

# ANALYTIQUE



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➤➤ Role of Macroeconomic Variables in  
Indian Mutual Fund Industry

– Sachchidanand Shukla

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# ANALYTIQUE

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## From the Editor's Desk

The Economic survey for 2010-11, tabled in the Lok Sabha on 25 February 2011, projected that the Indian economy will grow at 9 per cent in the financial year 2011-12. The survey also brought out an interesting fact that the sustained inflation, is in part, a by product of growth and financial inclusion and a deficit which earlier did not cause inflation, may now do so, because ordinary citizens are putting their money into circulation. Perhaps for this very reason the most striking feature of Budget 2011-12 is the absence of measures to curb inflation. While, in his sixth budget speech, the Finance Minister confirmed that the economy is back to its pre- crisis growth trajectory, in the medium term perspective he tells us that the three priorities of sustaining a high growth trajectory, making development more inclusive and improving the institutions, public delivery and governance practices remain relevant.

An attempt made in the Budget towards the inclusive growth by focusing on health and education is indeed in the right direction. But from the industry point of view, the budget remains silent on at least two important issues- land acquisition and environmental clearances. This is in spite of the fact that there has been clear recognition that serious infrastructure gap exists not due to lack of funds, but because there are numerous bottlenecks in implementing projects. Again, the Budget promises to increase the share of manufacturing to 25 per cent from 16 per cent of GDP, which indeed is important to generate employment but any clear roadmap to formulate a national manufacturing policy is still awaited.

However, given the overall perception about the business environment in respect of inflationary pressure, tight monetary policy, global uncertainty and rising oil prices, domestic investments may pose a concern specially when investment financed by foreign savings is inherently unstable.

In spite of all these facts let us hope that GDP growth of 9 per cent will continue in the coming year while sharing the Finance Minister's concern that, it's not availability of resources but the implementation gaps, leakages from public programmes and the quality of the outcomes that are the serious challenge to achieve the targeted goals.

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# On the Last Issue of Analytique

MR. VAIBHAV SHUKLA, Partner at Kocchar & Co has taken the readers through the situation and rigors surrounding corporates' aspirations for inorganic growth in his article **"The Stage is Set for Takeovers to Take Over India"**.

He provides the background to and the goals of the draft text of the proposed Takeover Regulations circulated on July 19, 2010 and the key amendments proposed towards those goals. One would have liked to see Mr. Shukla use his expertise to bring out the linkages in a more obvious fashion, since, to the untrained eye, the regulatory methods of bridging the gap between intent and letter are often confusing.

The text and effect of each regulation on the various stake holders in the takeover process has been brought out quite lucidly and makes the reading pleasurable.

What I most appreciate about this article was that he has summed it up in a way every article on knowledge should. With functional directions, in extant case, for the people who may be affected the most – the targets.

MR. RAM PRATAP SINHA, an Associate Professor of Economics at Government College of Engineering and Leather Technology, Kolkata has presented a linear, step-by-step walkthrough of some key issues affecting India through the last few decades in his article on **"Economic Reform and Fiscal Management: the India Experience"** in an admirably well supported article.

Erstwhile concepts such as the Net Liquidity Ratio, as also the details of the reforms initiated in '91 from the perspective of fiscal management make for very informative reading, especially when read through the 'macro' lens that Mr. Sinha provides for his readers.

Mr. Sinha has also talked about FRBM Act 2003, and one would have liked to read his views on the criticism leveled from certain quarters against this act relating to reduction of responsibility for fiscal discipline to a formula driven constraint by, at times, setting revenue/ deficit targets independent of the surrounding economic situations.

At times, it may be difficult to accurately identify specific mistakes in exclusion to the circumstances surrounding it. What one would have liked to read further in this (or a separate) article would be a presentation of the options available at the points in time of decision making in several of the instances highlighted (i.e., the alternatives that presented themselves against the ones that were finally chosen) and it would be wonderful to see Mr. Sinha lend his expertise to an article such as this in the future.

**MR. MUKESH BHASIN**, MD of EMFOUR Capital, an Investment Bank based in Mumbai lays out a well reasoned article captioned as **“Debt Capital Markets in India & Some Recent Transaction Developments.”**

By way of background, Mr. Bhasin highlights the issues faced by the Debt Capital Markets (“DCM”) in India, though I feel we could have gained more from the article if the issues were segregated into the symptoms and the underlying problems for a clearer perspective.

The author begins with the poor statistics of DCM in India, most markedly that the debt requirements of corporates are met only to the extent of 5% from the DCM, as against 70% in most developed countries. That the largest issuer of bonds is the Government is well known, and coupled with the fact that the primary corporate bond market is dominated by high rated issuers such as All India FIs and PSUs, the author highlights the bleak scenario faced by the DCM currently and concurrently, his reasoning for choice of topic. However, he goes on to highlight the exact positives that have prompted this article, being:

- the several DCM issuances of tenors ranging from 15 to 25, some taken to refinance Banks at a cost advantage,
- the Real Estate Financing continuing in spite of the concerns around the real estate bubble (an area for the lending to which Banks and NBFCs are highly regulated),
- Promoter Financing, which has seen additional interest from MFs as also FIIs and HNIs, both of whose increased involvement in and of itself has helped.

Based on the occurrences highlighted above, Mr. Bhasin has expressed an expectation of DCM to evolve to a state wherein the corporate financing ratio becomes “1:1:1 in favor of DCM: Bank Credit: Equity” over the next 5 years.

Mr. Bhasin’s article informs the reader of the above facts and expectations in a clear and concise manner and has been among the most pleasurable I’ve read on this topic in recent times.

**Nishant A. Shah, FCA**  
9820131115 (M)

# Role of Macroeconomic Variables in Indian Mutual Fund Industry

Sachchidanand Shukla\*

## Abstract

*The Indian Mutual Fund Industry has been growing at a robust pace in the last few years with increasing number of global fund managers operating in Indian markets with new products and services. However, the last few years have exposed this asset class to vagaries of global macro economic upheavels. This study strives to identify a few macro economic variables amongst a maze that could be a source of risk to the burgeoning domestic mutual fund industry.*

## Introduction

The last three years have proved to be a continuous growth story for the Indian mutual fund industry in terms of increase in assets under management (AUM) and also number of new schemes launched. This brings forth the importance of quality research to help model the macroeconomic risks associated with this mutual fund industry.

With the Bull Run in the Indian capital markets, the AUM has leapfrogged from the level of Rs.131,000 crore in early 2003 to scale Rs.678,160 crore mark at

end-December, 2010. The increased openness of the economy to global markets brings in more uncertainties in terms of both internal and policy impacts on the markets and participants of capital markets. For instance, Indian markets have been witnessing the increased visible impact of global interest rate changes, output, growth cycles, and trade-related issues in the recent past. Since Indian mutual funds have become major players in the capital markets (equity and debt), stock markets are being driven by the local and global economic factors, fund managers require to understand the linkages, and accordingly plan their strategies of investments and new fund launches.

The paper is organized as under: section I provides an overview of Indian and global mutual fund industry and section II gives the current Indian Macroeconomic scenario. Section III explains the purpose of the study and section IV provides data and methodology. Lastly, section V sums up the entire analysis.

## Section I: An Overview

The concept of Mutual Funds evolved over the past few decades as a pooled investment vehicle that provides an

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opportunity to share the benefits as well as distributes the risks associated with investing in capital markets. The first such mutual fund started in 1924 at Boston in US, the Mutual Fund (MF) industry had spread to other countries, and succeeded as an additional investment opportunity along with other means of investing. Accordingly, bankers, investment firms, brokers, investment advisors contributed to the success of mutual fund industry by catering to the needs of investors.

However, the 1929 stock market crash had an adverse impact on the financial markets. In the year 1940, US government enacted Investment Company Act that had laid down regulations for the US MF industry. The statistics reveal that from \$448 million in assets under management and 2,96,000 shareholder accounts in 1940, the industry quickly reached the \$1-billion mark by 1945, and one-million accounts by 1951. There were 400 funds with more than \$50 billion in assets by the year 1970 and further grown to 5,761 funds and \$ 2.8 trillion in assets during 1995. The assets stood at \$11.49 trillion in August 2007. Thus the MF industry is the second largest financial intermediary in size next to commercial banks in US. As for the product diversification is concerned money market mutual funds were introduced in 1970s followed by the Government bond funds, sectoral funds, index funds, adjustable rate mortgage funds (Real Estate funds), hedge funds, and international funds.

## Indian Mutual Fund Industry Scenario

Indian mutual fund industry initially envisaged to address the then existing problem of a gap between large plan investment program and shortage in savings level. The then Finance Minister Late Shri T.T. Krishnamachari thought it appropriate to set up a Trust that would mobilize middle and low-income class savings. Accordingly, in the year 1963 through an Act of Parliament the Unit Trust of India (UTI) was set up under the Government of India and was assigned with the responsibility of acting as financial intermediary between small investor and capital markets. The Trust started its operation on February 1, 1964. Subsequently, on 1st July 1964 UTI issued units under Unit Scheme 64 (US64). Later, over a period of more than 3 decades, UTI introduced variety of products to mobilise savings and deployed them in various developmental projects, thus catalysing the economic development of the country.

In 1987 the domestic mutual fund industry was made open to the Public Sector Banks and insurance companies for participation. Later, with the issuance of guidelines on February 14, 1992 (MOF 19(27) SE/90), the foreign and private sector mutual funds were allowed to be participants in the Indian mutual fund industry. There has been an increase in the number of participants entering the mutual fund industry, which led to a rise in both competition, and availability of a

wider choice of products for investors. Restructuring of the erstwhile UTI resulted in formation of UTI AMC on Feb 1, 2003 comprising of all the NAV-based schemes.

With the advent of economic reforms undertaken in the country since 1991 many changes took place in Indian real and financial sectors. To name a few declining monopoly status of industries in major segments of the manufacturing sector, allowing FDI in various sectors, banks, financial institutions, technological changes, financial innovations, market-linked interest rates and falling interest rates due to competition from domestic private sector as well as global players. All these resulted in a mismatch of assets and liabilities, fast-depleting reserves, profitability and revenues, increased internal cost structure of banks, financial institutions and so also for the UTI.

## **Section II: Current Indian Macroeconomic scenario**

India's GDP growth has seen a sharp pick up and is expected to grow at 8.5% in FY11 even as the world struggles to grow. After registering a high of 9.4% growth in the year 2006-07 (the second highest rate in India's history), the growth rate fell to 6.7% in the aftermath of subprime crisis but has recovered well. While inflation and inflationary expectations have remained much above RBI's comfort level of around 5-5.5%, 10 year yield after falling to near 5% in Sep 2003 is now hovering around 8%. Given the tight monetary policies being pursued

by the RBI, industrial production and growth in the manufacturing segment has been losing momentum and has averaged at 3% in the first two months of 2011. Foreign exchange reserves have quadrupled to over USD 300 now.

## **Role of Macroeconomic Factors and Impact on Equity and Debt Markets**

Due to the ongoing process of economic reforms along with the liberalization measures, Indian economy has been facing challenges in terms of both external shocks and internal issues. The external shocks include a phenomenal increase in the foreign capital inflows, exchange rate volatility, oil shocks, and contagion effects. Internal structural issues have been in terms of slow pace of legal and agricultural reforms, lack of social security system, industrial restructuring, Non-Performing Assets in the banking sector, etc., which have been causing hindrance to the reform process.

Macroeconomic uncertainty has given rise to several risks impinging on banks, mutual funds, financial firms, and non-financial firms. Macroeconomic risk in terms of exchange rate, inflation, interest rate and liquidity risks would translate into the financial performance of the entities, companies and financial institutions. For instance, banking sector fragility can be attributed to the credit risk or the risk of loss resulting from counter party default. Assuming that each bank or corporate firm responds to macro economic developments, a simple model of ability

of macroeconomic variables to explain movements in banks' or firm's risk can be examined.

In the Indian context, the post-liberalisation financial sector reforms impacted all sectors of the economy. Lot of restructuring is being undertaken in the industry due to increased competition and also as a response to the change in the overall environment. One can also observe transparency in the central bank's conduct of monetary policy, the visibility of policy changes on the players in the markets including corporate sector.

One can observe an increased policy attention being paid towards the changes in macroeconomic developments in the economy by the Foreign Institutional Investors as well as Foreign Direct Investment by Multi-National Companies, and their strategies of investment in the country's equity and debt markets. This had prompted domestic players, including corporate sector, to initiate research wings to study the impacts of macroeconomic policy actions on their businesses and to support their investment decisions accordingly.

### Section III Hypothesis

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These inter-relationships of the macroeconomic variables and their impact on the assets under management of Indian mutual funds and also the extent of risk arising out of the changes in policies need to be studied systematically. This would enable one to evaluate whether the policies are impacting the inflows into mutual fund

industry and to understand the impacts and its direction.

The objective of this study is to evaluate the inter-relationship between the macroeconomic variables and assets under management of Indian mutual funds industry. Macroeconomic factors are interesting for the following three reasons. First, these factors impact stock markets over the long horizon. Secondly, they influence many investment strategies. Finally, there has been more visibility in the recent past that the Indian stock markets responding to macroeconomic policy changes.

However, the role and impact of macroeconomic variables and policies had been more pronounced in the recent years. The investment decisions in the capital and debt markets and also the behaviour of these markets in relation to the economic fundamentals demands quantified assessment. When the growth rates in manufacturing sector and agricultural sector is poor, markets are still active and buoyant. Just based on technical, speculative rallies are likely to do major harm to the overall economy, if these are not backed by the fundamentals of the economy. Also the markets are not deep and vibrant with a large number of participants that may lead to biased positions taken by a handful of people, and disturb the investor confidence once a scam is detected.

As the MF industry has been witnessing fluctuating inflows and outflows through its sales and redemptions/ repurchases, the assets under management of

different schemes has been on an increasing trend. It is interesting to analyse the flows and identify whether the macroeconomic factors are impacting for such fluctuations. Such identification can help in understanding as well as predicting future movements of inflows and outflows.

#### **Section IV: Data & Methodology**

As early as in 1966 King's (1927-60) study provided the evidence on the existence of industry influences on the stock price behavior. He measured the effects of common movement between securities beyond market effects, and found this extra market covariance was associated with industries. To elaborate, two steel sector stocks had a positive correlation between their returns, even after the effects of the market had been removed.

Burmeister *et al* (1986-88) used a set of multi-index models based on a priori-hypothesized set of macroeconomic variables. They found that five variables were sufficient to describe the returns on securities.

Salomon brothers (1989) employed multi-index models using monthly data. Using a sample of 1000 institutional quality stocks, they found that 41% of the fluctuation in return for individual stocks was explained by the model.

Currently Indian mutual fund industry data can be analysed in terms of five broad categories namely, income schemes, growth schemes, balanced schemes, gilt scheme, and money market or liquid schemes. For the present study,

data from AMFI web-site on sales, redemption / repurchases of income, growth, balanced, gilt and MMF/Liquid schemes were taken. The Assets under Management (AUM) of all these five types of schemes was also considered.

The macro economic factors that impact the behavior of inflows and outflows into the mutual fund schemes include Index numbers of Industrial Production (IIP), money supply (M3), interest rates of 10-year G-securities yield, Wholesale Price Index (WPI) for inflation, Foreign Institutional Inflows (FII), and foreign exchange reserves.

To analyse inflows as well as outflows, month-wise data were used for the study. The data on sales, redemptions and repurchases for income, growth, balanced, gilt and Liquid or MMF schemes MF are provided in the graphical manner to analyse the trend movement. Further, the movement in the AUM of these five types of schemes was also analysed to explore the relationship between AUM and key macroeconomic variables.

Initially the percentage growth of each of the AUM, sales (net of repurchases) of five categories of schemes is computed (Appendix 1). Then the percentage of each of the schemes to net sales over this period is computed using monthly data. The graphical representation of sales and repurchases of each of five categories is done to observe pictorial view of the movements in net inflows. Also descriptive statistics of all the variables used is tabulated in the table in Appendix 1.

Then regression equations are estimat-

ed for Assets under management taking all five categories of schemes one at a time as dependent variable and all other macroeconomic variables including trend as independent variables. The results are tabulated in Appendix 2.

## Section V: Conclusion

To find out the factors affecting the assets under management of each of the five categories of schemes, regression analysis was carried out. Each scheme's AUM was taken as dependent variables and the macro variables were taken as independent variables. The equations were estimated in linear and double log methods and reported in Appendix 2.<sup>1</sup>

While estimating the model, a time trend variable is included in all equations to capture the autonomous time related changes in the endogenous variables. This variable had a statistically significant coefficient indicating the impact of time on the movement of the endogenous variables.

The linear equation of AUM of income schemes equation (1) has  $R^2$  value of 0.20 and the coefficients of independent variables money supply and the rate of inflation have negative relationship with the dependent variable. Money supply and reserves variables have statistically significant t-ratios. The double log function for income schemes was not reported due to its poor fitness.

Equation (2) AUM of growth schemes both in linear and double log equations has  $R^2$  value of 0.98 and 0.92

respectively. The independent variables of money supply, wholesale prices and 10 year G-Sec interest rates have statistically significant coefficients.

Equation (3) gilt schemes AUM in linear form has  $R^2$  value of 0.91 and independent variables interest rates, money supply have a significant t-ratios. In the double log estimation has interest rates and reserves have significant coefficients.

