(Un)Common Suffering: Distributional Impact of Recent Inflation in India

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June 2010

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Distributional Impact of Recent Inflation in India

[published in MACROSCAN, January 2011, can be accessed from
http://www.macroscan.org/fet/jan11/print/prnt060111Inflation.htm#]

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Abstract

The recent inflation in India is special both because of its peaks as also for its persistence. While couple of years back the rising inflation was blamed on global factors, this time around there is no denying the fact that it is due to structural problems of our economy, especially those related to the agricultural, specifically the foodgrains sector. Impact of the recent inflation is also not shared equally, with the bottom strata facing uncommon difficulties, as their purchasing power seems to have been halved over the last four years. This short paper estimates effective inflation rates faced by different income/consumption groups in India and comments on the distributional impact.

Introduction

For the past couple of years Indian economy has been under a severe and consistent inflationary pressure. While only in January 2008 Inflation Rate (point to point, WPI) was 4.5 per cent, it increased to 12.8 per cent by August 2008. It was followed by a period of low rates till October 2009, but from November onwards prices again had an accelerating trend and by April 2010 Inflation Rate touched 11 per cent, hovering thereabout since then. This is in sharp contrast to most of the 2000-2005 period when Inflation Rate hardly ever crossed 7 per cent, and the last time inflation crossed double digit was in May 1995.[2] Therefore, the recent increase in rate of inflation is quite striking not only because of the peaks, but also because it appears to be a consistent phenomenon.

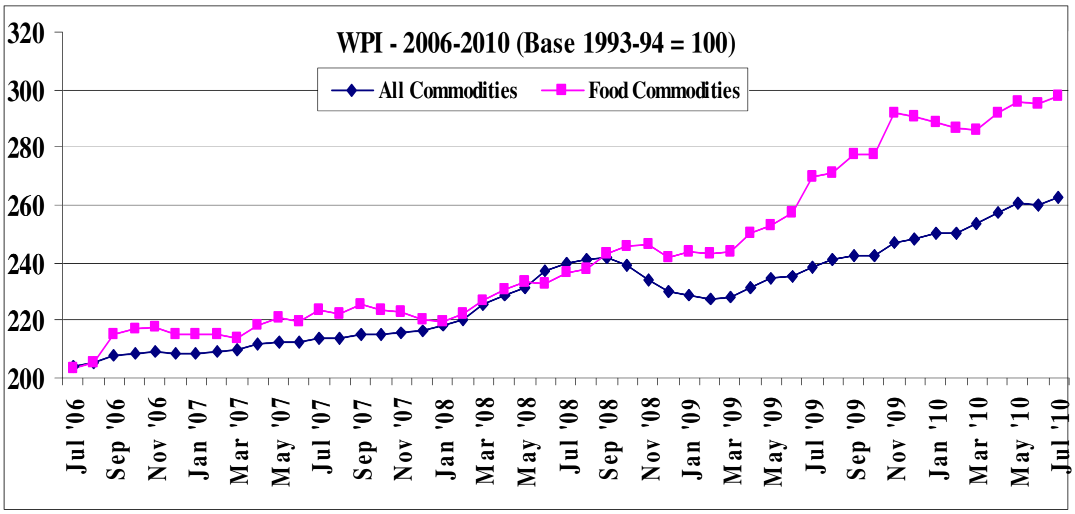
As it has snowballed into a social crisis and a possible election issue, there has been a flurry of writings and rumblings from various quarters regarding the reasons behind it, the impacts, and possible policy suggestions over the last year or so. It seems that the inflation during 2008-09 was quite different from the most recent one. While the increase in inflation rate during 2008-09 undoubtedly had a global link, associated with global rise in the prices of mineral oils, metals, and food grains, this time around, inflation does appear to be an India-specific phenomenon, as there are no major global factors at play. In addition, researchers have also argued that instead of countering the global trends, our domestic policies, especially those related to Money Supply, had consolidated and stimulated the inflationary trends during 2008 (Marjit, 2008), whereas the current spate of rising inflation is at the face of tight money policy. Moreover, though inflation is supposed to weaken the purchasing power of a currency, recent inflation in India has been accompanied by the Rupee's relative strengthening against international currencies, especially the USD. This suggests that inflation today is more a *structural problem* creating supply side constraints both on the production as well as distributional logistics fronts, especially in Food Commodities. It appears that factors like lack of capital formation in agriculture, withdrawal of the State from irrigation and extension activities, speculation & commodity trading with a practically non-existent Public Distribution System, have also contributed to the crisis. Some researchers have been consistently pointing out that domestic policy lapses in these areas are the main reason behind persistent and increasing rates of prices (Chandrasekhar, 2008, 2010), but their arguments seem to be falling on deaf ears.

