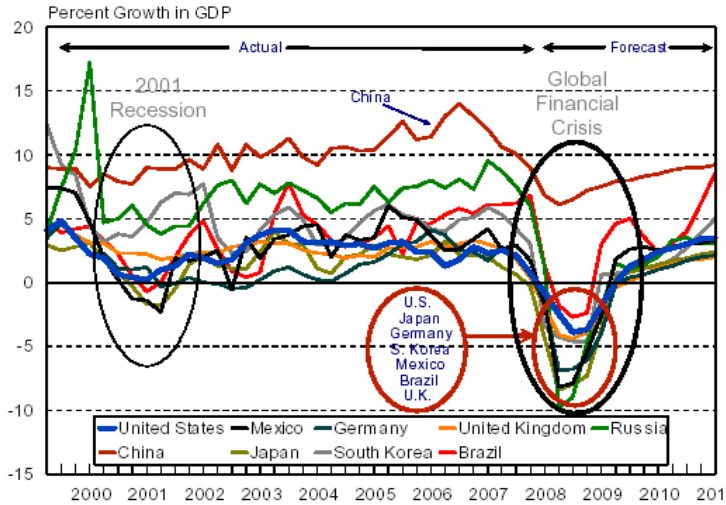
lending crisis), which peaked in approximately 2006-07.[4] In March 2007, the United States' sub-prime mortgage industry collapsed (Park and Lee 2009) to higher-than-expected home foreclosure rates, with more than 25 sub-prime lenders declaring bankruptcy, announcing significant losses, or putting themselves up for sale. As a result, many large investment firms have seen their stock prices plummet. The stock of the country's largest sub-prime lender, New Century Financial plunged 84%. Liquidity crisis promoted a substantial injection of capital into the financial markets by the U.S. Federal Reserve. In 2008 alone, the U.S. government allocated over $900 billion to special loans and rescues related to the U.S. housing bubble, with over half going to the quasi-government agencies of Fannie Mae, Fredie Mac, and the Federal Housing Administration. Bailout of Wall Street and the financial industry moral hazard also lay at the core of many of the causes.

Initially, it was thought that other major world economies would not be significantly affected. But, the crisis of U.S. quickly became a global problem (UNCTAD 2009), affecting major economies worldwide both directly and indirectly. The sub-prime crisis in the U.S., following the collapse of the housing sector boom, has sent ripples through the economies of many countries (Pradhan 2007). The crisis has brought about a slump in economic growth (Figure 1) in most countries and has been called the most serious financial crisis since the Great Depression, with its global effects characterized by the failure of key businesses, decline in the consumer wealth estimated in the trillion of U.S. dollars, rapid decrease in international trade, slowdown in foreign investments, steep falls in industrial productions, substantial financial commitments incurred by the governments, and significant decline in the economic activity.

Such sectors as stock markets and bank investment funds have

flowed into U.S. from fast growing economies in Asia and oil importing countries. This inflow of funds combined with low U.S. interest rates from 2002-04 contributed easy credit conditions, which fueled both housing and credit bubbles.

[4] Subprime lending become popular in the U.S. in the mid 1990s, with the outstanding debt increasing from $33 billion in 1993 to $332 billion in 2003. As of December 2007, there was an estimated $1.3 trillion in subprime mortgages outstanding. 20 per cent of all mortgages originated in 2006 were considered to be subprime, a rate unthinkable just ten years ago. This substantial increase is attributable to industry enthusiasm: banks and other lenders discovered that they could make hefty profits from origination fees, bundling mortgages into securities and selling theses securities to investors.

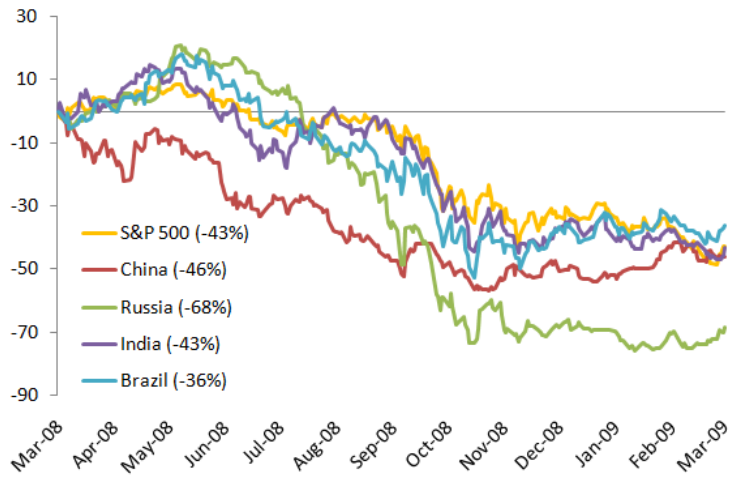


Source: Congressional Research Service, Data and Forecasts (March 15) Global Insight.

FIGURE 1
QUARTERLY (ANNUALIZED) ECONOMIC GROWTH RATES FOR SELECTED COUNTRIES

been badly affected worldwide, especially in U.S. and BRIC (Brazil, Russia, India, and China) countries (Figure 2). The central banks of many countries[5] on these continents have taken evasive action to

[5] The European Central Bank (ECB) took action to prevent a liquidity crunch in Europe. The French bank BNP Paribas had three investment funds that were connected to the subprime market in the U.S. The bank stopped withdrawals from these funds. Losses were faced by NIBC, a Dutch investment bank during the first half of 2007. Losses were faced by Dillon Read, the fund affiliated with UBS, the Swiss Bank. Rhineland Funding, which is affiliated with the German bank IKB, was substantially hit by the subprime crisis. The Japanese Yen did not benefit from the advantages of lower interest rates because of an increase in the value of the Yen. This increase was due to the U.S. subprime crisis. Japan's central bank has noted that the impacts of the crisis on the country have been far more intense than anticipated and that Japan's economic growth has slowed considerably. Impacts have started to surface in China with a sharp fall in the shares held by Chinese banks. Shares held by the Bank of China fell by 6.4% and 4.1% in Hong Kong and Shanghai markets. In India, the rise in the value of the Rupee versus the U.S. Dollar is expected to damage exports. Indian companies involved in mortgage processing for the U.S. have faced a decline in work orders. India has also recently faced major falls in stock markets, which



Source: Bespoke Investment Group.

FIGURE 2

ONE-YEAR % CHANGE IN BRIC COUNTRIES AND S&P 500[6]

prevent credit crises that could lead to economic recession. Thus, the current financial crisis is more global than any other period. The January 2009 update of the World Economic Outlook (WEO 2009) projects global growth to slow from just under 3.5 per cent in 2008 to 1.5 per cent in 2009.[7] The global financial crisis initially affected advanced economies, emerging economies, and low-income economies in very different ways.

Advanced economies were first hit mainly by systematic banking crisis in the U.S. and Europe (Nanto 2009), emerging markets with

have been attributed, by many experts, to the U.S. subprime crisis.

[6] Over the last year, the U.S. has performed better than Russia and China, inline with India, and worse than Brazil. Russia's stock market is down the most of the BRIC countries at -68%. China's Shanghai Composite is down 46% and has really seen a nice pickup lately. India's Sensex is down 43%, which is right inline with the S&P 500, and Brazil is down 36%.

[7] Advanced economies are suffering their worst downturn since World War II, with economic output expected to contract by over 1.75 per cent in 2009. Growth in expected to fall in Brazil, China, India, and other emerging market economies, dragged down from 6.25 per cent in 2008 to about 3.25 per cent in 2009. Growth in developing economies is expected to slow to 3.33 per cent in 2009 from 6.33 per cent in 2008.

well-developed financial systems was initially mostly affected by cross broader financial linkages through capital flows, stock market investors and exchange rate. Under developing and poor countries have been mostly insulted (Panagariya 2008) from the first round effects of the financial crisis owing partly to sound macroeconomic management, but also because of the underdeveloped nature of the financial markets and are not well connected to international markets.

In the present paper an attempt has been made to study the impact of global financial crisis on the Indian economy. The paper has been divided into 4 sections. Section 2 discusses the impact of global financial crisis on various segment of Indian economy. Section 3 highlights the policy option adopted by Indian government to overcome the situation of crisis. Section 4 highlights the recovery of Indian economy from economic slowdown and in the end of paper concluding remarks are given.

II. Impact of Global Financial Crisis on India

India's economy has been one of the stars of global economies in recent years, growing 9.2% in 2007 and 9.6% in 2006 and has seen a decade of 7 plus per cent growth. Growth had been supported by markets reforms, huge inflows of FDI, rising foreign exchange reserves, both an IT and real estate boom, and a flourishing capital market. But, in the middle of 2008, price increases of global commodity (Hamilton 2008), especially those of oil, metal, and food took a toll on India. Inflation reached at 12.91 per cent, the highest level seen for a decade. With this growth softened, budget deficits widened and trade balances worsened. Before the India could recover from the adverse impact of high commodity prices, the global financial crisis has come knocking. Initially, it was argued that India would be relatively immune to this crisis, because of the '*strong fundamentals*' of the economy and the supposedly well-regulated banking system. But, a crisis of this magnitude was bound to affect globalized economy like India and it has (Jha 2009). Economy began to slow down from the middle of 2007-08. After a long spell of growth, the Indian economy is experiencing a downturn. Industrial growth is faltering, inflation remains at double-digit levels, the current account deficit is widening, foreign exchange reserves are depleting and the rupee is depreciating. IMF has also predicted that Indian economy can not remain immune from global

TABLE 1

MONTHLY TRENDS IN FOREIGN INVESTMENTS IN 2008-09 (U.S.$ MILLION)

Months	Foreign Direct Investment	Foreign Portfolio Investment	Total Investment
April	3,749	-880	2,869
May	3,932	-288	3,644
June	**2,392**	**-3,010**	**-618**
July	2,247	-492	1,755
August	2,328	593	2,921
September	2,562	-1,403	1,159
October	**1,497**	**-5,423**	**-3,746**
November	1,083	-574	509
December	1,362	30	1,392
January	2,733	-614	2,119
February	1,466	-1,085	381
March	1,956	-889	1,067
March-April	35,146	-13,855	21,291

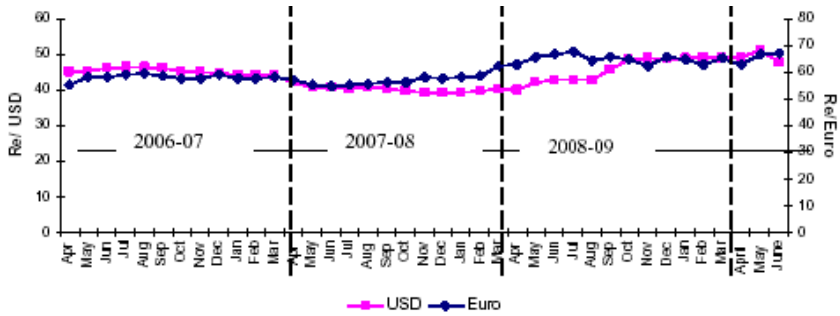
Note: Highlight areas indicates negative investment.
Source: Reserve Bank of India.

financial crisis and crisis will hit India's growth story. Indian government is feeling the heat of global crisis in India. As a result, The Union Government has constituted a committee to consider issues raised by India Inc on global financial crisis and its impact on India. Some notable impacts of global financial crisis on the various segments of Indian economy are presented in Section 2.A to 2.D.

