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Exclusive Growth – Inclusive Inequality

By

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Federation of Indian Micro and Small & Medium Enterprises (FISME)

Exclusive Growth – Inclusive Inequality*

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Occasional Paper on
'Exclusive Growth – Inclusive Inequality'

Abstract

Inclusive growth has been the subject of much debate in the country in recent years. Economic growth rate exceeding nine percent has been achieved and, it appears, will be sustained for the next few years. But has this growth benefited everyone? And if so, has it benefited the poor more than the rich? Investigating these issues the authors find that indeed, growth has benefited all segments, including the underprivileged. As a consequence poverty fallen in all parts of India. However, the paper also finds that the rich have benefited more than the poor in most parts of India, and as a consequence inequality has increased in almost all states of the country. Investigating this further, the paper finds that there is a distinct and strong correlation between self employment and equality. In states where self employment is high inequality is low.

The policy implications are quite clear - the government needs to encourage self employment and entrepreneurship, not just employment.

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Section 1: Introduction

Inequality is an important issue for the UPA government. For instance, the Approach Paper to the 11th Five Year Plan (2007-12) adopted in December 2006, mentions "inclusive growth" in the title itself¹. There is a specific chapter² on bridging divides. "The strategy of inclusive growth proposed in this paper can command broad based support only if growth is seen to demonstrably bridge divides and avoid exclusion or marginalization of large segments of our population. These divides manifest themselves in various forms: between the haves and the have-nots; between rural and urban areas; between the employed and the under-unemployed; between different states, districts and communities; and finally between genders."

As this quote makes clear, inequality and the allied notion of poverty can take different forms. In the last resort, development and deprivation are about individuals, since specific individuals may be poor or earn low levels of income relative to others. Ascribing poverty or inequality to collective identification, be it based on geography (States, districts, rural versus urban areas) or caste (SCs, STs, OBCs, religious minorities) or even gender amounts to use of surrogate and simplified indicators. Collective identification can commit the double error of not including the deprived in the assumed "have" category or of including the developed in the assumed "have-not" category. Yet another preliminary point concerns the distinction between poverty and inequality. The former is an absolute concept, while the latter is a relative one. It is logically possible for the standard of living of the poor to increase, while relative inequality also increases because the standard of living of the rich has increased by relatively more and it is by no means obvious that this is undesirable. And finally, poverty (or inequality) is not only about income and/or expenditure. They have other dimensions too, such as unequal access to education, health and physical infrastructure and participation in decision-making processes. Some of these, but not all, are captured in the Millennium Development Goals.

For a long time, the poverty/inequality debate in India was mired in methodological issues concerning the comparability of the large sample NSS data of 1999-2000 with that of 1993-94. Thus, the debate on the effects of post-1991 liberalization on poverty and/or inequality took place in the complete absence of any reliable data, notwithstanding attempts to make NSS 1999-2000 comparable with NSS 1993-94³. This changed with the availability of the NSS 2004-05 (61st round). In this paper, we will avoid any comparisons that involve NSS 1999-2000. Instead, the comparisons will be between NSS 1993-94 and NSS 2004-05, the earlier NSS large sample having been conducted in 1987-88. The two end points chosen for comparison permit an equation between poverty/inequality trends and the present cycle of reforms, 1991 being close enough to 1993-94. Poverty (head-count) ratios across Indian States have already been published by the Planning Commission, based on the 61st round⁴. These are shown in Table 1. These are the uniform recall period⁵ estimates. Deprivation measured through the poverty ratio is high in Bihar, Chhattisgarh, Jharkhand, MP, Maharashtra, Orissa, UP, Uttarakhand and Dadra & Nagar Haveli. At least in terms of this criterion, Rajasthan no longer belongs to the BIMARU category, whereas Orissa does.

¹ *Towards Faster and More Inclusive Growth, An Approach to the 11th Five Year Plan, Planning Commission, Government of India, December 2006.*

² Chapter - 5.

³ *The Great Indian Poverty Debate, Angus Deaton and Valerie Kozel edited, Macmillan, India, 2005 has several contributions on this and it is unnecessary to repeat the issues. The large sample NSS data surface at roughly five-yearly intervals and the interim thin samples are not reliable enough*

⁴ <http://planningcommission.gov.in/news/prmar07.pdf>

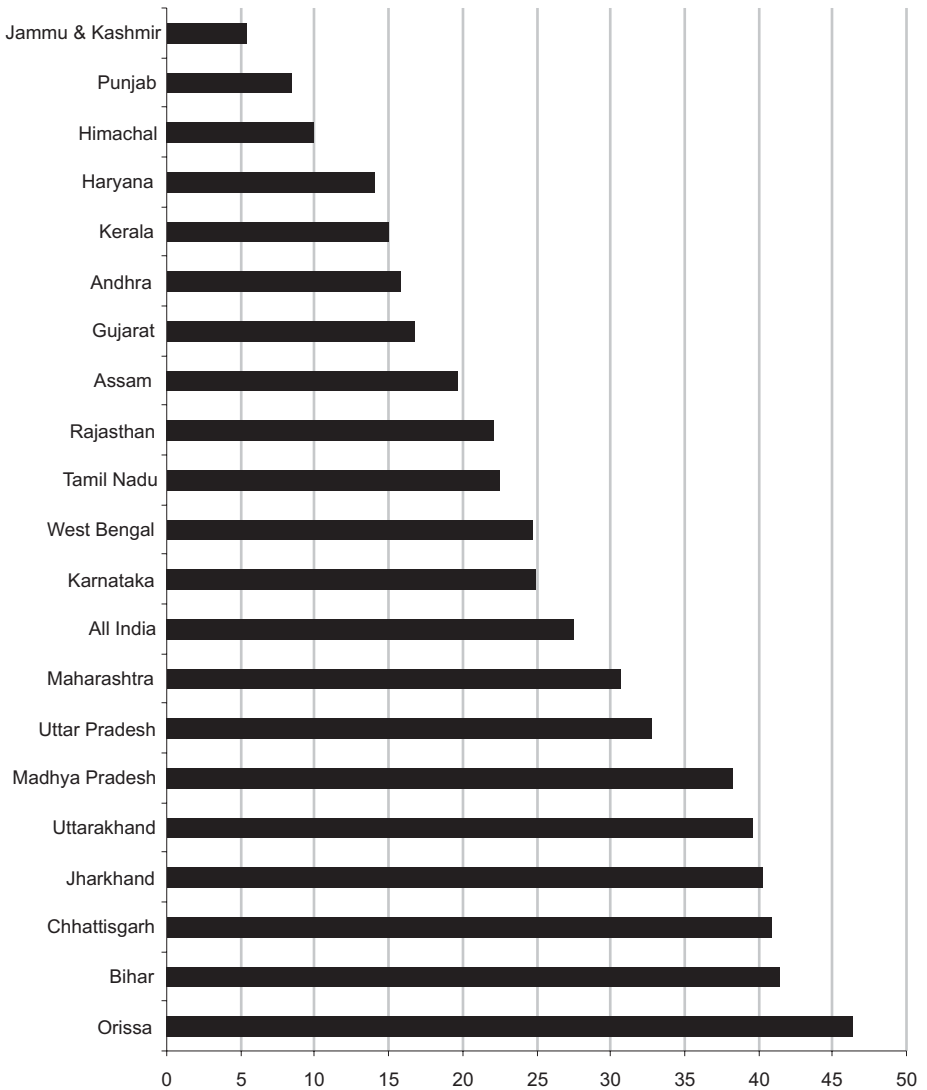
⁵ *The uniform recall period is one of 30 days and these estimates are comparable to 1993-94. 1999-2000 used a mixed recall period of 365 days for some items, rendering comparisons with 1993-94 untenable.*

