



Munich Personal RePEc Archive

Trends and Patterns in Consumption Expenditure: A Review of Class and Rural-Urban Disparities

Roy, Satyaki

Institute for Studies in Industrial Development

October 2011

Online at <https://mpra.ub.uni-muenchen.de/35901/>

MPRA Paper No. 35901, posted 16 Jan 2012 21:01 UTC

**Trends and Patterns in Consumption Expenditure:
A Review of Class and Rural-Urban Disparities**

Satyaki Roy

This paper primarily aims to capture the changing patterns of consumption expenditure of three broad classes, namely, the 'upper' 'middle' and 'bottom' classes in the rural and urban India. In contrast to what is generally held that differences in consumption of necessities across classes decline more the economy grows, this paper argues that there had been hardly any sign of convergence. Furthermore, in the cases of most of the food and non-food items, especially, education and medical services the consumption expenditure in real terms is showing trends of a widening gap between the upper and the bottom classes.

Affiliation: Assistant Professor at the Institute for Studies in Industrial Development, New Delhi.

Acknowledgement: This paper is a part of a larger research programme on 'Structural Changes, Industry and Employment in the Indian Economy: Macro-economic Implications of Emerging Patterns' sponsored by the ICSSR. I would like to thank T.S. Papola and Surajit Mazumder for their comments and suggestions on the earlier draft. My special thanks to Ravi Shrivastava, Atulan Guha and Himanshu who commented on the paper at the national workshop held at ISID on 7-8 July, 2011 and to members of the ICSSR evaluation team, especially Amitabh Kundu who made important suggestions on the paper during their visit at the institute. The usual disclaimer applies.

Introduction

The rise in per capita income levels that have taken place in the post-reform period are likely to have been accompanied by significant change in the patterns of consumption expenditure. The relation between income and consumption is mostly studied at the macro level looking into how consumption changes in response to changes in income; what could be the effect of large or small changes in income either on a temporary basis or that of a permanent nature and the likely effects on consumption expenditure and so on. There are well informed theories that explain the individual patterns of consumption expenditure over the life span and the determinations of distribution between consumption and savings in various stages of life. At the aggregate level consumption being the weighted sum of consumption patterns of different income levels and since income levels had not been the only factor influencing consumption patterns it is difficult to assess how the patterns of consumption expenditure changes with changes in income for an individual or a group of people. Studies in psychology or behavioral science try to explain individual changes in tastes and preferences those are assumed to be given or known in the conventional demand function. Many of the sociological studies delve deeply into consumption as a social construct especially to capture the notion of consumerism, the way non-price factors shape the demand structure of consumers and their identities.

In this paper our limited aim is to figure out trends and patterns of consumption expenditure across consumption classes over a period of time. It is a largely agreed fact that high growth in India had been accompanied by increasing inequality in income. Although consumption is not the domain in which income inequalities are adequately captured rather more the economy attains higher levels of development, inequalities in consumption across income classes is expected to decline. This paper tries to ascertain how rising income inequalities impact upon consumption expenditures of various groups of people. And in our view 'class' remains to be one of the most useful notion that explain variance of consumption expenditure of various groups of people in a meaningful way. In any case we neither believe in a simplistic notion that income levels solely determine consumption patterns of individuals nor do we hold a reduction that individual consumption patterns are homogeneous within income classes. In spite of the limitations in the process of aggregation, classes provide a reasonable entry point to inquire about the complex process of consumption. This paper aims to make out how consumption

expenditure behaved across major consumption classes and differences within and between classes provide us a marker of inequality of a more complex nature. The problem however being that when we look into changes in consumption expenditure, it happens to be a compound effect of various changes such as changes in absolute and relative incomes, absolute and relative prices of commodities and their various demand elasticities, as well as changes in tastes and preferences for products. It is beyond the scope of a paper to decompose various effects and bring out a comprehensive conclusion that captures demand patterns and consumption behaviors of various classes in a disentangled manner. But the paper aims to bring into the fore the consumption expenditures of the major classes in absolute and relative terms and also see the variation in trends between real and nominal values overtime that might provide some pointers for further research in this direction.

Broad consumption classes

In classical political economy class remained mostly an economic category with limited attention to social structures and the way they influence the economic processes, while in Marx 'class' becomes a complex notion, sometimes defined in terms of relative power structure and conflicts that defines the dynamics of society, on the other it is conceived as a social process of producing surplus, a distinct determinate of various modes of production. In the historical writings 'class' in Marx is more of a political process that could be actualized in the process of struggle. The class process, on the other in Marx, cannot be reduced to an auto-generated group identity of income classes as it is often done; rather it is a complex process in which classes 'personify' particular position they occupy in the process of extracting surplus labour. And this process of extraction is not determined by economic processes alone but constituted by both economic and non-economic determinations. In this paper when we talk about consumption classes we are not at all intended to capture the complex class process as briefly specified and their ramifications in the level of consumption, but rely on a simple assumption that consumption classes are at least roughly related to the complex class process and gives us a meaningful reference point at least to look into the various dimensions of inequality.

NSSO reports consumption expenditure of twelve consumer classes at both state levels and all-India defined on the basis of total monthly per capita consumer expenditure (MPCE) for households. The MPCE classes were so formed that the first two and the last two classes each

contained about five per cent of the all-India population according to class boundaries defined in the respective quinquennial survey, and the remaining classes each contained about ten per cent. Thus from this data we can get the consumption expenditure patterns of various classes on food and non-food items. However in the context of inequality in order to find a pattern in consumption expenditure, studying twelve consumption classes so defined would be incomprehensible in the sense changes in patterns across classes would be smoothed out and the differences between 'rich' 'poor' and the 'middle' would be defused in a way of incremental changes. As a result we define 'poor', 'rich' and 'middle' consumption classes in a tractable manner in order to bring out the broad trends within major classes.

We consider the 'bottom ten per cent' and the 'top ten per cent' that is, the first and last two of the NSSO, MPCE classes as the consumption classes representing the 'poor' or the 'bottom class' and the 'rich' or 'upper class' respectively. The 'middle class' has been defined in the literature in several ways. Easterly (2001) defines the middle class as those lying between the 20th. and 80th. percentile on the consumption distribution. Banerjee and Duflo (2007) studied the consumption pattern of 13 developing countries using an absolute definition as follows: Households whose daily per capita expenditures valued at purchasing power parity (PPP) is between \$2 and \$4 and those where it is between \$6 and \$10 as they match with Easterly's definition in most of the cases. In case of rural India however the \$2 line lies above the eightieth percentile of consumption and hence could not represent the middle segment of the population. The major problem with definitions based on absolute consumption range is comparability in the sense the absolute range of consumption that effectively captures the middle segment of one relatively developed country would be representing the consumption pattern of higher classes of a less developed country. Efforts had also been made primarily from the sociologists to define the middle segment on the basis of mix and status of occupational categories (Birdsall et al, 2000; Birdsall, 2007). The underlying proposition was middle class is more of a sociological category captured in sociological and cultural aspects linked to various occupations. The multidimensional and contradictory class 'places' of intermediate classes was mapped by Polantzas (1975) arguing that in capitalism the class positions are reflected in three spheres namely, economic, political and ideological. Except for the capitalist and the working class who are respectively dominant and dominated in each class places, there are other intermediate classes who might be dominant in one while dominated in the other. Occupations might be the

more befitting categories to capture such conflicting class locations however with changes over time in the relative values of the different types of education and skills, occupations that constitute the middle segment should also change.