Equation (4) estimates the linear specification of relationship between AUM of balanced funds and determinants thereon. The equation has  $R^2$  value of 0.95 with variables money supply; FII inflows have statistically significant t-ratios. Double log estimation of the equation also has significant t-ratios for variables like money supply and interest rates.

Equation (5) estimates AUM of liquid and money market funds in linear form has  $R^2$  value of just 0.95 with money supply and FII inflows coefficients are statistically significant. Double log estimation of this equation has reserves, interest rates and money supply with statistically significant t-ratios.

Overall the regression tests are in line with the expectations. While there are a number of macro variables that influence asset markets we have found a few variables to be more important than the others. Expectedly, for Gilt, Liquid and Money Market Funds, Money Supply and interest rates do have an important bearing on the results. Thus for balanced growth funds

the macro economic variables that are most important are Money Supply, 10 year G-Sec (or the interest rate proxy) and FII flows. Further analysis in terms of dropping the insignificant variables and re-estimating the equations, removing the trend and test for stationarity of the variables, inclusion of dummy variable to capture the policy effects need to be carried out to refine the study further.

## Notes

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1. To analyse the relationship between AUM and other macroeconomic variables, the following equations were estimated using linear, and double- log models.

### Income Schemes

Dependent variable AUM of Income schemes: Independent variables: the yield on Government Securities of 10 year ( $\beta_1$ ), IIP ( $\beta_2$ ), WPI ( $\beta_3$ ), M3 ( $\beta_4$ ), and foreign exchange reserves ( $\beta_5$ ), FII inflows( $\beta_6$ ) and time trend ( $\beta_7$ ).

### Growth Schemes

Dependent variable AUM of Growth schemes: Independent variables: the yield on Government Securities of 10 year ( $\beta_1$ ), IIP ( $\beta_2$ ), WPI ( $\beta_3$ ), M3 ( $\beta_4$ ), and foreign exchange reserves ( $\beta_5$ ), FII inflows ( $\beta_6$ ) and time trend ( $\beta_7$ ).

### Balanced Schemes

Dependent variable AUM of Balanced schemes: Independent variables: the yield on Government

Securities of 10 year ( $\beta_1$ ), IIP ( $\beta_2$ ), WPI ( $\beta_3$ ), M3 ( $\beta_4$ ), and foreign exchange reserves ( $\beta_5$ ), FII inflows( $\beta_6$ ) and time trend ( $\beta_7$ ).

### Gilt schemes

Dependent variable AUM of Gilt schemes: Independent variables: the yield on Government Securities of 10 year ( $\beta_1$ ), IIP ( $\beta_2$ ), WPI ( $\beta_3$ ), M3 ( $\beta_4$ ), and foreign exchange reserves ( $\beta_5$ ), FII inflows( $\beta_6$ ) and time trend ( $\beta_7$ ).

### Liquid and Money Market Schemes

Dependent variable AUM of Liquid and money market schemes: Independent variables: the yield on Government securities of 10 year ( $\beta_1$ ), IIP ( $\beta_2$ ), WPI ( $\beta_3$ ), M3 ( $\beta_4$ ), and foreign exchange reserves ( $\beta_5$ ), FII inflows( $\beta_6$ ) and time trend ( $\beta_7$ ).

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## Appendix: 1

	Income	Growth	Balanced	Liquid/MMF	Gilt	WPI	IIP	M3	Reserves	FII	Interest Rates
Mean	78585.33	68130.54	6627.667	79569.64	3666.59	5.442025	9.434449	16.87615	22.44564	741.7179	7.167379
Median	56236	63937	6597	72006	3786	5.339266	9.044369	16.64	20.53	903	7.226768
Maximum	476051	126368	10795	128102	6196	8.462867	15.82868	21.89	43.8	3279	8.232
Minimum	47451	21604	4221	49065	1963	3.66242	4.510942	12.25	6.38	-3906	5.123795
Std. Dev.	70490.33	36289.35	1857.341	23249.31	1311.432	1.226911	2.579536	2.892672	10.32174	1480.352	0.756163
Skewness	4.811834	0.173636	0.422264	0.791805	0.176489	0.659622	0.285238	0.124643	0.518506	-0.748698	-0.843952
Kurtosis	27.37343	1.51617	2.1101608	2.229928	1.828265	2.622175	2.938914	1.713569	2.365018	4.116904	3.463292
Jarque-Bera	1115.854	3.773817	2.470545	5.038849	2.433531	3.060126	0.53491	2.790202	2.402722	5.67071	4.978451
Probability	0	0.15154	0.290756	0.080506	0.296187	0.216522	0.765325	0.247808	0.300785	0.058698	0.082974
Sum	3064828	2657091	258479	3103216	142997	212.239	367.9435	658.17	875.38	28927	279.5278
Sum Sq. Dev.	1.89E+11	5.00E+10	1.31E+08	2.05E+10	65354431	57.20178	252.8522	317.9669	4048.459	83274748	21.72772
Observations	39	39	39	39	39	39	39	39	39	39	39

Descriptive Statistics of all Variables used in the study.

## Appendix: 2

LINER			
1) Gilt =	-45.789 WPI	+ 10.945IIP	+ 704.01 Intrate
	(-0.56)	-0.33	-6.6
	+127.99 M3	+ 7.40 Res	+ 0.073 FII
	-2.82	-0.62	-1.49
	-181.31 Trend		
	(-15.49)		
	R <sup>2</sup> = 0.91	adj. R <sup>2</sup> = 0.90	DW = 0.85
2) Growth =	-451.13 WPI	+ 401.73 IIP	+ M3 2289.8193
	-0.46	-0.99	-4.19
	+ 0.420 FII	+ 117.65 Res	- 4563.95 Intrate
	-0.71	-0.82	(-3.58)
	+ 2894.36 Trend		
	-20.61		
	R <sup>2</sup> = 0.98	Adj. R <sup>2</sup> = 0.98	DW = 0.859
3) Income =	-14065.09 WPI	+ 3990.15 IIP	-15213 M <sub>3</sub>
	(-1.04)	-0.72	(-2.01)
	+ 12.15 FII	+ 4215.94 Res	+ 29123 Intrate
	-1.49	-2.12	-1.65
	3062.92 Trend		
	-1.57		
	R <sup>2</sup> = 0.20	DW = 2.217	
4) Liquid MMF =	-2897.91WPI	+ 263.48 IIP	- 891.39 M <sub>3</sub>
	(-1.05)	-0.23	(-0.58)
	-0.07 FII	+ 987.39 Res	+ 7691.95 Intrate
	(-0.04)	-2.42	-2.12
	1536.57 Trend		
	-3.86		
	R <sup>2</sup> = 0.69	Adj. R <sup>2</sup> = 0.63	DW 1.34
5) Balanced =	100.62 WPI	14.85 IIP	179.53 M <sub>3</sub> + 0.49 Res
	-1.1	(-0.39)	-3.53
	0.11 FII	+ 100.58 Intrate	+ 118.25 Trend
	-2.04	-0.85	-9.04
	R <sup>2</sup> = 0.95	Adj. R <sup>2</sup> = 0.94	DW 1.19
DOUBLE LOG			
1) Ln Gilt =	-071/2 WPI	-0.081/2 IIP	-0.151/2M3 – 0.291/2 Res
	0.24	(-0.48)	(-0.45) (-1.86)
	+ 6.71/2 Int. rates	- 00001 FII	-1.241/2 Trend
	-11.74	(-0.38)	(-13.82)
	R <sup>2</sup> = 0.57	Adj. R <sup>2</sup> = 0.49	DW = 1.14

DOUBLE LOG (Contd.)			
2) Ln Balanced =	-0.037 bn WPI	+ 0.02 bn IIP	+ 16 bn M <sub>3</sub>
	(-0.20)	-0.19	-5.38
	- 0.039 bn Res	+ 3.23 bn Intrates	+ 0.00002 FII
	(-0.41)	-9.11	-1.98
	-0.27 bn Trend		
	R <sup>2</sup> = 0.699	Adj. R <sup>2</sup> = 0.64	DW = 1.43
3) Ln Growth =	-0.41 bn WPI	+ 0.13 bn IIP	+ 1.81bn M <sub>3</sub>
	(-2.07)	-1.05	-7.4
	+00001 FII	+ 0.017 bn Res	
	-0.91	-0.17	
	+3.16 bn Intrate	-0.0006 Trend	
	-9.2	(-0.16)	
	R <sup>2</sup> = 0.92	Adj. R <sup>2</sup> = 0.91	DW = 1.42
4) Ln MMF =	-0.21 bn WPI	+0.078 bn IIP	+0.00002 FII
	(-0.90)	-0.52	-1.01
	0.25 bn Res	+ 1.47 bn M3	+3.59 bn Intrate
	-2.16	-5.12	-8.87
	-0.028 Trend		
	(-6.63)		
	R <sup>2</sup> = 0.48	Adj. R <sup>2</sup> = 0.39	DW = 1.62

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# Oil Policies in India – Still a Long Way to Go

Debojyoti Dey and Niteen Jain\*

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## Abstract

*Crude oil prices have started demonstrating accelerating rise, reminding large users, like India, of the pitfalls of indefinitely postponing deregulation of oil prices. While deregulation of fuel prices can have inflationary tendencies in the short run, the long-run effect of a pricing regime that reflects the economic value of oil, is not maleficent for the economy. On the other hand, providing open-ended fuel subsidies of huge quantum is fiscally unsustainable, while having distortionary effects at the macro level. Hence, there is little alternative to deregulating oil prices. Deregulation would also release resources for the government to not only invest in provision of socially productive goods, but also commercializing alternative energy usage. But some issues need to be addressed before effecting deregulation, viz. rationalising the taxation structure, promoting hedging against oil price volatility and educating stakeholders of the efficiency gains of deregulation which outweigh the costs. International experience suggests that these are, indeed, possible.*

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## Introduction

After trading in double digits for the entire year 2010, the global crude oil benchmark, Brent crude, breached the psychologically important \$100 a barrel mark in February 2011 for the first time since 2008. While the current sudden spike in oil prices can be attributed to the unstable geopolitical situation in the West Asia North Africa (WANA) region, the global economic recovery after the crisis of 2008-2009 appears to be providing floor support to high prices. Corroborating this trend, global oil demand was up 3% year-on-year in 2010 with inventories in developed countries remaining relatively low. Interestingly though, U.S. and Europe have not seen any significant increase in oil consumption and the entire incremental demand for crude oil post-2008 seems to have emanated from emerging economies, especially in Asia. The increasing share of emerging economies, particularly China and India, only strengthens the two-decade long structural shift in the global oil economy which is now being driven more by the appetite for oil in these economies.

India is, justifiably, worried. This is not only on account of our high

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dependence on oil imports (India imports about 70 per cent of her oil requirements), but also the high oil intensity of the economy itself. As a result, the impact of oil price increase in India transcends the immediate effect on the oil-using industrial and transportation sectors and quickly gets transmitted to the economy as a whole. A 2006 study by the International Energy Agency (IEA) found that a sustained \$10/barrel increase in oil prices, over a one-year period, would lower world GDP by at least 0.5 per cent. Another study by the Institute of Economic Growth, Delhi found that a 100 per cent increase in the price of imported oil would lead to a 15 per cent increase in the domestic prices, and a 3 per cent decline in industrial production. The impact on domestic inflation is expectedly high, as recognized in the high weightage of 9.36 percent accorded to oil products in the Wholesale Price Index. This, after the government provides considerable subsidy to consumers for virtually all petro-products in order to absorb high international prices.

### **Non-Sustainability of Open-Ended Subsidies**

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Analysis of the secondary impact of a rise in crude oil prices to growth, throws interesting and mixed results. While in the short run, such a rise would have an adverse impact on industrial output, trade balance et al, if the increase in price is not cushioned through government subsidies, its impact in the long run, without subsidization, may not be as

harmful as otherwise guessed. As many studies have found, this is because the burden of subsidy that the society has to bear to cushion the short-term shock, comes back as a cost in the longer run. The financing of subsidy typically can take any of four forms: levy of an additional tax, reduction in government expenditure, public borrowing or simply printing more currency (deficit financing). The first and the last of these alternatives are directly inflationary. A reduction in government expenditure is more plausible on the capital account (such as reduced allocation on infrastructure creation, health and education) than on the current account (salaries of government staff) and therefore is clearly anti-growth. Finally, large public borrowing for unproductive purposes crowds out resources for the more productive private investment.

However, the Indian government has so far been absorbing the resultant price shocks arising out of high crude prices, not just as on account of direct increase in prices of petro-products, but also on those that increase through the secondary effects of crude price increases. The Economic Survey for 2010-11, for instance, mentions that below-the-line bonds issued by the government in lieu of subsidies (mainly for the petroleum and fertilizer sectors) rose to a level of Rs 1.1 lakh crore in 2008-09, which was 2 per cent of the GDP. Without debating the merits of such subsidies, what needs to be realized is that without concomitant revenues for this additional expenditure, this amount feeds into budgetary deficit and from there to

excess liquidity into the system. This ironically leads to inflationary pressures – the same devil which is sought to be controlled through the subsidies. Additionally, as the deficit is financed through borrowings, its secondary effect is on two counts: firstly, through an upward movement in the interest rates as a large public borrowing program would naturally entail in a functioning market like ours. This results in a rise of the government's own interest service obligations. Secondly, private investment, which is more productive and efficient, would be crowded out in competing for resources.

### **Impact of Pass-Through: Not Necessarily Maleficent**

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Hence, deregulating oil prices is the only sustainable way forward for the Indian economy. Crude oil's latest rally has revived memory of 2008, when crude prices skyrocketed to \$147 per barrel and the burden of subsidies ballooned to more than Rs. 103,000 crores. Media reports suggest that when Brent crude was hovering around \$100, Jaipal Reddy, the union petroleum minister, remarked that the subsidy bill in the current financial year was expected to be Rs. 80,000 crores. With the current rise, the subsidy bill could well cross Rs. 100,000 crores again. Interestingly, the government's decision in June 2010 to initiate deregulation of oil prices starting with petrol has actually kept the subsidy amount to the current expected figure of Rs. 100,000 crores; else the bill could have been much higher, with associated problems on managing the fiscal deficit and its concomitant effects on growth and

foreign trade. A study jointly carried out by the Petroleum Federation of India (PERTOFED) and the National Council for Applied Economic Research (NCAER) finds that if the government restricts the pass-through of world price increase reaching the domestic prices and manages the impact through measures that are not sustainable in a fiscal sense, the domestic economy is bound to suffer. The deteriorating fiscal deficit would require measures that in turn lead to contraction of the economy impacting the health of the economy. On the other hand, concludes the report, if the global price rise of oil is allowed to pass through, there could be initial dampening of output and an increase in the overall price level. However, such a policy of pass-through would enable the government to maintain its prevailing level of productive expenditure without having to worry about the fiscal deficit. Resources thus freed could be utilized on provision of essential goods such as foodgrains and fuel to the poor, or through direct cash transfers, as appears to be the current government plan.

### **Deregulation – TINA**

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The planned deregulation of oil products is, expectedly, not an easy task for the government. This is especially relevant in scenarios like the present when international oil prices been ruling high, which has the ability to further stoke inflation that is already a political hot potato. The domestic political developments over the past few months have not made the government any stronger for such a bold action, either.

Yet, as discussed above, the avowed intent of the government to gradually free up oil prices and eliminate subsidies is a welcome step, if only as a TINA (There is No Alternative) factor at work. But even apart from the TINA factor, the government needs to educate the citizens that the move will improve the cash flows of the public oil marketing companies, spurring investments in the exploration and marketing fields. With market prices better reflecting the economic (scarcity) value of oil, usage will be rationalised and the much-needed R&D investments in making oil usage more efficient to the user industries. Neighbouring China, for instance, has become quite focused on the twin issues of 'Conservation and Substitution' of fossil fuels, engaging a task force to propose a low-carbon policy goal for potential inclusion in the 12th Five-Year Plan (2011-2015). The reduction of Chinese energy consumption per unit of GDP by 75-85 percent is reported to be a key element of the proposed policy.

Apart from attracting private domestic and foreign investment in exploration and marketing of fossil fuels, the more realistic market-determined energy pricing policy would foster competition, lead to better use of resources and develop a market for alternative energy sources. This will enable a shift in the energy mix from the scarce and price-volatile oil to other energy sources, especially towards the relatively abundant natural gas. In fact, the resources released through elimination of subsidies could fund investments to make use of renewable energy commercially viable. The

government also needs to educate the citizens that maintaining low prices artificially through an expensive subsidy program comes back as low growth and inflationary pressures, later.

## Preparing for the Deregulation Era

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Apart from strengthening the role of the regulators for ensuring a level playing field and a transparent pricing mechanism, the government should eschew partial/ selective deregulation as this has the potential to spew greater evils such as adulteration, pilferage, etc. Another important task lies for the government in rationalising the tax structure on oil. Thanks to the plethora of taxes on oil (e.g. excise duty is Rs 14.35 a litre on petrol and Rs 4.60 a litre on diesel); the pricing structure faced by consumers is highly distorted. All taxes together constitute 25-45 percent of the selling price of any fossil fuel in India. As a result, petrol today costs much more in India than in the US (about \$3 a gallon), and is among the highest in the developing world.

Another aspect that the government needs to look into, given the persistent high volatility in global oil prices, is to encourage hedging of oil price risk. In this context, the Mexican example of successful sovereign oil hedging in 2009 should hold relevant lessons for public policy in India. Even the IMF in a 2001 report had suggested oil dependent countries to explore the scope for hedging their oil price risks.