Table 1: Poverty Ratios across States (%), 2004-05

States/UTs	Rural	Urban	Total
Andhra Pradesh	11.2	28.0	15.8
Arunachal Pradesh	22.3	3.3	17.6
Assam	22.3	3.3	19.7
Bihar	42.1	34.6	41.4
Chhattisgarh	40.8	41.2	40.9
Delhi	6.9	15.2	14.7
Goa	5.4	21.3	13.8
Gujarat	19.1	13.0	16.8
Haryana	13.6	15.1	14.0
Himachal Pradesh	10.7	3.4	10.0
Jammu & Kashmir	4.6	7.9	5.4
Jharkhand	46.3	20.2	40.3
Karnataka	20.8	32.6	25.0
Kerala	13.2	20.2	15.0
Madhya Pradesh	36.9	42.1	38.3
Maharashtra	29.6	32.2	30.7
Manipur	22.3	3.3	17.3
Meghalaya	22.3	3.3	18.5
Mizoram	22.3	3.3	12.6
Nagaland	22.3	3.3	19.0
Orissa	46.8	44.3	46.4
Punjab	9.1	7.1	8.4
Rajasthan	18.7	32.9	22.1
Sikkim	22.3	3.3	20.1
Tamil Nadu	22.8	22.2	22.5
Tripura	22.3	3.3	18.9
Uttar Pradesh	33.4	30.6	32.8
Uttarakhand	40.8	36.5	39.6
West Bengal	28.6	14.8	24.7
A & N Islands	22.9	22.2	22.6
Chandigarh	7.1	7.1	7.1
Dadra & N Haveli	39.8	19.1	33.2
Daman & Diu	5.4	21.2	10.5
Lakshadweep	13.3	20.2	16.0
Pondicherry	22.9	22.2	22.4
All India	28.3	25.7	27.5

Source: Planning Commission of India

Poverty Levels in Major States (%)



We have estimated inequality figures both for 2004-05 and 1993-94 using data from the National Sample Survey Expenditures. The data source is the same, the methods are the same, and the time period spans the post-reform period⁶. These are inequality measures based on household expenditure, since NSS doesn't collect data on income from all types of households.

As is obvious, inequality based on expenditure is bound to be lower than inequality based on expenditure or consumption. The NHDR and NSSO estimates of inequality, as measured by the Gini coefficient⁷, are shown in Table 2. One notices the low levels of inequality in India till 1993-94, as compared to other countries in the world, despite the problems of comparing inequality based on consumption data with those based on income data, an inevitable problem in inter-country comparisons. For instance, the NSSO⁸ reports a Gini coefficient of 0.30 and 0.27 for rural and urban India respectively, compared with figures like United States (.408), Hong Kong (.434), Singapore (.425), Argentina (.528), Chile (.571), Uruguay (.449), Costa Rica (.499), Mexico (.495), Trinidad and Tobago (.403), Panama (.564), Malaysia (.492), Brazil (.580), Colombia (.586), Venezuela (.441), China (.447), Peru (.546), Ecuador (.437), Philippines (.461), Paraguay (.578), Turkey (.436), Dominican Republic (.517), Iran (.430), Georgia (.404), El Salvador (.524), Turkmenistan (.408), Nicaragua (.431), Bolivia (.601), Honduras (.538), Guatemala (.551), South Africa (.578), Namibia (.743), Botswana (.630), Nepal (.472), Papua New Guinea (.509), Madagascar (.475), Cameroon (.446), Uganda (.430), Swaziland (.609), Lesotho (.632), Zimbabwe (.501), Kenya (.425), Haiti (.592), Gambia (.502), Senegal (.413), Nigeria (.437), Guinea (.403), Cote d'Ivoire (.446), Zambia (.421), Malawi (.503), Burundi (.424), Central African Republic (.613), Guinea-Bissau (.470), Mali (.505), Sierra Leone (.629) and Niger (.505)⁹.

Table 2: Gini Ratios based on per capita consumption expenditure

States/UTs	1983	1983	1993-94	1993-94	2004-05	2004-05
	Rural	Urban	Rural*	Urban*	Rural*	Urban*
Andhra Pradesh	0.294	0.327	0.290	0.323	0.294	0.375
Arunachal Pradesh	-	-	0.306	0.279	0.280	0.248
Assam	0.192	0.276	0.179	0.290	0.199	0.320
Bihar/Jharkhand	0.256	0.301	0.225	0.309	0.213	0.355
Goa	0.287	0.297	0.313	0.278	0.322	0.419
Gujarat	0.256	0.172	0.239	0.291	0.273	0.310
Haryana	0.272	0.313	0.311	0.284	0.339	0.366
Himachal Pradesh	0.264	0.312	0.284	0.462	0.310	0.326
Jammu & Kashmir	0.222	0.238	0.241	0.286	0.247	0.249
Karnataka	0.303	0.334	0.269	0.319	0.266	0.369
Kerala	0.33	0.374	0.301	0.343	0.381	0.410
Madhya Pradesh/ Chhattisgarh	0.295	0.306	0.281	0.331	0.277	0.407

⁶ Inequality figures for 2004-05 are available from the NSSO. The National Human Development Report (NHDR) also reported figures on inequality in the past. National Human Development Report 2001, Planning Commission, Government of India, March 2002.

⁷ The Gini coefficient is the most commonly used measure of inequality. Though, unlike the Theil measure, it cannot be cleanly decomposed into inter-group and intra-group components. The Gini coefficient lies between 0 and 1. The higher its value, the greater the inequality.

⁸ 61st Consumption Expenditure Round

⁹ Human Development Report 2006, *Beyond scarcity: Power, poverty and the global water crisis*, UNDP and Macmillan, 2006.