The other approach of defining the middle class is by using the Engel coefficient as the boundary line. FAO (2001) defined Engel coefficient as the share of expenditure on food, beverages and tobacco of the total expenditure. According to the FAO's criterion Engel coefficient above 59 per cent denote poverty, 50 to 59 per cent means adequately fed and clothed, 40 to 50 per cent stands for ease, while people living with 30 to 40 per cent Engel coefficient are rich, those who below 30 per cent are the richest. According to this notion middle class segment is that comprising of people having Engel coefficient between 30 to 40 per cent. The problem with this definition is that it hardly considers the relative provisions of various goods and services across countries. In other words, for instance, if expenditure on necessary expenditure and health care increases as a result of privatizing such services and hence leading to a relative increase in the share of non-food expenditure that does not imply that people are better off!

In this context what could be more appropriate both for a definition of middle class that is comparable over time and space is a relative measure very similar to 'bottom or the top ten per cent'. Such a definition of 'middle' consumption class that is widely accepted is those between 75 to 125 per cent of the median per capita consumption that is the segment of the population just lying at the mid-segment of the consumption distribution. Thus for every reference year the median level of per capita consumption expenditure is computed and the lower and upper limit of consumption expenditure for the middle class is the 75 and 125 per cent of respective median value. Then for the middle class we find out the percentage of population having MPCE within that range and also their consumption expenditure on various items through interpolation. Although the items considered for the survey on consumption expenditure especially for non-food items changed over the years, for the sake of comparability we consider only those major items for which data is available for all the reference years.

As mentioned, NSSO constructs the MPCE classes in large scale rounds in a way such that the first two and last two classes each contain about 5 per cent of the population and the rest containing about 10 per cent of the population. In the intermediate small sample rounds the percentage share of population lying within consumption classes might deviate from the 5 or 10

per cent shares but in the successive quinquennial rounds again the consumption classes comprise of fixed shares of population. To keep matters simple we reasonably assume that even for the small sample years the consumption expenditures of the bottom two and top two classes largely approximates the consumption patterns of bottom and top ten per cent of the population. For the middle class we separately compute the lower and upper limits for each reference year and calculated the percentage of population within middle class in both rural and urban segments.

Table 1: Boundaries of consumption expenditure of three major classes and percentage of population within middle class in rural and urban segments

Year	Rnd./Rpt.	Rural				Urban			
		BTUL	Median	TLL	%WMC	BTUL	Median	TLL	%WMC
1993-94	50 th /401	140	237.26	455	36.15	190	358.74	825	35.31
1994-95	51 st /436	140	252.69	455	43.54	190	382.26	825	35.25
1995-96	52 nd /440	140	288.53	455	34.88	190	451.16	825	35.38
1997	53 rd /442	140	325.99	455	41.95	190	487.52	825	34.51
1998	54 th /448	140	320.28	455	42.68	190	517.34	825	34.64
1999-00	55 th /454	255	436.83	775	42.58	350	685.49	1500	32.94
2000-01	56 th /476	255	429.9	775	45.04	350	693.74	1500	33.27
2001-02	57 th /481	255	418.6	775	41.91	350	733.75	1500	32.94
2002	58 th /484	255	456.45	775	44.97	350	776.43	1500	31.28
2003	59 th /490	255	469.05	775	30.86	350	794.44	1500	32.55
2004	60 th /505	255	471.1	775	45.46	350	807.62	1500	32.66
2004-05	61 st /508	270	455.55	890	43.6	395	847.09	1880	31.97
2005-06	62 nd /523	270	529.35	890	43.61	395	899.91	1880	33.26
2006-07	63 rd /527	270	578.14	890	42.21	395	989.73	1880	32.44

Source: Computed from NSS reports on household consumption expenditure, various rounds. Notes: Rnd./Rpt.= NSS Round and report No.; BTUL: Upper limit of the bottom class; TLL: Lower limit of the upper class; WMC: within middle class.

The upper limit of consumption expenditure for the bottom, middle and the upper classes, in the rural segment, increased by 1.93 times, 1.92 times and 1.95 times during the period 1993-94 to 2004-05 (Table 1). In the urban segment the respective changes are 2.07 times, 2.36 times and 2.27 times during the same period. In rural areas percentage of people within middle class increased from 36.15 per cent in 1993-94 to 42.21 per cent in 2006-2007. Share within the

middle class in the rural segment increased as a result of a decline in the share of above middle class population together with a marginal rise in the share of population below middle class segment. In urban areas, on the contrary, percentage of people within middle class declined from 35.31 per cent in 1993-94 to 32.44 per cent in 2006-2007 (Table 2).

Table 2: Share of population within three consumption classes in rural and urban segments

	Rural			Urban		
	%BMC	%AMC	%WMC	%BMC	%AMC	%WMC
1993-94	24.94	38.91	36.15	29.38	35.31	35.31
1994-95	24.69	31.77	43.54	30.37	34.48	35.25
1995-96	23.83	41.29	34.88	29.49	35.13	35.38
1997	25.09	32.96	41.95	29.51	35.98	34.51
1998	25.21	32.09	42.68	29.54	35.82	34.64
1999-2000	24.01	33.4	42.58	29.62	37.43	32.94
2000-01	24.3	30.65	45.04	29.58	37.14	33.27
2001-02	25.04	33.05	41.91	31.47	35.59	32.94
2002	23.95	31.08	44.97	31.71	37.01	31.28
2003	24.85	30.86	30.86	31.28	36.17	32.55
2004	22.99	31.54	45.46	30.91	36.43	32.66
2004-05	24.85	31.54	43.6	31.56	36.47	31.97
2005-06	25.24	31.15	43.61	30.59	36.15	33.26
2006-07	25.15	32.64	42.21	31.18	36.68	32.44

Notes: BMC= below middle class; AMC= above middle class; WMC=within middle class

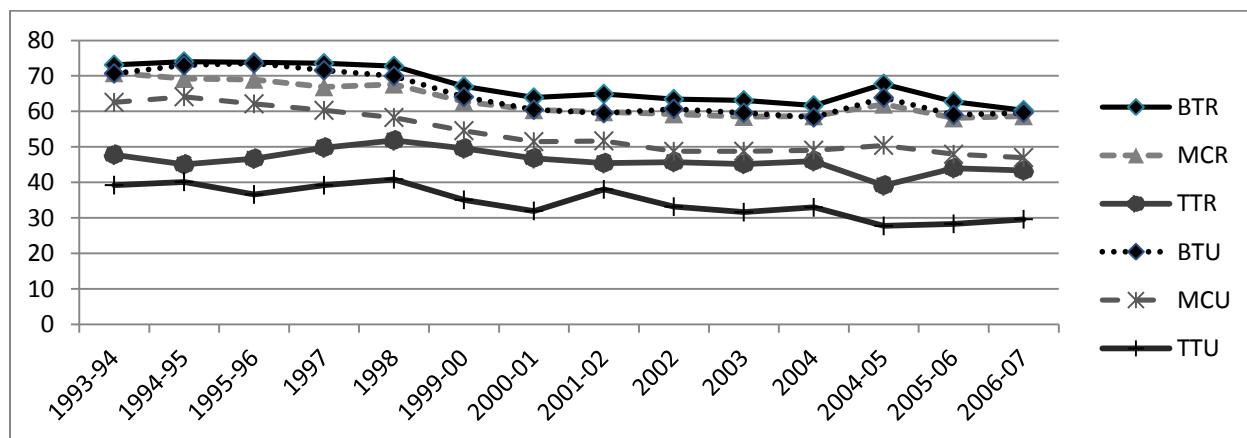
Source: Computed from NSS reports on household consumption expenditure, various rounds

It was a result of rise in the share of population both in the upper and lower segments. Thus in the urban areas over the last two decades there seems to be a process of increased polarization resulting a shrinkage in the middle segment while in the rural segment a leveling down from the top would have resulted in the swelling of the middle segment. In the following section we discuss about the trends in expenditure on food items of the three consumption classes in rural and urban segments. In the case of shares the total expenditure on food it is computed as percentage of total consumption expenditure while for the shares of specific food items the share is measured out of total expenditure on food in respective segments and reference years.