While there has been no dearth of macroeconomic projections, most of the analysis has been on the growth impact of inflation and almost nothing on the distributional impact (notable exception has been Ghosh, 2009). The present article focuses on this specific issue of distributional impact of current inflation by quantifying the differential impact of the current inflation on different income groups of the society.

Trends in WPI and CPI Inflation Indices

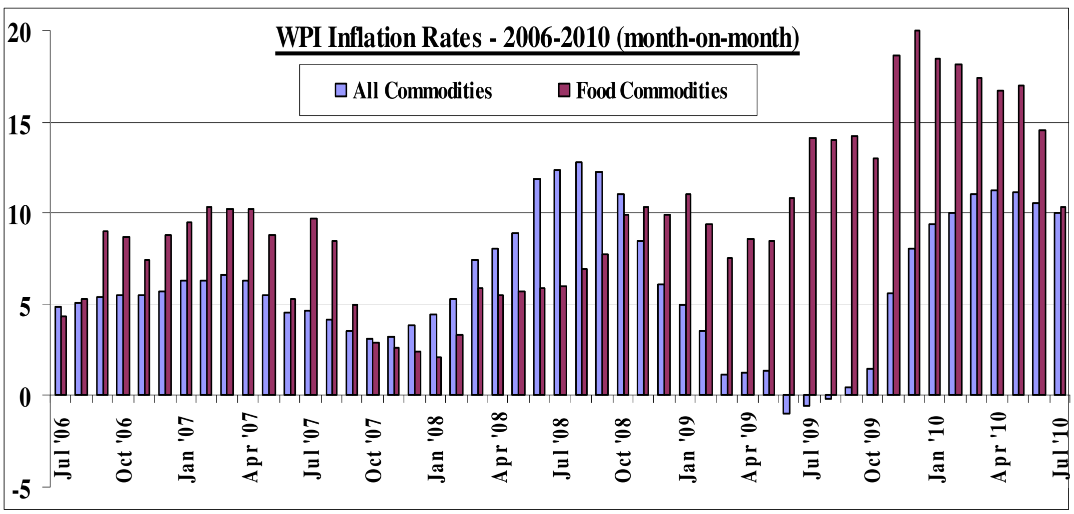
Inflation rate in India is officially measured through changes in WPI. In addition, effective inflation for consumers is measured through changes in CPI. While most analysis has been based on the aggregate WPI, we are more concerned about price trends in different commodity groups, especially those in the CPI. We therefore look into inflation in three broad groups of commodities - Food, Fuel, and Others.

It is observed that the current bout of inflationary pressure started roughly in December 2007, and WPI Inflation, which had remained in the 4-6 per cent band for a long period of 26 months – January 2006 to March 2008 –climbed up sharply to supra-10 figures, first in June 2008, and then again in February 2010. Food price inflation increased sharply during March-April 2008, crossed double-digit mark in June 2009, reached a peak of 20 per cent in December 2009, and declining marginally thereafter. The inflation rate for Fuel group was quite high during 2004-05, declined till November 2007, and increased steeply thereafter. It remained negative for most of 2009, but rose sharply again during 2010. Inflation in the Non-Food–Non-Fuel sector was initially low but is increasing and shadowing the WPI Inflation in recent past. The most recent figures obtained from Government of India puts the Inflation Rates at 10.0 per cent (WPI), 10.3 per cent (Food), 14.3 per cent (Fuel), and 8.5 per cent (Non-Food–Non-Fuel) for July 2010.