A. Reversals of Capital Flows, Depreciation of Rupee, and Fall of Stock Market

The most immediate effect of that crisis on India has been an outflow of foreign institutional investment from the equity market. Foreign institutional investors, who need to retrench assets in order to cover losses in their home countries and are seeking havens of safety in an uncertain environment, have become major sellers in Indian markets. FIIs have pulled out an estimated U.S.$ 13 billion from Indian stock market in 2008 (Sumanjeet 2009a). Almost immediately after the crisis surfaced FII registered a steel fall between October and November 2007, from $5.7 billion to minus 1.6 billion. Since then the downward trend of FII has remained unabated (Table 1).

FDI investment during 2008-09 was volatile but overall remained stable. Foreign investment received in 2008-09 was U.S.$ 35.1 billion,



Source: Bloomberg.

FIGURE 3

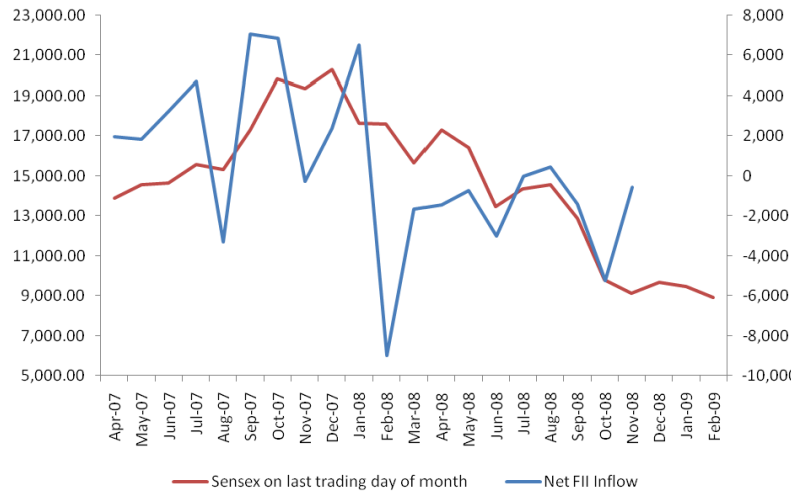
EXCHANGE RATE OF INDIAN RUPEE WITH U.S. DOLLAR AND EURO

slightly higher than the FDI received in 2007-08 (U.S.$ 34.3 billion). A significant difference in the total investments of 2008-09 and 2007-08 has been on due to the inflow and outflow of foreign investment observed in 2007-08 and 2008-09 respectively.

Remittances are another source of inward foreign capital flows[8] that in the past have helped to balance India's large trade account deficit and keep the current account deficit at a reasonable level. The remittances from overseas Indians started feeling the impact of the global crisis during the third quarter of FY2008-2009 when, on a year-on-year basis, they declined by 0.5%. The impact becomes more evident in the fourth quarter of FY2008-2009 when the inflow of remittances declined by more then 29% as compared to the same period in previous year. With the poor economic outlook for oil producing economies in the Gulf and West Asia, coupled with rising pressure against immigration in advanced countries, it is expected that remittances will further decline in the coming quarters.

The financial crisis has also created a shortage of money supply and India is also facing a credit crunch especially in terms of foreign exchange and the Indian Banking sector and forex markets are facing tight liquidity situations each passing day for the past quite some time. This liquidity crisis along with FII sell off has forced the Indian Rupee to devaluate (Sumanjeet 2009b) like never before and in a span of 9

[8] In 2007, with $27 billion as remittances, India was placed as the number one recipient of inward remittances globally by World Bank, with China in close second ($25.7 billion).



Source: The Economic Times.

FIGURE 4
FALL IN FIIS AND STOCK MARKET

months the Indian Rupee has slipped from around Rs 40/U.S.$ to Rs 47/U.S.$.

As is to be expected, FII outflows might also have had a negative impact on domestic investment. Given the relative thinness of the Indian share market, the sharp fall in FII followed by their withdrawal contributed, albeit with some lag, to the bursting of the India's stock market bubble (Figure 4). However, Indian stock markets are never free from falling big and the market crash in 2008 was an anticipated one, but a fall of this extent was never anticipated by even the big of the bear.

Curiously enough, though IIP growth had started declining since March 2007, the share market boom continued until early 2008; between March and December 2007, the Bombay Stock Exchange (BSE) index, fuelled in part by substantial FII inflows, went up from 12,858 to 19,827. The bullish sentiments prevailed for a short while even after the downward drift in FII began in November 2007. The Indian Stock Markets have crashed[9] from a peak of around 21,000 in

[9] January 21, 2008, the Sensex saw its highest ever loss of 1,408 points at the end of the session on Monday. The Sensex recovered to close at 17,605.40 after it tumbled to the day's low of 16,963.96, on high volatility as investors

January 2008 to close to 10,000 in December 2008. Stocks like RNRL, Ispat, RPL, Essar oil, and Nagarjuna fertilizers have lost 50-70% of their value. The crisis in the global markets, a fall in the rupee and poor IIP numbers led to the fall.

B. Fall in Growth Rate, Industrial Output, and Rise in Inflation

Second, the global financial crisis and credit crunch have slowed India's economic growth. GDP started decelerating in the first quarter of 2007-08, nearly six months before the outbreak of the U.S. financial crisis and considerably ahead of the surge of recessionary tendencies in all developed countries from August-September 2008. That was just the beginning of slowdown impact on India's GDP growth. GDP growth for 2008-09 was estimated at 6.7% as compared to the growth of 9.0% posted in the previous year. All the three segments of the GDP namely agriculture, forestry and fishing, industry and services sector were seen to post growth of 1.6%, 3.8%, and 9.6% respectively in 2008-09 against the growth of 4.9%, 8%, and 10.8% respectively in 2007-08. Poor agricultural growth is also attributed to low monsoon in major parts of India (Figure 5).

Table 2 clearly shows that due to shrinkage in demand in the markets, it is not only manufacturing industry but also the services sector that is getting hit. The government came up with a set of stimulus measures on three occasions to aid the ailing industry compromising on the deficits. These measures have however have led to widening of fiscal deficits.

Further, India's industrial output fell at its fastest annualized rate in 14 years, despite tax cuts and fresh spending programme announced by the government of India in December and January to boost domestic demand. Data released by CSO showed that the factory output shrank by 1.2 per cent in February, on week global and domestic demand. This is against growth rate of 9.5 per cent during the same month

panicked following weak global cues amid fears of the U.S. recession. On January 22, 2008, the Sensex saw its biggest intra-day fall on Tuesday when it hit a low of 15,332, down 2,273 points. The Bombay Stock Exchange benchmark Sensex witnessed its second-largest fall ever losing 900.84 points to close at 16,677.88. May 18, 2006, the Sensex registered a fall of 826 points (6.76 per cent) to close at 11,391, following heavy selling by FIIs, retail investors and a weakness in global markets. The markets crashed by 801 points to close at a low of 10,528. The crisis in the global markets, a fall in the rupee and poor IIP numbers led to the fall.

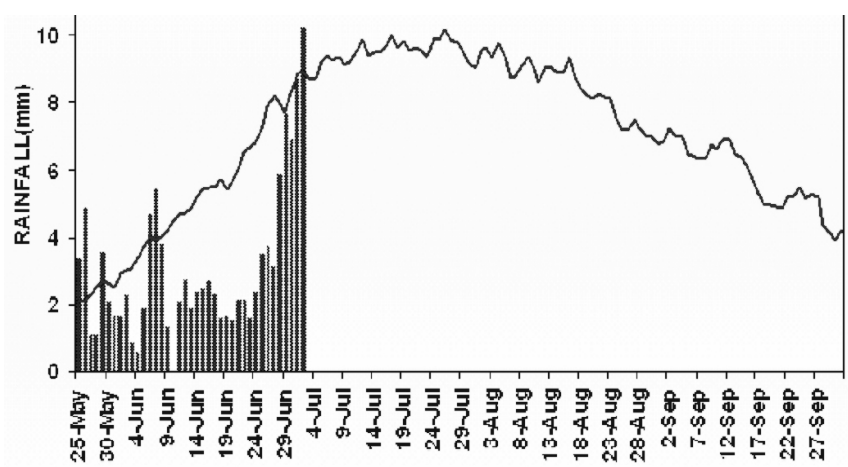
TABLE 2

INDIA'S MACROECONOMIC INDICATORS

Indicators	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
GDP (at current prices, U.S.$ Billion)	599.4	700.9	808.7	916.7	1173.1	1179.8	1217.6F
GDP Growth (at constant prices, %)	8.5	7.5	9.5	9.7	9.0	6.7*	6.0
Agriculture and Allied	10.0	0.0	5.8	4.0	4.9	1.6*	-
Industry	7.4	10.3	10.2	11.0	8.1	3.9*	-
Services	8.5	9.1	10.6	11.2	10.9	9.7	-

Notes: *CSO Revised Estimate; -Not Available.

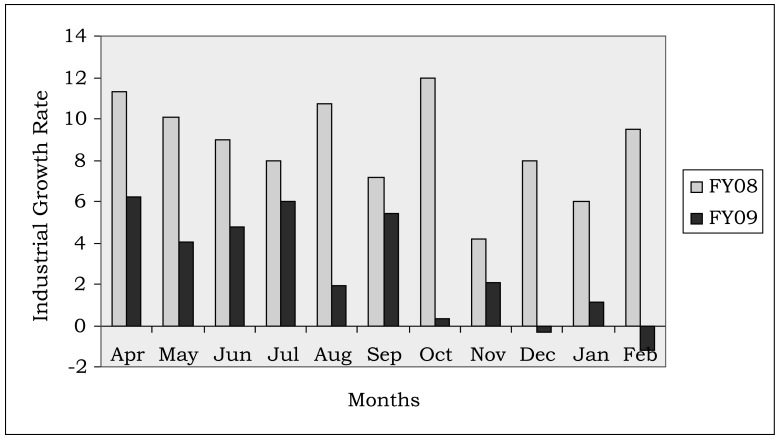
Sources: Economic Survey, Various Issues; Union Budget 2009-10, RBI Monthly Bulletin, Annual Report and Weekly Statistical Supplement.



Source: Indian MAT Department.

FIGURE 5

DAILY MEAN RAINFALL OVER THE COUNTRY AS A WHOLE (MM)



Source: Central Statistical Organization (CSO).

FIGURE 6
FALLING INDUSTRIAL OUTPUT

a year ago. Industrial output thus grew 2.8 per cent during April-February, against 8.8 per cent in the same period a year ago. Manufacturing, which constitutes 80 per cent IIP (Index of Industrial Production), contracted by 1.4 per cent in February, as production of basis, intermediates and consumer goods shrank compared with a year ago (Figure 6).