Trends in consumption expenditure on food items

In rural areas the share of food expenditure in total consumption expenditure declined by about 10 per cent for all income classes. The share of total expenditure on food for the bottom, middle and upper classes declined in percentage from 73.1 to 60.3, 70.8 to 58.7 and 47.8 to 43.3 respectively during the period 1993-94 to 2006-07. The shares in food expenditure in the urban segment for the bottom, middle and upper classes declined from 70.7 to 59.6, 62.5 to 46.9 and 39.2 to 29.6 percent respectively during the same reference period. As shown in Chart 1 the gap between bottom class and middle class in terms of share of expenditure in food is wider in the urban segment compared to the rural areas but that between the upper class and the middle class is more or less same in both the segments. Comparing the slopes we find that the declines have been higher for all the three classes in the urban segment compared to their rural counterparts. Moreover in each of the segments bottom classes show a sharper decline than the middle and upper classes.

Chart 1: Share of food expenditure in total consumption expenditure by classes and segments



Source: Same as Table 1; Notes: BTR= Bottom class rural; MCR= Middle class rural; TTR= Upper class rural; BTU= Bottom class urban; MCU= Middle class urban; TTU= Upper class urban

Table 3 shows the relative shares of various food items in the food basket of respective classes. Although the table reports data for two years, the point-to-point trends are representative of the trends over the years. Looking into the expenditure on food items we find that the difference in consumption expenditure is sharper across classes in the case of cereals, milk and milk products and beverages etc. Relative shares of cereals in total expenditure on food are highest in the case

of both rural and urban bottom class which is quite expected and the relative shares of milk and beverages is highest in the case of both rural and urban upper class. In the case of three items namely: cereals, spices and salt the relative shares of expenditure had been higher for bottom class than the upper class both in rural and urban areas for the two reference years 1994/95 and 2006/07.

Table 3: Share of expenditure on various food items by segments and classes

	BTR		MCR		TTR		BTU		MCU		TTU	
	94-95	06-07	94-95	06-07	94-95	06-07	94-95	06-07	94-95	06-07	94-95	06-07
CRL	56.10	52.60	44.62	36.25	27.06	22.89	47.34	40.68	31.80	25.78	16.88	15.92
GRM	0.11	0.48	0.27	0.28	0.57	0.39	0.12	0.23	0.29	0.34	0.48	0.30
CRLSUB	0.06	0.03	0.10	0.08	0.16	0.23	0.10	0.04	0.14	0.10	0.11	0.10
PLS	5.90	4.86	5.93	6.45	6.21	5.99	6.40	6.99	6.33	6.32	4.43	4.78
MLK	5.57	4.49	12.01	12.30	20.88	20.78	8.45	8.10	16.14	17.97	22.25	21.56
EDO	7.72	7.08	7.26	7.94	8.15	6.79	8.05	8.33	9.19	7.89	7.06	6.07
MEF	3.43	3.55	4.68	6.26	6.07	7.60	3.81	4.59	6.33	6.84	7.23	6.45
VEG	9.18	13.04	9.49	12.71	8.79	10.40	9.65	12.35	9.44	11.69	8.18	9.54
FRF	0.65	0.94	1.50	2.00	2.91	4.10	1.19	1.59	2.76	3.33	5.40	6.04
FRD	0.31	0.04	0.33	0.46	0.76	1.10	0.33	0.34	0.65	0.76	1.69	1.99
SUG	3.47	3.03	4.53	3.74	5.18	4.05	4.66	4.05	4.55	3.77	3.18	2.62
SLT	0.49	0.54	0.33	0.40	0.22	0.31	0.39	0.47	0.30	0.36	0.19	0.24
SPC	3.97	4.70	4.04	4.35	3.43	3.72	4.63	4.59	3.76	4.06	2.81	2.83
BVG	3.03	4.60	4.92	6.79	9.63	11.65	4.89	7.66	8.34	10.78	20.11	21.56

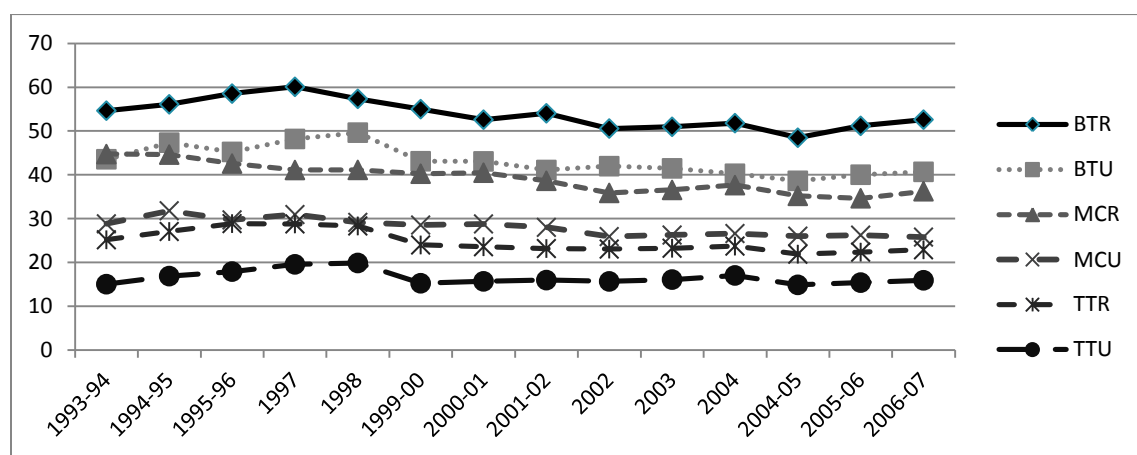
Source: Same as Table 1; Notes: CRL=cereals; GRM=gram; CRLSUB=cereal substitute; PLS=pulses & products; MLK=milk&products; EDO=edibleoil;MEF=meat-egg-fish;VEG=vegetables; FRF=fruits (fresh); FRD=fruits (dry); SUG=sugar; SLT=salt; SPC=spices; BVG=beverages etc.

In the rural segment considering the two reference years for the bottom class the items for which shares in expenditure declined are cereals, cereal substitutes, pulses and products, milk and milk products, edible oil, sugar and dry fruits. The items for which share in food expenditure increased are the following: gram, egg-fish-meat, vegetable, salt, beverages and fresh fruits. In the urban segment considering the same bottom class expenditure shares declined for cereals, cereal substitutes, milk, sugar and spices and the share increased for the rest. In both the segment the highest decline and rise could be seen for cereals and vegetables respectively.