Source: Authors' Calculation based on Data Sources mentioned in Note 2.

While Headline Inflation has been much talked of, the man in the street is more concerned about the price (s)he pays for commodities. Rise in prices paid by the common people is reflected by the Consumer Price Index (CPI). Consumers in the rural areas are affected by movements in CPI for Agricultural and Rural Labourers (CPIAL), while those in urban areas are concerned with CPI for Industrial Workers (CPIIW) and CPI for Urban Non-manual Employees (CPIUNME). Inflation in CPI lagged behind the WPI and started the current northward journey from January 2008 onwards. However, unlike WPI which showed decelerating trend in 2009, CPI Inflation has been significantly high all throughout the last four years and instead of slowing down is on the rise over the last few months. This is all the more disconcerting because the deceleration in WPI over most of 2009 was associated with global recession, which led to some job-loss and decreased income for a large part of Indian populace. Thus, while incomes remained stagnant, consumer prices were on the rise. Even among the sectors, increase in CPIAL has been greater than CPIIW or CPIUNME indicating that prices in rural areas have increased at a faster pace than that in the urban areas. At a disaggregated level, rise in CPI for the Food group has been higher than that in overall CPI, especially in the most recent past, seemingly confirming our earlier comment that the present inflation is a supply side problem. CPI for Fuel showed a decelerating trend till April 2008, and has been erratic all throughout the period, probably because of the administered prices of fuel. Interestingly, fuel prices in rural areas have increased at a much faster rate compared to that in urban areas. This is due to greater share of Firewood in the calculation of CPIAL as also due to unregulated and unorganised fuel market in rural areas. The recent shift in fuel price policy to a market based regime is expected to be reflected in a more systematic movement in Fuel price inflation in line with global prices, and with global crude prices firming up, the common man is going to be hit harder.



Source: Authors' Calculation based on Data Sources mentioned in Note 2.

What is significant is that inflation has been most severe in the Foodgrains group. Since a large part of consumption expenditure of majority of the people is on food, with very low price elasticity, the common man has been affected most severely. Also, because of low weight of Food group in WPI, Headline Inflation has not revealed the true misery of the people.

If we look at the Rates of Price Increase as revealed by rise in price indices, we find that over the last four years WPI has increased by about 29 per cent (Table 1). Rise in CPI has been substantially higher, with urban price indices rising by around 40 per cent and rural prices increasing by about 49 per cent. Prices of Food have increased the most – more than 50 per cent – followed by Fuel prices in rural areas. It thus transpires that purchasing power of the common people have declined by about 49 per cent in rural areas and more than 40 per cent in urban areas over the last four years. However, this impact has not been uniform and the suffering has been uncommon to some groups, which we explore in the next section.

Table 1
Rates of Increase in Price Indices

Indicator		*Weight*	*Percentage Increase During* *July 2006 – July 2007*	*July 2007 – July 2008*	*July 2008 – July 2009*	*July 2009 – July 2010*	*July 2006 – July 2010*
WPI	**All**	100.0	4.9	11.7	-0.1	10.0	**28.7**
	Food	15.4	8.7	6.3	14.9	10.3	**46.5**
	Fuel	14.2	-1.5	17.1	-10.3	14.3	**18.2**
	Others	70.4	5.4	11.8	-1.4	9.0	**26.9**
CPIAL	**All**	100.0	8.6	9.4	12.9	11.0	**48.9**
	Food	66.7	9.6	10.7	9.9	15.6	**54.1**
	Fuel	7.9	6.5	8.5	9.0	14.1	**48.9**
	Others	25.4	6.7	6.2	21.9	-1.9	**35.3**
CPIIW	**All**	100.0	6.1	8.3	11.9	13.7	**40.4**
	Food	46.2	8.4	11.8	14.7	17.3	**48.9**
	Fuel	6.4	7.4	6.2	2.1	3.4	**19.2**
	Others	47.4	3.6	5.3	10.5	11.6	**34.9**
CPIUNME-All		100.0	6.4	7.4	13.0	14.1	**41.2**
	Food	46.2	9.4	10.0	15.3	9.7	**52.1**
	Fuel	6.4	7.0	6.2	2.1	5.4	**22.3**
	Others	47.4	3.4	5.0	12.3	19.6	**33.0**