But the biggest factor leading to a smooth transition to a deregulated

era can come only if the government actively educates the citizens about the public costs and pitfalls in continuing with the present regime of unsustainably subsidizing the oil economy. International experience suggests that this is neither a novel idea nor an impossible task. Ghana, for instance, was faced with popular unrest when it tried to increase prices of oil in 2005. The government, therefore, set up a representative Poverty and Social Impact Assessment (PSIA) Committee for fuel to assess the groups which benefit from fuel subsidies. When the committee established that bulk of the subsidy was utilised by the non-poor, the government hiked fuel prices by about 50 percent. Simultaneously, it started a slew of development programs such as elimination of fees in government schools, improvement in public transport, etc. What is significant is that a public relation campaign was launched at the same time with the Minister of Finance making regular radio broadcasts on the need for increasing oil prices and highlighting areas where the resources released through withdrawal of subsidies have been expended. This level of transparency helped quell public opposition to oil price increase and move towards a market-determined fuel price regime.

## Conclusion

The oil price policy in India is one of the last remnants of the tightly-regulated economic structure that has been dismantled progressively over the

years. Such deregulation has brought in huge economic benefits by improving the overall efficiency and releasing resources of the government for investment in socially productive public goods. It is high time such efficiency gains are reaped by the oil economy too – not just for realising the above-mentioned benefits that a market-determined pricing regime would spur, but also because policy emphasis needs to gradually shift from managing oil prices to incentivising the harnessing and mass usage of multiple energy sources. In the long run, the Indian oil economy ought to resemble nothing less than an energy supermarket on the supply side, where stakeholders have a wide assortment of choices of energy sources, each with a price tag that reflects its true economic value.

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# Lessons from History

Mehrab Irani\*

## Abstract

*The current turbulent and volatility witnessed in all the asset classes including equities, bonds, oil gold, base metals, real estate etc and the synchronized global bear market which we observed in the year 2008 are leaving many investors totally abashed. There has been lots of panic and every investor, analyst, fund manager are debating whether this is a bull market correction or a bear market and if the answer is the latter, then whether a structural or a cyclical one. This article tries to answer those questions by studying the US and Indian stock market history, price movements, valuations, interest rates etc.*

## Introduction

As per Dow Theory (which according to me is the father of all Technical Analysis and the most simple and logical), there are three movements of any markets which are publicly and liquidly traded. The first and most important is the primary trend – the broad upward or downward movement known as bull or bear markets which generally is of several years duration. The second and the most deceptive movement is the secondary reaction – an important

decline in a primary bull market or a rally in a primary bear market. These reactions normally last for three weeks to three months. The third, and usually the unimportant, movement, is the daily fluctuations. Once, we know the primary movement, whether bull or bear, we have to try to buy (sell) during the “secondary reactions” so as to try to get the maximum return once the primary bull (bear) market resumes. I am clear in my mind that currently we are very much in the midst of a “primary bull” market which began in March 2009 (and not October 2008) at the level of around 8050 (2520) on the Sensex (Nifty). Now, if we believe that this is a “primary bull market” then currently we are undergoing a “secondary correction” of the primary bull market and hence we have to aim to buy close to the end of the “secondary correction”. We have to remember that it is relatively easy to predict the primary trend, but very difficult to understand the secondary reactions because they are very quick, fast and do so much price damage that most investors believe that the primary bull market has ended and maybe bear market has begun. And just when everyone starts believing that, suddenly the primary bull market resumes which then takes the indices to new highs,

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above the previous “intermediate top” from where the “secondary reaction” had begun. Hence, secondary reactions are deceptive and they scare away most of the investors. These temporary reversal of market trends or secondary reactions are recognized as serving the same purpose marketwise as brakes do for a car – they act as a means of checking excess velocity. These secondary corrections generally correct 33per cent to 66per cent of the previous primary move with intermediate support levels. Hence, this market can correct to even 14700 and still it will be classified as a “secondary correction”. If the market goes below 14700 then the “primary trend” hypothesis will be challenged and in that case it would mean that this was not a “secondary correction” but the actual reversal in “primary trend”. There are intermediate support levels at 17800, 17300, 15900 and finally at 14700 (corresponding levels for Nifty it would be 5250, 5180, 4880, 4400). At each of these levels we have to be alert for bottom formation patterns and if that is confirmed we should be buying at those levels because it would mean the secondary reaction is running out of fuel and the primary bull market trend has resumed. If somebody still has doubt on these market movements, see the period between the years 2003 to 2008 when the Sensex went up from around 3000 to 21200, wherein there were atleast four corrections – June 2004 (Political – Congress comes to power with the help of Left parties), October 2005 (minor scam in penny stocks), April 2006 (mid cap stocks correction – had run up too fast) and

August 2007 (global – first scare of the sub prime crisis) which were between 15per cent to 30per cent in price.

## Lessons from History

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Now, let us understand this with the basis on simple fundamental analysis. Table 1 shows primary and secondary movement of the previous bull market. Although, the Sensex surged 7 times during the period of 2003 to 2008, there were four secondary corrections which took away 15per cent to 30per cent from the “intermediate tops” in matter of few weeks, shaking the conviction of even the strongest bull – that is the objective of secondary corrections- otherwise if money making in the market was so easy then nobody needed to do any other work! Also note, the subsequent movements, once the secondary correction is over and primary bull trend resumes is between 54per cent to 108per cent, much more than the secondary correction range of 15per cent to 30per cent - that’s because it was a primary bull market (the scenario will be opposite in a primary bear market). Now, fundamentally let us understand that generally bear market bottoms come closer to a P/E ratio of 10 (April 2003 or even March 2009) while bull market tops can happen anywhere between 25 to 40x P/E ratios. The important point here is that generally secondary corrections end at P/E of around 12 to 16x. The current Sensex P/E is around 17x and hence it certainly has further scope to go down. One more observation, that the market has undergone a secondary correction at

Table 1: Sensex levels & P/E along with secondary corrections

Date	Sensex	P / E	% Increase / Decline	Comments
Apr-03	2900	10.7		Bear market Bottom
Apr-04	6035	17.3	108.1%	Intermediate Top
May-04	4260	12.2	-29.4%	End of Secondary Correction
Sep-05	8750	19.4	105.4%	Intermediate Top
Oct-05	7600	16.9	-13.1%	End of Secondary Correction
Apr-06	12670	24.2	66.7%	Intermediate Top
May-06	8790	16.8	-30.6%	End of Secondary Correction
Jul-07	15900	22.1	80.9%	Intermediate Top
Aug-07	13800	19.2	-13.2%	End of Secondary Correction
Jan-08	21206	25.5	53.7%	Bull Market Top

Source: BSE

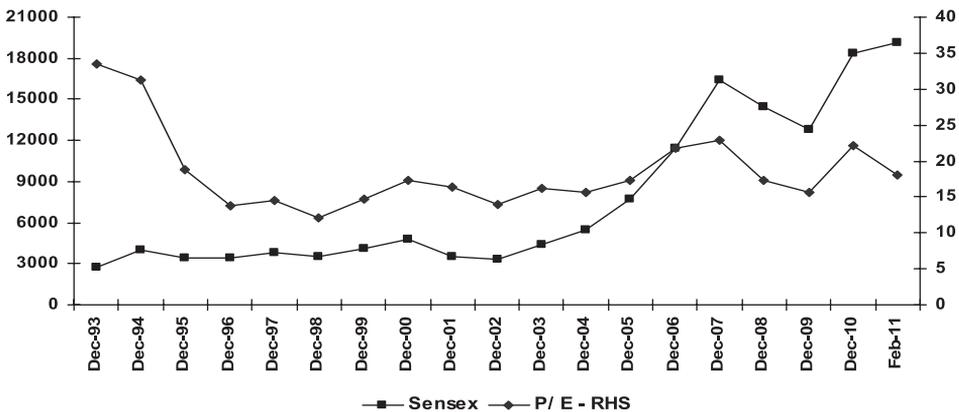
6035 which was around the same levels of 6175 touched in February 2000 which was the previous bull market top – before the technology bubble burst. The same thing has happened currently that the Sensex touched 21108 in January 2011 which was within striking distance of the previous bull market top of 21206 conquered in January 2008.

Chart 1 is an interesting chart which shows the various Sensex levels along with its P/E ratio. Bear market bottoms are generally around 10x P/E while bull

market tops are anywhere between 25x to 40x. It is easy to predict bear market bottoms because at certain price stocks become very cheap on replacement cost and dividend yield basis and much more difficult to predict bull market tops because although however tall a tree may grow it can never touch the sky but when its growing tall and fast nobody knows when it will stop growing and the same goes for bull markets also.

Chart 2 brings out the 150 years history

Chart 1: Sensex levels & P/E Along with Secondary Corrections



Source: BSE

of US S&P 500 P/E along with its long term interest rates. The great bear market bottoms of the past century in the US have been 1907, 1921, 1932, 1949, 1974 and 1982. Kindly note how the US markets have formed major bull market tops between 25 to 40x P/E ratios while the bear market bottoms have been closer to 8 to 10 P/E. Also note, how the initial bear markets of the last century in the US was in conjunction with deflation and hence low long term real interest rates while in the latter half was along with high inflation and the high interest rates – note the 1981 high long term interest rates of around 16per cent when the 50-year multi decade bear market in bonds ended and subsequently one of the longest bull markets in equities in US commenced.

Table 2 shows the past 115 years of US DJIA history of when it made bull market and intermediate tops and bear market bottoms (For complete US DJIA detailed history of major tops and bottoms kindly look at Exhibit VII

at the end of this report). The major purpose of this table is to show how many years it takes for the market to conquer the previous bull market high and what kind of returns is generates for the investors. Kindly note, that it takes anywhere between 5 to 22 years for the market to go from one peak to another peak. Hence, the cycle of a primary bull market top to a bear market bottom to again conquering the previous primary bull market top takes around 5 to 22 years. Further, if somebody invests just when the previous bull market top has been tested i.e. for example at 21000 on Sensex in India in January 2011 then it generates CAGR returns of anywhere between -3.4per cent to 17.8per cent over the subsequent 5-year period (average of 9.2per cent). Even somebody might believe that investing at bear market bottom would give excellent returns which is also far from truth because investing at bear market bottom and waiting till the previous bull market top arrives have yielded

Chart 2: 150 Years of US S&P 500 P/E and Long Term Interest Rates



Source: econ.yale.shiller

Table 2: 150 years of US S&P 500 P/E and Long Term Interest Rates

Date	US DJIA	P / E	Comments	CAGR Return from Bottom till it Makes New High	Subsequent 5-Year Return Once Crosses Above Previous High
Jan-06	103	19.9	Bull Market Top		
Dec-07	58	10.6	Bear Market Bottom		
Aug-19	107	12.8	Above previous high 162 months	4.4%	-3.4%
Jun-21	64	4.9	Bear Market Bottom		
Nov-24	110	3.8	Above previous high 63 months	10.8%	19.8%
Sep-29	381	32.9	Bull Market Top		
Nov-32	41	5.8	Bear Market Bottom		
Nov-54	385	12.8	Above previous high 264 months	10.6%	7.4%
Dec-68	1050	22.3	Intermediate Top		
Jul-74	600	8.9	Bear Market Bottom		
Feb-83	1080	9.6	Above previous high 182 months	3.9%	13.1%
Jul-00	11500	44.2	Bull Market Top		
Oct-06	11600	26.1	Above previous high 75 months	0.1%	
Jan-08	14200	24.1	Intermediate Top - All Time High		
			<b>Average Return</b>	<b>6.0%</b>	<b>9.2%</b>

Source: Dow Jones

around 4.4per cent to 12.6per cent (average of just 6.0per cent). Hence, the major portion of the returns have not come by investing at bear market bottoms or when the market makes new highs above previous bull market tops but infact investing during the secondary correction which happens after making a new high (or touching / approaching it i.e. the current period in India) or during the later / last leg of the bull market.

Now, let us study this in light of our own BSE Sensex (Table 3). The Sensex made a “bull market top” at 4580 (P/E 61x) in April 1992 (Harshad Mehta scam). The subsequent bear market ensured 57.3per cent erosion in value to 1956 (P/E 24.1x) by April 1993 at

the bear market bottom. However, that does not mean that the new bull market started – it only meant the end of the bear market. However, markets do rally, as have we seen in the last 120 years of US equity market history or the Indian markets from bear market bottoms. The same way, the Sensex rallied by 135per cent from a bear market low of 1956 in April 1993 to an “intermediate top” of 4600 (P/E 35.6x) in February 1994. However, the Sensex then went into hibernation for many years to come and made a new high only in December 1999 (P/E 18.1x) giving meager CAGR returns of 1.3per cent over a 7½ year period. It then went to the bull market top of 6120 (P/E 21.9) by February 2000

before the technology bubble bust. This high of 6120 in February 2000 gave a paltry CAGR return of just 4580 since the previous bull market top of April 1992. Also note, the subsequent 5-year CAGR return since the bull market top of 6120 in April 2000 was a measly 2per cent although the great bull market of 2003-2008 was very much underway. However, if we see the returns from the bottom of “secondary correction” of May 2004 to the “bull market top” of January 2008, then that comes to 400per cent absolute or importantly CAGR return of 54.4per cent. To conclude, the major money in market is not made by investing at “bull market tops” or even at “bear market bottoms” (unless somebody sells after the initial rally from the bear

market bottom to the intermediate top – in the current context from 8040 in March 2009 to 21100 in January 2011), but the major “sustainable long term” return comes from investing in the subsequent secondary correction after the intermediate top has been made to the next bull market top. The rally from the “bear market bottom” (April 2009 – 8050) to the “intermediate top (January 2011 – 21100) is over and the initial more than 100per cent return has come and gone (as was the case in US during the years 1907, 1921, 1932, 1949, 1974, 1982 or in India in the years 1993 or recently 2009). Hence, in the present context, the major money is most likely now to be made by investing close to the current secondary market bottom (say between 15000

**Table 3: India 20 years of Sensex history of Bull Market Tops and Bottoms**

Date	BSE Sensex	P / E	% Increase/ Decline	Comments	CAGR Return Bottom till it Makes New High	Subsequent 5-year Return Once Crosses Above Previous High
Apr-92	4580	61.0		Bull Market Top		
Apr-93	1956	24.1	-57.3%	Bear Market Bottom		
Feb-94	4600	35.6	135.2%	Intermediate Top		
Jun-96	4200	26.8	-8.7%	Intermediate Top		
Aug-97	4580	17.2	9.0%	Intermediate Top		
Apr-98	4400	15.1	-3.9%	Intermediate Top		
Dec-99	5050	18.1	14.8%	Above previous high 92 months	1.3%	5.7%
Feb-00	6120	21.9	21.2%	Bull Market Top	3.7%	2.0%
Jan-04	6250	18.0	2.1%	Above previous high 49 months	0.2%	10.0%
May-04	4240	12.2	-32.2%	Intermediate Bottom		
Jan-08	21206	24.5	400.1%	Bull Market Top	54.4%	0.0%
Mar-09	8050	9.8	-62.0%	Bear Market Bottom		
Jan-11	21100	19.6	162.1%	Intermediate Top		

Source: BSE

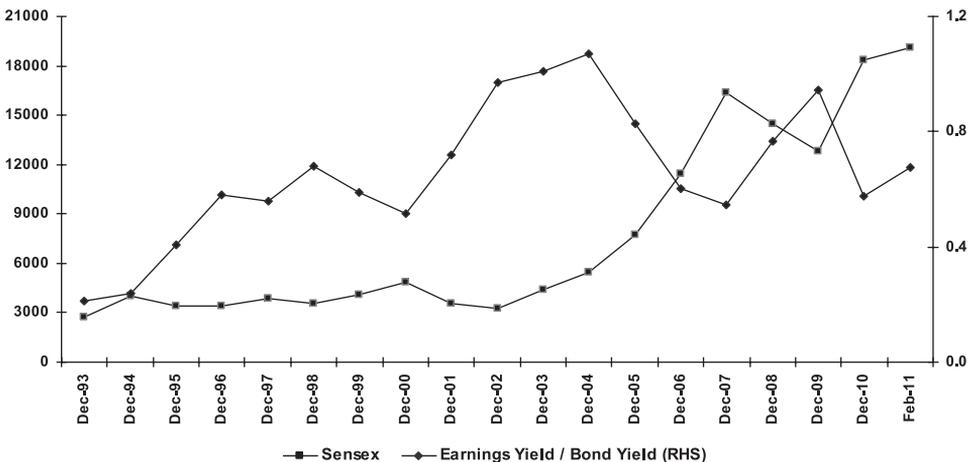
to 16000) to the next bull market top (between 30000 to 50000).