In the case of middle class in the rural segment items that record a decline in share are: cereal, cereal substitutes and sugar and for the rest the shares show a rise. In the urban segment, items showing a decline in expenditure share were cereals, cereal substitutes, pulses, edible oil and sugar and it increased for the rest of the items. In the rural segment for the upper classes

expenditure share declined for cereals, gram, pulses, milk and milk products, edible oil and sugar while the share increased for the rest. In the urban segment the list of items showing declining share was more or less same only difference being a decline in the share of meat-egg-fish. For both the middle and upper classes in the two segments the highest decline in share occurred in the case of cereals while the highest rise was registered for expenditure on beverages. In the urban segment the share of expenditure on cereals, pulses, vegetables, sugar, spices and edible oil had been higher for the bottom and middle classes compared to the upper class in both the reference years.

Chart 2: Share of cereals in food expenditure by classes and segments

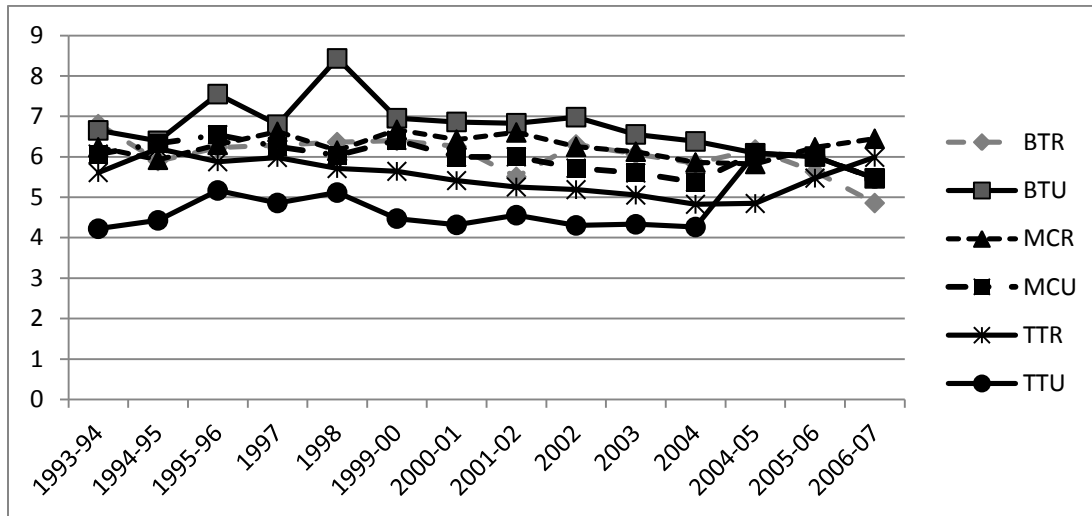


Source: Same as Table 1; Notes: Same as Chart 1

There seems to be variation in the pattern of expenditure on food items for the upper class in the rural and urban segments. Expenditure on beverages is 20 per cent and even more for the two reference years in the urban segment while it is close to 10 per cent or so in the case of rural upper class during the same years. Chart 2 shows the expenditure on cereals for all the three classes in rural and urban segments. The share of cereals within food expenditure for urban bottom class is less than that of rural bottom class by about ten percentage points. For the rural middle class the share of cereals within food-expenditure shows a sharper decline compared to that for the urban middle class. The share for the urban upper class remained more or less same but for rural upper class we see a sharper decline. The share of cereal in food expenditure reflects the Engel hypothesis. The curves from top to bottom exactly reflect the relative ranking of consumption classes in terms of income. We find that consumption on cereals accounts for a

share in food expenditure very similar in the case of urban bottom class and rural middle class while they are closer in the case of urban middle class and rural upper class.

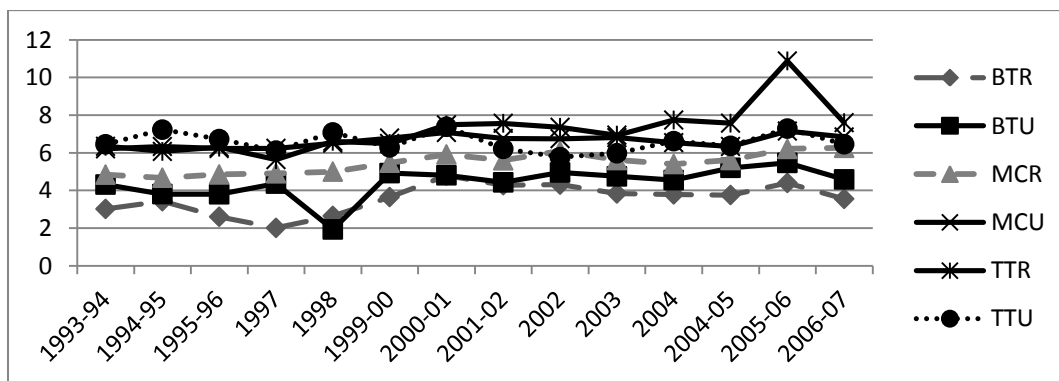
Chart 3: Share of pulses and products in food expenditure by classes and segments



Source: Same as Table 1; Notes: Same as Chart 1

The share of pulses and products in food expenditure declined in the case of both rural and urban bottom class (Chart 3). For the middle class there are varying trends: In the rural segment it increased moderately while for the urban middle class it declining marginally. For the upper class in the urban segment we find a consistent upward trend while in the case of the rural upper class it declined till 2004-05 and shows a rise thereafter.

Chart 4: Share of meat-egg-fish in food expenditure by classes and segments



Source: Same as Table 1; Notes: Same as Chart 1

The share of meat-egg-fish in food expenditure increased for all the rural classes (Chart 4). In the urban segment it increased for the middle and bottom class but remained more or less stable in the case of the upper class. The share of vegetables within food expenditure increased for all income classes both in rural and urban segment but the rise is less sharper in the case of the upper classes compared to others in both the segments.

Thus if we identify some broad trends in consumption expenditure on food items those would be the following: a) The share of food expenditure declined for all classes in rural and urban segment and it declined more in the case of urban population compared to the rural; b) In both the segments the bottom classes show a sharper decline in this regard compared to the middle and upper classes; c) In the case of the bottom class the share of expenditure of vegetables within the food group shows the highest rise while for the middle and upper classes the share of beverages marks the highest rise; d) The share of pulses and products within the food group declined for the bottom class in both rural and urban segments and for the middle class it increased marginally in the rural segment while declined for the urban middle class. For the urban upper class there has been a consistent rise, although for the rural counterpart it declined till 2004/05 and increased thereafter; e) Share of meat-egg-fish increased for all rural classes. In the urban segment it increased for the lower and middle classes while remained stable for the urban upper class.

Trends in consumption expenditure on non- food items

A similar point to point comparison of the share of various items within the non-food expenditure for the three consumption classes is done considering two reference years 1994-95 and 2006-07 (Table 4). The relative shares on pan, tobacco, intoxicants and fuel and light have been higher for bottom and middle classes than the upper classes in the two reference periods for both rural and urban areas.

In the rural segment for the bottom class expenditure share increased sharply for clothing, foot wear and durable goods and major declines being recorded in pan, tobacco and miscellaneous consumer goods. The expenditure share on clothing for the upper class declined sharply while for the middle class the share increased relatively less compared to the bottom class. The share of expenditure on durable goods fell for the upper class while it increased for both the bottom and

middle class. In the case of rural middle class, expenditure share increased for clothing, education and durable goods and major declines being recorded for miscellaneous consumer goods, pan and tobacco. For the upper class in the rural segment expenditure share increased sharply for misc. consumer services, education, fuel and light and it fell sharply in the case of clothing and durable goods.

