Caste and the Escape from Poverty in India, 2005-2012

Abstract

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The Indian economy has grown by leaps and bounds over the last two decades of its liberalized journey. The world economic crisis notwithstanding, India has shown resilience and steadfastness. A prominent outcome of this growth has been the steady fall in poverty over the last two decades. Academics, practitioners and policy makers all agree that both rural and urban poverty fell substantially over this time period, although considerable debate remains over the magnitude of this fall. Official estimates show rural poverty declining from a high of 37% in 1993-94 to 25% in 2011-12, while urban poverty fell from 33% to 12%[1].

If everyone agrees poverty rates have fallen over time, we are less certain about who are the people who have risen out of poverty. Moreover, despite overall declining net poverty rates, some have newly fallen into poverty (New poor) while others have remained unaffected. (Still Poor/ Non-poor). The lack of national panel data has prevented our asking the questions needed about who these people are. The second wave of the India Development Survey now provides the opportunity to understand the drivers of change for each of these groups.

Background:

Contemporary poverty in India has always been structured by the age-old divisions of caste and religious community. In rural areas, Brahmins and other forward castes have been the traditional landowners while Dalits (Scheduled Castes) have more often worked as landless laborers. Indigenous tribal groups (Adivasis), often set apart geographically and socially from the rest of India, have typically been the poorest of the poor. In recent times, these caste divisions have been reinforced by differences in educational attainment despite aggressive affirmative action policies by the Government of India.

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[1] *Based on NSSO, Consumption Expenditure Schedule for the corresponding years.*

The result has been a high concentration of poverty among the most traditionally disadvantaged groups. In a recent report (Desai et al. 2010) while Forward Caste Hindus experienced a 12% poverty rate, Dalit poverty was more than two and half times as high (32%) and a crippling 50% of Adivasis were poor. Other intermediary castes (OBCs – Other Backward Classes) had intermediate levels of poverty (23%).

Religious differences in poverty are more complex owing to different levels of urbanization and nonagricultural employment. Nevertheless, 31% of minority Muslims were poor, a rate not much different from Dalits. Other minority religions, Jains, Sikhs, and to a lesser extent Christians, have been relatively prosperous; together their 2005 poverty rate was only 12%, about the same as Forward Caste Hindus.

This and most other poverty analyses in India have used cross sectional data, most often the National Sample Survey data collected every five years[2]. Panel data analysis has been less common; what has been available has used mostly selected rural samples from NCAER and ICRISAT data. The latest available panel data set is for the year 1998-99 (Mehta and Bhide 2003, Gaiha and Imai 2003).

One earlier panel analysis of rural poverty persistence in the 1970s showed that the most disadvantaged groups also realized the lowest rates of escape from poverty. While 63% of "Upper Castes" who were poor in the first wave were no longer poor a decade later, only 37% of Dalits and 30% of Adivasis had managed to escape poverty during that time. Religious differences were smaller; 48% of all Hindus had escaped poverty compared to 40% of Muslims (Mehta and Bhide, 2003).

India has however experienced much higher rates of poverty reduction in the last two decades than in these earlier periods. Whether this more rapid poverty decline has finally managed to pull up the most disadvantaged groups remains to be seen however.

Motivation

India's rapid economic growth between 2004-5 and 2011-12, involved tremendous sectoral shifts. The share of agriculture in the economy continued to shrink, while that of services grew. The manufacturing sector was more or less constant. However, the growth of the service sector was not accompanied by a concomitant growth in employment so workers were often crowded into an increasingly diminishing agricultural sector. At the same time, the Government of India instituted a rural employment guarantee program that provided non-agricultural manual jobs to low-skilled workers and created part-time opportunities for farmers and farm laborers. In this paper, we explore the way in which these sectoral shifts led to transition out of poverty as well as transition into poverty for those who were non-poor in the earlier period.

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[2] *NSSO Consumption Expenditure Data. It is a large country wide sample survey conducted every 5 years and collects household level information on rupee expenditure on consumed items. This household consumption expenditure is then used as a proxy for the household's monthly income.*

Given the close connection between the caste and religious status of Indians and their poverty rates, this analysis focuses on the role of social background in creating conditions for transitions out of and into poverty. Past research has documented the existence of a segmented labor market in India that makes it difficult for disadvantaged social groups to obtain higher paying jobs. For example, Muslims are often shut out of formal sector jobs and consequently seem to be concentrated in self-employment. Dalits and Adivasis have access to government jobs via job reservations but may find it difficult to leave manual work and find skilled private sector employment. Past research has documented that upper caste households have greater social networks that may allow them to find better jobs and be better able to weather external shocks like draughts and illnesses. Thus, we expect that caste, ethnicity and religion may shape the relationship between occupation and poverty transitions.