Source: Press Releases of Government of India, Various Issues; Reports on Price Indices obtained from Ministry of Statistics and Programme Implementation, Various Issues. See Note 2.

Distributional Impact: Who are the Worst Sufferers?

While everyone except speculators are adversely affected by the current inflation, some groups are more so than the rest. At a theoretical level, it has been postulated that inflation favours the profit earners (the rich, mostly) and robs the wage earners (the middle and low income group). While income of the former group is mostly indexed to current prices, that of the latter groups follow prices only after a lag, and that too is not compensated fully. Apart from this textbook rendition of distributional impact of inflation, effective inflation faced by different socio-economic groups would also be different because of their different consumption pattern. We would try to quantify the impact of the recent inflation on different income groups in India.

As price rises are not uniform across commodity groups, effective inflation would depend on the consumption pattern of the families. Since the commodity baskets of the lower income groups are different from that of the high income groups, effective inflation rates faced by them are also dissimilar. Periodical surveys from National Sample Survey Office

(NSSO) provide data on the consumption pattern of different economic groups. NSSO data divides the population into *Twelve* Monthly Private Consumption Expenditure (MPCE) classes and shares of different commodity groups in total expenditure are provided for each of these classes separately. The bottom four MPCE classes can be taken as the Low Income Group while the top four as the High Income Group. The middle four MPCE classes can be taken to represent the Middle Income Group.

Table 2
Consumption Pattern of Indian Households

MPCE Classes	*Average MPCE (Rs per capita)*	*Shares of Commodity Groups in Total Expenditure (%)*		
		Food	*Fuel*	*Others*
Rural – I	195	68.3	13.6	18.1
Rural – II	256	67.2	13.4	19.4
Rural – III	298	61.9	11.3	26.8
Rural – IV	343	60.8	11.7	27.5
Rural – V	387	59.3	11.1	29.6
Rural – VI	433	60.1	10.8	29.1
Rural – VII	482	59.3	10.8	29.9
Rural – VIII	542	58.1	10.3	31.6
Rural – IX	631	55.8	10.2	34.0
Rural – X	775	53.4	9.7	36.9
Rural – XI	1003	49.8	9.1	41.1
Rural – XII	1743	33.7	5.9	60.4
Urban – I	283	64.9	14.3	20.8
Urban – II	368	63.0	13.3	23.6
Urban – III	444	56.7	12.3	31.0
Urban – IV	533	55.3	12.5	32.2
Urban – V	627	52.5	12.0	35.4
Urban – VI	732	50.4	11.8	37.8
Urban – VII	859	48.2	11.4	40.4
Urban – VIII	1010	45.9	10.7	43.4
Urban – IX	1227	42.4	10.1	47.5
Urban – X	1599	38.8	9.0	52.1
Urban – XI	2156	35.6	8.8	55.6
Urban – XII	3943	23.6	6.0	70.4
Rural Low Income	299	67.7	13.5	18.8
Rural Middle Income	468	61.5	11.4	27.0
Rural High Income	927	39.1	7.0	53.9
Rural - All	625	53.3	9.7	37.0
Urban Low Income	445	63.8	13.8	22.4
Urban Middle Income	813	49.7	11.5	38.8
Urban High Income	1985	27.6	6.9	65.4
Urban - All	1171	40.0	9.4	50.7

Source: Authors' calculations based on NSSO Report No 523, Household Consumption Expenditure in India 2005-06, GOI (2008)

This enables us to derive the consumption basket of the bottom, middle and top fractile income classes. Using NSSO data for 2006-07, it is observed that Fuel & Light has the lowest share in total expenditure for all the three income groups (Table 2). For the Low and Middle Income people, Food commodities constitute the largest consumption expenditure group, while for the High Income group consumers largest share of expenditure goes to Non-Food Non-Fuel commodities.