Table 4: Share of expenditure on various non-food items by segments and classes

	BTR		MCR		TTR		BTU		MCU		TTU	
	94-95	06-07	94-95	06-07	94-95	06-07	94-95	06-07	94-95	06-07	94-95	06-07
PAN	2.42	0.36	2.02	0.96	0.78	0.58	1.56	0.76	1.52	0.60	0.48	0.19
TOB	7.62	3.20	6.71	3.61	2.07	1.68	6.13	3.09	3.76	1.73	1.00	0.61
INTX	4.33	2.34	2.86	2.17	1.19	1.62	1.72	1.21	1.47	1.01	1.03	0.52
F&L	41.78	37.53	26.61	25.90	8.66	13.69	35.69	32.32	22.56	20.09	8.35	9.74
CLTH	4.21	18.45	13.96	16.04	22.68	9.37	2.90	15.89	9.27	10.84	13.87	6.91
FTWR	0.86	2.42	1.99	2.20	2.93	1.66	0.65	2.16	1.69	1.90	2.25	1.40
MCONG	17.01	12.85	15.66	13.43	7.02	10.02	19.18	13.97	17.30	12.65	9.38	8.78
MCONS	9.96	9.16	11.71	12.63	10.59	20.31	10.94	9.98	12.64	17.86	23.15	26.93
RENT	0.05	0.00	0.32	0.32	0.87	1.51	4.10	3.49	8.86	7.97	8.63	8.89
TAXCES	0.26	0.08	0.23	0.40	0.25	0.59	1.60	0.84	1.16	1.32	1.76	1.40
EDU	2.62	2.26	3.51	4.94	3.52	8.24	5.24	4.40	7.54	8.94	8.10	13.84
MEDI	0.91	0.46	1.09	2.04	5.01	7.57	0.65	1.30	1.55	2.37	2.90	3.85
MEDNI	6.06	6.07	9.89	10.33	8.37	11.73	7.41	8.17	7.34	8.91	3.56	6.02
DG	1.93	4.82	3.44	5.01	26.03	11.43	2.23	2.44	3.36	3.81	15.55	10.92

Source: Same as Table 1; Notes: PAN=pan;TOB=tobacco; INTX=intoxicants; F&L=fuel and light; CLTH =clothing; FTWR=footwear; MCONG= misc. consumer goods; MCONS=misc. consumer services; RENT=rent; TAXCES= taxes & cess; EDU=education; MEDI= medical (institutional); MEDNI= medical (non-institutional); DG=durable goods.

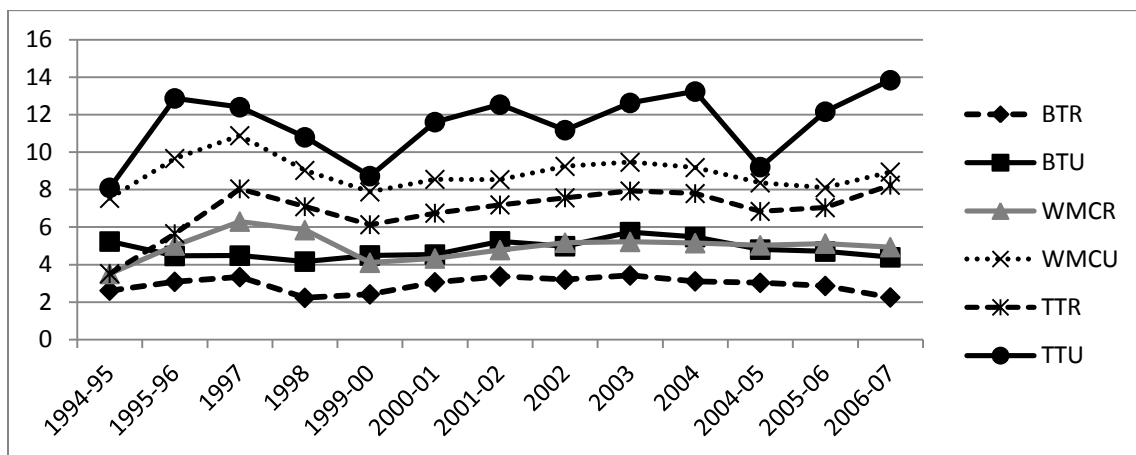
In the urban segment for the bottom class expenditure share increased sharply for clothing and foot wear. Major declines have been recorded in the case of miscellaneous consumer goods, tobacco, fuel and light considering the two reference years. For the urban middle class expenditure share increased sharply for misc. consumer services, clothing and medical (non-inst.) while major declines were recorded in the case of miscellaneous consumer goods and fuel and light. Expenditure share increased sharply for education, misc. consumer services and medical (non-inst.) in the case of the urban upper class and shares declined sharply for clothing and durable goods comparing the two reference years.

The share of clothing in non-food expenditure remained high for both rural and urban middle and lower classes although there seems to be a marginal decline in all the four classes since 2002 and 2003. The rise since 1998 had been relatively sharper for the lower classes compared to the middle classes for both the segments. On the other hand, the rise in the share of clothing

expenses had been higher in the case of rural bottom class compared to urban bottom class. In the case of middle class also data show difference in expenditure shares between rural and urban segments. For instance in the year 2006-07 the share of clothing in non-food-expenditure for the rural middle class is 16 per cent while that for the urban middle class it is 10.8 per cent. Expenditure shares of taxes and cesses, education and medical including institutional and non institutional expenditures increased for the middle class and the upper class in the both the segments.

For the bottom class expenditure share on education declined and that of medical (non-institutional) increased. The shares for medical (institutional) however declined for the bottom class in the rural segment while it increased for the bottom class in the urban segment.

Chart 5: Share of education in non- food expenditure by classes and segments

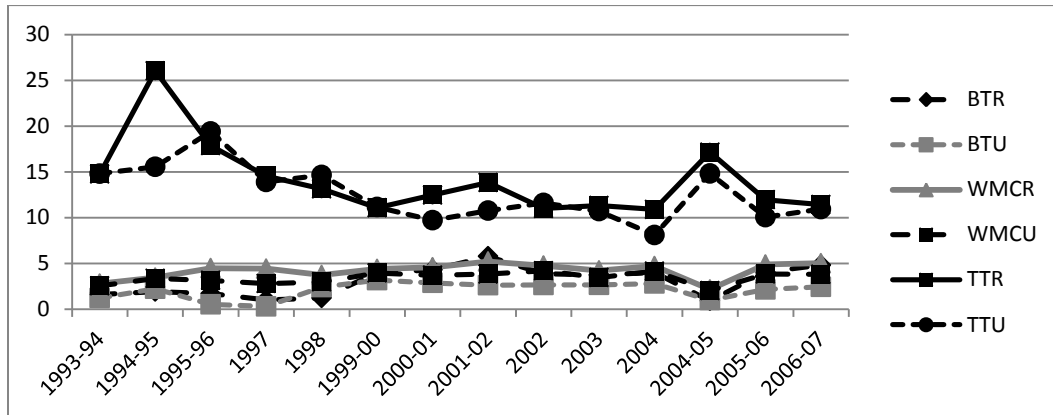


Source: Same as Table 1; Notes: Same as Chart 1

Expenditure on education reveals the class difference in a clear manner. For the bottom classes in both rural and urban segments the share on education within non-food expenditure had shown a marginal decline over the reference period. In the case of the middle class the share marginally increased while it increased sharply for both rural and urban upper class (Chart 5). In 2006-07 the share on education for the rural lower class was 2.26 per cent and that in the case of rural upper class was 8.24 per cent. In the urban segment for the bottom class expenditure share on education was 4.39 per cent while that for the upper class it was 13.84 per cent. Considering the middle class in the two segments the share of expenditure on education in the year 2006-07 for

the rural segment was 4.9 per cent while that for the urban middle class it was 8.9 per cent. In the case of the upper class the shares for the same reference year was 13.8 per cent and 8.2 per cent for the urban and rural segments respectively.