This paper relies on a unique panel data set, which was first fielded first in 2004-05 and the latest round was completed in 2011-12. The survey collected information on household incomes, expenditures, occupations, employment levels, education, health, social networks and organization memberships amongst many other topics.

Tracking both rural and urban households over this period of seven years presents a unique opportunity to observe how households have been able to seize the new economic opportunities in order to augment household incomes. Did the tremendous growth of this period succeed in pulling up groups that had been disadvantaged for centuries: Did a rising tide lift all boats or just the better equipped ones? And to what extent can the changes during this period be explained by groups' different pre-existing levels of economic, human, and social capital?

Specifically, we address the following questions:

1.   Are transitions into and out of poverty associated with traditional divisions of caste and religion?

2.   To what extent are the group differences in entries into and exits out of poverty explained by the economic, human, and social capital that households held at the beginning of this period?

Panel Data:

The paper will use two waves of data from the India Human Development Survey (IHDS)[3]. This panel is comprised of sample households spread across 33 states and union territories of India, covering 384 districts, 1503 villages, and 971 urban blocks located in 276 towns and cities. Size of the urban sample is 14,544. The data set provides household level consumption expenditure data which shall be used to calculate households' monthly per capita expenditures. hence incidence of poverty head counts. The first wave was completed in 2004-05 and the second recently in 2011-12.

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[3]

Methodology:

Poverty status of a household is a dynamic concept. Unlike chronic poverty where households remain poor over long periods of time, transient poverty indicates households move in and out of poverty over short and/or long time periods. Our strategy will be to analyze exits from and entrances into poverty in separate models for samples of the poor and non-poor in wave-1 (2004-5). Our principal focus will be on changes across caste and religious groups (see preliminary tables below).

In order to talk of causality for a household's chances of escaping poverty (or risks of becoming poor), we have to look at various causal variables at the initial time period (t_1). A dynamic regression model will analyze the Poverty status of a household in time t_2 factoring in a range of explanatory variables in the initial time period as well as the caste and religious status of the household as reported in the initial time period (t_1):

$$Y_{0t} = a_0 + b_{02} \, C_i + b_{03} \, X_{0,t-1} + e_{0t} \quad when \ Y_{t-1} = 0 \quad , \text{and}$$

$$Y_{1t} = a_1 + b_{12} \, C_i + b_{1,3} \, X_{t-1} + e_{1t} \quad when \ Y_{t-1} = 1 \quad ,$$

Where,

$\qquad Y_t \quad$ = Poverty status in current period,

$\qquad C_i \quad$ = a vector of caste and religious community dummy variables,

$\qquad X_{t-1}$ = Set of controls in the initial time period,

$\qquad \qquad$ Viz. industrial sectors, land ownership, social networks, education and age of the male head of household, household size and composition,

$\qquad Y_{t-1} \quad$ = Poverty status in last time period.

$\qquad \varepsilon_t \quad$ = Error term

We begin with reduced form equations including only caste and religion dummy variables then add the specified controls to calculate to what extent the community differences in exits and entrances can be attributed to the different initial positions of the caste and religion groups.

Preliminary Results - *Escaping Poverty: Aggregate*

To identify poor households, the official poverty line[4] for 2004/05 and for 20011/12 has been used (Tendulkar Poverty Lines[5]). Below are quite preliminary results showing the current

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[4] Planning Commission of India releases official poverty lines periodically.

poverty status of households in wave-2, who were identified as poor or non-poor in wave-1. [These data are still somewhat incomplete and are intended more as illustrative of the relationships we expect to find rather than as exact levels of escapes and descents into poverty. We expect to analyze more definitive data by the end of 2013.]

Table-1: *Poverty status of Poor from round-1 (2004/05) in the current round (2011/12), Rural/Urban/Tot*

Percentages	Rural (2012)		Urban (2012)				
	Poor	Non-Poor	Poor	Non-Poor			Still Poor
Poverty in 2005							No more Poor
Poor	33.7	66.3	23.1	76.9			New Poor
Non-Poor	15.2	84.8	6.3	93.7			Never Poor
Total	19.6	80.4	10.0	90.0			

Looking at households who were identified as poor in wave 1 (Table-1), we find in wave 2, a substantial reduction in the incidence of poverty across the board. In rural areas about two thirds (66.3%) of the previously poor escaped poverty over this period; in urban regions over three quarters (76.9%) escaped poverty.

On the other hand, small percentages of households who were not in poverty in 2005 had fallen back into poverty in 2012 despite the general economic growth; 15.2% in rural areas and 6.3% in urban areas.