For a little over a year after the outbreak of financial crisis, the global economy experienced, between September 2007 and October 2008, a pronounced stagflationary phase, with the growth slowdown on the one hand and rising inflation on the other hand. So far as the Indian economy is concerned since prices of practically all petroleum products are administered and trade in agricultural goods is far from free, transmission of global inflation to domestic prices occurred with a time lag, from November 2007 rather than September 2007. Beginning of 2008 has seen a dramatic rise in the price of rice and other basic food stuffs. There has also been a no-less alarming rise in the price of oil and gas (Table 3). When coupled with rises in the price of the majority of commodities, higher inflation was the only likely outcome.

Indeed, by July 2008, the key Indian Inflation Rate, the Wholesale Price Index, has risen above 11%, its highest rate in 13 years. Inflation rate stood at 16.3 per cent during April to June 2008.[10] This is more than 6% higher than a year earlier and almost three times the RBI's

TABLE 3

WPI INFLATION-SECTOR WISE ANALYSIS[11]

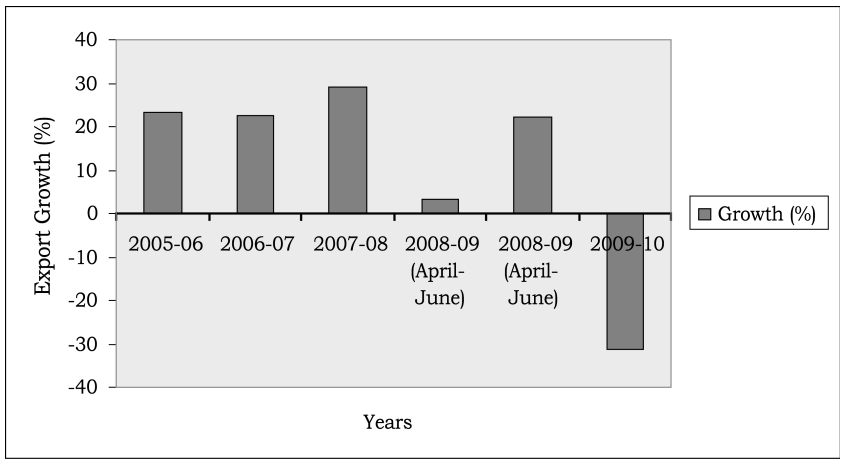
Year	Index Change				Average Inflation (%)			
	WPI	PA	Fuel	Mfg	WPI	PA	Fuel	Mfg
1995-96	5.1	3.7	5.6	5.9	8.01	8.27	5.07	8.57
1996-97	6.6	11.5	15.3	2.6	4.60	8.43	10.33	2.05
1997-98	5.8	6.3	17.8	3.0	4.37	2.69	13.89	2.87
1998-99	7.1	10.8	4.6	6.4	5.95	12.05	3.29	4.35
1999-00	9.2	6.1	28.2	3.3	3.29	1.20	9.07	2.75
2000-01	8.3	2.4	42.2	5.7	7.06	2.85	8.04	3.22
2001-02	2.6	6.3	10.6	-0.2	3.62	3.65	9.26	1.82
2002-03	10.5	10.3	22.9	7.3	3.41	3.38	5.53	2.69
2003-04	8.0	2.9	6.3	9.8	5.43	4.23	6.32	5.61
2004-05	9.2	2.3	27.8	7.9	6.44	3.70	10.03	6.25
2005-06	7.7	9.9	25.9	2.8	4.45	2.90	9.58	3.14
2006-07	13.2	22.6	3.7	11.9	5.38	7.67	5.62	4.39
2007-08	16.3	20.9	21.8	13.7	4.67	8.90	0.99	4.97

Source: Commerce Ministry, IBI Gilts Ltd.

target of 4.1%. Inflation has climbed steadily during the year, reaching 8.75% at the end of May. There was an alarming increase in June, when the figure jumped to 11%. This was driven in part by a reduction in government fuel subsidies, which have lifted gasoline prices by an average 10%.

[10] Although inflation is part of the normal economic phenomena of any country, any increase in inflation above a predetermined level is a cause of concern. High levels of inflation distort economic performance, making it mandatory to identify the causing factors. Several internal and external factors, such as the printing of more money by the government, a rise in production and labor costs, high lending levels, a drop in the exchange rate, increased taxes or wars, can cause inflation. In India, inflation is much due to shortage of food production before the crisis as much as it is due to the financial crisis as real investment had got affected by the crisis.

[11] Ideally we should see lower average inflation in case of lower rise in index numbers. However, in Table 3 we do not see any relation as consistently. In fact, it breaks more often than not. For instance, in 1995-96 average inflation is 8.01 per cent the second highest in time series. However, the index rises by just 5.1 points. In 2002-03, 2006-07, and 2007-08 the index rise in double digits but inflation is not as high. In 2002-03, the low inflation could be possible because of much lower rise in index in 2001-02 (2.6 points). But, the same does not apply for 2007-08 where index rises in 2006-07 as well.



Source: CMIE.

FIGURE 7
EXPORT PERFORMANCE AFTER 2006-09

C. Fall in Exports, Outsourcing Services, and Service Sector

India's exports fell the most in at least 14 years as the worst global recession since the Great Depression slashed demand for the nation's jewellery, clothing, and other products. It must be noted this growth contraction has come after a robust 25%-plus average export growth since 2003. A low-to-negative growth in exports may continue for some-time until consumption revives in the developed economies. The slow-down in the trade sector post April 2008 is more explicit. Exports have declined continuously since July 2008 except the month of December. They declined from U.S.$ 17,095 million in July 2008 to U.S.$ 11,516 million in March 2009, which accounts for almost 33% decline (Figure 7).

India's export of steel fall by a whopping 35 per cent to 3.2 million tonnes during the current fiscal buoyed by healthy domestic demand, Centre for Monitoring Indian Economy (CMIE). Automotive tyre exports from India also suffered a setback in the first quarter of current financial year, according to latest Tyre Manufacturing Association of India. During the period exports registered a 22 per cent drop against that the in the same period of 2008-09.

Further, worldwide slowdown in vehicles sales is likely to drag down India's components exports between zero and 5 per cent in the current

fiscal. The Automotive Components Manufacturing Association has warned that if the slump in auto sales continues, exports could also be negative this year. Apparel exports from India have fallen sharply by 24 per cent since August 2008 due to declining sales in the U.S. and the European Union while those from Bangladesh, Indonesia, and Vietnam are on an upswing. The current global meltdown has hit the country's cashew farmers. Official reports with the Cashew Export Promotional Council of India (CPECI) show that cashew kernel exports have dropped marginally from 11.5 lakh tonnes in 2006-07 to only 11 lakh tonnes in 2007-08. Indian seafood export during 2007-08 has also recorded a fall of 11.58 per cent in terms of quantity and 8.9 per cent in terms of rupee. The domestic tea industry, which was showing some signs of recovery in 2008 after a long spell of recession since 1999, has been pushed back into gloomy the ongoing financial crisis. Software services receipts also declined by 12.7 per cent during Q4 of 2008-09. However, when compared with the performance in the first three quarters of 2008-09, software exports at U.S.$ 11.2 billion during Q4 of 2008-09 was almost in line with an average software exports of U.S.$ 11.9 billion recorded in the first three quarters of 2008-09.

Initially, the commerce ministry had set an export target of $200 billion for 2008-09, which was subsequently revised downwards to U.S.$ 175 billion in January this year. But the latest numbers reveal that India has missed even the revised target. While, imports fell 36.6 per cent in April from a year earlier and the trade deficit narrowed to U.S.$ 5 billion from U.S.$ 8.7 billion in the same month in 2008. Oil imports slid 58.5 per cent to U.S.$ 3.6 billion, while non-oil purchases dropped 24.6 per cent to $12.11 billion. The sharp decline in both exports and imports during Q4 of 2008-09 led to a lower trade deficit (Table 4). The trade deficit on a BoP (Balance of Payment) basis in Q4 of 2008-09 (U.S.$ 14.6 billion) was less than half of the average trade deficit (U.S.$ 34.9 billion) recorded in the first three quarters of 2008-09. The trade deficit during Q4 of 2008-09 was much lower than that of Q4 of 2007-08 (U.S.$ 22.3 billion).

A decelerating export growth has implications for India, even though our economy is far more domestically driven than those of the East Asia. Still, the contribution of merchandise exports to GDP has risen steadily over the past six years- from about 10% of GDP in 2002-03, to nearly 17% by 2007-08. If one includes service exports, the ratio goes up further. Therefore, any downturn in the global economy will hurt India. There also seems to be a positive correlation between growth in

TABLE 4

MAJOR ITEMS OF BALANCE OF PAYMENT (U.S.$ MILLION)

Item	April-June		July-September		October-December		January-March	
	2007-08 (PR)	2008-09 (PR)	2007-08 (PR)	2008-09 (PR)	2007-08 (PR)	2008-09 (PR)	2007-08 (PR)	2008-09 (P)
1	2	3	4	5	6	7	8	9
1. Exports[12]	34,356	49,120	38,273	48,987	40,985	37,257	52,549	39,820
2. Imports[13]	56,346	80,545	59,510	87,663	67,038	71,961	74,895	54,418
3. Trade Balance (1-2)	-21,990	-31,425	-21,237	-38,676	-26,053	-34,704	-22,346	-14,598
4. Invisibles, net	15,310	22,406	16,940	26,164	21,522	21,671	20,820	19,345
5. Current Account Balance (3+4)	-6,680	-9,019	-4,297	-12,512	-4,531	-13,033	-1,526	4,747
6. Capital Account Balance*	17,880	11,254	33,533	7,778	31,269	-4,848	26,516	-4,447
7. Change in Reserves#	-11,200	-2,235	-29,236	4,734	-26,738	17,881	-24,990	-300

Notes: * Including errors and omissions; # On BoP basis (*i.e.* excluding valuation); P: Preliminary; PR: Partially Revised.
Source: Reserve Bank of India.

[12] (1) On a BoP basis, India's merchandise exports recorded a sharp decline of 24.2 per cent in Q4 of 2008-09 as against an increase of 47.2 per cent in Q4 of 2007-08.

(2) As per the commodity-wise data released by the Directorate General of Commercial Intelligence and Statistics (DGCI & S) for the period January-February 2009, merchandise exports declined by 25.1 per cent, reflecting a fall in exports of all commodity groups. Amongst the commodities, the exports of raw cotton, rice, sugar and molasses, iron and steel, gems and jewellery, and petroleum products showed maximum fall in export growth during this period.

[13] (1) Import payments, on a BoP basis, also registered a sharp decline of 27.3 per cent in Q4 of 2008-09 as against a high growth of 55.8 per cent in Q4 of 2007-08. According to the data released by the DGCI&S, the decline in imports is mainly attributed to the sharp fall in oil import payments due to lower crude oil prices during Q4 of 2008-09.