States/UTs	1983 Rural	1983 Urban	1993-94 Rural*	1993-94 Urban*	2004-05 Rural*	2004-05 Urban*
Maharashtra	0.285	0.337	0.307	0.358	0.312	0.378
Manipur	0.269	0.169	0.154	0.157	0.160	0.177
Meghalaya	-	-	0.281	0.245	0.162	0.263
Mizoram	0.141	0.187	0.173	0.182	0.201	0.249
Nagaland	-	-	0.165	0.201	0.229	0.242
Orissa	0.267	0.296	0.246	0.307	0.285	0.353
Punjab	0.279	0.319	0.282	0.281	0.294	0.402
Rajasthan	0.343	0.304	0.265	0.293	0.250	0.371
Sikkim	-	0.332	0.212	0.255	0.273	0.257
Tamil Nadu	0.325	0.348	0.312	0.348	0.322	0.361
Tripura	-	-	0.243	0.283	0.219	0.342
Uttar Pradesh/Uttarakhand	0.29	0.319	0.282	0.326	0.291	0.367
West Bengal	0.286	0.327	0.254	0.339	0.274	0.383
Andaman & Nicobar Islands	0.303	-	0.254	0.404	0.336	0.376
Chandigarh	0.254	-	0.246	0.468	0.253	0.360
Dadra & Nagar Haveli	0.244	-	0.259	0.325	0.355	0.301
Daman & Diu	0.287	0.297	0.261	0.212	0.264	0.261
Delhi	0.314	0.332	0.277	0.406	0.282	0.336
Lakshadweep	-	-	0.257	0.306	0.317	0.394
Pondicherry	0.275	0.383	0.304	0.301	0.348	0.316
All India	0.298	0.33	0.286	0.344	0.305	0.376

Source: * - Author Estimates from NSS 1993-94 & 2004-05 Consumption Expenditure Rounds.

In Table 2, India doesn't show such high levels of inequality till 1994-94, not even for individual States, barring perhaps urban Himachal Pradesh in 1993-94 and urban Chandigarh in 1993-94. In general, rural inequality in India tends to be lower than urban inequality, although there are a few exceptions to this general principle. Relatively low inequality levels in India have sometimes been regarded as one of the successes of India's development experience since Independence. The more interesting question is the effect of liberalization on inequality, measured by inequality in the distribution of consumption expenditure specifically. Subject to the comparability issue mentioned earlier, NSS 1999-2000 shows no such increase in inequality (0.258 for rural and 0.341 for urban). Against this background, one notices the fairly sharp increases in inequality in 2004-05, with Gini coefficients not only crossing 0.350 (urban Andhra, urban Bihar/Jharkhand, urban Haryana, urban Karnataka, rural Kerala, urban Maharashtra, urban Orissa, urban Rajasthan, urban Tamil Nadu, urban Uttar Pradesh/Uttarakhand, urban West Bengal, urban Andaman & Nicobar, urban Chandigarh, rural Dadra & Nagar Haveli, urban Lakshadweep), but also 0.400 (urban Goa, urban Kerala, urban Madhya Pradesh/Chhattisgarh, urban Punjab). There is an impressionistic view that inequality has increased in post-reform India and it is this that fuels the pro-rich and anti-poor perception of reforms. Gini coefficients do not change significantly over short periods of time. Secular changes take time to manifest themselves. Given this, the level of Gini coefficients in Table 2 in 2004-05 substantiate the proposition that the impressionistic view is correct, especially for urban India. The levels of inequality, and the speed at which they have increased, are unprecedented.

Section 2: The poverty picture

In this section, we concentrate on the poverty picture, measured by poverty ratios or head count ratios (HCRs). While the poverty lines are the same as used by the Planning Commission, our poverty ratios are computed from raw NSS 2004-05 data. It is important to stress this point, because there are reasons for discomfort with the Planning Commission methodology. To mention but one example, the Planning Commission doesn't actually compute poverty ratios for the North-East, on the argument that the sample

sizes are too small. Instead, Assam's poverty ratios are applied to the rest of the North-East. All that is done is that those poverty ratios for Assam are distributed according to the rural/urban population in that particular State.

Our poverty ratios are shown in Table 3. For ease of presentation, these poverty ratios are presented separately for large and small States. Table 3 shows these poverty ratios and the changes between 1993-94 and 2004-05. It is not possible to compare poverty ratios separately for the newly formed States of Jharkhand, Uttarakhand and Chhattisgarh. Instead, one has to report poverty ratios for the undivided States of Bihar, UP and Madhya Pradesh in the interest of comparability.

Table 3: State-wise Poverty Ratios (%)

States	50 th Round (1993-94)	61 st Round (2004-05)	Percentage point change in HCR b/w 1993-94 & 2004-05
Large States			
Assam	41.40	20.38	-21.02
Himachal Pradesh	28.63	9.83	-18.80
Bihar + Jharkhand*	54.92	41.98	-12.94
Tamil Nadu	35.45	22.79	-12.66
West Bengal	37.02	24.73	-12.29
Haryana	25.02	13.57	-11.45
Kerala	25.02	14.80	-10.23
Karnataka	32.89	24.34	-8.55
Jammu & Kashmir	13.18	5.06	-8.12
Uttar Pradesh + Uttarakhand*	40.79	33.03	-7.77
Gujarat	24.20	16.96	-7.24
Andhra Pradesh	21.82	14.79	-7.03
Maharashtra	36.99	30.59	-6.40
Rajasthan	27.46	21.44	-6.02
Madhya Pradesh + Chhattisgarh*	42.57	38.92	-3.65
Punjab	11.27	8.14	-3.13
Orissa	48.69	46.61	-2.09
Small States			
Arunachal Pradesh	37.00	9.90	-27.10
Meghalaya	21.29	3.11	-18.18
Sikkim	29.38	14.33	-15.05
Manipur	15.54	3.35	-12.19
Goa	14.93	10.92	-4.01
Mizoram	4.26	1.69	-2.57
Nagaland	1.68	-	-1.68
Tripura	21.29	30.52	9.23
All India	35.86	27.47	-8.38

Source: Estimates by Amaresh Dubey from NSS 2004-05 Consumption Expenditure Rounds.

Notes: * - Undivided States

The overall all-India trend echoes that in Table 1. There has been a drop in the poverty ratio from 35.86% in 1993-94 to 27.47% in 2004-05, a fairly significant drop of 8.38% in eleven years. Among large States, the largest absolute declines have been in Assam, Himachal Pradesh, undivided Bihar, Tamil Nadu, West Bengal and so on, with limited declines in States like Orissa, Punjab, undivided Madhya Pradesh and so on. Similarly, among small States, there have been large declines in Arunachal, Meghalaya, Sikkim and Manipur, with limited declines in Mizoram and Nagaland. Tripura is the only one among Indian States where

there has been an increase in the poverty ratio from 1993-94 to 2004-05. The magnitude of the decline is bound to be a function of growth and its composition and also of the original income (expenditure) distribution. Since such distributions typically tend to be log normal, sharp declines are possible when the thick part of the distribution passes above the poverty line. Poverty continues to be a major problem in undivided Bihar, undivided UP, Maharashtra, undivided Madhya Pradesh, Orissa and Tripura. To repeat the point made earlier, the BIMARU categorization has changed.

What do poverty declines depend on? Apart from the points about the composition of growth and the shape of the expenditure distribution, poverty declines require growth. Though indirect, growth is the only long-lasting solution to problems of poverty and unemployment. The proposition that direct anti-poverty programmes are often necessary to supplement the growth effects of poverty reduction does not negate the proposition about growth being necessary. Table 4 links poverty reduction (expressed as an annual percentage rather than as an absolute decline) with the annual growth in gross State domestic product (GSDP) during the period. One should note that fairly high GSDP growth rates have been observed in Himachal Pradesh, West Bengal, Haryana, Karnataka, Gujarat, Meghalaya, Sikkim, Pondicherry, Goa, Nagaland, Delhi and Tripura during this period.