These shares of Food, Fuel and Others in the commodity basket of different classes of people have been used as weights to derive the effective inflation rates faced by the different income groups from the commodity-group CPIs. While CPIAL is used for rural sector, simple average of CPIIW and CPIUNME has been used for the urban sector. This provides us with the Effective Consumer Inflation Rate for the six groups of people considered by us (Table 3). Since essential items like Food and Fuel feature more prominently in the basket of the LIG people and these items have experienced relatively higher price rise during the study period, effective inflation rates are higher for the poorer section of the people, both in the rural and the urban areas. It also appears that the urban consumers have suffered more erosion of purchasing power during 2009-2010, mainly because of the inflation in Non-Food–Non-Fuel commodities, which feature heavily in their consumption basket. However, it is still price rise in food commodities that hurts people most since these are basic to decent standard of living.

Table 3
Effective Inflation Rates Faced by Different Economic Groups

MPCE Groups	***Percentage Decrease in Purchasing Power During***				
	July 2006 – July 2007	***July 2007 – July 2008***	***July 2008 – July 2009***	***July 2009 – July 2010***	***July 2006 – July 2010***
Rural Low Income	8.6	9.6	12.1	12.1	**49.9**
Rural Middle Income	8.4	9.3	13.1	10.7	**48.4**
Rural High Income	7.8	8.1	16.3	6.1	**43.6**
Urban Low Income	7.5	8.9	12.4	13.7	**42.7**
Urban Middle Income	6.6	8.1	12.1	13.3	**40.6**
Urban High Income	5.3	6.8	11.8	14.1	**37.6**

Source: Authors' Calculations.

Over the last four years the impact has therefore been hardest on the lower income people, especially those in the rural areas. It is observed that the purchasing power has declined by about 50 per cent for the Rural Low Income Group people compared to about 38 per cent for the Urban High Income Group people. In addition, since a majority of the lower income groups are wage earners and that too from the unorganised sector, their income levels are not compensated for the price rise. On the other hand, most of the people in the highest income groups are either profit earners or engaged in the organised sector. Therefore, their incomes are frequently indexed to price rise and they are somewhat compensated against the inflationary trends.

If we consider the fact that per capita income has increased by about 40 per cent over the last 4 years (in nominal terms) and assuming (though unrealistically) that this growth has been shared equally by all the groups of people, we still arrive at a fall in real income for five of the six groups considered by us. Only the urban HIG people seem to have had a rise in real income under such restrictive assumption. If we now contemplate the reality that most of the recent income growth have benefited the upper echelons of the society we can easily comprehend the uncommon immiseration of the already marginalized group that has taken place, especially at the countryside.

This has wider socioeconomic implications since eroding away of the purchasing power through the current inflation has been biased against the poor, decreasing their real per capita income proportionately more steeply than the richer people. This has been enhancing the already widespread economic inequality in India and is perhaps the most appalling impact of the current inflation. We hope that the present commentary stirs up some thoughtful debate on the wider socioeconomic impact of the distributional effect of the specific type of inflation currently perceived in India and appropriate policies are formulated before the resultant inequality goes out of control.

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[2] Data used in this article are obtained from – RBI Bulletin, various years, [available at www.rbi.org, accessed on 12/08/2010]; Reports on Consumer Price Indices for Agricultural & Rural Labourers and for Industrial Workers, Various Issues [available from www.labourbureau.nic.in accessed on 28/08/2010]; Reports on Wholesale Price Indices and Consumer Price Indices for Urban Non-Manual Employees, Various Issues [available from www.mospi.nic.in accessed on 26/08/2010].

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