(2) The commodity-wise break-up of imports data released by the DGCI&S revealed sharp decline in imports of certain commodities like gold and silver, consumption goods, capital goods, and crude oil and related products leading to a decline in imports by 31.8 per cent during January-February 2009 as against an increase of 55.4 per cent during the corresponding period of previous year.

exports and the country's GDP. For instance, when between 1996 and 2002 the average growth rate in exports was less than 10%, the GDP growth also averaged below 6%. A slowdown in export growth also has other implications for the economy. Close to 50% of India's exports-textiles, garments, gems and jewellery, leather, and so on-originate from the labour-intensive small- and medium-enterprises. A sharp fall in export growth could mean job losses in this sector. This would necessitate government intervention. A silver lining here, however, is the global slowdown will also lower cost of imports significantly, thereby easing pressures on the balance of payment.

The current crisis parallels the 2001-2002 bust especially for India's outsourcing (BPOs and KPOs) sector. The outsourcing sector is heavily dependent on demand from the U.S. and Europe, which are currently going through a deep recession. This is going to have a strong negative impact on Indian IT groups. Approximately 61% of the Indian IT sector's revenues are from U.S. clients and 20% from U.K., the rest comes from other European countries, Australia, *etc.* Just take the top five India players who account for 46% of the IT industry's revenues, the revenue contribution from U.S. clients are approximately 58%. The outsourcing arm of Infosys Technologies, India's second-biggest software maker, and iGate Global Solutions, both based in Bangalore, lost a major client when GreenPoint Mortgage was shut down by parent Capital One Financial Corp. About 30% of the industry revenues are estimated to be from financial services.

After exports, there seems to be bad news in store for the domestic IT and BPO market in 2009 which is expected to grow only 13.4 per cent being the slowest growth since 2003. This will largely on the back of slower IT consumption in some key verticals including retail and financial services. Large Indian firms such as TCS, Infosys, Wipro, Satyam, Cognizant, and HCL Technologies collectively referred as SWITCH vendors are now forced to reconcile to a lower growth rate as their larger banking and auto clients became victims of the financial crisis. The SWITCH vendor account for over half of the country's software exports. The industry, which grew by 30 per cent on a compound annual basis over the past five years, is likely to see its growth rate halve this year as the economic turmoil intensifies. In fact, the Indian IT and BPO market is slated to see 16.4 per cent CAGR in the coming five years leading to 2013, compared with 24.3 per cent growth recorded between 2003 and 2008 (Table 5).

In addition, from a qualitative standpoint, the tentacles of the finan-

TABLE 5
SLOW GROWTH OF IT, BPO SECTOR IN INDIA

Market Segment	2007	2008	2009 (Projected)
Software	7,823	9,628	11,300
Services	20,920	25,092	29,934
Hardware & Others	52,890	59,465	63,703
Total IT Market	81,633	94,185	104,937
Total BPO Market	4,468	6,846	9,637
Grand Total	86,101	101,031	114,574

Source: IDC.

cial sector business are quite well-entrenched and have significant structural impact as well. A recent study by Forrester reveals that 43% of Western companies are cutting back their IT spend and nearly 30 per cent are scrutinizing IT projects for better returns. Some of this can lead to offshoring,[14] but the impact of overall reduction in discretionary IT spends, including offshore work, cannot be denied. The slowing U.S. economy has seen 70 per cent of firms negotiating lower rates with suppliers and nearly 60 per cent are cutting back on contractors. With budgets squeezed, just over 40 per cent of companies plan to increase their use of offshore vendors.

The service sector, which contributes over 55 per cent to India's economy, has started showing a marked deterioration due to the global financial crisis, credit crunch and higher interest rates during recent months, according to a survey carried out by apex business chamber FICCI. During April-November 2008 various services has a negative performance (Table 6). These were air passenger traffic, fixed line telephone subscribers, assets mobilization by mutual funds, asset under management of mutual funds and insurance premium.

Segments adversely impacted by the global crisis include financial services, information technology and infotech-enabled services, aviation

[14] Offshore outsourcing is the practice of hiring an external organization to perform some business functions in a country other than the one where the products or services are actually developed or manufactured. It can be contrasted with offshoring, in which the functions are performed in a foreign country by a foreign subsidiary. Opponents point out that the practice of sending work overseas by countries with higher wages reduces their own domestic employment and domestic investment. Many customer service jobs as well as jobs in the information technology sectors in countries such as the U.S., and the U.K. have been or are potentially affected.

TABLE 6

INDIAN SERVICE SECTOR IN RECESSION (UNIT: %)

Services	Growth Rate (2007-08)	Growth Rate (2008-09)
Air Passenger Traffic	20.0	-4.7
Domestic Air Passenger Traffic	22.5	-8.5
Fixed Line Subscriber	-3.2	-3.0
Assets Mobilized by Mutual Funds	54.0	-50.0
Assets under Management of Mutual Funds	50.0	-26.0
Insurance Premium	23.0	-2.7

Source: Compiled by Researcher from Various Sources.

and real estate. The credit crunch and higher interest rates have impacted these areas. Wireless telephone subscribers grew 50% in April-November 2008 compared with corresponding period of the previous year. In fiscal 2007-08, the growth was 58 per cent compared to the previous year. Internet subscribers grew by 26 per cent (20 per cent), and Broadband subscribers by 87.7 per cent (23.6 per cent). The dipping performance in the services sector comes close on the heels of the manufacturing sector registering a negative growth and this would result in slowdown in the overall economic growth rate. The government has already admitted that the expected rate of economic growth could not come down to seven per cent.

D. Other Implications

Added to above mention, the major social costs of a recession are those associated with the enforcement of job cuts, lay off and significant upheavals in labour markets. Many companies are laying off their employees or cutting salaries for a few days in month or cutting production and not doing any further recruitment.[15] Official sources suggest that there has already been a sharp fall in employment in the export oriented sectors like textiles and garments, gems and jewellery, automobiles, tyre, and metal products. The estimates show that in the

[15] The country's second largest reality firm, Unitech has reduced its workforce by about 10 per cent, out of total of 1,700 employees, as part of its cost cutting measures. Besides downsizing employees strength over the last 4-5 months, the company is also not filling up vacancies which were left empty in the processes of normal attrition. The company's current rate of attrition is about 15-20 per cent annually.

year 2008-09, with export growth of 3.4%, the total job loss in India due to lower export growth was of around 1.16 million.

The job loss in the IT and BPO sector in the country topped 10,000 in the September-December 2008. While employees of medium-sized companies bore the brunt of job losses in the September-December period, it is going to be their counterparts in the big and small firms, who would increasingly face the axe in the coming six months. According to a recent report, over 50,000 IT professionals in the country may lose their jobs over the next six months as the situation in the sector is expected to worsen due to the impact of global economic meltdown on the export-driven industry, a forecast by a union of IT Enabled Services warned.

India's travel and tourism sector has been hit by global financial crisis. The Indian tourism industry, valued at Rs 333.5 billion, earns most of its forex revenues from the U.S., U.K., and European visitors. As per the industry, on account of recent crisis, the sector may lose as much as 40% of annual revenues.[16] Even as per the estimates of the Tourism Committee of The Associated Chambers of Commerce and Industry of India (ASSOCHAM) on account of the global slowdown, the growth in tourism sector is likely to fall by a minimum of 10% and stay at around 5% YoY for FY09. Of the tourist visiting India, corporate travelers account of the majority chunk. This segment was already getting affected since the start of the year on account of the global credit and subprime crisis. With companies cutting down travel budgets, this segment exercised caution. While the recent terror attacks will affect this segment on a temporary basis, it is more likely to suffer due to the prolonged economic crisis. Hotels in the metros which largely cater to corporate tourists have witnessed a sharp dip in occupancy rates in the past few weeks, in some cases as much as 25% to 30%. As per hotel consultants HVS International's analysis, almost all the

[16] Tourism is especially vulnerable to economic uncertainty and volatility for a simple reason. Most travel and tourism involves discretionary expense. During tough economic times people conserve their cash to cover the essentials of life, food, shelter, and family necessities. However, this does not mean that tourism stops. The trend that we have learned from past crises whether we refer to past economic crises or the global tourism scare resulting from the events of 9/11 is that people continue to travel but they will travel differently from the way they do during times of economic buoyancy. Those tourism and hospitality businesses which will survive and indeed thrive in the months ahead are those which can adapt because there are always winners and losers in any outbreak of economic volatility.

top six-hotel markets-Delhi, Mumbai, Chennai, Hyderabad, Bangalore, and Kolkata have been impacted. While the room rates have officially increased hotels are selling corporate travel packages at huge discounts to maintain occupancy levels. Tour operators believe that the real discounts and tariff cuts are as high as 30% to 50%. The recent economic downturn has also been a cause of concern for the Indian hospitality Industry. Taj brand of hotels reported a 73 per cent drop in its net profits at Rs 16 crore for the quarter ended June 2009 against Rs 61 crore in the pervious corresponding quarter.

Last but not the least, the prices of food articles has increased by more than one-fifth in this one-year. This, obviously, affects household budgets, especially among the poor for whom food still accounts for more than half of total household expenditure. Meanwhile, non-food primary product prices have hardly changed. The prices of fibres mainly cotton, jute and silk have barely increased at all. Oilseed prices have fallen by more than five per cent. This, immediately, affects all the producers of cash crops, who will be getting the same or less for their products even as they pay significantly more for food. They are also paying more for fertilizer and pesticides, prices of which have increased by more than five per cent. Another major item of essential consumption has also increased in price- that of drugs and medicines, up by 4.5 per cent. This obviously impacts upon the entire population, but especially the bottom half of the population who may find it extremely difficult if not impossible to meet such expenditures in times of stringency.

III. Policy Responses from India

The global financial crisis has called into question several fundamental assumptions and beliefs governing economic resilience and financial stability. What started off as turmoil in the financial sector of the advanced economies has snowballed into the deepest and most widespread financial and economic crisis of the last 60 years? With all the advanced economies in a synchronized recession, global GDP is projected to contract for the first time since the World War II, anywhere between 0.5 and 1.0 per cent, according to the March 2009 forecast of the International Monetary Fund (IMF). The emerging market economies are faced with decelerating growth rates. The World Trade Organization (WTO) has forecast that global trade volume will contract by 9.0 per cent in 2009. Governments and central banks around the world have

responded to the crisis through both conventional and unconventional fiscal and monetary measures. Indian authorities have also responded with fiscal and monetary policy and regulatory measures (Mishra 2009).

A. Monetary Policy Measures

On the monetary policy front, the policy responses in India since September 2008[17] have been designed largely to mitigate the adverse impact of the global financial crisis on the Indian economy. In mid September 2008, severe disruptions of international money markets, sharp declines in stock markets across the globe and extreme investor aversion brought pressures on the domestic money and forex markets. The RBI responded by selling dollars consistent with its policy objective of marinating conditions in the foreign exchange market. Simultaneously, it started addressing the liquidity pressures through a variety of measures. A second repo auction in the day under the Liquidity Adjustment Facility (LAF)[18] was also introduced in September 2008. The repo rate was cut in stages from 9 per cent in October 2008 to rate of 5 per cent. The policy reverse repo rate under the LAF was reduced by 250 basis points from 6.0 per cent to 3.5 per cent. The CRR (Cash Reserve Ratio) was also reduced from 9 per cent to 5 per cent over the same period, whereas the SLR (Statutory Liquidity Ratio) was brought down by 1 per cent to 24 per cent. To overcome the problem of availability of collateral of government securities for availing of LAF, a special refinance facility was introduced in October 2008 to enable banks to get refinance from the RBI against declaration of having extended bona fide commercial loans, under a pre-existing provision of the RBI Act for a maximum period of 90 days. These policy measures of the RBI since mid September resulted in augmentation of liquidity of nearly U.S.$ 80

[17] Till August 2008, the RBI followed a tight monetary stance in view of the inflationary pressure arising from crude, commodity and food prices.