Table 4: Poverty reduction and trend GSDP growth (%)

State	Percentage point reduction in poverty b/w 1993-94 and 2004-051	Annualized trend Growth in GSDP (1993-94 prices) between 1993-94 and 2004-52
Large States		
Andhra Pradesh	7.03	5.91
Assam	21.02	3.27
Bihar/Jharkhand*	12.94	4.65
Gujarat	7.24	6.19
Haryana	11.45	6.15
Himachal Pradesh	18.80	6.56
Jammu & Kashmir	8.12	4.69
Karnataka	8.55	6.96
Kerala	10.23	5.74
Madhya Pradesh/Chhattisgarh*	3.65	4.00
Maharashtra	6.40	5.29
Orissa	2.09	4.45
Punjab	3.13	4.36
Rajasthan	6.02	5.70
Tamil Nadu	12.66	4.96
Uttar Pradesh/Uttarakhand*	7.77	4.09
West Bengal	12.29	7.05
Small States		
Arunachal Pradesh	27.10	3.85
Delhi	-0.78	8.44
Goa	4.01	7.47
Manipur	12.19	5.35
Meghalaya	18.18	6.83

Mizoram	2.57	-
Nagaland	1.68	8.05
Pondicherry	7.71	13.39
Sikkim	15.05	6.65
Tripura	-9.23	9.08

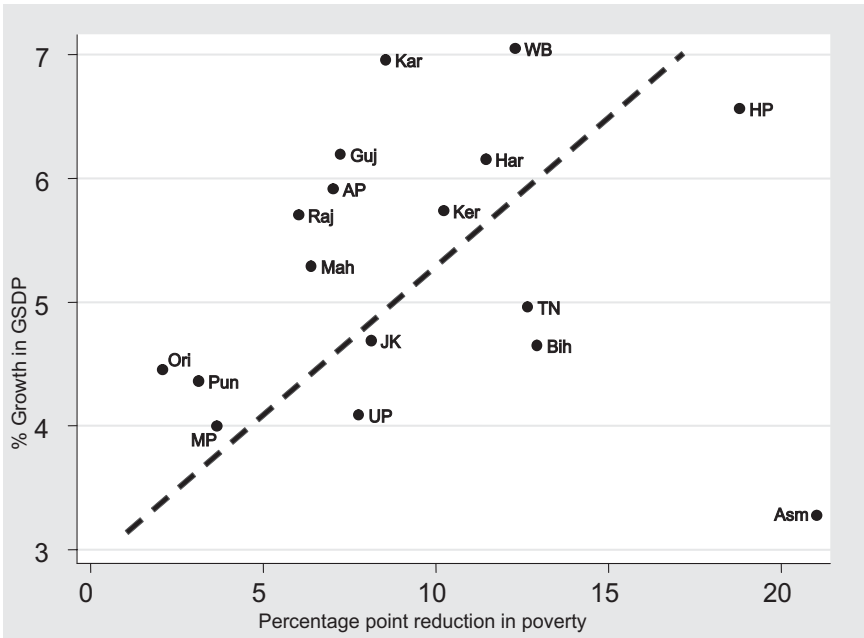
Source: 1: Estimates by Amaresh Dubey from NSSO 1993-94 & 2004-05 Expenditure Rounds.

2: CSO

Notes: * Undivided states

The link between economic growth and poverty is obvious and observable (see Figure 1 below) at least among the larger States. No doubt there are outliers such as Assam. The smaller States such as Pondicherry, Delhi, and Chandigarh also blur the picture. Indeed, such comparisons may also be clouded by the fact that the relationship between poverty reduction and growth is not linear. High poverty States such as Orissa should be able to reduce poverty at a faster rate for the same level of growth than low poverty States such as Punjab. Be that as it may, figure 1 shows that indeed for the larger States (for whom the data are more robust) this correlation is quite strongly observable.

Figure 1: Poverty reduction and GSDP growth between 1993-94 and 2004-05 (Large States)



Notes: Bihar includes Jharkhand, Madhya Pradesh includes Chhattisgarh and Uttar Pradesh includes Uttarakhand.

Before concluding this section on poverty, we report the poverty ratios across religion and caste. As Table 5 shows, it is by no means the case that poverty ratios haven't declined for SCs or STs. While the absolute poverty ratio for SCs is significantly higher than the all-India figure in 2004-05, the absolute decline between 1993-94 and 2004-05 is more for SCs than for the all-India population. However, this is not the case for STs. Similarly, the decline for Muslims has also been fairly significant. Except for STs, this indicates the danger of generalizing across collective categories like caste or religion. There is also an interesting sidelight to Table 5. For all-India, poverty is more of a rural problem than an urban one. However, for the "others" category, the head count ratios are more or less the same across rural and urban. For STs, rural poverty is more serious than urban poverty. But for SCs, urban poverty is more serious than rural poverty. The high poverty ratios for ST Sikhs and SC Buddhists should also be noted.

Table 5: Poverty ratios across religion and social groups (%)

1993-94												
Religion	ST			SC			Others			All		
	Rural	Urban	All	Rural	Urban	All	Rural	Urban	All	Rural	Urban	All
Hindu	51.66	48.34	51.39	48.81	50.10	49.03	29.54	26.32	36.50	28.66	30.74	35.16
Muslims	54.37	40.00	50.01	35.10	47.73	39.57	44.85	47.81	44.84	45.86	47.73	45.83
Christians	35.79	11.35	32.33	42.76	54.31	46.56	27.08	20.70	31.33	24.76	22.46	28.69
Sikhs*	-	-	-	28.19	28.75	28.26	4.35	7.84	11.36	5.24	10.97	11.27
Jains*	-	-	-	-	-	-	13.03	6.55	13.34	8.13	6.49	8.16
Buddhists	20.81	39.11	23.05	54.64	52.56	53.95	33.91	34.80	51.59	34.22	51.60	51.59
Zoroastrianism*	-	-	-	-	-	-	-	3.90	0.00	3.90	16.82	16.81
Others	42.47	48.13	43.21	60.88	25.25	48.90	18.77	35.91	42.39	26.68	37.03	41.13
All India	50.16	43.48	49.56	48.33	49.74	48.58	31.17	29.64	36.85	30.73	32.86	35.86
2004-05												
Religion	ST			SC			Others			All		
	Rural	Urban	All	Rural	Urban	All	Rural	Urban	All	Rural	Urban	All
Hindu	47.06	39.72	46.48	37.73	41.46	38.46	21.21	18.90	20.57	27.95	23.63	26.91
Muslims	21.80	22.27	21.91	39.61	35.52	38.14	32.98	40.65	35.50	32.96	40.56	35.46
Christians	21.75	11.39	20.15	22.02	31.43	24.96	11.20	11.24	11.21	16.32	13.38	15.48
Sikhs*	-	-	-	17.36	14.00	16.98	5.71	1.20	4.45	10.36	3.14	8.72
Jains*	-	-	-	-	-	-	2.60	4.80	4.25	2.59	4.52	4.06
Buddhists	14.03	0.13	12.95	46.06	42.66	44.70	9.10	34.58	13.60	41.07	41.84	41.36
Zoroastrianism*	-	-	-	-	-	-	-	10.76	22.71	35.42	10.74	18.22
Others	40.61	26.55	39.88	55.75	15.90	41.75	0.00	5.58	1.97	39.03	18.80	37.34
All India	44.68	34.24	43.78	37.13	40.86	37.88	22.68	22.62	22.66	28.03	25.82	27.47