Escaping Poverty- Caste groups:

The chance of escaping poverty was closely related to the caste position of the poor. The more privileged the caste, the better the chances of escaping poverty. If we look at the poor from wave-1 (Table-2), we find that among rural Brahmins, 73% of the previously poor had escaped poverty over the seven years. Similarly, among the "others" (primarily forward castes) 76% of the wave-1 rural poor escaped poverty. At the other end of the caste hierarchy, only 64% of poor rural Dalits, (Scheduled castes) escaped poverty. Adivasis (Scheduled Tribes) had even lower prospects: only a little over half, 52%, escaped rural poverty. Thus, chronic poverty is disproportionately found among the socially most disadvantaged, reinforcing centuries of deprivation.

Table-2: Poverty Status in Round-2 (2011-12) of the Rural Poor from Round-1 (2004-05) by Caste Groups.

Caste category	All India Rural Poverty (2011-12)			
	Poor	Non-Poor	Total	N
Brahmin	27.0	73.0	100	114
Others (mostly Forward Castes)	24.0	76.0	100	761
OBC	28.3	71.7	100	2342
Dalits (SCs)	36.1	63.9	100	1611
Adivasis (STs)	47.8	52.2	100	1430
Total (poor in 2005)	33.7	66.3	100	6258

Similar differences are observed for urban regions (not reported), albeit the incidences of escape are higher for all social groups.

Descent into Poverty- Caste groups

While the risks were low of falling into poverty during these prosperous times, those risks were also closely structured by caste position (Table 3). Only 11% or 12% of rural Brahmins and Forward Castes fell into poverty during this period; even among OBCs only 13% of the previously non-poor fell into poverty. Those rates were higher among Dalits (20.3%) and again highest among Adivasis (28.2%). And while descent rates were far lower in urban areas, these too were aligned with caste position (results not shown).

Table-3: Poverty status in round-2 (2011-12) of the Rural Non-Poor in Round-1 (2004/05) by Caste Groups.

Caste category	All India Rural Poverty (2011-12)			
	Poor	Non-Poor	Total	N
Brahmin	12.4	87.6	100	1004
Others (mostly Forward Castes)	10.9	89.1	100	5436
OBC	13.1	86.9	100	8919
Dalits (SCs)	20.3	79.7	100	4757
Adivasis (STs)	28.2	71.8	100	1516
Total (Non-poor in 2005)	15.2	84.8	100	21632

Escaping Poverty-Religious groups:

Differences in exits and entrances from poverty were smaller across religious communities (Table 4). Rural Muslims escaped poverty slightly faster (70.3%) than did rural Hindus (66.0%) although this difference is reversed in urban areas (results not reported). Tribal religions again

fared far worse, only 48.7% escaping poverty, while the remaining religions (e.g., Christians and Sikhs) seem to have capitalized on their higher levels of education and English speaking skills to escape poverty better than other groups.

Table 4: Poverty Status in Round-2 (2011-12) of the Rural Poor from Round-1 (2004-05) by Religion.

Religion	All India Rural Poverty (2011-12)			N
	Poor	**Non-Poor**	**Total**	
Hindu	34.0	66.0	100	5260
Muslim	29.7	70.3	100	608
Tribal religions	51.3	48.7	100	212
Others	25.0	75.0	100	178
Total (Poor in 2005)	33.7	66.3	100	6258

Conclusion:

Preliminary results indicate that over the period of seven years (2004/05-2011/12) large shares of the rural and urban poor have escaped poverty, i.e. 66% in rural and 77% in urban areas. Nevertheless, this progress has varied substantially across caste groups in predictable ways. The most underprivileged in 2005 had the least chance of escape in the following years.

Further analysis of poor as well as non-poor households by various household characteristics would clearly identify the underlying features of those who escaped poverty, those who remained poor and those who fell into poverty. Dynamic regression models for the two waves would bring out the characteristics of disadvantaged groups that have locked them into poverty.

References

Dahl, Espen, Fløtten, Tone and Lorentzen, Thomas. 2008. "Poverty Dynamics and Social Exclusion: An Analysis of Norwegian Panel Data." *Journal of Social Policy*, 37: 231-249

Desai, Sonalde B, Amaresh Dubey, Brij Lal Joshi, Mitali Sen, Abusaleh Shariff, and Reeve Vanneman. 2010. *Human Development in India: Challenges for a Society in Transition.* New Delhi: Oxford University Press.

Jalan, Joytsna and Martin Ravallion. 1998. "Transient Poverty in Post reform Rural China." *Journal of Comparative Economics*, 26: 338–357.

Mehta, Aasha Kapur and Bhide, Shashank Bhide, 2003. Issues in Chronic Poverty: Panel Data Based Analysis. Chronic Poverty Research Centre Working Paper. Available at SSRN: http://ssrn.com/abstract=1756888 or http://dx.doi.org/10.2139/ssrn.1756888..