[18] Liquidity Adjustment Facility (LAF) was introduced by RBI during June, 2000 in phases, to ensure smooth transition and keeping pace with technological up-gradation. On recommendations of an RBI's Internal Group RBI has revised the LAF scheme on March 25, 2004. Further revision has been carried w.e.f. Oct. 29, 2004. The revised LAF scheme has the following features: The funds under LAF are used by the banks for their day-to-day mismatches in liquidity. Under the scheme, Reverse Repo auctions (for absorption of liquidity) and Repo auctions (for injection of liquidity) are conducted on a daily basis (except Saturdays). 7-days and 14-days Repo operations have been discontinued w.e.f. Nov. 01, 2004. All commercial banks (except RRBs) and PDs having current account and SGL account with RBI.

TABLE 7

ACTUAL/POTENTIAL RELEASE OF PRIMARY LIQUIDITY-SINCE MID-SEPTEMBER 2008

Measure/Facility	Amount (Rs crore)
1. CRR Reduction	160,000
2. Unwinding/Buyback/De-sequestering of MSS Securities	97,781
3. Term Repo Facility	60,000
4. Increase in Export Credit Refinance	25,512
5. Special Refinance Facility for SCBs (Non-RRBs)	38,500
6. Refinance Facility for SIDBI/NHB/EXIM Bank	16,000
7. Liquidity Facility for NBFCs through SPV	25,000*
Total (1 to 7)	422,793
Statutory Liquidity Ratio (SLR) Reduction	40,000

* Includes an option of Rs 5,000 crore.

Source: RBI.

TABLE 8

INTEREST RATE-MONTHLY AVERAGE (IN %)

Segment/Instrument	March 2008	October 2008	January 2009	March 2009	June 2009
Call Money	7.37	9.90	4.18	4.17	3.25
Commercial Paper	10.38	14.17	9.48	9.79	6.06*
Certificates of Deposits	10.00	10.00	7.33	8.61	3.70
91-Day Treasury Bills	7.33	7.44	4.69	4.77	3.22
10-Year Government Security	7.69	7.80	5.82	6.57	6.83

Note: *related to May 2009.

billion (422,793 crore). In addition, the permanent reduction in the SLR by 1.0 per cent of NDTL (Net Demand and Time Liability) has made available liquid funds of the order of Rs 40,000 crore for the purpose of credit expansion (Table 7).

The liquidity situation has improved significantly following the measures taken by the Reserve Bank. The overnight money market rates, which generally hovered above the repo rate during September-October 2008, have softened considerably and have generally been close to or near the lower bound of the LAF corridor since early November 2008. Other money market rates such as discount rates of CDs (Certificates of Deposits), CPs (Commercial Papers), and CBLOs[19] (Collateralized Borrowing and Lending Obligations) softened in tandem with the

overnight money market rates (Table 8).

The LAF window has been in a net absorption mode since mid-November 2008. The liquidity problem faced by mutual funds has eased considerably. Most commercial banks have reduced their benchmark prime lending rates. The total utilization under the recent refinance/ liquidity facilities introduced by the Reserve Bank has been low, as the overall liquidity conditions remain comfortable. However, their availability has provided comfort to the banks/FIs, which can fall back on them in case of need.

Taken together, the measures put in place since mid-September 2008 have ensured that the Indian financial markets continue to function in an orderly manner. The cumulative amount of primary liquidity potentially available to the financial system through these measures is over U.S.$ 75 billion or 7 per cent of GDP. This sizeable easing has ensured a comfortable liquidity position starting mid-November 2008 as evidenced by a number of indicators including the weighted-average call money rate, the overnight money market rate and the yield on the 10-year benchmark government security.

B. Fiscal Stimuli Packages

To contain the knock on effects of the global slowdown, the Government of India announced three successive fiscal stimuli packages during December 2008 - Feburary 2009 amounting to a total of Rs 80,100 crore (U.S.$ 16.3 billion) to the exchequer. These stimulus packages were in addition to the already announced post budget expenditure towards the farmer loan waiver scheme, rural employment guarantee and other social security programs,[20] enhanced pay structure arising from the 6th pay commission, *etc*. As a result, net borrowing require-

[19] CBLOs were developed by the Clearing Corporation of India (CCIL) and Reserve Bank of India (RBI). The details of the CBLO include an obligation for the borrower to repay the debt at a specified future date and an expectation of the lender to receive the money on that future date, and they have a charge on the security that is held by the CCIL.

[20] Following the announcement in the Union Budget 2008 in February 2008, the commercial bank, cooperative banks and regional rural banks implemented in the period till June 2008, the debt waiver scheme (100 per cent) for small and marginal farmers and debt relief (25 per cent) program for other farmers, covering an estimated 40 million farmers to the extend of nearly Rs 71,000 crore or U.S.$ 14.5 billion. The RBI took sector specific measures to alleviate the stress faced by employment intensive sectors such as SME, export, and housing.

ment for 2008-09 increased nearly 2.5 times the original projection in 2008-09 from 2.08 per cent of GDP to 5.89 per cent of GDP.

The government's first fiscal package, announced on December 2008, a day after the central bank cut the Repo and Reverse Repo rates, has Rs 20,000 crore as additional expenditure, an across-the-board 4% excise duty cut amounting to Rs 8,700 crore and benefits worth Rs 2,000 crore for exporters.[21]

In less than a month since the UPA Government announced its first fiscal stimulus package in December 08, the government again announced its second fiscal stimulus package dose which was combined with significant monetary measures from the RBI announcing further cuts in key benchmark interest rates, both being aimed at kick starting investments and stimulating demand in the economy which has seen a significant slowdown in demand arising out of recessionary conditions in several global markets. The second stimulus package has five elements this time which include a strong focus on interest rate reduction, additional liquidity enhancement to productive sectors, export sector being offered financial aid,[22] a boost being given to the Infrastructure Sector[23] and finally easier access to ECB's (External Commercial

[21] (1) Pre and post-shipment export credit for labour intensive exports, *i.e.*, textiles (including handlooms, carpets, and handicrafts), leather, gems and jewellery, marine products and SME sector is being made more attractive by providing an interest subvention of 2 per cent upto 31/3/2009 subject to minimum rate of interest of 7 per cent per annum. (2) Additional funds of Rs 1,100 crore will be provided to ensure full refund of Terminal Excise duty/CST. (3) An additional allocation for export incentive schemes of Rs 350 crore will be made. (4) Government back-up guarantee will be made available to ECGC to the extent of Rs 350 crore to enable it to provide guarantees for exports to difficult markets/products. (5) Exporters will be allowed refund of service tax on foreign agent commissions of upto 10 per cent of FOB value of exports. They will also be allowed refund of service tax on output services while availing of benefits under Duty Drawback Scheme.

[22] The government has decided to restore duty entitlement passbook (DEPB) rates to exporters at prevailing rates prior to November 2008. Besides the DEPB scheme would now be extended till end December this year. The other measures to counter recessionary trends including withdrawal of exemption from countervailing duty (CVD) on TMT bars and structural. The exemption on CVD and special CVD on cement has been withdrawn. Also the full exemption from basic custom duty on Zinc and Ferro is being withdrawn. These exemptions were earlier introduced to contain inflation.

[23] On the infrastructure front more finances have been allowed to raised. The India Infrastructure Company Ltd. (IIFCL) will allowed to access an addition Rs 30,000 crore in trenches through tax free bonds. This would help additional

Borrowings) and FIIs.[24] The stimulus package announced has an additional plan expenditure of Rs 20,000 crore during current year, mainly for critical Rural, Infrastructure and Social Security sectors, and measures to support Exports, Housing, Micro, Small & Medium Enterprises (MSME) and Textile sectors. In this package, government has focused on the Infrastructure needs wherein the India Infrastructure Finance Company Limited (IIFCL) would be raising Rs 10,000 crore to refinance infrastructure projects worth Rs 25,000 crore. It has also envisaged funding of additional projects worth Rs 75,000 crore at competitive rates over the next 18 months. Funding for these projects to IIFCL would be enabled in tranches of additional Rs 30,000 crore by way of tax-free bonds, once funds raised during current year are effectively utilized (Estimated benefits to the tune of Rs 40,000 crore).

Barely a week after the presentation of the Interim Budget, the government came out with the third fiscal stimulus package in which further tax cuts costing Rs 29,100 crore or about 0.5 per cent of GDP were announced. The service tax was cut by two points from the prevailing level of 12 per cent and excise duty was reduced by a similar magnitude for items presently subject to 10 per cent.

The indications so far seem to be that the package of policy measures is not really having the intended impact of reviving the real sector. In spite of the more than Rs 400,000 crore of liquidity released into the financial markets, the credit offtake has been remarkably poor (Nachane 2009).

There are also questions on the appropriateness of the measure in the already strained fiscal scenario. The effectiveness of cuts in excise duty and service tax in providing a demand stimulus is doubtful-first, the tax cuts should result in price cuts and then, these should translate into higher demand in the situation of falling incomes. Furthermore, there will always be dissatisfaction when the tax cuts are reversed. Many, in fact, believe that fiscal stimulus is better served by expenditure increase rather than tax cuts not only because the impact is direct but also because it can be better targeted (Rao 2009). Hopefully, the reduction in excise duty and service tax rates will facilitate the unification

projects of about 75,000 crore at competitive rates over the next 18 months.

[24] The extant policy on ECBs has been further liberalized. Now the FIIs have been allowed to invest upto $15 billion in corporate bonds as against $6 billion earlier. The 'all-in-cost' ceiling on ECBs have been removed for borrowings under the RBIs approve route. The housing sector has been given access to the ECBs for the development of integrate township.

of the two taxes for levying the GST (Goods and Services Tax) at a reasonable rate when implemented. In any case, the entire episode of announcing tax cuts just after a week of presenting the Interim Budget points to the government's lack of clarity in combating the slowdown.

C. Regulatory Measures

Recognizing that the unexpected and swift turn of events could lead to problems of a spiraling downturn; the RBI took a series of regulatory measures in addition to providing liquidity and special refinance. In November 2008, as a counter-cyclical measure, the additional risk weights and provisions were withdrawn and restored to previous levels. The prudential regulations for restructured accounts were modified, as a one-time measure and for a limited period of time in view of the extraordinary external factors, for preserving the economic and productive value of assets which were otherwise valuable. The modified regulations were in operation for applications for re-structuring received upto March 31, 2009 and restructured packages implemented within 120 days of receipt of application or by June 30, 2009, whichever was earlier. The modification permitted the restructured accounts to be treated as standard assets provided they were standard on the eve of the crisis, *viz.*, September 2008, even if they had turned non-performing when restructuring had been taken up.