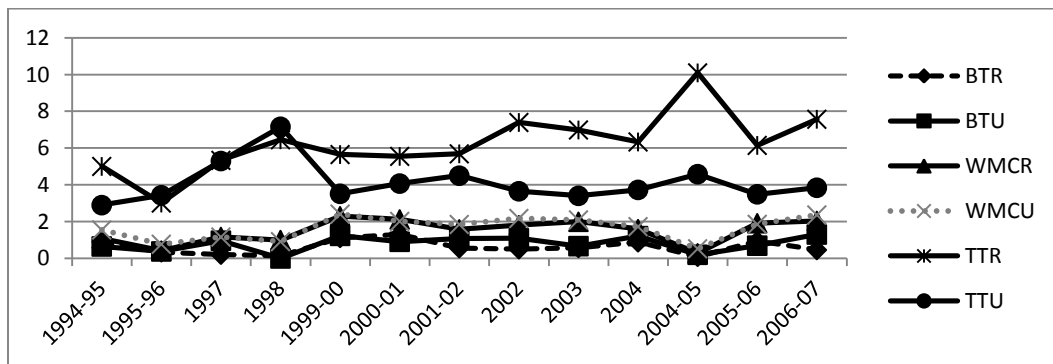
Chart 6: Share of durable goods in non- food expenditure by classes and segments



Source: Same as Table 1; Notes: Same as Chart 1

Expenditure share on durable goods within the non-food group declined sharply for both rural and urban upper classes while it shows marginal increasing trend for the middle and lower classes in rural and urban segments (Chart 6). The share on durable goods for the urban upper class in 2006-07 was however more than four and three times than that of the bottom and middle class respectively. In the case of the rural upper class it was more than thrice and twice to that of the rural bottom and middle class respectively.

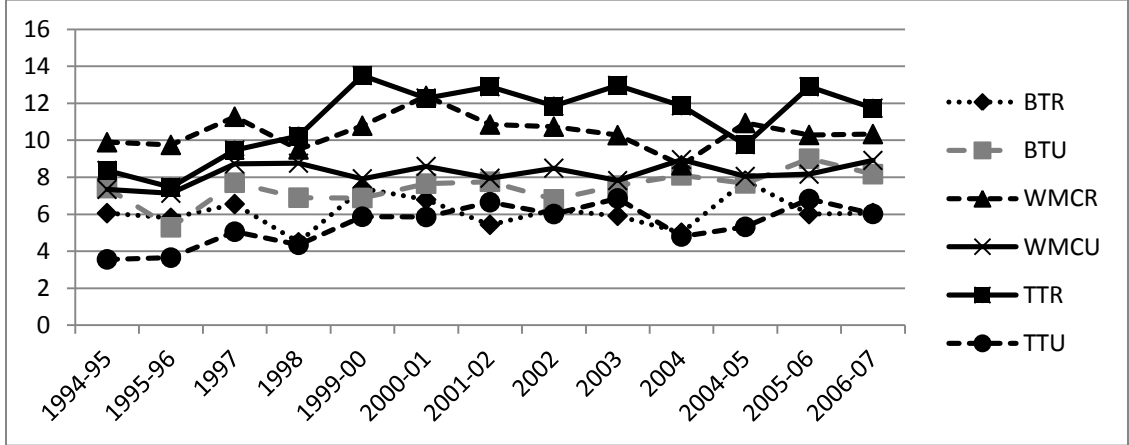
Chart 7: Share of medical (institutional) in non- food expenditure by classes and segments



Source: Same as Table 1; Notes: Same as Chart 1

Considering the share of total medical expenditure in non-food expenditure the trends across the consumption classes are the following: a) Share is higher for urban bottom class compared to the rural bottom class while for the middle and upper classes the share for rural segments has been much higher than the urban counterparts. The share of total medical expenditure in the non-food group for the urban bottom class is 9.5 per cent while that for the rural bottom class is 6.5 per cent; b) For the upper class the share of medical expenditure in the rural segment has been much higher than that for the urban counterpart and although both have a rising trend the slope for the rural had been much higher than that for the urban; c) Both for the bottom class and the middle class in the two segments the share on total medical expenses show a marginal rising trend; d) For the bottom class the share on medical (institutional) remained more or less same and that for the medical (non-institutional) there is a rising trend (Chart 7, 8). In the case of middle class although the share on both components increased but the share on medical (non-institutional) shows a higher slope; e) For the upper class the gap between the rural and urban segment has been much higher for medical (non-institutional) compared to that for medical (institutional); f) For the upper class the share on medical (non-institutional) increased much earlier than the share in medical (institutional).

Chart 8: Share of medical (non-institutional) in non-food expenditure by classes and segments



Source: Same as Table 1; Notes: Same as Chart 1

Share of entertainment in non-food expenditure increased for all income classes both in rural and urban areas. The share of expenditure in the case of urban bottom class and that for the rural middle class had been close to one per cent while the same share in the case of urban middle and

upper class had been close to three per cent. The rural-urban gap for both the middle class and upper class had been large and this had increased over the years. The share of misc. consumer goods within non-food expenditure for the upper class remained more or less same in both rural and urban segments. For the middle and the lower classes there is a clear trend of decline and the decline is relatively sharper for the lower classes. However the share had been much higher for the bottom classes compared to the upper classes.

We find opposite trends in the case of miscellaneous consumer services. First, the share had always been higher for the upper classes compared to middle and lower. Second there had been a marginal declining trend in the case of bottom class both for the rural and urban segment while for other consumption classes there had been a clear increasing trend. Third, in this regard there has always been a large gap between rural and urban segments both in the cases of middle and upper classes. The gap between middle classes in the rural and urban segments has increased over the years. Fourth, excepting the upper class, for other consumption classes the shares had been quite close to each other until 1998.

Trends in deflated consumption expenditure

In the previous sections we looked into the shares of consumption expenditure in the food and non-food group for the three consumption classes which basically reflects how *ex post* priorities of an average consumer belonging to the respective classes changed over the years. In order to bring out the changes in consumption pattern in terms of real quantities we need to deflate each of the absolute expenditures by a suitable price index. In this regard we used the National Accounts Statistics giving us the final consumption expenditure data both at constant and current prices for a continuous series. We compute a price index series for all commodities fixing 1993-94 as the base year, that is index number for every commodity in that year is 100. Using these index numbers we compute the deflated consumption expenditure of every consumption class for all the relevant commodities over the years and that provides an index of the trends in real consumption expenditure. We further compare the slopes and intercepts of the trend lines derived from absolute figures and deflated figures and also see how the shares changed in reference to the indexed trends. The findings throw some more light on the observations derived from shares of expenditure.