### Interest Rates & Equity Markets

Currently, there is lot of fear amongst investors regarding the high inflation (particularly food and primary articles) and the resultant strict monetary policy, tight liquidity and high interest rates. The yield curve which was very steep with the 0-10 year spread of around 500 bps has today become inverted with the same 0-10 year spread at -200 bps. Today, banks are borrowing at around 10.5per cent bulk deposit rates, add 200 bps of operating expenses and around 300 bps of spread and their average lending rates to corporates would have to be around 15.5per cent. Now, lot of the top corporates must be easily borrowing at almost 300 to 500 bps below this “average rate” and hence the rate for the SME, unsecured retail and auto loans has to be close to 18per cent to 20per cent. I don’t think any business or consumer can survive

at these high interest rates. Hence, the current high interest rates is the biggest cause of concern for equities – reduced bottomline through increase in finance and interest cost, reduced stock valuations to increase in discount rate and compete for the same investable surplus of the investor. Hence, for any meaningful recovery in equities it is a sine quo non that the interest rates have to first stabilize and then soften. Currently, India is going through a mini economic cycle (explained later on). Now, let us concentrate on interest rates and compare it with equity valuations and markets. The best “composite valuation” for the stock and bond markets comes from comparison of the Earnings Yield (opposite of P/E) of the Sensex with the Bond yields (10-year G-Sec Yield). Chart 3 shows the BSE Sensex along with the Earnings Yield / Bond Yield. Kindly note, how at higher Earnings Yield / Bond Yield the equity market bottom out while and lower Earnings Yield / Bond Yield they

Chart 3: BSE Sensex Compared to Earnings Yield / Bond Yield



Source: BSE

become very vulnerable. Currently, Earnings Yield and Bond Yield is around 0.7x as compared to the long term 15-year average of 0.9x. Hence, a reasonable correction in equity markets and corollary to that, softening of interest rates, is expected and will be played out over the next few weeks or months to correct this ratio.

Now, interest rates in India have reached close to those levels where it was at the depth of the financial and credit crisis in the year 2008. However, before we get scared with the current high interest rate and the hype around it, let us understand the economic or business cycle to drive home this point.

### **Interest Rates Peak and Bond Prices Bottom (Idle Asset Class - G-Secs)**

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An economic cycle begins as bond prices bottom out and conversely interest rates peak. This generally occurs after the economy has entered an over heated or high growth phase. The preferred asset class at this stage should be G-Secs. Probably we are currently in this phase.

### **Demand for Credit Declines (Idle Asset Class - G-Secs)**

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The prevailing recessionary (slow down) conditions reduces the demand for credit, as businesses and consumers retrench. Companies find themselves in some kind of cash squeeze at this stage of the cycle. Sales start dipping sharply, inventories pile up, companies respond by cutting production and not ordering further since they are stuck with

inventory. A cash-flow deficit results because of falling / dwindling sales which results in short term borrowings at high costs. This is one reason why interest rates witness a parabolic rise at the end of the cycle (which we are seeing currently). This is like a forced corporate borrowing and that is the reason interest rates generally peak with such kind of a spike.

### **Central Bank Comes into Action (Idle Asset Class - G-Secs & Corporate Bonds)**

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Once, interest rates witness a parabolic rise, economic growth slows down, corporate profits start dwindling, consumers cut down on spending etc. The Central Bank then increases money supply, cuts interest rates, frames new easy rules for borrowing and lending which is what we are witnessing across the developed markets currently. This results in lower interest rates at the shorter end and a steeper yield curve. If the market feels that inflation will return soon than the yield curve will remain steep and investors will forego higher but risky long term yields in favour of lesser but safer short-term yields (This was the situation in India couple of quarters back with 1-10 year yield spread at 500 bps while currently it is flat to inverted yield curve with zero or negative spread). This period is all about the expectations of the recovery and inflation. The spread (difference between equivalent credit risk free G-Secs and Bonds) is generally high at this point of time.

## Equities Bottom Out (Idle Asset Class - Equities)

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Once interest rates have peaked (bond prices bottomed out) its only a matter of time before which equities will hit the bottom. Once the market believes that interest rates have indeed bottomed out then stocks will be accumulated in anticipation of a recovery. During recession companies are generally more aggressive in cutting costs and lowering their break even levels. Therefore the recovery in equities is much greater and the initial rally from lows might be very explosive. One clue of whether the initial recovery rally will be above or below average might be the time lag between the low in bond yields and the recovery in stocks. Generally speaking, the longer the lag, the greater is the implied severity and duration of the recession. For example, in the US, in 1877, the lag was 4 years and it was followed by doubling of stock prices. In 1920 and 1982, the bottom in bonds and stocks was separated by about one year, and both the periods were associated by longer than average bull market in equities. The 1920 period was followed by the “roaring twenties” which led to the great depression in 1929 while the 1982 (kindly note that this year marked the end of the near 50 years long “primary” bear market in US bonds during which period long term US Treasuries had moved up from 2.03per cent in April 1946 to 15.1per cent in October 1981) the bull market lasted almost 18 years upto 2000. One thing we have to remember is that the spreads between G-Secs and corporates have to narrow i.e. the borrowing costs

for businesses have to come down to lay down the roots of a new bull market in equities; just reduction in G-Secs is not enough although that is the beginning.

## Commodities Bottom Out (Idle Asset Class Cyclical and Commodity Stocks / Commodities)

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Now bonds have risen and stocks are rising in the economic cycle but commodities, particularly industrial commodities, might still be in a bear market. Mostly, the price low occurs during the terminal phase of the recession, but even so, commodities usually remain in wide trading range and only embark on a sustainable advance once the recovery is underway. The final peak in commodity prices develops under a cloud of speculative froth as both individuals and companies try to cash in on the boom. That lays down the roots of the next economic downturn, increase in interest rates and so forth.

## Conclusion

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Major money in the market is not made by investing at “bull market tops” or even at “bear market bottoms” but the major return comes from investing in the subsequent “secondary correction” after the “intermediate top” has been made to the next bull market top. (In the current context, would come close to the end of the current secondary correction at between 15000 to 16000 on Sensex).

Its always wise to look at composite valuation (Earnings Yield / Bond Yield) of equities compared with interest rates

since there is no other single variable which affects equity prices as much as interest rates do.

The current “secondary equity correction” in India and other emerging markets like China is similar to that as in the US during 1982 (high commodity inflation when the economy is growing fast) as compared to the

years 1921, 1932, 1949 which were led by deflation and falling prices.

Its wise as an investor to position in the right asset class so as to make the maximum of the economic cycle – remember when one asset class is in a bear market most probably there is some other asset class which is in a bull market.

## Appendix

**Exhibit VII: Major Market Levels of US DJIA Since Inception  
– 115 Year History and Future**

Year	DJIA	Q Ratio*	Returns	Comments
1896	41			Inception
1905	98		139%	Multi Year High
1907	48		-51%	Bear Market Bottom
1919	110		129%	Bull Market Top
1921	64	0.28	-42%	Great Bear Market Bottom
1929	381		495%	Bull Market Top
1932	41	0.30	-89%	Great Bear Market Bottom
1937	190		363%	Bull Market Top
1938	92		-52%	Multi Year Low
1942	87		-5%	Multi Year Low
1946	211		143%	Multi Year High
1949	150	0.35	-29%	Great Bear Market Bottom
1968	1050		600%	Bull Market Top
1974	600	0.35	-43%	Bear Market Bottom
1981	1000		67%	Multi Year High
1982	769	0.27	-23%	Great Bear Market Bottom
2000	11500		1395%	Bull Market Top
2007	14198		10%	Multi Year High
2009 to 2012	6000 to 8000			Great Bear Market Bottom

Source: Dow Jones & Co.

\*Ratio of the Price to the Replacement Value of Assets



Globally, while the outlook for recovery in advanced economies has improved, concerns persist over the durability of the momentum. EMEs face the risk of inflation from potential overheating and hardening of commodity prices. On the domestic front robust broad-based growth puts the economy back on its earlier high growth trajectory but sectoral imbalances pose risks to inflation. Whereas, India's export growth has remained strong, its current account deficit widened significantly reflecting larger trade deficit and subdued net invisibles surplus and would necessitate larger and stable long-term capital flows to limit risks to medium-term sustainability. It is in this backdrop, a brief review of the Indian economy of the third quarter of 2010-11 being made to capture some relevant issues on the present scenario. The analysis is organised in three different sections. The first provides an overview of the domestic macroeconomic development while the second highlights some recent developments on the industrial front. Finally, the third section concludes the analysis.

## MACROECONOMIC DEVELOPMENTS:

### I. An Overview:

- The first half GDP growth suggests return to the high growth path (Table 1).

**Table 1: Sectoral Growth Rates of GDP (2004-05 prices)**

(Per cent)

Item	2008-09@	2009-10 #	2009-10				2010-11		2009-10	2010-11
			Q1	Q2	Q3	Q4	Q1	Q2	H1	H1
1	2	3	4	5	6	7	8	9	10	11
1. Agriculture & allied activities	1.6	0.2	1.9	0.9	-1.8	0.7	2.5	4.4	1.0	3.8
2. Industry	3.1	10.4	4.6	8.5	12.3	15.1	11.7	9.0	6.5	10.3
2.1 Mining & quarrying	1.6	10.6	8.2	10.1	9.6	14.0	8.4	8.0	9.1	8.2
2.2 Manufacturing	3.2	10.8	3.8	8.4	13.8	16.3	13.0	9.8	6.1	11.3
2.3 Electricity, gas & water supply	3.9	6.5	6.4	7.7	4.7	7.1	6.2	3.4	7.1	4.8
3. Services	9.3	8.3	8.0	10.2	7.3	8.5	9.4	9.7	9.1	9.6
3.1 Construction	5.9	6.5	8.4	8.3	8.1	8.7	10.3	8.8	8.4	9.6
3.2 Trade, hotels, restaurants, transport, storage & communication, etc.	7.6	9.3	5.6	8.2	10.2	12.4	10.9	12.1	6.9	11.5
3.3 Financing, insurance, real estate & business services	10.1	9.7	11.7	11.3	7.9	7.9	7.9	8.3	11.5	8.1
3.4 Community, social & personal services	13.9	5.6	7.6	14.0	0.8	1.6	7.9	7.3	11.0	7.6
4. GDP at factor cost	6.7	7.4	6.3	8.7	6.5	8.6	8.9	8.9	7.5	8.9

@: Quick Estimates. #: Revised Estimates.

Source: Central Statistics Office.

- During the second quarter of 2010-11 employment growth situations improved as compared to the previous quarter as well as the corresponding quarter of last year (Table 2).

**Table 2: Changes in Estimated Employment**

(in '000s)

Industry/ Group		Mar 2010 over Dec 2009	Jun 2010 over Mar 2009	Sep 2010 over Jun 2010	Sep 2010 over Sep 2009
1		2	3	4	5
1.	Textiles including apparels	-119	-63	245	79
2.	Leather	0	21	4	34
3.	Metals	4	45	27	99
4.	Automobiles	29	51	29	115
5.	Gems and jewellery	24	4	4	39
6.	Transport	-2	-21	13	-12
7.	IT/BPO	129	129	108	936
8.	Handloom/ Powerloom	-5	-3	6	7
<b>Overall</b>		<b>61</b>	<b>162</b>	<b>435</b>	<b>1296</b>

Source: Eighth Quarterly Quick Employment Survey, July-September 2010: Ministry of Labour and Employment, Labour Bureau, Gol

- Service sector, which has the dominant share in GDP, during Q2 of 2010-11 showed gradual acceleration over the previous three quarters (Table 3).

**Table 3: Indicators of Services Sector Activity**

(Growth in per cent)

Services Sector Indicators	2008-09	2009-10	Apr-Oct 2009-10	Apr-Oct 2010-11
1	2	3	4	5
Tourist arrivals \$	-3.3	3.5	0.2	8.5
Commercial vehicles production \$	-24.0	35.9	15.1	41.3
Cement*	7.2	10.5	11.0	4.1
Steel*	1.6	4.9	2.9	6.9
Railway revenue earning freight traffic \$	4.9	6.6	8.8	7.7
Cell phone connections	80.9	47.3	49.5	26.6
Cargo handled at major ports	2.2	5.7	3.6	1.7
Civil aviation				
Export cargo handled	3.4	10.4	5.2	20.5
Import cargo handled	-5.7	7.9	-6.9	27.4
Passengers handled at international terminals	3.8	5.7	2.7	12.7
Passengers handled at domestic terminals	-12.1	14.5	8.7	14.8

\$: Data pertain to April-December. \*: Data pertain to April-November

Source: Ministry of Tourism; Ministry of Statistics and Programme Implementation and Society of Indian Automobile Manufacturers (SIAM).

## II. Aggregate Demand:

- Private consumption expenditure and gross capital formation emerge as the key growth drivers. Lead indicators of private demand, such as corporate sales, capital expenditure plans, non-oil imports and credit demand point to sustained momentum in growth. Even though global uncertainty remains a downside risk to the growth process.
- Government final consumption expenditure continued to grow at a robust pace but showed noticeable slackening relative to higher growth of last year, reflecting the impact of the resumption of the fiscal consolidation process (Table 4).

**Table 4: Expenditure Side GDP (2004-05 Prices)**

Item	2008-09@	2009-10#	2009-10				2010-11		2009-10	2010-11
			Q1	Q2	Q3	Q4	Q1	Q2	H1	H1
1	2	3	4	5	6	7	8	9	10	11
<b>Growth Rates</b>										
Real GDP at market prices	5.1	7.7	5.6	6.6	7.3	11.2	10.3	10.6	6.1	10.4
Total Consumption Expenditure	8.3	5.3	5.9	9.8	4.8	2.6	8.0	9.3	7.8	8.7
(i) Private	6.8	4.3	4.3	6.7	5.3	2.6	7.8	9.3	5.5	8.6
(ii) Government	16.7	10.5	15.4	30.2	2.5	2.1	9.0	9.2	22.4	9.1
Gross Fixed Capital Formation	4.0	7.2	3.1	4.0	8.8	17.7	19.0	11.1	3.6	14.9
Change in Stocks	-61.2	5.9	-0.8	3.5	8.7	11.1	15.3	12.4	1.4	13.8
Net Exports	40.2	-9.7	13.2	-7.6	-0.3	-113.4	12.2	-2.9	0.1	3.4
<b>Relative Shares</b>										
Total Final Consumption Expenditure	70.9	69.4	73.1	72.6	73.4	62.3	71.6	71.7	72.8	71.6
(i) Private	59.5	57.6	61.6	61.3	60.4	51.1	60.3	60.6	61.4	60.4
(ii) Government	11.5	11.8	11.4	11.3	13.1	11.2	11.3	11.2	11.4	11.2
Gross Fixed Capital Formation	32.9	32.8	32.4	34.3	31.9	34.6	35.0	34.4	33.4	34.7
Change in Stocks	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.3	1.3
Net Exports	-6.1	-5.1	-5.7	-7.8	-6.7	0.4	-5.8	-6.8	-6.7	-6.3
Memo:										(₹ crore)
Real GDP at market prices	4,465,360	4,807,222	1,085,993	1,108,537	1,242,858	1,339,454	1,197,587	1,225,554	2,194,530	2,423,141

@: Quick Estimates. #: Revised Estimates.

Note : As only major items are included in the table, data will not add up to 100.

Source: Central Statistics Office.

- The composition of government expenditure has shifted towards capital expenditure. The progress in Central Government finances during 2010-11 (April-November) shows a lower growth in expenditure as compared to 2009-10, along with strong growth observed in tax and non-tax revenues. Consequently, revenue deficit (RD) and gross fiscal deficit (GFD) during

2010-11 (April-November) were substantially lower in absolute terms and as proportions of budget estimates, than those during the corresponding period of the previous year (Table 5).

**Table 5 : Central Government Finances: April-November**

Item	Amount (Rs. crore)		Percentage to Budget Estimates for		Growth Rate (Per cent)	
	2009-10	2010-11	2009-10	2010-11	2009-10	2010-11
1	2	3	4	5	6	7
1. Revenue receipts	307,125	476,716	50.0	69.9	-2.5	55.2
i) Tax revenue (Net)	232,873	296,634	49.1	55.5	-8.2	27.4
ii) Non-tax revenue	74,252	180,082	52.9	121.6	20.9	142.5
2. Non-debt capital receipts	8,326	27,449	155.8	60.8	215.4	229.7
3. Non-plan expenditure	447,995	479,771	64.4	65.2	25.1	7.1
<i>of which:</i>						
i) Interest payments	119,504	134,544	53.0	54.1	7.0	12.6
ii) Defence	78,955	86,404	55.7	58.6	50.2	9.4
iii) Major subsidies	90,766	90,137	85.6	82.6	-8.1	-0.7
4. Plan expenditure	173,677	210,916	53.4	56.5	27.6	21.4
5. Revenue expenditure	565,027	616,874	63.0	64.3	23.8	9.2
6. Capital expenditure	56,645	73,813	45.8	49.2	49.9	30.3
7. Total expenditure	621,672	690,687	60.9	62.3	25.8	11.1
8. Revenue deficit	257,902	140,158	91.2	50.7	82.4	-45.7
9. Gross fiscal deficit	306,221	186,522	76.4	48.9	73.5	-39.1
10. Gross primary deficit	186,717	51,978	106.4	39.2	188.0	-72.2

Source: Controller General of Accounts, Ministry of Finance.

- After witnessing deterioration in the previous two years, consolidated revenue deficit and gross fiscal deficit of State Governments are estimated to fall in 2010-11 (BE). Combined finances of the Central and State Governments budgeted for 2010-11 indicate that the key deficit indicators as per cent of GDP would moderate compared to the elevated levels of 2009-10 (Table 6).