In case of NBFC, having regard to their need to raise capital, they were allowed to issue perpetual debt instruments qualifying for capital. They were also allowed further time of one more year to comply with the increased Capital to Risk Weighted Assets Ratio (CRAR) stipulation of 15 per cent as against the existing requirement of 12 per cent. Risk weight on banks' exposures to NBFC, which had been increased earlier, was brought down. Further, NBFCs (Non Banking finance Company) that were not otherwise permitted to resort to overseas borrowings were allowed to raise short term borrowings' housing finance companies were also allowed to access ECBs subject to RBI approval. Taking advantage of the discount on Foreign Currency Convertible Bonds (FCCBs) issued by India companies in overseas markets, they were allowed to prematurely buy back their FCCBs at prevailing discounted rates.

The impact of liquidity easing and prudential measures is reflected in the credit growth in the year ended June 2009 at 15.8 per cent against 26.3 per cent in the previous year. Though there was slowing down in the period after October 2008, the credit growth in the period

October 2008 to June 2009 clocked annualized rate of 8.9 per cent. The credit growth during November 2008 - May 2009 was higher than average for sectors such as infrastructure, real estate, NBVFC, SME, agriculture, and certain industries like iron and steel.

An unprecedented contraction in exports that has already continued for 10 successive months was the backdrop against which commerce and industry minister Anand Sharma presented a new foreign trade policy (FTP) on 27th August, 2009 whose highlights include tax refunds for exporters, lower transaction costs, promises of better export infrastructure and a broader strategy to ship more Indian goods and services to new markets in Latin America, Oceania, and Africa instead of traditional, but recession-stricken markets in Europe and North America. With a target of U.S.$ 200 billion exports for next fiscal and an annual export growth of 15%, the 2009-2014 FTP provides an extended tax holiday and duty refund for exporters. Under protectionism, the FTP had allowed duty free import of capital goods. With a view to double India's percentage share of global trade in five years, and increasing employment opportunities, certain special initiatives have been considered for agriculture, handlooms, handicraft, gems and jewellery, and leather sectors. To improve the infrastructure of the export sector, 'Towns of Excellence,' and the associated units will be granted additional support and incentives. The 5% incentive for handicrafts under special focus would promote the industry interests. The policy aims to provide a thrust to the employment-oriented sectors, which have witnessed job losses due to recession, especially in the fields of textiles, leather, and handicrafts. To give a boost to the drought-hit industry, the Textile Corporation of India is setting up cotton depots. The cotton prices shoot up during drought. These depots, will act as buffers for the industry.

IV. Recovery of Indian Economy

It is interesting to note that after two years of recession, almost all the countries are recovering again.[25] Hence statements from politicians

[25] Many economists and policy makers are arguing that the world's premier economies have shown economic growth between April and June 2009 and this marks the end of the great recession. A top U.S. Federal Reserve official said the recession is fading and growth will resume later this year. The S&P 500 topped the psychologically important 900 level for the first time since early January. The FTSEurofirst 300 index of top European shares had ended up 1.5 per cent, its highest close since January 12, with oil and gas and industrial

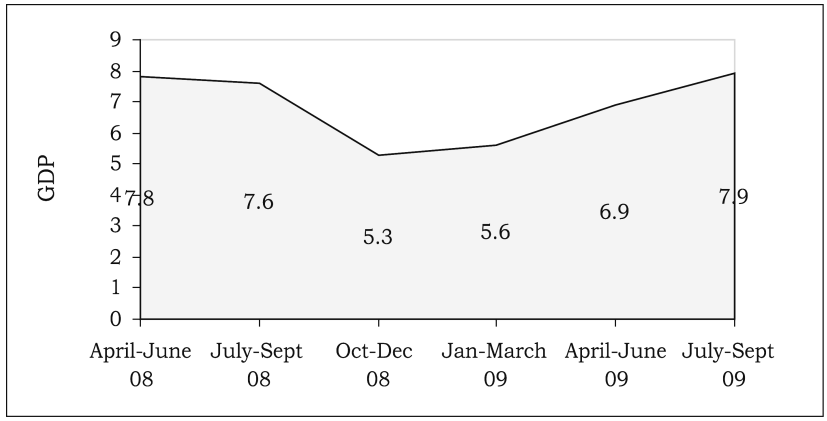
and others as well as official data which in other times would be seen to be pessimistic or at best neutral are now viewed as something to cheer about. In May 2009 the U.S. authorities allowed ten banks to return part of the money they had received from the government to shore up their financial position at the height of the crisis.[26] Even though President Obama admitted that the crisis was far from over, the news of banks returning the money ahead of schedule was received positively by the markets. U.S. Treasury Secretary Timothy F. Geithner was probably alluding to the above development when he said that "the force of the global storm is receding a bit." The role the U.S. government was committed to play to save the banks will probably get reduced. He also identified improving signs in the U.S. economy and better outlook internationally. The good news was not confined to the U.S. alone. IMF[27] in its recent report also mentioned that 'global economic recovery has started.' According to reports, prices in China fell less sharply in May than in April giving rise to expectations that the U.S.$ 686 billion stimulus package of the Chinese government was beginning to check deflationary forces. And latest GDP data from Brazil portend an upswing in its economy. Indian economy is also recovering slowly since the beginning of year 2009. However, the recovery rate is very slow. India's economic slowdown unexpectedly eased in the first quarter. India's economic growth logged a notable acceleration to 6.1 per cent for the first quarter of this fiscal from 5.8 per cent for the quarter before due to strong showing by various services industries. The Indian economy performed far better than was predicted[28] in the three month period from July through September 2009, with the Asian

engineering among the top sectoral gainers.

[26] The fact that the banks had received large capital infusion in the face of an extraordinary crisis to save themselves and the banking system from collapse was forgotten. The conditions that prompted such extraordinary action on the part of the U.S. authorities have by no means gone away.

[27] This report, published by the International Monetary Fund, presents the IMF's analysis and projections of economic developments at the global level and focuses on major economic policy issues as well as on the analysis of economic development and prospects. The report is prepared twice a year and is used for activities of global economic surveillance. The latest report focuses in particular on the topic, "Crisis and Recovery."

[28] With both the *Financial Times* and the *Wall Street Journal* reporting that market analysts were expecting third quarter growth of 6.3 per cent those expectations were confounded as India saw its economy put in its best performance since the first three months of 2008, with the *Financial Times* noting the particular strength of the country's manufacturing and service sectors.



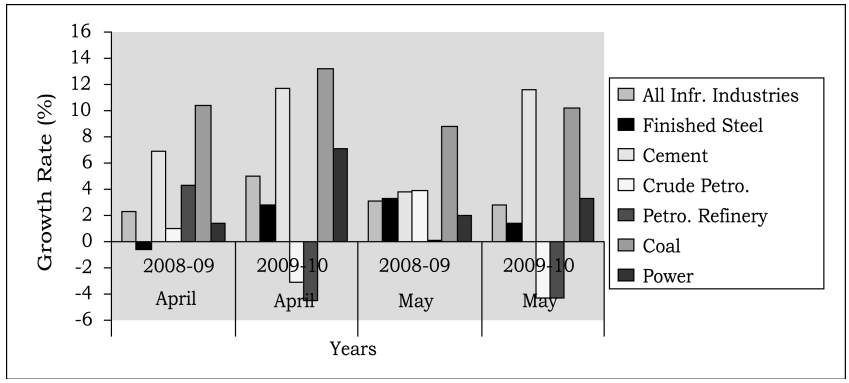
Source: Central Statistical Organization (CSO).

FIGURE 8
ACCELERATION IN GDP

country enjoying year-on-year growth in its Gross Domestic Product (GDP) of 7.9 per cent. (Figure 8). Further, it is expected the Indian economy may grow by 9 per cent in next fiscal on the back of strong industrial growth and rising domestic consumption, according to recent report of Ernst and Young.

The growth registered by the farm sector at 2.4 per cent and manufacturing at 3.4 per cent remained below the overall expansion, showed the data on the country's gross domestic product released by the Central Statistical Organization (CSO). The best performance was from the trade, hotels, transport and communication group, as also the financial services and real estate sectors with an 8.1 per cent expansion each, while mining came next 7.9 per cent followed by construction with 7.1 per cent. The industry data revealed domestic passenger car sales in July went up to 115,067 units from 87,901 units in the same month last year. Software exporters paced gains after Goldman Sachs upgraded its outlook on the country's information technology services sector. Tata Consultancy Services, the biggest software exporter, rose 2.85 per cent after Goldman Sachs more than doubled the stock's target price. After auto, realty was the best performer, rising 2.14 per cent to 3,693.02. The metal index rose by two per cent at 12,305.66 as Hindalco Industries, the biggest aluminum producer, rose 3.38 per cent to Rs 105.45 after UBS raised it to "buy" from "sell."

The data during the first two months of 2009-10 on six core infra-



Source: Ministry of Industry, GOI.

FIGURE 9

GROWTH IN SIX INFRASTRUCTURE INDUSTRIES[29] (IN %)

structure industry indicated improvement in output (Figure 9). The main drivers of growth seen in the six core infrastructure industry during the period were cement, power and coal posting growth of 11.7%, 5.1%, and 11.8% respectively in April-May 2009-10 compared to the growth of 5.4%, 1.7%, and 9.5% respectively during the same period of previous fiscal. However, production of crude petroleum and petroleum refinery were badly hit.

The official data shows that the cement sector has grown 9.97 per cent in December 2008 as compared to November and the year on year increase is 11%. Steel, which declined from September onwards last

[29] Key infrastructure industries rose by 3.5 per cent in October 2009 on better performance by petroleum refinery products, electricity and finished steel. The six infrastructure industries, which account for a quarter of the nation's industrial production, registered 2 per cent growth in October 2008. Petroleum refinery products grew by 7.2 per cent in October as compared to 5 per cent in the same month last year, according to data released by the Central Government. In the case of electricity and finished steel (carbon), the growth was 4.7 per cent and 1.1 per cent, respectively. The index for the six key industries rose to 254.8 in October from 246.3 a year earlier, the data evealed. During April-October this year, the six infrastructure sectors rose by 4.7 per cent, better than 3.3 per cent recorded in the year-ago period. Except for crude oil, which posted a negative growth of 2.2 per cent, all other key industries posted positive growth. Cement grew by 5.3 per cent against 6.2 per cent in the same period last year. Among other components of the six key industries, coal output stood at 5 per cent in the reviewed period.

TABLE 9
GROWTH IN AUTOMOBILE SEGMENT

Segment	August 2008	August 2009	Change (%)
Cars[30]	96,082	120,669	26
Motorcycle	485,270	611,173	26
Scooters	96,441	1,118,694	23
Commercial Vehicles	34,289	40,624	18
Three Wheelers	31,929	39,201	23
Total	811,341	1,008,702	24
Exports	140,746	149,320	6

Source: SIAM.

year, has shown a recovery in December last and January this year. It has now touched 22.86 million metric tones, a figure it achieved in May 2008 when the sectoral growth rate was 4.1%. This may not be quite impressive but the very fact that the sector is growing is a matter of some satisfaction.