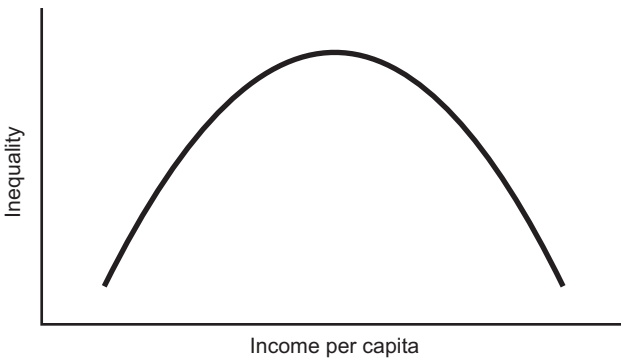
Source: Estimates by Amaresh Dubey from NSS 1993-94 & 2004-05 Expenditure Rounds.

Notes: "-" due to low sample sizes

Section 3: The inequality picture

From poverty, we now turn to inequality. Poverty is usually, though not invariably, an absolute concept, defined as the percentage of population below a poverty line¹⁰. For instance, poverty can also be defined as a relative concept, by making the poverty line itself a function of the average level of income¹¹. But in general, and in the context of this paper, poverty is defined as an absolute concept. The literature is less unambiguous on the interpretation of inequality, in terms of whether the notion is absolute or relative. If inequality is a relative concept, any measure of inequality will be scale invariant, that is, the level of inequality will not be a function of the average level of income. But it is possible to also interpret inequality as an absolute concept, so that the level of inequality is also made a function of the average level of income. Having said this, inequality is usually interpreted as a relative concept. As such, theory or the empirical evidence doesn't clearly indicate the relationship between poverty and inequality. But one should mention the Kuznets curve¹², shown in Figure 4. The reason for mentioning this is the theoretical underpinnings of the inverted U-shaped Kuznets curve, where the first phase of increasing inequality and the subsequent phase of reducing inequality are both linked to rural to urban migration and the integration of the rural economy with the urban one. If we leave aside the subsequent declining phase, in the increasing phase, there is a secular shift from low-income and low-inequality agriculture to high-income and higher-inequality industry, or in the present context, perhaps even services. In a much later paper, Montek Singh Ahluwalia separated three components of the development process – inter-sectoral shifts and migration to the urban sector, expansion in education and skills and demographic transition¹³. Given the present Indian context, any increase in inequality is likely to be an outcome of the first two of these effects.

Figure 2 : Kuznets Curve



¹⁰ The internal and endogenous Indian poverty line is roughly the same as the international poverty line of 1 US \$ per day.

¹¹ There is the related point that the Indian poverty line needs revision. 80% of the basket consists of food items, clothing accounts for the remaining 20%. Education and health are not counted, as at that time, it was assumed that these weren't supposed to represent private consumption expenditure and would be taken care of by the State. With increasing private expenditure on education and health, even among the poor, the poverty line should probably be recomputed. Simultaneously, life-style changes, even among the poor, should imply fewer calories for physical survival.

¹² "Economic Growth and Income Inequality," Simon S. Kuznets, *American Economic Review*, Vol.45, 1955.

¹³ "Inequality, Poverty and Development," Montek Singh Ahluwalia, *Journal of Development Economics*, Vol.3, 1976.

Table 6 shows the inequality trends based on expenditure. The first trend one notices is a very sharp increase in inequality, measured by the Gini coefficient, between 1993-94 and 2004-05. The all-India Gini coefficient is as high as 0.363, breaking away from the historical Indian trend of around 0.32 or thereabouts. This is particularly significant, because as has been mentioned before, the Gini coefficient is robust and takes time to change. The point is not just the increase, but the time period over which it has taken place.

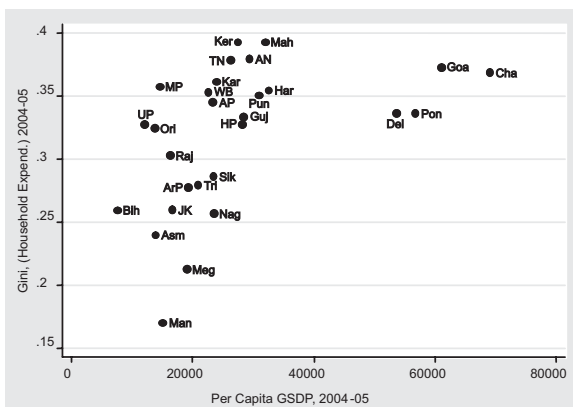
Table 6: State-level Gini coefficients and GSDP: Change between 1993-94 and 2004-05

State	GINI based on household expenditures of all Households - 1993-94	GINI based on household expenditures of all Households - 2004-05	Change in GINI - all Households	Per capita GSDP 2004-05 current prices ¹	Annualized trend Growth in GSDP (const. Prices) between 1993-94 and 2004-5 ²
Large States					
Jammu & Kashmir	0.28	0.26	-0.02	16,567	4.69
Himachal Pradesh	0.32	0.33	0.00	28,036	6.56
Bihar/Jharkhand	0.25	0.26	0.01	7,475	4.65
Maharashtra	0.38	0.39	0.02	31,937	5.29
Rajasthan	0.28	0.30	0.02	16,196	5.70
Assam	0.22	0.24	0.02	13,767	3.27
Uttar Pradesh/Uttarakhand	0.30	0.33	0.03	11,920	4.09
Andhra Pradesh	0.31	0.35	0.03	23,258	5.91
Tamil Nadu	0.34	0.38	0.04	26,074	4.96
Madhya Pradesh/Chhattisgarh	0.32	0.36	0.04	14,486	4.00
Orissa	0.28	0.32	0.04	13,614	4.45
West Bengal	0.31	0.35	0.05	22,486	7.05
Haryana	0.31	0.35	0.05	32,433	6.15
Karnataka	0.31	0.36	0.05	23,900	6.96
Gujarat	0.28	0.33	0.05	28,364	6.19
Punjab	0.29	0.35	0.07	30,816	4.36
Kerala	0.32	0.39	0.08	27,347	5.74
Small States					
Meghalaya	0.29	0.21	-0.08	18,921	6.83
Delhi	0.40	0.34	-0.06	53,437	8.44
Arunachal Pradesh	0.32	0.28	-0.04	19,210	3.85
Manipur	0.16	0.17	0.01	15,009	5.35
Tripura	0.26	0.28	0.02	20,763	9.08
Pondicherry	0.31	0.34	0.03	56,650	13.39
Sikkim	0.23	0.29	0.05	23,335	6.65
Mizoram	0.20	0.25	0.06	-	-
Goa	0.30	0.37	0.07	61,033	7.47
Nagaland	0.18	0.26	0.08	23,407	8.05