Table 5: Intercepts and slopes of trend lines of expenditure on various food and non-food items

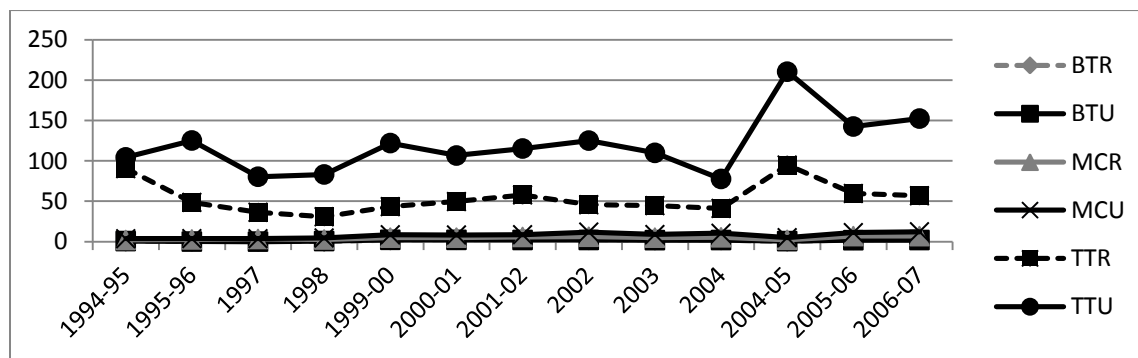
Intercepts of trend lines showing indexed expenditure						
	BTR	MCR	TTR	BTU	MCU	TTU
CRLS	40.815	62.943	73.437	42.086	61.933	72.503
PLAP	4.9334	10.147	17.292	7.0273	14.103	21.801
MEF	1.9816	6.653	13.992	3.1182	12.404	26.981
VEG	7.2754	14.571	24.089	9.4751	21.097	39.206
CLTH	2.404	9.095	61.87	2.357	12.94	85.15
FTWR	0.233	1.403	10.46	0.296	2.508	16.57
DG	0.457	2.49	49.35	0.658	3.335	86.1
EDU	0.732	3.015	13.27	6.108	10.24	56.12
MEDI	0.213	0.842	11.03	3.991	1.643	27.3
MEDNI	1.716	7.777	26.99	0.998	9.766	25.35
Slopes of trend lines showing indexed expenditure						
	BTR	MCR	TTR	BTU	MCU	TTU
CRLS	-0.1952	-0.7923	-0.5231	-0.1681	-0.4714	-0.2512
PLAP	-0.0645	-0.109	-0.2142	-0.0609	-0.1936	-0.3388
MEF	0.0882	0.1905	0.9072	0.156	0.179	0.0893
VEG	0.1623	0.2051	0.2484	0.146	0.1312	-0.1419
CLTH	0.736	1.115	-1.508	0.991	1.755	0.395
FTWR	0.084	0.143	-0.211	0.139	0.289	0.028
DG	0.155	0.297	0.644	0.117	0.636	4.792
EDU	0.035	0.138	1.063	-0.295	0.649	4.626
MEDI	0.007	0.093	1.698	-0.296	0.257	1.365
MEDNI	0.104	0.321	1.906	0.41	0.954	3.712

Source: Same as table 1; Notes: Same as Table 3,4

For all the three consumption classes there has been a rising trend in the consumption of meat-egg-fish and the slope has been the sharpest in the case of rural upper class. However if we compare the intercepts of the trend lines showing deflated consumption expenditure we find that this is 1.98 in the case of rural bottom class and 13.99 in the case of rural upper class, while in the urban segment the respective intercepts are 3.12 and 26.98 (Table 5). This perhaps indicates the huge gap that exists at the initial period between the bottom and upper classes in terms of real consumption of meat, egg and fish in both rural and urban segments. Considering the slopes of the trend lines we find that for the bottom class in the rural segment the slope is 0.08 while for the upper class it is 0.9. In the urban segment there seems to be an opposite trend. The slope for the bottom class is 0.16 while that for the upper class it is 0.09. This can perhaps be explained by the gap in the intercepts of the trend lines for the upper and bottom class in the two segments. It perhaps gives us a clue that the consumption of meat-egg-fish for the upper class in the urban segment was relatively much higher in the initial period compared to their rural counterparts and because of that the rise had not been as sharper in the urban segment as it had been for the rural upper class. Similar reasoning is applicable in the case for vegetables, clothing and footwear. Comparing the intercepts of the trend lines of indexed consumption of vegetables we find that it is 39.2 in the case of urban upper class and that for the rural and urban bottom classes these were

much lower only 7.27 and 9.47 respectively. In the case of clothing and footwear the real consumption expenditure shows a declining trend for the rural upper class while for others it increased, although the gaps in intercepts between classes reflect huge difference in initial entitlements. The intercept for real values of clothing in the case of bottom classes are 2.40 and 2.36 for the rural and urban segments respectively while for the upper classes these are 61.87 and 85.15 for the respective segments. Similarly in the case of footwear the intercepts for the bottom classes in the rural and urban segment are 0.23 and 0.29 while for the upper classes in the two segments these are 10.46 and 16.57.

Chart 9: Indexed consumption expenditure on durable goods by classes and segments



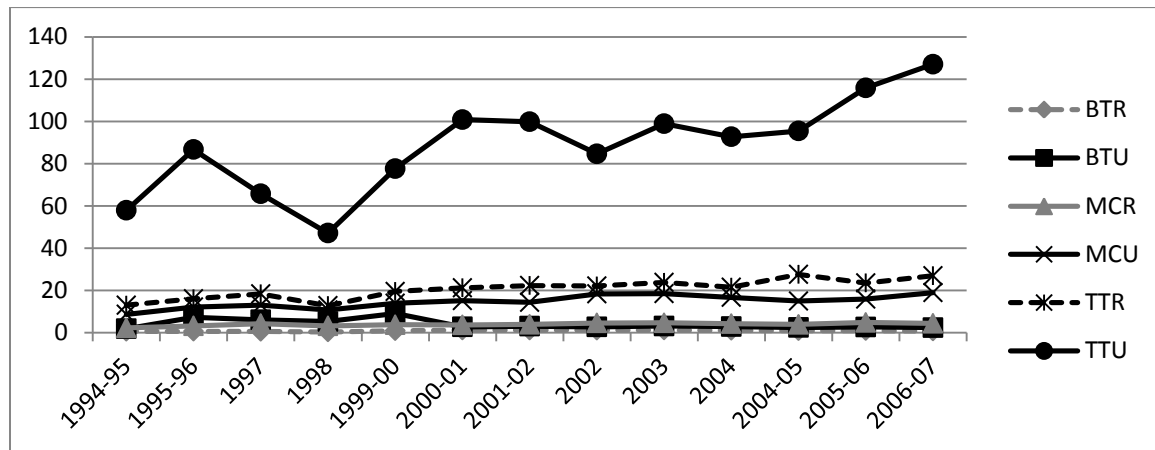
Source: Same as Table 1; Notes: Same as Chart 1

There had been a rising trend in the indexed consumption of durable goods for all the consumption classes (Chart 9). The trend has been sharpest in the case of urban upper class. The slope of the trend line for the urban middle class seems to be close to that for the rural upper class. Although the slope of the trend line reflecting share of durable goods in the non-food group for the upper classes shows a negative trend and for the middle class there is a marginal rise, it is interesting to note that the intercepts for the real trends of durable goods is 86.1 and 49.35 for the urban and rural upper class respectively while these are 3.33 and 2.49 for urban and rural middle classes.

In reference to consumption expenditure on education the sharpest rise had been for the urban upper class (Chart 10). The difference in the slopes within middle and upper classes for the rural and urban segments is also high in the case of education. The real consumption of education for the urban bottom class declined over the years. This might be the result of education becoming

increasingly unaffordable because of steep increase in the cost of education. In the case of education the slope for rural bottom class is 0.03 and that for the upper class it is 1.06; while the slopes for the urban counterparts are -0.3 and 4.6 respectively.