Car sales in August grew a robust 25.5% as companies despatched more vehicles to dealerships to boost stocks ahead of the demand spurt in forthcoming festive season. Maruti, Hyundai, Tata, and Mahindra led the growth in car and passenger vehicle sales after a 31% growth in July. Total auto sales were up 24% at 10 lakh units in August against 8.1 lakh units in the same month last year, according to industry body Siam (Table 9).

Car sales in August stood at 1.2 lakh units against 96,082 units in the corresponding month last year. Demand for new models added to the festive rush and kept the momentum going for car sales that witnessed the seventh straight month of growth. Industry analysts said demand was likely to remain strong in the coming months, especially over low base of last year when demand was hit by economic slowdown and high interest rates. The two-wheeler industry also saw a 26% growth at 6.1 lakh units against 4.8 lakh units in August last year, with Hero Honda fuelling the demand for motorcycles. On the scooter side, Honda Motorcycle and Scooter India, Hero Honda, TVS, and

[30] Riding on a low base and softer interest rate regime, car companies reported double digit jump in volumes in November 2009. Maruti Suzuk reported its November sales grew by 60 per cent. Hyundai also had a good growth as its domestic sales shot up by 93 per cent in November 2009. Tata/Fiat joint venture witnessed 55 per cent rise. General Motors also reported 65 per cent jumps in sales.

Suzuki pushed up sales, which grew 23% at 1.1 lakh units. Sales of commercial vehicles were also up, growing by 18% at 40,624 units against 34,289 units in August 2008.

Slowdown in the economy and rapid decline in global commodity prices toned down the overall inflation to below 0 levels for the first time in 35 years. However, it was found that prices of some of the items of mass consumption were still rising[31] (Rakshit 2009). While, the average overall inflation numbers for the month of June 2009 turned negative however, food articles falling within the category of primary commodities continue to rise by 8.6% in June 2009 on YoY terms compared to 6% in the previous year. Furthers food articles was also seen to get dearer (m-o-m basis) over May 2009. In June 2009 prices of non food articles, fuel leather and basic metals dropped by 2%, 12.6%, 1%, and 14% respectively from positive growth of 17%, 16%, 1.6%, and 21% seen in the previous year. The annual inflation rate, as measured by the wholesale price index (WPI), fell to 0.27 per cent for the week ended March 14 this year, compared with 8.02 per cent in the corresponding week last year (Table 10).

Foreign institutional investors' (FIIs) net investment in Indian equities crossed $8 billion in calendar 2009 with foreigners buying stocks worth $274 million on 31st August 2009. At the end of July, net inflows from FIIs stood at $7.3 billion and it took another 20 trading sessions before net inflows crossed the U.S.$ 8 billion mark, the first time in this year. Last year, hit by recession back home FIIs took out nearly $12 billion from the Indian stock markets but with sentiment improving from March this year, foreigners have returned with net investment amounting to $9.3 billion, according to SEBI. The benchmark index Sensex has risen[32] 65% till 31st August 2009[33] (Figure 10).

[31] India's annual rate of inflation for the week ended December 5, 2009 this year for primary articles rose to 14.98% from 13.90% in the preceding week due to higher prices of food items such as potatoes, pulses and vegetables. It was 11.50% for the same week in the previous year. The 52-week average inflation for the week ended December 5 was 8.10%, data released by the Ministry of Commerce and Industry showed. The annual rate of inflation for commodities in the broad group, 'Fuel, Power, Light, and Lubricants,' for the week ended December 5 was 3.95%, up from 0.06% for the previous week and 0.48% during the corresponding week a year ago. The 52-week average inflation for the week ended December 5 was minus 5.93%.

[32] Markets ended flat amidst concerns about rainfall deficit and drought being declared across various villages of the country. The market was highly volatile during the August with global positives being weighed down by the

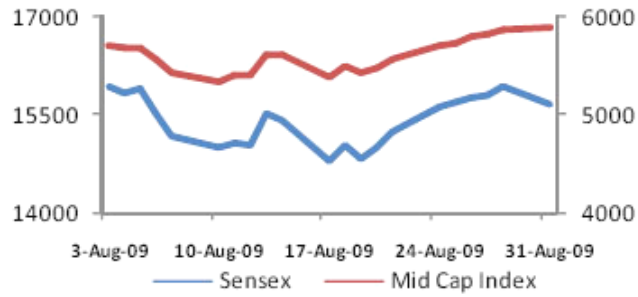
TABLE 10
MONTHLY TRENDS IN WHOLESALE PRICE INDEX - MONTHLY AVERAGE
(% CHANGE)

Commodities	2008-09		2009-10	
	May	June	May	June
All Commodities	8.9	11.8	0.8	-1.4
1. Primary Article	9.5	10.6	6.2	5.4
1) Food Articles	5.7	5.9	8.3	8.6
2) Non-Food Articles	13.9	17.1	1.4	-2.0
2. Fuel Power Light & Lubricants	7.7	16.3	-6.5	-12.6
3. Manufactured Products	9.0	10.6	1.4	0.1
1) Food Products	11.5	14.4	13.6	11.1
2) Beverages, Tobacco & Tobacco Products	8.2	7.9	5.8	5.7
3) Textiles	-1.6	3.6	8.3	4.3
4) Wood & Wood Products	6.3	9.8	3.6	0.3
5) Paper & Paper Products	3.1	3.5	2.9	2.5
6) Leather & Leather Products	1.1	1.6	0.0	-1.0
7) Rubber & Plastic Products	5.7	6.0	2.6	2.6
8) Chemicals & Chemical Products	8.7	9.8	1.4	1.7
9) Non-Metallic Mineral Products	5.7	5.0	2.2	2.9
10) Basic Metals Alloys & Metals Products	20.3	21.3	-13.2	-14.0
11) Machinery & Machine Tools	5.5	6.5	-0.9	-2.3
12) Transport Equipment & Parts	6.4	6.1	0.3	0.6

Further, the Sensex of the Bombay Stock Exchange (BSE) gained 325 points to reach 16,014 on 7th September 2009. Markets have surged higher in the second half with the NSE Nifty has surging past the 4,750 mark to reach a 52 weeks high and the BSE Sensex has also surged past the 16,000 levels (Figure 11). Following the global financial turmoil, the markets had plunged to 8,047.17 points on March 6, 2009. Investor sentiment on 7th September got a further boost from positive trends across Asia. Besides, expectations of strong quarterly earnings and signs of stability in global economy bolstered their confi-

monsoon concerns. Sensex ended almost flat down 0.02% and Nifty gaining a meager 0.55%. The selling pressure from the FIIs to the tune of Rs 3,767 crs was fully absorbed by the Domestic Institutions who were buyers to the tune of Rs 4,985 crs. Midcaps and Small caps however outperformed the benchmark indices gaining 5.6% and 12.75% respectively.

[33] The recovery was mostly due to a rise in stocks of auto, realty and metals. The auto sector index, which rose by 3.07 per cent to 2,537.48, was the biggest gainer on aggressive buying by funds on the basis of reports that the automobile industry posted healthy growth in July.



Source: RBI Monthly Bulletin.

FIGURE 10

BSE-SENSEX PERFORMANCE IN AUGUST 2009

Source: The Businessline, 7th September 2009.

FIGURE 11

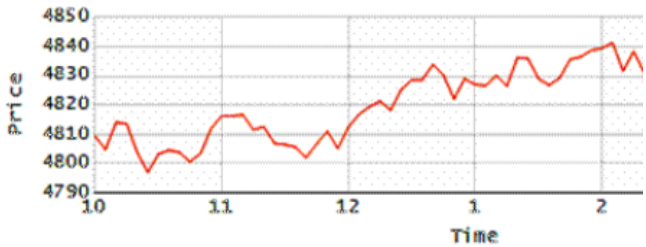
SENSEX TOUCHED 16,000 MARKS ON 7TH SEPTEMBER 2009

dence.

In similar fashion, the wide-based National Stock Exchange index Nifty crossed the crucial 4,800 point level to close higher by 22.35 points at 4,805.25 (Figure 12). Buying was more or less confined to fundamentally strong stocks. As many as 15 shares in the 30-BSE index closed with significant gains, while the other 15 closed lower. Hindalco, Sterlite were the two big gainers at 6.05% and 4.78% respectively. Market leader Reliance was up by 3.73%.

Commodities outperformed[34] in the Mid May. The CRB (Commodity

[34] Agro commodities were affected due to slack domestic and export demand and impending monsoon in India. Surprisingly, gold too moved upwards along with the rest of the asset class. The major reason for the movement in commodities was a weaker dollar that brought back investors to commodities.



Source: The Businessline, 7th September 2009.

FIGURE 12
NIFTY TOUCHED 4,842 MARKS ON 7TH SEPTEMBER 2009

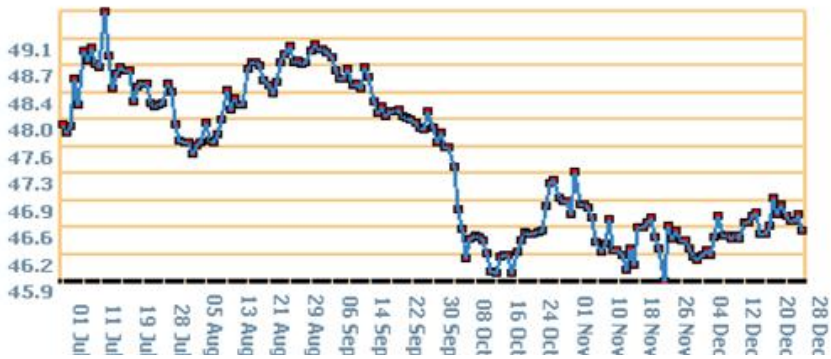
Research Bureau) Index[35] rose sharply from 236 to 254, a rise of nearly 8% with precious metals, energies and base metals moving up sharply. Crude oil's performance was the best amongst the entire complex where prices shot up by 20% on NYMEX[36] (New York Mercantile Exchange) during the last fortnight. Except aluminum, most industrial metals surged by more than 10%.

The rupee has been largely volatile since January 2009, trading in a wide range between 46.75 and 52.18 against the U.S. dollar. The last five months of 2009 have been quite eventful for the Indian rupee, with the currency gaining steadily against the U.S. dollar, after a catastrophic 2008 that saw the Indian rupee fall more than 20% from 39 levels to 50 levels. At a time when the Indian economy was visibly slowing down, the recent gain in the rupee has proved to be a blessing in disguise. Indian Rupee has risen more than 10%, since bottoming in March, it has increased only 4.3% in value in the year-to-date (Figure 13). Still, given how turbulent the first few months of 2009 were (a continuation of 2008, really), this modest appreciation was actually the

Further, weakness in the U.S. dollar may keep buying interest among investors intact in most of these commodities.

[35] Since 1934, Commodity Research Bureau (CRB) has been the world's leading commodities and futures research, data, and analysis firm.