Source: Author estimates from NSS 1993-94 and 2004-05 Consumption Expenditure Rounds. 1&2: Estimates from CSO

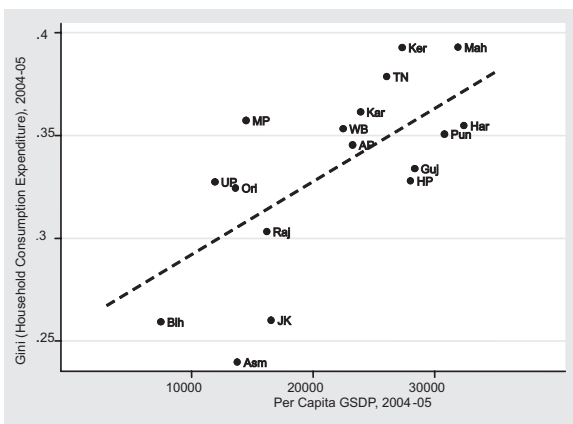
Several questions immediately follow. First, what is the relationship between changes in the Gini coefficient and the level of income, the Kuznets curve so to speak? This is shown in Figures 3 through 5. Figure 3 does suggest a positive relationship between the Gini and per capita GSDP. But this becomes clearer from Figures 4 and 5, where there is a separation between large States and small ones. The large and the small States seem to be in two completely different clusters. For large States (Figure 4), we are clearly in the first half of the Kuznets curve. This is also true of the small States (Figure 5), but the small States are in two completely different clusters, with the North-East different from the likes of Delhi, Pondicherry, and Goa. Figures 6 through 8 repeat the exercise, but with changes in the Gini coefficient plotted against the change in per capita GSDP. The positive relationship still seems to hold, especially if one separates the large States from the small ones.

Figure 3: GSDP per capita and Gini coefficient for 2004-05 (all States/UTs)



Notes: Bihar includes Jharkhand, Madhya Pradesh includes Chhattisgarh and Uttar Pradesh includes Uttarakhand.

Figure 4: Gini coefficient and per capita GSDP for 2004-05 (Large States)



Notes: Bihar includes Jharkhand, Madhya Pradesh includes Chhattisgarh and Uttar Pradesh includes Uttarakhand

Figure 5: Gini coefficient and per capita GSDP for 2004-05 (Small States)

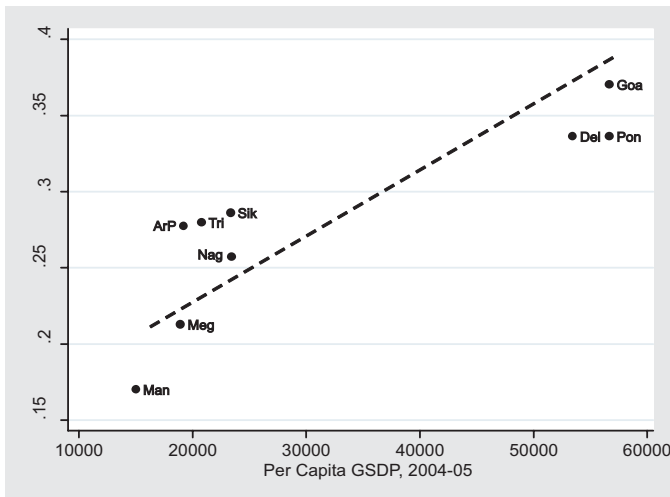
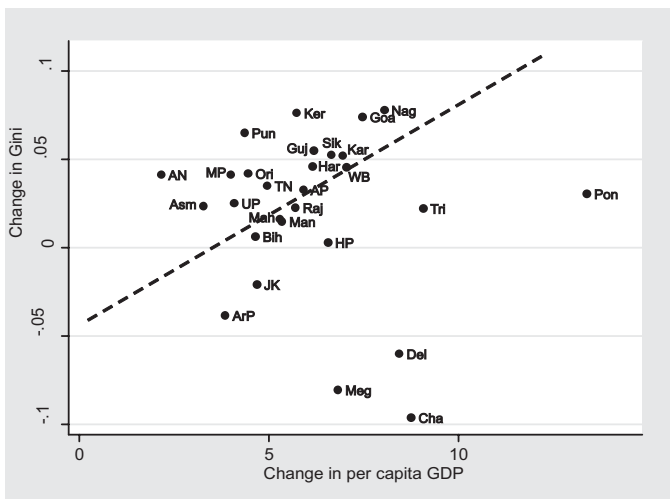
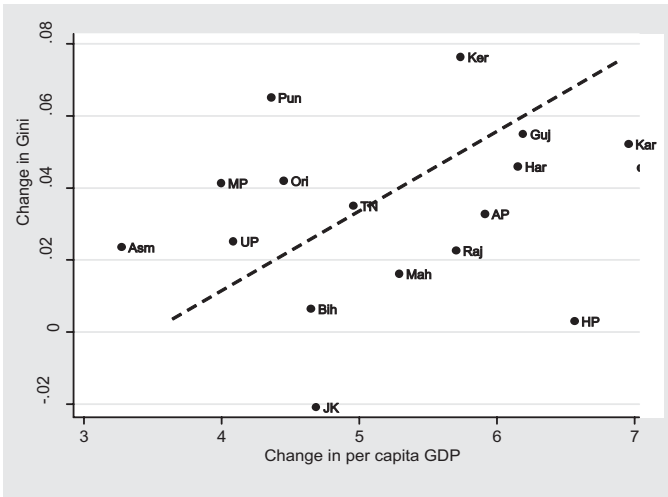


Figure 6: Change in Gini coefficient and change in per capita GSDP b/w 1993-94 & 2004-05 (all States/UTs)



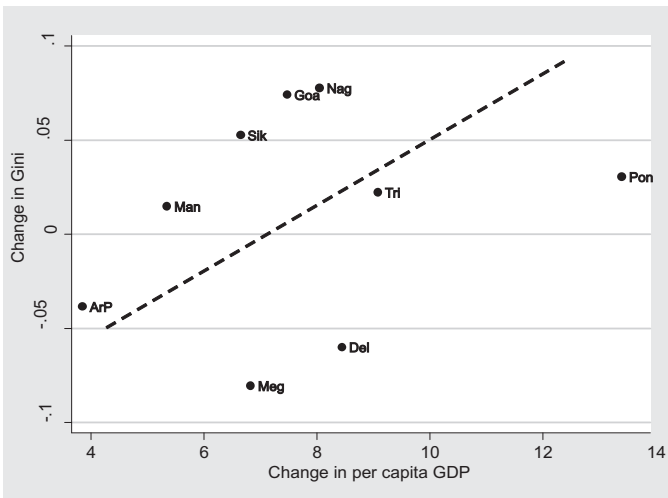
Notes: Bihar includes Jharkhand, Madhya Pradesh includes Chhattisgarh and Uttar Pradesh includes Uttarakhand.