**Table 6: Key Fiscal Indicators**

(Per cent to GDP)

Year	Primary Deficit	Revenue Deficit	Gross Fiscal Deficit	Outstanding Liabilities*
1	2	3	4	5
<b>Centre</b>				
2008-09	2.6	4.5	6.0	59.2
2009-10 RE	3.2	5.3	6.7	58.2
2010-11 BE	1.9	4.0	5.5	57.8
<b>States #</b>				
2008-09	0.6	-0.2	2.4	26.2
2009-10 RE	1.6	0.8	3.4	26.2
2010-11 BE	1.0	0.4	2.9	25.8
<b>Combined</b>				
2008-09	3.4	4.3	8.5	74.5
2009-10 RE	4.8	6.0	10.0	74.3
2010-11 BE	3.0	4.4	8.3	74.3

RE : Revised Estimates. BE: Budget Estimates.

\* : Includes external liabilities at current rates based on the Report, Government Debt Status and Road Ahead, Ministry of Finance, Government of India, November 2010

# : Data pertain to 27 State Governments.

Note : Negative sign indicates surplus.

- Corporate sales growth remained high suggesting buoyancy in demand. The private corporate sector contributed to the robust economic activity, and in turn, benefited from strong sales growth during the second quarter of 2010-11 (Table 7).

**Table 7: Private Corporate Sector - Financial Performance**

(Growth rates/ratios in per cent)

Item	2008-09				2009-10				2010-11	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
1	2	3	4	5	6	7	8	9	10	11
No. of companies	2500	2386	2486	2561	2530	2531	2562	2565	2546	2586
Sales	29.3	31.8	9.5	1.9	-0.9	0.1	22.5	29.1	24.2	18.7
Other income*	-8.4	-0.6	-4.8	39.4	50.2	6.0	7.4	10.3	-21.2	58.5
Expenditure	33.5	37.5	12.6	-0.5	-4.4	-2.5	20.6	30.7	29.0	19.9
Depreciation provision	15.3	16.5	16.8	19.6	21.5	20.7	21.6	20.1	19.9	16.8
Gross profits (PBIT)	11.9	8.7	-26.7	-8.8	5.8	10.9	60.0	36.7	8.2	10.3
Interest payments	58.1	85.3	62.9	36.5	3.7	-1.0	-12.3	-2.9	26.9	5.9
Profits after tax	6.9	-2.6	-53.4	-19.9	5.5	12.0	99.3	44.0	2.4	10.8
<b>Select Ratios</b>										
Change in stock-in-trade to sales #	2.9	2.2	-1.7	-1.8	0.6	2.3	0.8	1.1	2.9	1.0
Gross profits to sales	14.5	13.5	11.0	13.7	15.7	14.9	14.3	14.6	13.9	13.6
Profits after tax to sales	9.7	8.6	5.3	8.1	10.2	9.4	8.8	9.0	8.6	8.5
Interest to sales	2.4	2.9	3.8	3.2	2.8	3.1	2.7	2.4	2.9	2.7
Interest to gross profits	16.8	21.5	34.6	23.3	18.0	20.5	19.1	16.6	21.1	19.9
Interest coverage (times)	6.0	4.6	2.9	4.3	5.6	4.9	5.2	6.0	4.7	5.0

# : For companies reporting this item explicitly.

\* : Other income excludes extraordinary income/expenditure, if reported explicitly.

Note: Growth rates are percentage changes in the level for the period under reference over the corresponding period of the previous year for common set of companies.

### III. The External Economy:

- Though the growth of exports has outpaced imports growth during April-December 2010, the trade deficit has widened in absolute terms (Table 8). In Q3 of 2010-11, with export growth significantly exceeding the import growth, the trade balance improved relative to the first two quarters.

**Table 8 : India's Merchandise Trade**

(US\$ billion)

Item	April-March		April-December			
	2009-10 (P)		2009-10 (R)		2010-11 (P)	
	Absolute	Growth (%)	Absolute	Growth (%)	Absolute	Growth (%)
1	2	3	4	5	6	7
Exports	178.7	-3.6	127.2	-13.8	164.7	29.5
Oil	28.1	2.1	19.5	-16.8	..	..
Non-oil	150.5	-4.6	107.7	-13.2	..	..
Imports	286.8	-5.6	206.2	-18.8	247.1	19.0
Oil	87.1	-7.0	61.6	-24.0	64.8*	21.4
Non-oil	199.7	-4.9	144.6	-16.3	157.1*	25.0
<b>Trade Balance</b>	<b>-108.2</b>	<b>-8.6</b>	<b>-79.0</b>	<b>-25.6</b>	<b>-82.4</b>	<b>4.3</b>
<b>Non-Oil Trade Balance</b>	<b>-49.2</b>	<b>-5.9</b>	<b>-36.9</b>	<b>-24.1</b>	<b>..</b>	<b>..</b>

\*: Figures pertain to April-November. R: Revised. P: Provisional. .. Not Available.

Source: Directorate General of Commercial Intelligence and Statistics.

- The rise in trade deficit (on BoP basis) led to a further widening of the current account deficit during the second quarter of 2010-11, on the back of stagnation in net invisibles surplus, partly due to the continuing growth imbalance between India and the rest of the world (Table 9).

**Table 9: India's Balance of Payments**

(US \$ Billion)

Item	2009-10	2009-10(PR)			2010-11		
		Q1	Q2	Q3	Q4	Q1 (PR)	Q2(P)
1	2	3	4	5	6	7	8
1. Exports	182.2	39.2	43.4	47.2	52.5	56.3	54.3
2. Imports	300.6	65.4	73.0	78.1	84.1	87.8	89.6
3. Trade Balance (1-2)	-118.4	-26.3	-29.6	-30.9	-31.6	-31.6	-35.4
4. Net Invisibles	80.0	22.1	20.4	18.7	18.8	19.4	19.6
5. Current Account Balance (3+4)	-38.4	-4.2	-9.2	-12.2	-12.8	-12.1	-15.8
6. Gross Capital Inflows	345.7	77.8	96.0	81.6	90.3	95.0	112.8
7. Gross Capital Outflows	292.3	74.2	76.7	66.9	74.5	78.8	92.3
8. Net Capital Account (6-7)	53.4	3.7	19.3	14.6	15.8	16.2	20.5
9. Overall Balance (5+8)#	13.4	0.1	9.4	1.8	2.1	3.7	3.3

# : Overall balance also includes errors and omissions apart from items 5 & 8

PR: Partially Revised P: Preliminary

- The moderation in net invisibles surplus during the quarter relative to the corresponding quarter of the previous year was mainly on account of decline in net investment income and private transfers, which offset the increase in net services (Table 10).

**Table 10: Net Invisibles**

(US\$ Billion)

Item	July- September	April- September	
	2010-11 (P)	2009-10 (PR)	2010-11 (P)
1	3	4	5
1. Services	10.5	19.1	19.5
<i>of which</i>			
Travel	0.6	0.6	1.3
Transportation	-0.2	0.1	-0.2
Software Services	12.2	21.4	24.3
Business Services	-1.0	-2.8	-2.1
Financial Services	-0.1	-0.1	-0.3
2. Transfers (Private)	13.0	26.7	26.1
3. Income	-3.9	-3.3	-6.5
Investment Income	-3.7	-3.0	-6.1
Compensation of Employees	-0.2	-0.3	-0.5
<b>Total (1+2+3)</b>	<b>19.6</b>	<b>42.5</b>	<b>39.1</b>

- The buoyancy in capital inflows continued during the second quarter of 2010-11 driven by large inflows under FII investments along with steady inflows under short-term trade credits and external commercial borrowings (ECBs) (Table 11).

**Table 11: Net Capital Flows**

US\$ billion

Item	July-September	April-September	
	2010-11 (P)	2009-10 (PR)	2010-11 (P)
1	3	4	5
Net Capital Flows	20.5	23.0	36.7
<i>of which</i>			
1. Foreign Direct Investment (FDI)	2.5	12.3	5.3
Inward FDI	6.7	19.8	12.6
Outward FDI	4.2	7.4	7.2
2. Portfolio Investment	19.2	17.9	23.8
FIIs	18.8	15.3	22.3
ADR/GDRs	0.5	2.7	1.6
3. External Assistance	0.6	1.0	3.0
4. ECBs	3.7	0.7	6.0
5. NRI Deposits	1.0	2.9	2.2
6. Short Term Trade Credits	2.6	0.0	6.7

PR: Partially Revised

P: Preliminary

- External debt stock as at end-September 2010 increased by 12.8 per cent to US\$ 295.8 billion from US\$ 262.3 billion at end-March 2010, with ECBs and short-term debt contributing around 71 per cent of the total increase (Table 12).

**Table 12: India's External Debt**

US \$ billion

Item	Outstanding			Variation	
	End-March 2009	End-March 2010 PR	End-September 2010 P	September 2010 over March 2010	
				Amount	Percent
1	2	3	4	5	6
1. Multilateral	39.5	42.8	46.8	3.9	9.1
2. Bilateral	20.6	22.6	24.7	2.1	9.2
3. IMF	1.0	6.0	6.2	0.1	2.5
4. Trade Credit (above 1 year)	14.5	16.9	18.5	1.6	9.3
5. ECBs	62.5	71.9	82.2	10.3	14.3
6. NRI Deposits	41.6	47.9	49.9	2.0	4.2
7. Rupee Debt	1.5	1.7	1.6	0.0	-1.0
<b>8. Long Term Debt (1 to 7)</b>	<b>181.2</b>	<b>209.8</b>	<b>229.8</b>	<b>20.0</b>	<b>9.5</b>
9. Short Term Debt	43.4	52.5	66.0	13.5	25.8
<b>Total Debt (8+9)</b>	<b>224.6</b>	<b>262.3</b>	<b>295.8</b>	<b>33.5</b>	<b>12.8</b>
Total Debt/GDP (in percent)	20.5	19.0			

PR: Partially Revised P: Provisional

Source: Ministry of Finance, Government of India and Reserve Bank of India

- Reflecting the dominance of debt creating flows during April-September 2010 (almost 50 per cent compared to the average share of about 44 per cent during the last one decade), debt sustainability indicators witnessed some deterioration at end-September 2010.

## IV. Financial Markets

- Frequent re-pricing of risks in the international financial markets reflected persisting uncertainties. Increased capital inflows into the EMEs exerted upward pressures on their currencies and equity prices (Table 13).

**Table 13 : Currency and Stock Price Movement in EMEs**

(Per cent)

Appreciation (+)/Depreciation (-) of Currency per US Dollar				Stock Price Variations			
Items	End- March 2009 @	End- March 2010 @	End- Dec 2010*	Items	End- March 2009 @	End- March 2010 @	End- Dec 2010*
1	2	3	4	5	6	7	8
Japanese Yen	0.7	5.9	15.2	Indonesia (Jakarta Composite)	-41.4	93.7	33.3
Chinese Renminbi	2.6	0.1	3.3				
Russian Ruble	-30.8	15.4	-3.7	Brazil (Bovespa)	-32.9	71.9	-1.5
Turkish Lira	-20.5	9.7	-1.7	Thailand (SET Composite)	-47.2	82.6	31.1
Indian Rupee	-20.9	12.9	0.5	India (BSE Sensex)	-37.9	80.5	17.0
Indonesian Rupiah	-21.1	28.6	1.2	South Korea (KOSPI)	-29.2	40.3	21.2
Malaysian Ringgit	-12.4	11.8	6.5	China (Shanghai Composite)	-31.7	31.0	-9.7
South Korean Won	-28.4	22.3	0.5				
Thai Baht	-11.4	9.8	7.6	Taiwan (Taiwan Index)	-39.2	52.0	13.3
Argentine Peso	-14.8	-4.1	-2.5	Russia (RTS)	-66.4	128.0	12.6
Brazilian Real	-24.6	30.4	7.2	Malaysia (KLSI)	-30.1	51.3	15.0
Mexican Peso	-24.9	14.6	0.2	Singapore (Straits Times)	-43.5	69.9	10.5

@: Year-on-year variation. \* Variation over End-March.

Source: Bloomberg, IFS, IMF

- The rupee appreciated against major currencies during the beginning of the third quarter of 2010-11, mainly due to strong FII inflows, but corrected subsequently, in line with the movement of the US dollar vis-a-vis other major currencies and moderation of FII inflows (Table 14).

**Table 14: Domestic Financial Markets at a Glance**

Year / Month	Money Market			Bond Market				Forex Market			Stock Market		
	Call Money daily turnover (Rs. Crore)	Call rates* (per cent)	Avg daily LAF (Rs. Crore)	G-Sec		Corporate Bond		Daily Inter bank turnover (US \$ mn)	Ex- change rate@ (Rs./ US\$)	RBI's net purchase (+)/ sale (-) (US \$ Million)	Daily NSE turnover (Rs. Crore)	CNX Nifty **	BSE Sensex **
Daily Turn-over ^ (Rs. Crore)				10- year yield (per cent)	Daily Turn-over (Rs. Crore)	Yield - AAA 5 - Yr Bonds							
1	2	3	4	5	6	7	8	9	10	11	12	13	14
2008-09	22,436	7.06	2,885	10,879	7.54	610	10.07	34,812	45.92	-34,922+	11,325	3,713	12,303
2009-10	15,924	3.24	100,015	13,936	7.23	1,644	8.23	30,107	47.42	-2,505+	16,959	4,658	15,585
Oct-09	15,776	3.17	101,675	12,567	7.33	1,474	8.50	28,402	46.72	75	18,148	4,994	16,826
Nov-09	13,516	3.19	101,719	17,281	7.33	1,571	8.14	27,599	46.57	-36	16,224	4,954	16,684
Dec-09	13,302	3.24	68,522	14,110	7.57	1,457	8.23	27,439	46.63	-25	13,948	5,100	17,090
Jan-10	12,822	3.23	81,027	12,614	7.62	2,769	8.32	32,833	45.96	0	17,813	5,156	17,260
Feb-10	13,618	3.17	78,661	12,535	7.79	1,988	8.53	34,040	46.33	0	12,257	4,840	16,184
Mar-10	17,624	3.51	37,640	8,544	7.94	3,196	8.61	32,755	45.50	155	13,631	5,178	17,303
Apr-10	16,374	3.49	57,150	14,242	8.01	3,342	8.37	36,821	44.50	0	13,828	5,295	19,679
May-10	16,786	3.83	32,798	24,225	7.56	3,305	8.15	40,243	45.81	0	12,937	5,053	16,845
Jun-10	14,258	5.16	-47,347	21,300	7.59	2,473	8.21	36,953	46.57	110	13,005	5,188	17,300
Jul-10	18,954	5.54	-46,653	13,691	7.69	2,899	8.27	34,252	46.84	0	12,661	5,360	17,848
Aug-10	15,916	5.17	-1,048	16,919	7.93	2,291	8.52	36,528	46.57	0	14,182	5,457	18,177
Sep-10	17,212	5.50	-24,155	16,215	7.96	2,508	8.52	37,574	46.06	260	15,708	5,811	19,353
Oct-10	17,840	6.39	-61,658	14,029	7.68	2,299	8.58	49880 P	44.41	450	17,165	6,069	20,250
Nov-10	17,730	6.81	-99,311	10,193	8.03	1,843	8.64	44104 P	45.02	870	17,333	6,055	20,126
Dec-10	18,872	6.67	-120,495	9,849	8.03	1,723	8.89	34894 P	45.16	-	13,440	5,971	19,228

\* : Average of daily weighted call money rates.

^ : Average of daily outright turnover in Central Government dated securities.

@ : Average of closing rates. \*\*: Average of daily closing indices.

† : Cumulative for the financial year. P: Provisional. -: Not available. LAF: Liquidity Adjustment Facility.

NSE : National Stock Exchange of India Limited.

Note : In column 4, (-)ve indicates injection of liquidity, while (+)ve indicates absorption of liquidity.

- Secondary market yields on CDs and CPs witnessed higher increases by the end of the third quarter as compared to the overnight rates as well as the Treasury Bills of comparable maturity (Table 15).

**Table 15 : Activity in Money Market Segments**

(₹ crore)

Year/ Month	Average Daily Volume (One Leg)			Commercial Paper		Certificates of Deposit	
	Call Money	Market Repo	CBLO	Outstanding	WADR (%)	Outstanding	WADR (%)
1	2	3	4	5	6	7	8
Sep-09	8,059	27,978	62,388	79,228	5.04	216,691	5.30
Oct-09	7,888	23,444	58,313	98,835	5.06	227,227	4.70
Nov-09	6,758	22,529	54,875	103,915	5.17	245,101	4.86
Dec-09	6,651	20,500	55,338	90,305	5.40	248,440	4.92
Jan-10	6,411	14,656	50,571	91,564	4.80	282,284	4.65
Feb-10	6,809	19,821	636,445	97,000	4.99	309,390	6.15
Mar-10	8,812	19,150	60,006	75,506	6.29	341,054	6.07
Apr-10	8,187	20,319	50,891	98,769	5.37	336,807	5.56
May-10	8,393	17,610	42,274	109,039	6.85	340,343	5.17
Jun-10	7,129	9,481	31,113	99,792	6.82	321,589	6.37
Jul-10	9,477	12,011	29,102	112,704	6.93	324,810	6.69
Aug-10	7,958	15,553	45,181	126,549	7.32	341,616	7.17
Sep-10	8,606	15,927	53,223	112,003	7.82	337,322	7.34
Oct-10	8,920	14,401	43,831	149,620	12.15	343,353	7.67
Nov-10	8,865	9,967	32,961	117,793	12.22	332,982	8.16
Dec-10	9,436	12,989	43,784	102156@	12.52	328566#	9.01

@ : As on December 15, 2010. #: As on December 17, 2010

CBLO : Collateralized Borrowing and Lending Obligation. WADR: Weighted Average Discount Rate.