Chart 10: Indexed consumption expenditure on education by classes and segments



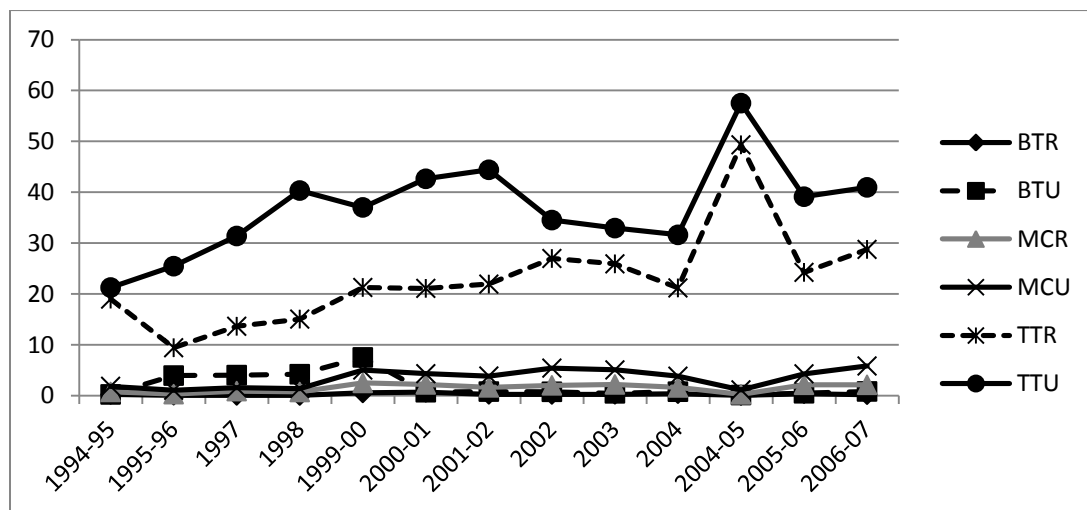
Source: Same as Table 1; Notes: Same as Chart 2

Consumption expenditure on medical (institutional) in real terms shows a rising trend for all classes except for the urban bottom class (Chart 11). The difference in terms of slopes as well as that of intercepts between the bottom and top classes is also high in the case of medical (inst). Similar to that in education, the difference in the slopes within middle and upper classes for the rural and urban segments is also high in this case. The slope in the case of rural bottom class is 0.007 and for the urban upper class it is 1.365 and the corresponding intercepts are 0.21 for the rural bottom class and 27.3 for the urban upper class.

Comparing intra-class differences in the two segments we find that within the bottom class the difference in the slopes of real expenditure between rural and urban segments is highest for meat-egg-fish in the food group and that for medical non-inst in the non-food group. In the case of the middle class this difference is highest for cereals and clothing respectively and that for the upper class is highest in the case of meat-egg-fish and durable goods. The differences in the trends in real expenditure reflect the effect of urbanization on the consumption patterns across classes.

In the cases of education, durable goods and medical care we find a pattern that is different from what it is for clothing and foot wear. In the latter cases the intercepts for the higher classes are large compared to that of the bottom classes but the slopes for the bottom class is higher than the upper classes. For the former group of goods not only the difference in the intercepts for the upper and bottom classes is large but also the slopes for the upper classes are much higher than those for the bottom classes. This implies perhaps that in regard to the consumption of education, medical care and durable goods the inequality between the bottom and upper classes is going to increase further.

Chart 11: Indexed consumption expenditure on medical (institutional) by classes and segments



Source: Same as Chart 11

The changing relation between the absolute and indexed figures and that to with respect to the patterns of changes taking place in the shares of consumption expenditure over time and across consumption classes, provide some more insights to the dynamics of inequality in the context of consumption. In absolute terms obviously there is a rising trend in expenditure on cereals and pulses while in real terms it shows a decline. Moreover, the share of cereals in food expenditure declined for all classes and for pulses also it declined for all classes except for the urban upper class. For all classes the difference between the slope of absolute and real figures is highest in the case of cereals and then for vegetables. What is evident from the above facts is that even by spending a larger amount of money on cereals and vegetables people was effectively consuming less over the years. The other important fact of course is that there has been a change in the

priority in the food basket as well reflected by the declining share of cereals and pulses. The intercepts of the shares in food expenditure in the case of cereals show clearly how its importance in the food basket declines from rural bottom class to urban upper class.

If we consider the slope of the shares (not shown in the paper) as an indicator of the relative importance within the food and non-food basket we find: a) for the bottom and middle classes in the food group it is vegetables that show the higher gradient; for the rural upper class it is meat-egg-fish and for urban upper class it is pulses. The share of meat-egg-fish in the case urban upper class shows a negative trend; b) In the non-food group for rural bottom class the gradient of the share in clothing has been the highest while for the urban bottom class it is medical non-inst; for both segments of middle class clothing has the highest slope in terms of share within the non-food group; for the upper class it is again clothing in the urban segment and durable goods for the rural segment.

Some concluding remarks

Change in the patterns of consumption expenditure is a complex process, nevertheless, some broad trends can be identified on the basis of 'social differentiation' of which income or consumption class is one dimension of several aspects of stratification. First, differences in the consumption between upper and bottom classes are supposed to be more in terms of conspicuous consumption that reflect cultural and 'status' identities while in the cases of necessities it is expected that consumptions more or less converge as the economy develops. In this paper we considered items of consumption that relate to necessities and we hardly find any converging trend. On the contrary, in the cases of most of the food and non-food items the consumption expenditure in real terms shows a rising gap between the upper and the bottom classes. Second, we find two groups of commodities: a) clothing and footwear, in which cases the gaps between the top and bottom classes in terms of initial entitlements were huge but the rising trend of consumption for the bottom classes have been higher than that of the upper classes; b) durable goods, education and medical care: not only the initial gaps between upper and bottom classes had been wide but the slopes were also higher for the upper classes compared to their bottom counterparts. Third, there has been a change in the relative priorities in the food basket in the rural and urban segments. The shift is against cereals and pulses and more towards high valued food such as meat-egg-fish and fruits and vegetables within the food basket. The declining share

of the cereals and pulses and the rising share of other items for the bottom class imply a distinct change in dietary that might have significant impact upon their nutrition. Patnaik (2007) had been arguing for long that the new food basket is more expensive and could not secure the nutritional requirements at least for the poor. This is because maintaining the same level of nutrition with a declining cereal intake requires quite a high supplementary consumption of meat, fish, egg, fruits and vegetables and since these replacements in adequate amount are beyond the capacity of the poor, the change is likely to result in a fall in their nutrition levels.

References

- Banerjee V. Abhijit and Esther Duflo (2007), 'What is Middle Class about the Middle Classes around the World?' Massachusetts Institute of Technology, Department of Economics Working Paper 07/29.
- Birdsall, Nancy, Carol Graham, and Stefano Pettinato (2000), 'Stuck In The Tunnel: Is Globalization Muddling The Middle Class?' Brookings Institution, Center on Social and Economic Dynamics Working Paper No. 14.
- Birdsall, Nancy (2007), 'The Macroeconomic Foundations of Inclusive Middle-Class Growth', 2020 Focus Brief on the World's Poor and Hungry People. Washington, DC: IFPRI.
- Easterly, William (2001), 'The Middle Class Consensus and Economic Development' *Journal of Economic Growth*, 6(4): 317-335.
- NSSO, Reports on household consumption expenditure, various rounds.
- Patnaik, Utsa (2007): *The Republic of Hunger and other Essays*, (India: Three essays Collective).
- Poulantzas, Nicos (1975): *Political Power and Social Classes* (London: Verso)