Figure 7: Change in Gini coefficient and change in per capita GSDP b/w 1993-94 & 2004-05 (all States/UTs) (Large States)



Notes: Bihar includes Jharkhand, Madhya Pradesh includes Chhattisgarh and Uttar Pradesh includes Uttarakhand.

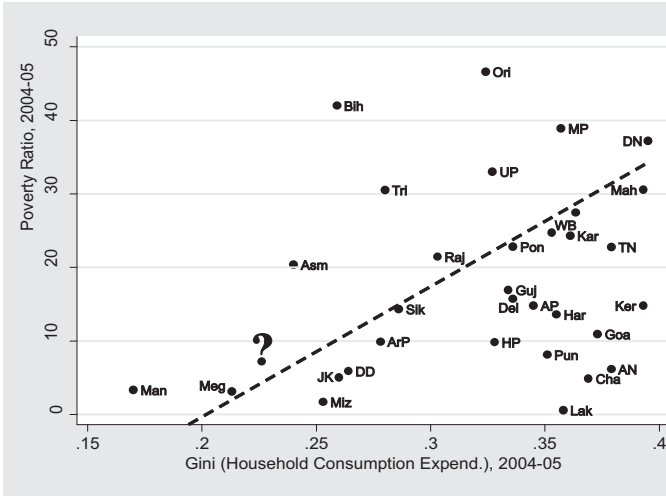
Figure 8: Change in Gini coefficient and change in per capita GSDP b/w 1993-94 & 2004-05 (Small States)



Second, is there an empirical link between poverty reduction and the Gini coefficient, it sometimes being suggested that there is a trade-off or inverse link between the two? In this case, the break-up between large States and small ones merely clutters up the picture. So in Figure 11, we report the link for all States taken together. As Figure 9 shows, the empirical evidence doesn't suggest any such inverse relationship. Instead, there might even be a positive relationship. The higher the poverty ratio, the higher tends to be the level of inequality and vice-versa.

Third, what is the evidence on the operational part of the Kuznets curve that is, increase in inequality consequent to rural integration with the urban economy

Figure 9: Poverty ratios and Gini coefficients, 2004-05 (all States/UTs)



Notes: Bihar includes Jharkhand, Madhya Pradesh includes Chhattisgarh and Uttar Pradesh includes Uttarakhand. (For State codes see appendix)

Fourth, there seems to be an interesting link between the percentage reporting themselves as self-employed and the level of inequality. This is partly obvious from Table 7. About 52% of the Indian work force reports itself as self-employed. What is interesting is Table 8, which shows Gini coefficients across employment categories. Gini coefficients are lower for the self-employed category. Stated differently, self-employment is a dampener on inequality and it is also probably the case that in countries where inequality has not shot up, a facilitating environment has been created for self-employment to thrive and foster. This is also true of India in the inter-State comparison, a proposition reinforced by Figure 10, which plots Table 9. In States where self-employment is high, inequality tends to be lower.

Table 7: Percentage self-employed and Gini (based on income) coefficient, 2004-05

States	% Self Employed (2004-05)	GINI based on incomes of salaried/ wage earners- 2004-05
Large States		
Maharashtra	42.25	39.30
Kerala	36.58	39.28
Tamil Nadu	34.56	37.85
Karnataka	45.95	36.15
Madhya Pradesh+Chhattisgarh	53.09	35.74
Haryana	56.81	35.48
West Bengal	50.26	35.32
Punjab	49.96	35.07
Andhra Pradesh	43.62	34.55
Gujarat	47.50	33.39
Himachal Pradesh	57.10	32.78
Uttar Pradesh+Uttaranchal	66.64	32.73
Orissa	51.26	32.44
Rajasthan	63.99	30.31
Jammu & Kashmir	61.61	26.01
Bihar+Jharkhand	58.05	25.93
Assam	65.85	23.97
Small States		
Goa	33.96	37.30
Sikkim	58.35	28.62
Tripura	47.02	27.99
Arunachal Pradesh	75.51	27.75
Nagaland	62.67	25.72
Mizoram	66.94	25.30
Meghalaya	65.06	21.29
Manipur	72.03	17.03
All India	52.64	0.363

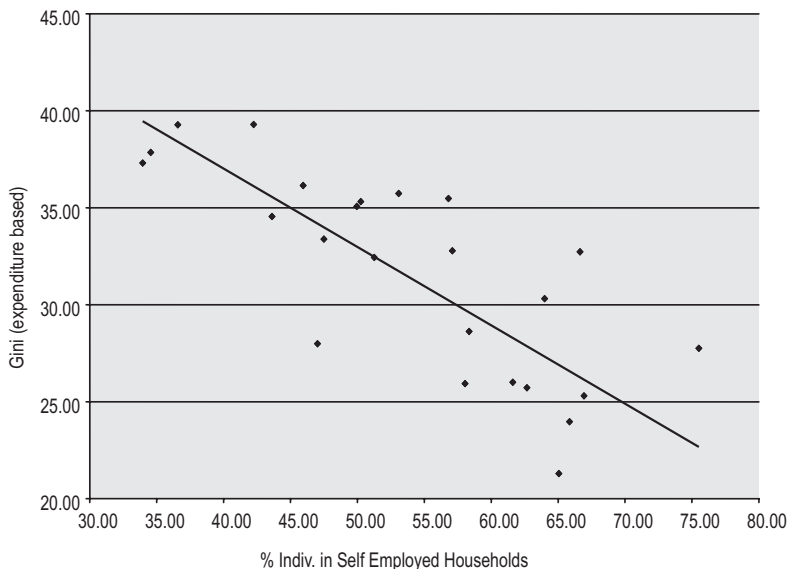
Source: Author estimates from NSS 2004-05 Employment & Unemployment Round

Table 8: Gini coefficients across employment categories

Employment Categories	GINI based on incomes of salaried/ wageearners- 2004-05
All India Rural	0.305
All India Urban	0.376
All India Total	0.363
Self Employed Rural	0.294
Self Employed Urban	0.362
Self Employed Total	0.333
Employed Rural	0.313
Employed Urban	0.384
Employed Total	0.394
Agriculture (self-employed+ employed)- Rural	0.281
Self employed agriculture- Rural	0.284
Employed agriculture- Rural	0.233

Source: Author estimates from NSS 2004-05 Employment & Unemployment Round.

Figure 10: Percentage Self Employed Households and Gini (based on NSS 2004-05 Consumption Expenditure Round)



Section 4: Expenditure Inequality and Income Inequality

So far, everything has been in terms of expenditure and also in terms of the Gini coefficient, which is only an aggregate measure of income inequality. Table 9 shows the income quintiles, for rural and urban incomes separately. The transition from expenditure (as obtained from NSS surveys) to income is done by changing the data sources. The NSS canvassed survey responses on both employment and expenditures. The Gini coefficients estimated above are from the expenditure survey data on households' monthly expenditures. The employment survey also queried respondents on the wage and salary levels of those who are not self employed (that is, the salaried class that span the whole range of occupations from the landless labourer to the organized sector white collar workers). Though a large part of the labour force (the self employed) is not covered, the data do provide interesting insights into incomes of wage and salary earners.