WAEIR : Weighted Average Effective Interest Rate

- Leasing and finance and manufacturing companies continued to be the major issuers of CPs (Table 16).

**Table 16 : Major Issuers of Commercial Paper**

(₹ crore)

End of Period	Leasing and Finance		Manufacturing		Financial Institutions		Total Outstanding
	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)	
1	2	3	4	5	6	7	8
Mar-09	27,183	62	12,738	29	4,250	10	44,171
Jun-09	34,437	50	23,454	34	10,830	16	68,721
Sep-09	31,648	40	31,509	40	16,071	20	79,228
Dec-09	36,027	40	42,443	47	11,835	13	90,305
Mar-10	39,477	52	22,344	30	13,685	18	75,506
Jun-10	42,572	43	43,330	43	13,890	14	99,792
Aug-10	57,161	45	55,933	44	13,455	11	126,549
Sep-10	58,098	52	40,485	36	13,420	12	112,003
Oct-10	80,305	54	54,894	37	14,421	9	149,620
Nov-10	58,871	50	45,457	39	13,465	11	117,793
Dec-10	53,329	52	35,767	35	13,060	13	102156@

@: As on Dec 15, 2010

- The yield on Treasury Bills in the primary market firmed up during the third quarter of 2010-11 (Table 17)

**Table 17 : Treasury Bills in the Primary Market**

Year / Month	Notified Amount (₹ crore)	Average Implicit Yield at Minimum Cut-off Price (Per cent)		
		91-day	182-day	364-day
1	2	3	4	5
2008-09	299,000	7.10	7.22	7.15
2009-10	380,000	3.57	3.99	4.37
2010-11 (up to Jan. 12, 2011)	227,000	5.90	6.18	6.30
Apr-10	36,000	4.14	4.64	5.07
May-10	36,000	4.39	4.76	4.92
Jun-10	12,000	5.29	5.31	5.49
Jul-10	16,000	5.56	5.86	5.99
Aug-10	33,000	6.15	6.41	6.48
Sep-10	13,000	6.14	6.46	6.59
Oct-10	27,500	6.65	6.94	6.97
Nov-10	24,000	6.82	7.20	7.14
Dec-10	19,000	7.14	7.32	7.37

- Both the average maturity of debt issuances and weighted average yield increased during 2010-11 (up to January 19, 2011), as compared with the corresponding period of the previous year (Table 18).

**Table 18: Issuances of Central and State Government Dated Securities**

(Rs. Crore)

Item	2009-10	2009-10*	2010-11*
1	2	3	4
<b>Central Government</b>			
Gross amount raised (₹ crore)	4,18,000	4,03,000	4,06,000
Devolvement on Primary Dealers (₹ crore)	7,219	7,219	5,773
Bid-cover ratio (Range)	1.4-4.3	1.4-4.3	1.4-3.9
Weighted average maturity (years)	11.2	11.15	11.56
Weighted average yield (per cent)	7.23	7.39	7.94
<b>State Governments</b>			
Gross amount raised (₹ crore)	1,31,122	1,00,085	82,464
Cut-off yield	7.04-8.68	7.04-8.49	8.1-8.6
Weighted average yield (per cent)	8.11	8.03	8.37

\*: Up to January 19, 2011

- The scheduled commercial banks (SCBs) raised the deposit rates to step up their deposit mobilization to support the high credit growth (Table 19).

**Table 19 : Deposit and Lending Rates of Banks**

(Per cent)

	Dec-09	Mar-10	Jun-10	Sep-10	Jan-11 @
1	2	3	4	5	6
<b>1. Domestic Deposit Rate</b>					
Public Sector Banks	6.00-7.25	6.00-7.25	6.00-7.25	6.75-7.75	7.00-9.25
Private Sector Banks	6.25-7.50	5.52-7.75	6.25-7.50	6.50-8.25	7.75-9.00
Foreign Banks	2.25-7.75	2.25-8.00	3.00-8.00	3.00-8.00	3.50-8.75
<b>2. BPLR/Base Rate#</b>					
1. Public Sector Banks	11.00-13.50	11.00-13.50	11.00-13.50	7.50-8.25	8.00-9.00
2. Private Sector Banks	12.50-16.75	12.50-16.75	12.50-16.75	7.00-8.75	7.75-9.50
3. Foreign Banks	10.50-16.00	10.50-16.00	10.50-16.00	5.50-9.00	6.25-9.00
<b>3. Actual Lending Rate*</b>					
1. Public Sector Banks	3.25-18.00	3.25-18.00	3.25-18.00	3.50-25.00	–
2. Private Sector Banks	3.50-25.84	3.00-28.00	2.80-26.00	4.00-27.00	–
3. Foreign Banks	3.50-22.00	3.60-23.00	3.60-25.00	2.25-35.98	–

\* : Interest rate on non-export demand and term loans above ₹ 2 lakh excluding lending rates at the extreme five per cent on both sides.

# : Base Rate system replaced BPLR system with effect from July 1, 2010.

@ : As on January 17, 2011

- The Indian equity market regained some strength by the end of the third quarter, in view of strong growth prospects of the Indian economy and expectations of encouraging corporate results (Table 20).

**Table 20 : Key Stock Market Indicators**

Indicator	BSE			NSE		
	2009-10	2009-10 (Apr-Dec)	2010-11 (Apr-Dec)	2009-10	2009-10 (Apr-Dec)	2010-11 (Apr-Dec)
1	2	3	4	5	6	7
1. BSE Sensex/S&PCNX Nifty						
(i) End-period	17528	17465	20509	5249	5201	6135
(ii) Average	15585	15151	18610	4658	4527	5587
2. Coefficient of Variation	11.88	12.6	6.96	11.33	11.9	7.04
3. Price-Earning Ratio (end-period)*	21.32	22.36	23.56	22.33	23.17	24.48
4. Price-Book Value Ratio	3.9	4.2	3.84	3.7	3.65	3.87
5. Market Capitalization to GDP Ratio (per cent)@	98.9	97.6	101.9	96.4	91.5	103

\* : Based on 30 scraps included in the BSE Sensex and 50 scraps included in the S&P CNX Nifty.

@ : As at end-period. Source: Bombay Stock Exchange Ltd. (BSE) and National Stock Exchange of India Ltd. (NSE).

- Resources raised through public issues increased considerably during April-December 2010 as compared to the corresponding period last year (Table 21).

**Table 21 : Resource Mobilization from Capital Market**

(₹ crore)

Category	2009-10 (Apr-Mar)	2009-10 (Apr-Dec)	2010-11 (Apr-Dec)
1	2	3	4
A. Prospectus and Rights Issues*	32,607	20,104	27,697
1. Private Sector (a + b)	25,479	13,301	18,799
a) Financial	326	313	3420
b) Non-financial	25,153	12,988	15,379
2. Public Sector	7128	6,803	9,079
B. Euro Issues	15,967	15,164	8,491
C. Mutual Fund Mobilization (net) @	83,080	141,639	-32164
1. Private Sector	54,928	108,170	-8,949
2. Public Sector #	28,152	33,469	-23,214

\*: Excluding offer for sale. @: Net of redemptions. #: Including UTI Mutual fund.

Source: Mutual Fund data are sourced from SEBI and funds mobilized under Fund of Funds Schemes.

## DEVELOPMENT ON INDUSTRIAL FRONT:

The manufacturing sector, despite being the driver of industry, has not grown significantly over time in terms of its share in the GDP. The share of Indian manufacturing in world manufacturing is also less than 1.4 per cent.

A higher base effect had adverse impact on the industrial growth rate in the Q3 (October-December 2010) and accordingly may moderate the industrial sector's contribution to the Gross Domestic Product (GDP) (Table 22).

**Table 22 : Growth in the IIP and its Major Components**

(per cent)

Period	Mining	Manu- facturing	Electri- city	Basic Goods	Capital Goods	Inter- mediate Goods	Consumer Goods	General
Q1 2008-09	4.0	6.1	2.0	3.3	9.2	3.0	8.7	5.6
Q2 2008-09	3.8	5.6	3.2	4.9	15.2	-1.3	7.0	5.2
Q3 2008-09	2.0	1.3	2.9	2.5	5.7	-5.9	4.8	1.5
Q4 2008-09	0.9	0.8	3.0	0.4	4.0	-3.0	3.2	1.0
Q1 2009-10	6.8	3.6	5.8	6.3	3.5	7.0	-0.3	4.0
Q2 2009-10	9.0	8.7	7.4	5.9	6.7	11.6	9.7	8.6
Q3 2009-10	10.3	14.4	3.8	6.1	22.7	19.4	10.6	13.3
Q4 2009-10	12.9	16.8	7.1	10.3	45.7	17.0	5.2	15.8
Q1 2010-11	10.2	12.6	5.6	6.8	31.9	10.5	9.2	11.9
Q2 2010-11	7.0	9.9	2.1	4.7	18.4	10.8	7.0	9.1
Q3 2010-11	5.8	5.1	6.5	6.8	3.8	6.5	3.7	5.3

Source : Central Statistics Office (CSO).

- The growth has mainly been driven by the capital goods and the consumer durables segments. Despite wide fluctuations, the April–December 2010 cumulative growth rate has remained at a robust 9.1 per cent for the manufacturing sector and 8.6 per cent for the IIP (Table 23).

**Table 23 : Sector-Wise Weighted Contribution**

	Weight	Weight Distribution	
		April-Dec 2009	April-Dec 2010
<b>Sector</b>			
Mining	10.5	0.7	6
Manufacturing	79.4	88	90
Electricity	10.2	5	4
<b>General IIP</b>	100.0	100	100
<b>Use-based</b>			
Basic goods	35.6	20	20
Capital goods	9.3	19	29
Intermediate goods	26.5	37	28
Consumer goods	28.7	24	23
Consumer Durables	5.4	20	21
Consumer Non-durables	23.3	4	2
General IIP	100.0	100	100

Source : Central Statistics Office (CSO).

- During April-December 2010, out of the seventeen industrial groups covered under the manufacturing sector, nine have had higher than 10 per cent cumulative growth rates and three higher than 5 per cent. Only five groups have had less than 5 per cent or negative cumulative growth rates. The poor performance of basic chemicals and chemical products, with an IIP weight of 14 per cent, has contributed significantly to pulling down the IIP (Table 24).

**Table 24 : Growth of Industry Product Groups (at two-digit level)**  
Index of Industrial Production (base 1993-94=100)

Industry Group	Weight	2008-09	2009-10	Apr-Dec (2009-19)	Apr-Dec (2010-11)
Manufacturing	793.6	3.3	11	8.9	9.1
<b>Industrial Groups with Growth Rates Above 10 per cent During April-December 2010-11</b>					
Transport Equipment	39.8	2.4	26.9	18.5	24.5
Other Manufacturing Industries	25.6	3.5	9.2	6.4	22.1
Metal Products	28.1	0.5	11.5	0.2	21.9
Machinery & Equipment	95.7	9	20.6	15.7	12.7
Food Products	90.8	-9.7	-1.5	-6.9	12.4
Leather Products	11.4	-6.9	2.5	1.1	11.4
Rubber, Plastic & Petroleum	57.3	-1.5	15.4	14.5	11
Jute Textiles	5.9	-10	-24.4	-14.1	10.8
Cotton Textiles	55.2	-1.9	5.5	4.1	10.2

Industry Group	Weight	2008-09	2009-10	Apr-Dec (2009-19)	Apr-Dec (2010-11)
<b>Industrial Groups with Growth Rates Below 10 per cent During April-December 2010-11</b>					
Basic Metals	74.5	4	6.5	4.6	8.4
Paper Products	26.5	1.9	3.9	2.1	8
Non-Metallic Mineral Products	44	1.3	9.5	8.1	6.5
Textile Products	25.4	5.8	8.4	10.6	3.7
Basic Chemicals & Chemical Products	140	5.5	8.8	11.3	2
<b>Industrial Groups with Negative Growth Rates During April-December 2010-11</b>					
Wool, Silk & Man-made Textiles	22.6	0	8.1	11.8	-0.6
Beverages & Tobacco Products	23.8	16.2	-0.2	-1	-3.1
Wood Products	27	-9.6	9.7	8.6	-13.8

Source : Central Statistics Office (CSO).

- A comparative study of IIP and Annual Survey of Industries (ASI) data clearly establishes that the downward bias of IIP has considerably increased and this has implications for GDP growth and the share of manufacturing in this growth. Assessment of the growth of registered manufacturing based on the ASI and IIP for the last five years clearly indicates persistence of this continued bias (Table 25).

**Table 25 : Rate of Growth of ASI Manufacturing (1999-2000 prices) and IIP Manufacturing**

	2004-05	2005-06	2006-07	2007-08	2008-09
ASI Output	22.01	9.26	19.72	10.17	8.9
ASI Gross Value Added	17.36	12.79	19.69	14.83	2.8
IIP Manufacturing	9.2	8.9	12.9	9.2	3.3
Difference	8.2	3.3	6.8	5.6	-0.5

Source : Office of the Economic Adviser, Department of Industrial Policy and Promotion (DIPP).

- The growth in net profits followed a downward trend and was very low in Q3 and Q4 of 2008-09. However, during the subsequent quarters, aided by low base and momentum in demand, corporate profits have recovered. But first half results in 2010-11 reveal pressures on net profits on account of higher commodity prices and staff costs and higher interest outgo. With faster increase in total expenditure in relation to sales, the profitability margin has contracted in recent months (Table 26).

**Table 26 : Year-on-Year Growth in Sales and Expenditure of Listed Public Limited Manufacturing Companies in the Private Sector**

Items	2008-09				2009-10				2010-11	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
No. of Companies	1926	1837	1849	1901	1885	1876	1901	1912	1900	1933
<b>Growth Rates in per cent</b>										
Sales	30.1	32.1	6.3	0.1	-2.7	-0.4	28.7	34.9	28.8	21.2
Change in Stock-in-trade	131.9	230.1	a	a	-79.5	0.1	b	b	354	-46.2
Expenditure	34.3	38.8	9.3	-2.9	-6.6	-3.4	26.6	37.5	34.5	22.5
Consumption of Raw Materials	38.1	44	4	-9.6	-14.5	-4.7	35.5	46.6	40.6	21.9
Staff Cost	19.3	17	12.4	7.9	9.9	9.1	12	18.1	18.1	20.4
Power & Fuel	28.8	37.8	21.7	3.1	-1.4	-5.7	1.7	10.6	10.6	15.5
Other Income	-9.5	2.7	14.9	26.8	62.7	10	12.3	42.4	42.4	69.5
Interest Costs	52	69.9	60.5	43.3	8.3	-2.1	-5	1.1	1.1	7.8
Profits after Tax (PAT)	6.9	-4.2	-66.4	-28.3	3.2	17.6	178	69.4	69.4	10.9
<b>Ratio in per cent</b>										
PAT to Sales	8.7	7.6	3.6	6.7	9.2	9	8	8.6	8	8.1

Source : Reserve Bank of India Studies on Corporate Performance based on abridged results of select Companies in the Private Corporate Sector.

Note: a : Numerator is negative; b : Denominator is negative

- The decline in textile fabrics/cloth during the current financial year has been on account of comparatively lower growth rates in the production of mill, power loom and hosiery segments. (Table 27).

**Table 27 : Production of fabrics/cloth (million sq. m)  
April- October**

Sector	2006-07	2007-08	2008-09	2009-10 (P)	2009-10 (P)	2010-11 (P)
Mill Sector	1746	1781	1796	1961	1097	1130
	-5.40%	-2.00%	-0.805	-8.20%	-3.00%	
Handloom	6536	6947	6677	6769	3956	3770
	-7.00%	-6.30%	-3.90%	-1.40%	-1.70%	
Powerloom	32,879	34,725	33,648	36,644	21,699	22,067
	-7.40%	-5.60%	-3.10%	-8.90%	-1.70%	
Hosiery	11,504	11,804	12,077	13,623	7941	8,362
	-10.40%	-2.60%	-2.30%	12.80%	-5.30%	
Others	724	768	768	814	448	476
	-0.06%	-6.10%	0.00%	-5.70%	-6.30%	
Total Cloth Production	53,389	56,025	54,966	59,809	35,141	35,805
	-7.70%	-4.90%	-0.02%	-8.80%	-1.90%	

Source : Office of the Textile Commissioner, Mumbai.

Notes : P is Provisional.

- The domestic production of urea in the year 2009-10 was 211.12 lakh MT, as compared to 199.20 lakh MT in 2008-09. The production of DAP increased sharply in 2009-10 and was at 42.46 lakh MT as compared to 29.93 lakh MT in 2008-09. The estimated production of urea in 2010-11 is projected at 215.37 lakh MT and that of DAP and complexes at 39.58 lakh MT and 91.66 lakh MT respectively (Table 28).

**Table 28 : Production and Import of Fertilizers**

(lakh MT)

Year	Production			Import		
	2008-09	2009-10	2010-11*	2008-09	2009-10	2010-11*
Urea	199.2	211.12	215.37	56.67	52.09	45.83
DAP	29.93	42.46	39.58	61.91	58.89	68.12
Complex Fertilizers	68.48	80.38	91.66			
MOP	Nil	Nil	Nil	56.72	52.86	47.84

Source : Department of Chemicals and Petrochemicals

Note : \* estimated; MT- Metric Tonne

- India ranked as the fourth largest producer of crude steel in the world during January–November 2010, after China, Japan, and the USA as per the World Steel Association. The country has also been the largest sponge iron producer in the world since 2002. Domestic crude steel production grew at a compounded annual growth rate of 8.4 per cent during 2005-06 to 2009-10 (Table 29).