[36] The New York Mercantile Exchange, Inc. is the larges physical commodity futures exchange and the preeminent trading forum for energy and precious metals. The Exchange has stood for market integrity and price transparency for more than 135 years. Transactions executed on the Exchange avoid the risk of counterparty default because the NYMEX clearinghouse acts as the counterparty to every trade. Trading is conducted in energy, metals, softs, and environmental commodity futures and options.



Source: RBI Monthly Bulletin.

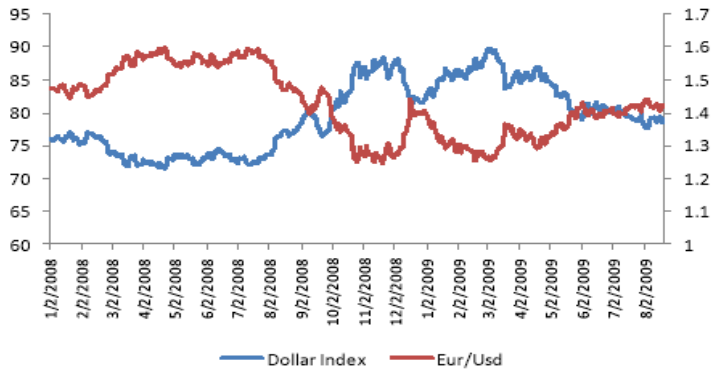
FIGURE 13
INDIAN RUPEE (INR) TO 1 U.S. DOLLAR (USD)

third highest, among Asian currencies, behind only the Indonesian Rupiah and Korean Won.

The appreciation or depreciation of the rupee,[37] as the case may be, is more influenced by the weakness or strength of the U.S. dollar. This means that factors affecting the dollar against a host of other international currencies need to be closely monitored. A string of economic reports released by the U.S. and Euro regions, statements made by central banks in these regions, inflationary concerns, and the GDP growth of these economies play a direct role in determining the value of a particular currency. For instance, the appreciation of the rupee to 47 levels (from 53 levels) in the second quarter of 2009 was also attributed to the weakness of the Dollar Index against major currencies, such as the euro and the pound (Figure 14), and positive sentiment on the back of the euro-a composite currency of 15 nations-gaining strength.

Government has also given indication of inclusive growth, thrust on infrastructure development, support to Indian industry in Economic

[37] While the rupee movement in a certain direction may benefit some, it may prove to be detrimental for others. For instance, if the rupee appreciates against the dollar (or any other currency, for that matter), the importers stand to gain as they have to shell out less units of the local currency (rupee payments) for each unit of dollar imports. On the other hand, the exporters stand to lose as they notch up less units of the local currency in exchange for their exports dollar earnings.



Source: Khaleej Times.

FIGURE 14

DOLLAR INDEX V/S EURO MOVEMENT

TABLE 11

RECENT INDICATORS IN 2009

Recent Indicators	Jan 09	Feb 09	March 09	April 09	June 09	July 09
2 & 3 Wheeler	-7.20	-2.60	-7.20	8.90	9.50	12.00
4 Wheeler	-13.40	0.60	-18.70	6.90	-1.00	10.60
Non Food Credit Growth	19.40	18.50	17.50	18.10	16.10	15.60
Indian Purchasing Manager's Index (PMI)[38]	46.70	47.0	49.5	53.3	55.7	55.33
Cement Dispatched (top 4 producers)	6.63	7.08	6.81	11.84	11.10	11.95

Source: Bloomberg.

[38] A Purchasing Managers Index (PMI) is an economic indicator; it is a composite index that is based on five major indicators including: new orders, inventory levels, production, supplier deliveries, and the employment environment. Each indicator has a different weight and the data is adjusted for seasonal factors. A PMI index over 50 indicates that manufacturing is expanding while anything below 50 means that the industry is contracting. The PMI report is an extremely important indicator for the financial markets as it is the best indicator of factory production. The index is popular for detecting inflationary pressure as well as manufacturing economic activity, both of which investors pay close attention to. The PMI is not as strong as the CPI in detecting inflation, but because the data is released one day after the month it is very timely.

Survey and Rail Budget to whether difficult economic scenario. And same will also be visible in Union Budget as well. Apart from budget the Indian economy indicators are showing sign of further improvements in June month (Table 11).

Cement dispatch, auto sales and PMI all have shown sign of improvement in last three months. The non-food bank credit had grown at lower rate but may be because of seasonal effect. Even declining interest rate is acting as a stimulus for stabilizing and growth of Indian Economy.

Last but not the least, money supply in April 2009 calculated over March 2009 shows, M3 swelled by 2.6% in April 2009 compared to 0.6% growth recorded in the corresponding period of previous year. The net bank credit to the government sector swelled by 4.1% from 0.1% growth posted in the previous year. Growth in the bank credit to the commercial sector remained negative. The net foreign exchange of banks continue to slide by 1.4% compared to an increase of 1.4% recorded in the previous year. Aggregate deposits expanded by 2.4% in April 2009 as against the Y-o-Y variation of 0.1% seen in the same month of the previous year. Investment stepped up by 6% compared to 4% in the previous year.

V. Some Reasons of Recovery

There are also several structural factors that have come to India's aid. First, notwithstanding the severity and multiplicity of the adverse shocks, India's financial markets have shown admirable resilience. This is in large part because India's banking system remains sound, healthy, well capitalized and prudently regulated. Second, India's comfortable reserve position provides confidence to overseas investors. Third, since a large majority of Indians do not participate in equity and asset markets, the negative impact of the wealth loss effect that is plaguing the advanced economies should be quite muted. Consequently, consumption demand should hold up well. Fourth, because of India's mandated priority sector lending, institutional credit for agriculture will be unaffected by the credit squeeze (Chandrasekhar 2008). The farm loan waiver package implemented by the Government further insulated the agriculture sector from the crisis. Fifth, over the years, India has built an extensive network of social safety-net programmes, including the flagship rural employment guarantee programme, which is protecting the poor

and the returning migrant workers from the extreme impact of the global crisis. Sixth, throughout the crisis, the RBI has also been very proactive in providing liquidity to the system, releasing about Rs 2.5 lakh crore in the form of CRR cuts and MSS redemptions and also cutting the Repo and Reverse Repo rates rapidly to 4.75% and 3.25% from peaks of 9% and 6% respectively. As a result, broader lending and deposit rates have also gradually come down by 200-300bp on an average. Last but not the least, the recent victory of the Congress party in the Indian general elections is a positive signal for international business and diplomacy. Prime Minister Manmohan Singh has a good chemistry with many world leaders and has aptly stuck to his international commitments in the past — the successful implementation of the Indo-U.S. deal on nuclear power is an example. The most important aspect of Congress' re-election has been its much more comfortable position in the new parliament, eliminating the need to seek support from rigid and obstructive communist parties. During the last five years India has moved forward in opening its economy, but the last government's speed and the level of engagement was restricted due to threats by powerful left-wing allies of necessity. It is ironic that in the middle of an international financial crisis that has seriously dented the reputation of capitalism the Indian communists have suffered their worst electoral defeat in decades.

A. Concluding Remarks

The present crisis situation is often compared to the Great Depression of the late 1920s and the early 1930s. True, there are some similarities. However, there are also some basic differences. The crisis has affected everyone at this time of globalization. Regardless of their political or economic system, all nations have found themselves in the same boat. Thus, first time world is facing truly global economic crisis. Around the world stock markets have fallen, large financial institutions have collapsed or been bought out, and governments in even the wealthiest nations have had to come up with rescue packages to bail out their financial systems. The cause of the problem was located in the fundamental defect of the free market system regarding its capacity to distinguish between "enterprise" and "speculation" and hence, in its tendency to become dominated by speculators, interested not in the long-term yield assets but only in the short-term appreciation in asset values. Weak and instable financial systems in some countries increased

the intensity of crisis. India which was insulted from the first round of the crisis[39] partly owing to sound macroeconomic management policies became vulnerable to the second round effects of global crisis. The immediate effects were plummeting stock prices, loss of forex reserves, deprecation of Indian rupee, outflow of foreign capital and a sharp tightening of domestic liquidity. Later effects emerged from a slowdown in domestic demand and exports. However, India's banking system has been considerably less affected by the crisis than banking system in U.S. and Europe.[40] The single most important concern that Indian government needed to be addressed in the crisis situation was the liquidity issue. The RBI had in its arsenal a variety instruments to manage liquidity, *viz.*, CRR, SLR, OMO, LAF, Refinance, and MSS. Through the judicious combination of all these instruments, the RBI was able to ensure more than adequate liquidity in the system. At the same time it was also ensured that the growth in primary liquidity was not excessive. The pressure on financial market has been eased, although there is some evidence of an increase in the non performing loans. However, the financial system has been more risk averse. The decline in global fuel prices and other commodity prices has helped the balance of payments and lowered the inflation level. This has created the space for monetary easing as well as providing better scope for fiscal stimulus. The monetary and fiscal stimulus package is expected to contain the downward slide in demand in 2009 while providing a good basis for recovery in 2010. However, there are many examples of policy failures (structural and macro-management) that contributed towards the pre-crisis slowdown and magnified the negative impact of the slowdown. For example, the reason behind the slowdown in export growth

[39] During the initial phases of the global crisis, the Indian financial markets remained unaffected as the direct exposure of banks to global subprime assets was negligible. The growth process being largely domestic demand driven remained broadly intact. It was then perceived that India and other EMEs were 'decoupled' from the advanced economies. As the crisis intensified, particularly after the Lehman collapse, the global shocks first impacted the domestic financial markets and then transmitted to the real economy through the trade, finance, and confidence channels.

[40] This is because the causes of the crisis in India are different from those elsewhere. In the advanced economics, the banking system suffered from huge losses, this led to collapse in the flow of credit and in confidence of and dragged down the real economy. In India, it is the real economy that has been affected through various channels and banks are feeling the effects of slowdown in the Indian economy.

in the pre-crisis period seems to be largely policy related. Ignoring all economic logic and international experiences, the government went in for large-scale liberalization of FIIs. This, apart from inflating stock market bubble, let to a significant strengthening of Indian rupee and posed a serious hurdle to the country's export growth. The Indian economy suffers from an extended period of high interest rates, high prices consequent to supply constraints that are more domestic in origin than global and declining business confidence that was ignored by policy players fixated on inflation and blinded by GDP numbers. But, in nutshell, macro and micro policies adopted by RBI have ensured financial stability and resilience of the banking system. The timely prudential measures instituted during the high growth period especially in regard to securitization, additional risk weights and provisioning for specific sectors measures to curb dependence on borrowed funds, and leveraging by systematically important NBFCs have stood us in good stead. Added to these, at the policy front there is need to focus of creating as much additional fiscal space as possible to prop up the domestic economy while preventing macroeconomic stability. Expenditure priority should be defined rationally. Public spending that creates jobs especially for poor is essential. Ongoing efforts to increase effectiveness and efficiency of the banking system must continue. At organizational level, efforts to raise domestic productivity and competitiveness in international market become critical factors for protecting export market shares. Last but not the least, a close coordination and integration between government of India, financial institutions and organizations is needed to deal with the crisis and restore the growth momentum.

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