For both rural and urban India, the highest increase in average per earner income has been for the relatively poor (the bottom 20%) and the relatively rich (the top 20%), with the middle (particularly the third quintile) becoming squeezed. This is a trend that is more marked for urban India than for rural India. Table 10, which shows the shares of the quintiles in total income, reinforces the picture. The share of the top 20% in total income has increased, particularly sharply for urban India. However, subject to some differences between rural and urban India, the relative squeeze in incomes has primarily been for the second, third and fourth quartiles, not so much for the bottom 20%. The squeeze is also more for urban India than for rural India.

Table 9: Average annual per capita income for wage and salary earners (in constant 2004-05 prices)

Quintiles	1993-94	2004-05	Annualized growth b/w 1993-94 2004-05
Rural Income Quintiles			
RQ1	4,226	11,808	9.8%
RQ2	8,347	21,562	9.0%
RQ3	12,262	31,032	8.8%
RQ4	17,203	44,496	9.0%
RQ5	43,827	129,945	10.4%
Total	17,172	47,767	9.7%
Urban Income Quintiles			
UQ1	7,889	23,285	10.3%
UQ2	18,854	47,771	8.8%
UQ3	32,258	75,890	8.1%
UQ4	55,041	145,628	9.2%
UQ5	109,979	378,040	11.9%
Total	44,802	134,113	10.5%

Source: Author Estimates from NSSO 1993-94 and 2004-05 Employment & Unemployment Rounds.

Notes: Since survey data typically under-report incomes and expenditures the reported incomes have been appropriately adjusted using the ratio of reported aggregate household expenditures in NSSO and total household expenditures in NAS, as the adjustment factor. The percentage change pattern is not affected significantly due to this adjustment though the quantum is. All figures are in 2004-05 prices calculated on the basis of CPI-AL for rural and CPI-UNME for urban, at the state level.

RQ1/UQ1 refers to bottom-most quintile in rural/urban areas and RQ5/UQ5 refers to upper-most quintile in rural/urban areas.

Table 10: Shares of quintiles in total income for wage and salary earners

Quintiles	1993-94	2004-05
Rural Income Quintiles		
Rq1	4.90	4.94
RQ2	9.70	9.03
RQ3	14.28	13.00
RQ4	20.05	18.63
RQ5	51.07	54.40
Total	100.00	100.00
Urban Income Quintiles		
UQ1	3.52	3.47
UQ2	8.41	7.12
UQ3	14.41	11.32
UQ4	24.58	21.72
UQ5	49.08	56.37
Total	100.00	100.00

Source: Author Estimates from NSSO 1993-94 and 2004-05 Employment & Unemployment Rounds.

Notes: This is a pure reporting of NSSO data and no adjustments were required for this table. RQ1/UQ1 refers to bottom-most quintile in rural/urban areas and RQ5/UQ5 refers to upper-most quintile in rural/urban areas.

Table 11: Average annual income growth across education categories for wage and salary

General Education	1993-94	2004-05	Annualized growth b/w 1993-94 & 2004-05
Not literate	13,171	32,362	8.5%
Literate below primary	18,220	42,709	8.1%
Primary	21,377	49,962	8.0%
Middle	28,144	62,271	7.5%
Secondary	46,634	103,602	7.5%
Higher Secondary	55,789	139,600	8.7%
Graduates & above	85,515	270,103	11.0%
Total	24,980	73,145	10.3%

Source: Author Estimates from NSSO 1993-94 and 2004-05 Employment & Unemployment Rounds.

Notes: Since survey data typically under-report incomes and expenditures the reported incomes have been appropriately adjusted using the ratio of reported aggregate household expenditures in NSSO and total household expenditures in NAS, as the adjustment factor. The percentage change pattern is not affected significantly due to this adjustment though the quantum is. All figures are in 2004-05 prices calculated on the basis of CPI-AL for rural and CPI-UNME for urban, at the state level.

Table 11 shows the average annual income growth across education categories and highlights the lack of education/skills as perhaps the single most important source of income differentials. The impact of reforms in creating greater opportunities is not the issue; the issue is related to the ability of the available human resources to benefit from such opportunities. The poor educational regime both at the primary and higher levels is aiding the other forces that push towards increasing inequalities.

Section 5: In conclusion

We do have an inequality problem, as distinct from the absolute poverty issue. The question is, what does one do about it? The UPA government has recently produced a "Report to the People"¹⁴. The Prime Minister's Foreword to this document states, "The key components of our strategy of "inclusive growth" have been to: (a) step up investment in rural areas, in rural infrastructure and agriculture; (b) increase credit availability to farmers and offer them remunerative prices for their crops; (c) increase rural employment, providing a unique social safety net in the shape of the National Rural Employment Guarantee Programme; (d) increase public spending on education and health care, including strengthening the mid-day meal programme and offering scholarships to the needy; (e) invest in urban renewal, improving the quality of life for the urban poor; (f) socially, economically and educationally empower scheduled castes, scheduled tribes, other backward classes, minorities, women and children; and (g) ensure that, through public investment, the growth process spreads to backward regions and districts.... This strategy of "inclusive growth" combines

¹⁴ May 2007, http://pmindia.nic.in/upa_en_2004-07.pdf

empowerment with entitlement and investment. Education empowers, improved health care empowers, employment guarantee entitles, fulfilling quota obligations entitles. Through a combination of offering entitlement, ensuring empowerment and stepping up public investment, our Government has sought to make the growth process more inclusive.” This is fine as a statement of intent. But for all practical purposes, the UPA government’s initiatives err on the side of entitlement, rather than empowerment. There is an attempt to cast everything into an employer-employee mould, be it through the national rural employment guarantee, reservations or social security legislation.

As has been mentioned earlier, self-employment has a dampening impact on inequality. The 52.64% figure for India may be a distorted one, in the sense that labour market rigidities and lack of skills constrain the work force from transiting to organized employer-employee relationships. However, the fact remains that cross-country, self-employment accounts for a significant share of employment. 30% of employment in Europe and 25% in the United States is in the form of self-employment, part-time work and temporary work¹⁵. Self-employment accounts for 59% of informal sector employment in Asia and 32% of total non-agricultural employment. The figure for India is higher still, since self-employment accounts for 52% of non-agricultural informal employment, with 57% for women¹⁶.

From a growth and employment perspective, self-employment needs to be pushed through an empowerment agenda of providing physical (roads, power) and social infrastructure (education, skills, health-care). The point made in this paper is that this has an inequality angle as well.

¹⁵ *Women and men in the informal economy: A statistical picture*, ILO, Geneva, 2002. Self-employment is only a subset of informal sector employment.

¹⁶ *Ibid.*

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