**Table 29 : Production, Consumption, Import and Export of Total Finished Steel and Pig Iron**

(million tonnes)

	Item	2005-06	2006-07	2007-08	2008-09	2009-10	Change (per cent) over 2008-09
Production for Sale	TFS	46.56	52.53	46.07	57.16	59.69	4.4
	PI	4.69	4.93	5.284	6.21	5.73	-7.6
Import	TFS	4.31	4.93	7.03	5.84	7.3	25
	PI	0.03	0.03	0.11	0.08	0.11	38
Export TFS	TFS	4.8	5.24	5.08	4.44	3.24	-27
	PI	0.44	0.71	0.56	0.35	0.28	-21
Real Consumption**	TFS	41.43	46.78	52.12	52.35	56.48	7.9
	PI	4.13	4.33	4.62	5.87	5.46	-6.9

Source : JPC, Ministry of Steel.

Notes : TFS= Total Finished Steel, Both Alloy and Carbon; PI=pig iron;

\*provisional.; \*\* adjusted for stock variation and double counting.

- The net profit of the profit-making Central Public-Sector enterprises (CPSEs) stood at ₹ 108,434.68 crore in 2009-10. The net loss of the loss-making enterprises on the other hand, stood at ₹ 15,842 crore during the same period. The foreign exchange earnings of the CPSEs amounted to ₹ 77,745 crore during 2009-10 and were clearly overtaken by the foreign exchange outgo of ₹ 420,415 crore (Table 30).

**Table 30 : Performance of CPSEs During 2009-10**

(₹ crore)

Sl.No.	Particulars	2009-10	2008-09	%Change over previous year
1.	Investment (long-term loan + equity)	579,920	513,532	12.93
2.	Capital employed (net fixed assets + working capital)	910,120	793,240	14.73
3.	Total turnover	1,235,060	1,271,529	-2.87
4.	Profit of Profit Making CPSEs	108,435	98,488	10.10
5.	Loss of Loss Making CPSEs	15,842	14,621	8.35
6.	Net Worth	660,245	665,686	-0.82
7.	Dividend declared	33,223	25,501	30.28
8.	Corporate tax	119,529	131,583	-9.16
9.	Interest Paid	35,720	39,300	-9.11
10.	Contribution to Central Exchequer	139,828	151,529	-7.72
11.	Foreign Exchange Earnings	77,745	74,206	4.77
12.	Foreign Exchange Outgo	420,415	433,332	-2.98

Source: Department of Public Enterprises.

- On a year-on-year basis, credit growth to industry sharply accelerated to 27.0 per cent in November 2010 from 14.2 per cent in November 2009. It is the infrastructure sector that kept credit growth to industry at the level of 27.0 per cent during the year ended November 2010. Net of infrastructure, year-on-year credit growth to industry was 20.0 per cent in November 2010, compared to 4.6 per cent during the corresponding period of the previous year.
- Industrial credit to micro and small enterprises (MSEs), including service-sector, grew at a higher rate of 21.5 per cent in November 2010 compared to 19.3 per cent during the corresponding period of the previous year. Further, industrial credit to MSEs in the manufacturing sector grew at 16.9 per cent during November 2010 as compared to 19 per cent during November 2009.

- The latest available data on bank credit and the financial resources from non-bank sources flowing to the industrial sector indicate increased investment activities in the sector (Table 31).

**Table 31 : Industry-wise Deployment of Gross Bank Credit**

Sector	% Growth (y-o-y)		Share in Outstanding credit to Industry (%)	
	Nov.2009	Nov.2010	Nov.2009	Nov.2010
Mining & Quarrying (incl. Coal)	2.6	27.0	1.3	1.3
Food Processing	5.9	30.3	4.6	4.8
Beverage & Tobacco	49.2	-2.3	0.9	0.7
Textiles	7.4	18.1	9.4	8.7
Leather & Leather Products	-0.5	16.1	0.5	0.5
Wood & Wood Products	4.1	27.9	0.4	0.4
Paper & Paper Products	11.0	16.3	1.5	1.4
Petroleum, Coal Products & Nuclear Fuels	-22.0	-14.6	5.9	4.0
Chemicals & Chemical Products	1.0	19.9	6.6	6.3
Rubber, Plastic & their Products	6.5	37.8	1.2	1.3
Cement & Cement Products	18.3	40.9	1.8	2.0
Basic Metal & Metal Product	18.3	25.7	12.8	12.6
All Engineering	4.7	31.9	5.7	5.9
Vehicles, Vehicle Parts & Transport Equipment	-2.9	16.5	3.1	2.9
Construction	8.9	16.4	3.2	3.0
Infrastructure	47.2	44.2	29.0	32.9
Industries	14.2	27.0	100.0	100.0
Industry total minus Infrastructure	4.6	20.0	71.0	67.0

Source : RBI.

Notes : Data are provisional and relate only to select banks.

- As per the new series of National Accounts (2004-05), average annual growth of new investment in the industrial sector (excluding construction) was 11.3 per cent, as against average GDP growth of 8.6 per cent during 2004-05 to 2009-10. The rate of growth of gross capital formation (GCF) for mining, registered manufacturing, and the electricity sector was even higher (Table 32).

**Table 32 : Gross Capital Formation (GCF) in Industry**

(₹ Crore at 2004-05 prices)

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	CAGR
1. Mining	37,322	52,260	60,412	68,470	59,266	96,079	20.82
2. Manufacturing	344,517	405,047	472,223	611,469	417,971	563,633	10.35
2.1 Registered	245,984	342,671	380,294	521,967	381,056	477,202	14.17
2.2 Unregistered	98,533	62,376	91,929	89,502	36,915	86,431	-2.59
3. Electricity	53,300	64,673	76,366	85,040	95,533	98,908	13.16
Total Industry GCF*	435,139	521,980	609,001	764,979	572,770	758,620	11.76
Rate of growth (%)		19.96	16.67	25.61	-25.13	32.45	
Total GCF excluding valuables	1,011,178	1,183,485	1,365,019	1,606,013	1,542,642	1,731,209	11.35
Share of industry in total GCF	43.0	44.1	44.6	47.6	37.1	43.8	

Source: Office of the Economic Adviser, DIPP and CSO.

Notes: CAGR- compound annual growth rate; \* Industry GCF excludes construction.

- During 2001-09, overall investment indicated in the Industrial Entrepreneur Memorandums( IEMs) filed increased at an average annual rate of 35.5 per cent. There was, as expected, a decline in investment intentions in 2009, but investment intentions in 2010 (January-November) indicate revival of business sentiment and an improvement in entrepreneurs' perception. Metals, machinery, cement, chemicals, and the auto sector continue to dominate as the preferred industries(Table 33).

**Table 33 : Investment Indicated in Industrial Entrepreneur Memorandums (IEMs) Filed**

(₹ Crore)

	2005	2006	2007	2008	2009	2010 (Jan. Nov.)
Food	40,098	62,845	10,520	15,924	15,637	18,272
Fermentation Industries	2888	8008	5171	8230	4566	2998
Textiles	21,605	26,325	22,193	10,730	9200	25,747
Wood & Wood Products	163	-	105	622	96	122
Paper and Paper Products	5473	8199	4649	5841	6037	5908
Leather and Leather Products	209	148	266	106	106	152
Chemicals	28,350	45,722	34,352	155,756	27,661	51,072
Rubber	1102	2403	1191	2867	2118	5330
Cement	11,800	42,406	76,906	125,948	53,742	94,732
Metals	101,730	144,128	180,973	364,978	254,285	380,691
Machinery	87,340	165,227	375,276	556,635	503,651	884,582
Transport	2,059	10,688	11,314	24,862	5,048	10,437
Others	25,707	48,669	69,583	207,842	95,958	64,398
Fuel	25,432	23,782	35,001	42,225	61,743	72,956
<b>Total</b>	<b>353,956</b>	<b>588,550</b>	<b>827,500</b>	<b>1,522,566</b>	<b>1,039,848</b>	<b>1,617,397</b>

Source: Office of the Economic Advisor, DIPP.

- While the FDI inflows have somewhat flattened out over the course of the last three years, the pace of inflows has been stable including during 2009-10 (Table 34).

**Table 34 : Growth in FDI Inflows**

(US\$ billion)

Financial Year	As per international practices*	Per-centage Growth	FDI Equity Inflows#	Per-Centage Growth
2003-04	4.32	(-) 14%	2.23	(-) 18%
2004-05	6.05	(+) 40%	3.78	(+) 69%
2005-06	8.96	(+) 48%	5.97	(+) 58%
2006-07	22.83	(+) 155%	16.48	(+) 176%
2007-08	34.84	(+) 53%	26.86	(+) 63%
2008-09 (P)	35.18	(+) 1%	27.99	(+) 4%
2009-10 (P)	37.18	(+) 6%	27.15	(+) 3%
2010-11 (April-Oct 2010)	14.9	–	12.62	–

Source : Office of the Economic Adviser, DIPP.

Note: \* As per Reserve Bank of India (RBI) Estimates.

# As per DIPP Estimates.

### C. CONCLUSION:

The above assessment suggests that elevated inflation and current account deficit are the two major macroeconomic concerns at the current juncture. It also indicates the sectoral imbalances require structural policies. Hence, the anti-inflationary focus of monetary policy would have to continue with the need for forward looking response to demand side pressures. Also, the demand management measures need to acquire centre stage in the near-term, with structural measures in the medium-run addressing sectoral imbalances and export competitiveness.

On the industrial front, the MSE sector seems to be relatively less favourably placed in terms of credit availability and credit cost of working capital as compared to the medium and large scale industrial and services sectors. This persistent bias needs to be corrected. In addition, as the growth of manufacturing is crucial for employment generation, augmentation of domestic supply, resource utilization and value addition, and for sustainable growth of exports, there is a strong case for enhancing public investment and building PPP in the R&D in skill and technology development. High technology base and skilled manpower are crucial for enhancing competitiveness of this sector in the globalized economy.



# Select Economic Indicators

Economic Growth												
	Constant (2004-05) Prices						Current Prices					
	2010-11			2009-10			2010-11			2009-10		
	Q1	Q2	Q3	Q1	Q2	Q3	Q1	Q2	Q3	Q1	Q2	Q3
GDP at Factor Cost (Rs. in Crore)	11,39,157 (8.9)*	11,52,618 (8.9)*	12,61,664 (8.2)*	10,46,494 (6.3)*	10,58,687 (8.6)*	11,66,145 (7.3)*	16,57,305 (20.9)*	16,88,143 (18.9)*	19,09,112 (17.4)*	13,70,580 (10.5)*	14,19,987 (13.0)*	16,25,784 (16.8)*
GDP at Market Price (Rs. in Crore)	12,25,551	12,56,776	13,76,242	11,12,505	11,37,893	12,55,103	17,70,783	18,24,907	20,62,574	14,39,407	15,04,823	17,24,003
Growth Rate (Per cent)												
Private Final Consumption Expenditure	60.1	59.2	60.1	61.8	60.2	60.4	56.6	58.4	59.5	59.4	59.2	60.1
Govt. Final Consumption Expenditure	11.2	11.2	11.6	11.3	11.2	13.1	11.2	11.1	12.1	11.2	11.1	13.5
Gross Fixed Capital Formation	34.6	34.1	29.8	30.4	31.9	30.9	32.6	32.2	27.3	30.0	31.1	29.2
Change in Stocks	3.4	3.6	3.3	3.5	3.6	3.5	3.4	3.4	3.0	3.3	3.4	3.2
Valuables	1.9	2.2	2.1	1.7	2.1	2.0	1.8	2.1	2.0	1.7	2.1	2.0
Exports	21.6	21.6	20.4	20.8	20.9	19.3	20.4	20.6	20.1	20.3	20.5	19.0
Less Imports	27.9	29.0	23.6	27.4	28.2	28.0	25.6	27.0	21.5	24.8	25.5	25.7
Discrepancies	-4.8	-2.8	-3.8	-2.1	-1.8	-1.3	-0.3	-0.7	-2.5	-1.1	-1.8	-1.2

\* Percentage Change over previous years.

Source: Ministry of Statistics & Programme Implementation, Government of India. Estimates of Gross Domestic Product for Third Quarter (October-December) of 2010-11.

Agriculture & Industrial Production												
Sector-wise Percentage Change over Previous Year												
Item	Constant (2004-05) Prices						Current Prices					
	2010-11			2009-10			2010-11			2009-10		
	Q1	Q2	Q3	Q1	Q2	Q3	Q1	Q2	Q3	Q1	Q2	Q3
Agriculture, Forestry & Fishing	2.5	4.4	8.9	1.8	1.2	-1.6	26.3	25.4	23.7	11.5	13.2	18.1
Industry												
Mining and Quarrying	8.4	7.9	6.0	6.9	6.6	5.2	26.7	25.1	22.3	7.7	5.2	6.9
Manufacturing	13.0	9.8	5.6	2.0	6.1	11.4	19.9	15.6	10.7	2.3	5.8	13.8
Electricity, Gas & Water Supply	6.2	3.4	6.4	6.2	7.5	4.5	13.1	9.3	11.7	7.4	11.2	9.2
Services												
Construction	10.3	8.7	8.0	5.4	5.1	8.3	16.5	14.2	17.1	6.0	5.5	13.0
Trade, Hotels, Transport and Communications	11.0	12.1	9.4	5.5	8.2	10.8	20.5	20.1	15.9	5.3	7.6	14.6
Financing Institutions, Real Estates & Business Services	7.9	8.2	11.2	11.5	10.9	8.5	19.3	18.0	20.1	19.4	18.6	21.1
Community, Social & Personal Services	7.8	7.4	4.8	13.0	19.4	7.6	20.6	17.9	14.1	22.9	31.1	21.6

Source: Ministry of Statistics and Programme Implementation, Government of India. Estimates of Gross Domestic Product for Third Quarter (October-December) of 2010-11.

## Agriculture & Industrial Production (Contd.)

Performance of Core-Industries	Q2		Q3	
Sector-wise Growth Rate (%) in Production (Weight in IIP: 26.68%)	2009-10	2010-11	2009-10	2010-11
Overall Index*	4.63	3.53	5.33	6.13
Crude Oil	-1.13	14.5	-0.87	15.50
Petroleum Refinery Products	-2.66	0.4	4.30	-0.07
Coal	10.1	1.16	4.23	1.50
Electricity	7.13	2.46	4.70	5.30
Cement Production	12.6	2.2	8.43	4.00
Finished (CARBON) Steel Production	1.7	4.2	7.93	9.23
* Overall Indices for quarter Q3 includes date for the months - April- Dec 2010, Q2 includes date for the months - July - August and September 2010.				
Compiled by BCCI; Source: Office of the Economic Advisor				

## External Sector

Exports and Imports (in US \$ million)					
Item	2008-09 (Apr-Mar)	2009-10 (Apr-Mar)	January-10	January-11	% Change in January 2011
Exports	185,295	178,751	15,557	20,605	32.4
Imports	303,696	288,373	25,267	28,587	13.1
Oil Imports	93,667	87,136	8,513	7,852	-7.8
Non-Oil Imports	210,029	201,237	16,754	20,734	23.8
Trade Balance	-118,401	-109,621	-9,710	-7,981	-
Source: Provisional data as per the Press Note of the Ministry of Commerce and Industry					

## Foreign Currency Assets

	Amount		Variation	
	Rs. Crore	US \$ Million	Rs. Crore	US \$ Million
At the end of			(over last year)	
March, 2007	836,597	191,924	189,270	46,816
March, 2008	1,196,023	299,230	359,426	107,306
March, 2009	1,231,340	241,676	35,317	-57,554
March, 2010	1,150,778	254,935	-80,562	13,259
2010-11			(over last month)	
April, 2010	1,133,322	255,023	-17,456	88
May, 2010	1,152,893	248,201	19,571	-6,822
June, 2010	1,164,431	249,878	11,538	1,677
July, 2010	1,202,388	258,801	37,957	8,923
August, 2010	1,207,494	256,477	5,106	-2,324
September, 2010	1,192,541	265,481	-14,953	9,004
October, 2010	1,199,656	269,343	7,115	3,862
November, 2010	1,213,296	263,531	13,640	-5,812
December, 2010	1,201,197	268,064	-12,099	4,533
January, 2011	1,241,305	270,143	40,108	2,079
February, 2011	1,229,970	272,238	-11,335	2,095
Source: Reserve Bank of India				

## External Sector (Contd.)

Rupees Per Unit of Foreign Currency*				
	US Dollar	Pound Sterling	Japanese Yen	Euro
March, 2008	40.3561	80.8054	0.4009	62.6272
March, 2009	51.2287	72.9041	0.5251	66.9207
March, 2010	45.4965	68.4360	0.5018	61.7653
<b>2010-11</b>				
April, 2010	44.4995	68.2384	0.4763	59.6648
May, 2010	45.7865	67.1747	0.4969	57.6553
June, 2010	46.5443	68.6952	0.5122	56.9016
July, 2010	46.8373	71.5150	0.5343	59.7636
August, 2010	46.5679	72.9736	0.5465	59.9700
September, 2010	46.0616	71.6578	0.5454	60.0592
October, 2010	44.4583	70.3381	0.5428	61.7153
November, 2010	45.0183	71.8498	0.5457	61.4981
December, 2010	45.1568	70.4635	0.5425	59.6652
January, 2011	45.3934	71.5394	0.5496	60.5178
February, 2011	45.4538	73.2921	0.5503	62.0904

\* FEDAI Indicative Market Rates (on Yearly/Monthly average basis)



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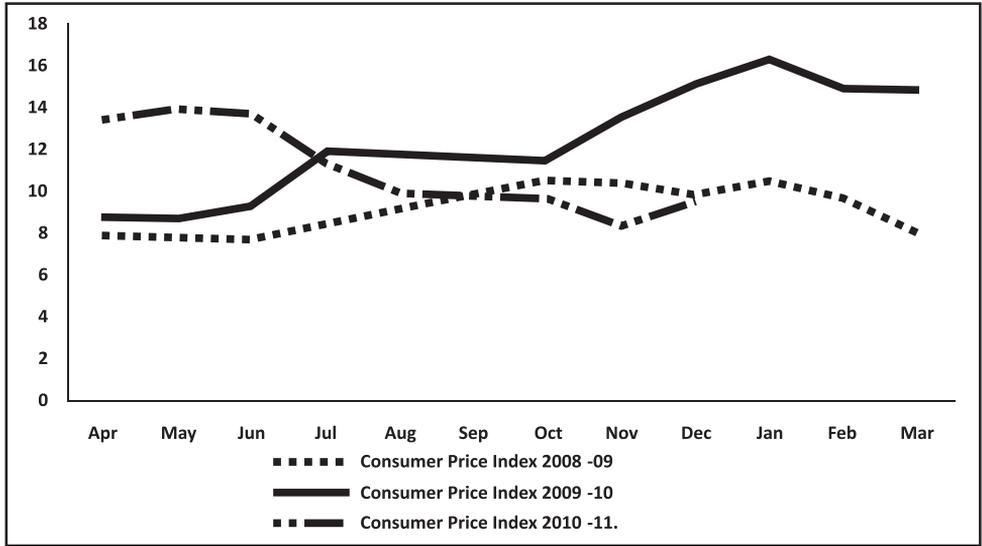
# Prices

Current Price Situation Based on Monthly Wholesale Price Index in January, 2010 (Base: 2004-05=100)

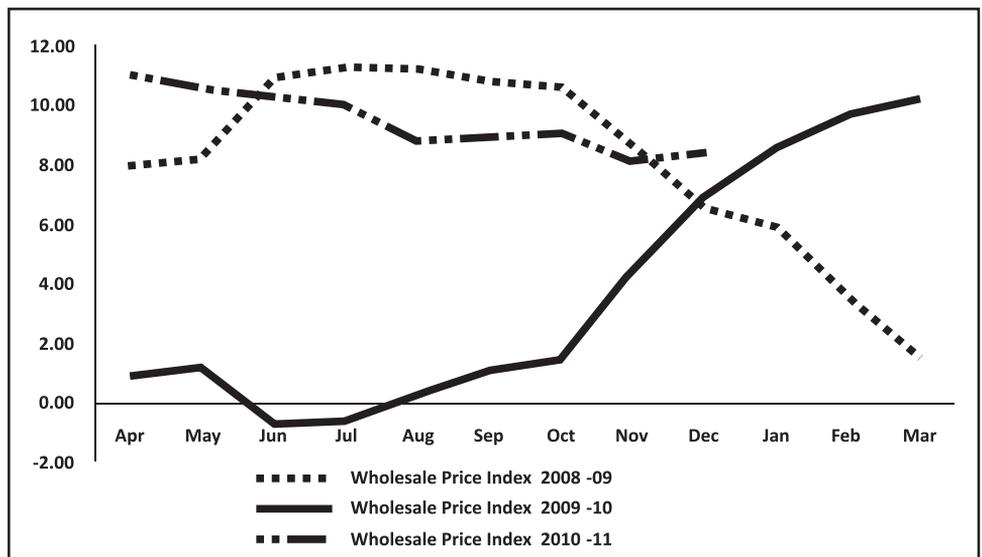
Items/Groups	Weight(%)	Cumulative Change (%) Since March		Inflation (%)		Inflation (%) (Average of last 12 months)	
		2009-10	2010-11	2009-10	2010-11	2009-10	2010-11
All Commodities	100	7.44	9.42	8.23	8.53	9.43	2.35
Primary articles	20.12	16.58	21.43	17.28	20.19	18.67	10.17
Food Articles	14.34	16.56	21.61	15.65	20.19	19.01	14.49
Fuel and Power group	14.91	14.91	10.32	11.41	6.76	12.19	-4.19
Manufactured Products	64.97	3.42	4.86	3.75	4.77	5.18	1.29

## Point to Point Rate of Growth

CPI (Base Rate 2001 = 100)



WPI (Base - 2004-05 = 100)



World Prices of Select Commodities							
Commodity	Unit	Annual Averages			Monthly Averages		
		Jan-Dec 2009	Jan-Dec 2010	Jan-Feb 2011	Dec 2010	Jan 2011	Feb 2011
<b>Energy</b>							
Coal, Australia	\$/mt	71.8	99.0	129.0	118.3	132.5	125.5
Crude Oil, average	\$/bbl	61.8	79.0	95.3	90.0	92.7	97.9
Crude oil, Brent	\$/bbl	61.9	79.6	100.1	91.8	96.3	104.0
Crude oil, Dubai	\$/bbl	61.8	78.1	96.3	89.1	92.4	100.3
Natural gas, US	\$/mmbtu	4.0	4.4	4.3	4.2	4.5	4.1
<b>Agriculture</b>							
Coffee,robusta	c/kg	164.4	173.6	232	207.4	222.9	241.1
Tea, auctions(3), average	c/kg	272.4	288.5	296.2	304.2	302.1	290.4
<b>Food</b>							
Coconut oil	\$/mt	725.4	1123.5	2149.0	1715.0	2038.0	2260.0
Copra	\$/mt	479.7	749.6	1428.5	1154.0	1354.0	1503.0
Groundnut oil	\$/mt	1183.7	1404.0	1759.0	1753.0	1788.0	1730.0
Palm oil	\$/mt	682.8	900.8	1285.5	1228.0	1281.0	1290.0
Palm kernel oil	\$/mt	700.0	1184.2	2207.5	1820.0	2120.0	2295.0
Soybean meal	\$/mt	407.7	378.3	447.5	433.0	451.0	444.0
Soybean oil	\$/mt	848.7	1004.7	1371.0	1322.0	1374.0	1368.0
Soybeans	\$/mt	436.9	449.8	572.0	547.0	572.0	572.0
<b>Grains</b>							
Maize	\$/mt	165.5	185.9	278.9	250.4	264.9	292.9
Rice, Thailand, 5%	\$/mt	555.0	488.9	522.9	532.0	516.8	529.0
Wheat, US, HRW	\$/mt	224.1	223.6	337.3	306.5	326.6	348.1
Wheat US SRW	\$/mt	186.0	229.7	329.6	308.6	320.4	338.8
Sugar, world	c/kg	40.0	46.9	65.1	61.7	65.3	65.0
<b>Raw Materials</b>							
<b>Timber</b>							
Logs, Malaysia	\$/cum	287.2	278.2	322.0	306.5	315.3	328.6
Plywood	c/sheets	564.6	569.1	586.6	582.4	584.5	588.7
Rubber, RSS1, US	c/kg	214.6	386.6	610.8	490.3	580.9	640.7
<b>Fertilizer</b>							
DAP	\$/mt	323.1	500.7	599.8	593.9	595.8	603.8
Phosphate rock	\$/mt	121.7	123.0	157.5	140.0	155.0	160.0
Potassium chloride	\$/mt	630.4	331.9	371.3	354.0	367.5	375.0
Urea	\$/mt	249.6	288.6	366.1	375.1	374.1	358.1
<b>Metals and Minerals</b>							
Aluminium	\$/mt	1664.8	2173.1	2473.9	2350.7	2439.5	2508.2
Copper	\$/mt	5149.7	7534.8	9711.7	9147.3	9555.7	9867.6
Gold	\$/toz	973.0	1224.7	1364.6	1390.6	1356.4	1372.7
Silver	c/toz	1469.4	2019.7	2970.5	2937.4	2855.2	3085.8
Steel products index	2000=100	227.1	229.7	243.2	233.5	240.9	245.5

Source: World bank-The Pink Sheet

# Government Accounts

## Trends in Central Government Finances: April-November 2010

	Budget Estimates 2010-11	April- January		Col. 3 as % of	Col.4 as % of	% Change over preceeding year	
		2009-10	2010-11	2009-10 (BE)	2010-11 (BE)	2009-10	2010-11 (4/3)
(Rs. Crore)							
<b>1. Revenue Receipts</b>	682,212	425,021	628,861	69.2	92.2	5.0	48.0
Gross tax revenue	746,651	453,608	578,226	70.8	77.4	-1.2	27.5
Tax (net to Centre)	534,094	333,336	426,477	70.3	79.9	1.2	27.9
Non Tax	148,118	91,685	202,384	65.4	136.6	21.4	120.7
<b>2. Capital Receipts of which:</b>	426,537	358,973	354,668	88.3	59.7	34.8	-29.1
Recovery of loans	5,129	5,129	9,702	121.4	189.2	50.6	89.2
Other Receipts	40,000	4,306	22,744	384.5	56.9	-	428.2
Borrowings and other liabilities	381,408	349,538	222,222	87.2	58.3	33.0	-36.4
<b>3. Total Receipts(1+2)</b>	1,108,749	783,994	883,529	76.8	79.7	16.8	12.7
<b>4. Non-Plan Expenditure (a) + (b)</b>	735,657	557,018	610,872	80.1	83.0	18.0	9.7
(a) Revenue Account of which:	643,599	517,920	553,771	83.7	86.0	16.3	6.9
Interest payments	248,644	157,266	171,767	69.7	69.1	6.1	9.2
Major Subsidies	108,667	106,101	101,452	100.5	93.4	-7.8	-4.4
Pensions	42,840	39,351	45,222	112.5	105.6	58.9	14.9
(b) Capital Account	92,058	39,098	57,101	50.9	62.0	46.9	46.0
<b>5. Plan Expenditure (i) + (ii)</b>	373,092	226,976	272,657	69.8	73.1	14.0	20.1
(i) Revenue Account	315,125	191,392	230,846	68.7	73.3	13.5	20.6
(ii) Capital Account	57,967	35,584	41,811	76.1	72.1	17.0	17.5
<b>6. Total Expenditure (4) + (5) = (a) + (b)</b>	1,108,749	783,994	883,529	76.8	79.7	16.8	12.7
(a) Revenue Expenditure	958,724	709,312	784,617	79.1	81.8	15.5	10.6
(b) Capital Expenditure	150,025	74,682	98,912	60.4	65.9	31.0	32.4
<b>7. Revenue Deficit</b>	276,512	284,291	155,756	100.6	56.3	35.9	-45.2
<b>8. Fiscal Deficit</b>	381,408	349,538	222,222	87.2	58.3	33.0	-36.4
<b>9. Primary Deficit</b>	132,744	192,272	50,455	109.6	38.0	67.8	-73.8

Source: Review of Union Government Accounts, Apr-Jan 2010-11, Ministry of Finance.

## Safety - Health - Environment

## SHE Bulletin



Bombay Chamber of Commerce and Industry's SHE Bulletin, is a quarterly which is published to provide information to the industry in the areas of Industrial Safety, Occupational Health and the Environment

Theme of July - September 2010 issue on **"Waste Management"** includes:

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- Case Study on Waste Management Initiatives in Public Private Partnership
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<b>Money &amp; Banking</b>						
<b>Money Stock - Components and Sources</b>				<b>(Rs. Crore)</b>		
Item	Outstanding as on		Variation over			
	2010	2011	Financial Year so Far		Year on Year	
	Mar. 31	Feb. 25	2009-10	2010-11	2009	2010
M <sub>3</sub>	5,599,762	6,239,385	13.8	13.6	17.0	16.5
<b>Components (i+ii+iii+iv)</b>						
(i) Currency with the Public	768,033	888,120	13.5	17.9	16.2	19.9
(ii) Demand Deposits with Banks	722,739	658,989	8.2	-6.8	20.2	5.7
(iii) Time Deposits with Banks	4,105,151	4,678,906	14.9	16.3	16.7	17.6
(iv) "Other" Deposits with Reserve Bank	3,839	13,370	-33.6	-5.8	-38.1	-2.1
<b>Sources (i+ii+iii+iv)</b>						
(i) Net Bank Credit to Government (a+b)	1,667,096	1,822,327	25.6	11.5	34.0	15.9
(a) Reserve Bank	211,586	269,302	-	-	-	-
(b) Other Banks	1,455,511	1,553,025	19.5	7.1	17.4	7.3
(ii) Bank Credit to Commercial Sector (a+b)	3,492,781	3,995,507	10.9	16.8	15.2	22.0
(a) Reserve Bank	1,328	1,325	-	-	-	-
(b) Other Banks	3,491,453	3,994,181	11.2	16.8	15.4	22.2
(iii) Net Foreign Exchange Assets of Banking Sector*	1,281,469	1,396,918	-3.8	9.0	-0.1	7.3
(iv) Government's Currency Liabilities to the Public	11,270	12,152	11.1	7.8	11.9	8.8
(v) Banking Sector's Net Non-Monetary Liabilities	852,854	987,518	-6.6	15.9	7.6	23.1
of which:						
Net Non-Monetary Liabilities of RBI	301,615	373,698	-12.4	23.2	-4.8	9.4

\* : Includes Investments in foreign currency denominated bonds issued by IIFC (UK) since March 20, 2009

<b>Select Scheduled Commercial Banks - Business in India</b>						
Item	Outstanding as on		Percentage Variation			
	(Rs. Crore)		Financial Year so Far		Year on Year	
	March 26, 2010	February 25, 2011	2009-10	2010-11	2009	2010
1. Bank Credit	3,240,399	3,810,445	11.4	17.4	15.9	23.2
Non-Food Credits	3,191,909	3,745,153	11.7	17.3	16.1	23.1
2. Aggregate Deposits	4,486,574	5,083,852	13.9	13.2	16.9	16.4
3. Investments in Govt. and other approved securities	1,166,410	1,485,162	18.4	7.3	16.4	7.6

<b>Policy Rates/ Interest Rates (per cent per annum)</b>		
Item / Week Ended	2011	2011
	Feb 26	Feb 25
Cash Reserve Ratio (per cent) (1)	5.50	6.00
Bank Rate	6.00	6.00
Repo Rate	4.75	6.50
Reverse Repo Rate	3.25	5.50
Prime Lending Rate (2)	11.00-12.00	8.25-9.50
Deposit Rate (3)	6.00-7.50	8.25-9.50
Call Money Rate (Low/High) (4)		
- Borrowings	3.24	6.77
- Lendings	3.24	6.77

(1) Cash Reserve Ratio relates to the Scheduled Commercial Banks (excluding Regional Rural Banks).  
(2) Prime Lending Rate related to five major Banks.  
(3) Deposit Rate related to major Banks for term deposits of more than one year maturity.  
(4) Data cover 90-95 per cent of total transactions reported by participants.



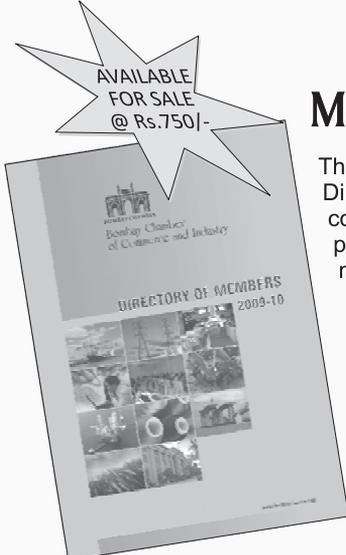
# India At A Glance

Table 1  
Distribution of Population, Sex Ratio, Density and Decadal Growth Rate of  
Population : 2011

India/State/ Union Territory #	Total population			Sex ratio (females per 1000 males)	Density (per sq. km)	Decadal growth rate		
	Person	Male	Female			Person	Male	Female
1	2	3	4	5	6	7	8	9
INDIA	1,210,193,422	623,724,248	586,469,174	940	382	17.64	17.19	18.17

Table 2  
Child Population in the Age Group 0-6 and Population Aged 7 Years  
and Above by Sex : 2011

India/State/ Union Territory #	Population			Total Population		
	Person	Male	Female	Person	Male	Female
1	2	3	4	5	6	7
INDIA	158,789,287	82,952,135	75,837,152	1,051,404,135	540,772,113	510,632,022



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**Table 3**  
Sex Ratio of Total Population and Child Population in the Age Group 0-6 and 7+ years : 2001 and 2011

India/States/ Union Territory #	Sex ratio (females per 1,000 males)					
	Child population Total population		Population aged in the age group 0-6		7 and above	
	2001	2011	2001	2011	2001	2011
1	2	3	4	5	6	7
INDIA	933	940	927	914	934	944

**Table 4**  
Literates and literacy rates by sex : 2011

India/State/ Union Territory #	Literates			Literacy rate (%)		
	Persons	Males	Females	Persons	Males	Females
1	2	3	4	5	6	7
INDIA	778,454,120	444,203,762	334,250,358	74.04	82.14	65.46

Source: Office of the Registrar General & Census Commissioner, GoI, March, 2011.

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