

Income Mobility in India: Dimensions, Drivers and Policy

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Introduction

- Close connection between study of mobility and that of inequality
 - Two types of mobility: intra-generational and intergenerational
 - Greater intra-generational mobility is associated an equalization of long-term incomes
 - Greater intergenerational mobility points to greater equality of opportunity
 - Distinct concepts of mobility: relative versus absolute
- Focus here is on income and occupational mobility
 - Important to supplement with study of mobility in terms of wealth, social position, etc.
- Emphasis here on rural India, but also remarks on mobility in urban and in particular, on urban focused policy

Introduction, cont.

- Tracking mobility is difficult due to data constraints
 - Key requirement is an ability to follow individuals and households over time – panel data
 - Rare in developing countries, especially nationally representative
 - For intergenerational mobility one wants to track living conditions/incomes across generations
 - Most commonly investigated with studies of fathers and sons
 - Early example was the Atkinson, Maynard and Trinder (1983) investigation of income mobility in York.
 - But even there data often rely on retrospective information, and it is difficult to control for age, and to distinguish between individual and household incomes.
 - Particularly difficult to observe changes in intergenerational mobility given the need to compare (at least) two entire generations

Data availability in India

- In India the main source of information on living standards comes from NSS surveys: large, nationally representative, but cross-sectional, surveys
 - Rounds from 1983, 1993/4, 2004/5, 2009/10
 - NSS data have documented important declines in poverty during past two decades
 - Further acceleration in the late 2000s
- Some dynamic analysis has been possible in recent years based on India Human Development Survey
 - Survey rounds for 1993/4, 2004/5 and 2011/2
 - panel, nationally representative, but smaller sample and doesn't enjoy the same "official" status as NSS data.
- Some experimentation with methods to convert NSS data into "synthetic panels" (Dang et al, 2014, Dang and Lanjouw, 2015)
- National-level analyses can be complemented by analysis from longitudinal village studies
 - Lanjouw, Himanshu, Stern (forthcoming) summarize a program of research in the north Indian village of Palanpur over 7 decades

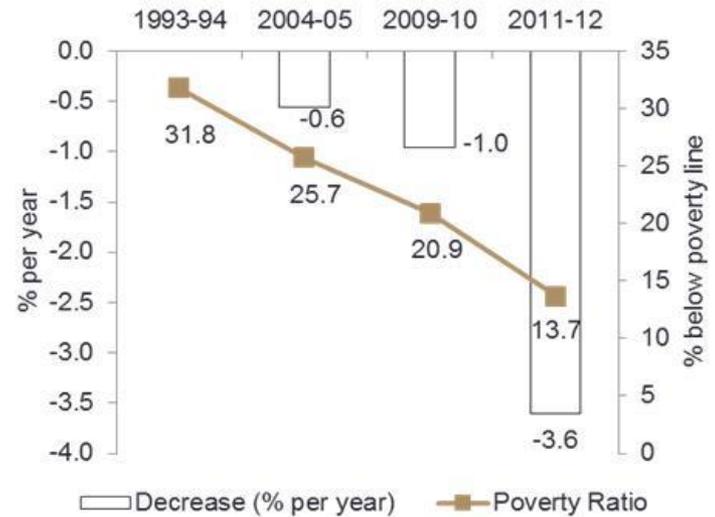
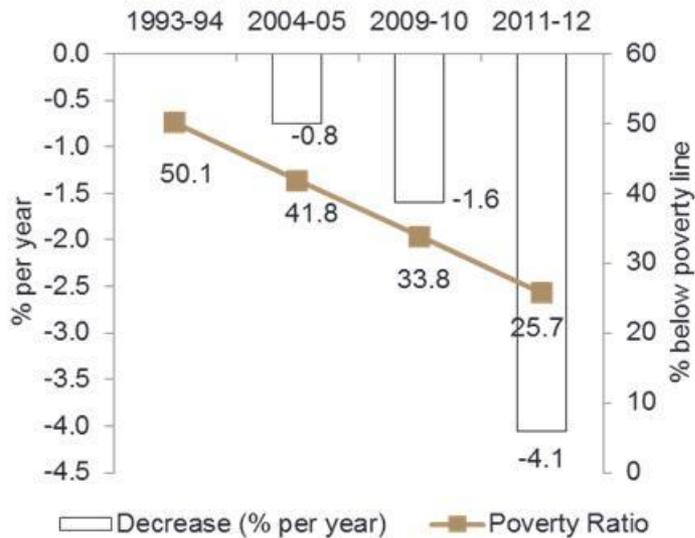
Emerging Stylized Facts

- Poverty decline in India has been significant in recent decades (based most available data)
- Evidence points to substantial intra-generational income mobility
 - Consistent also with evidence on considerable poverty “churning”
 - This despite the acknowledged constraints placed on mobility by a caste-system that governs access to occupations, and that profoundly influences household behavior
 - Caste restrictions appear to be weakening. Occupational changes are a major force behind mobility.
- Mobility out of agriculture into the non-farm sector. Usually into casual non-farm employment (frequently construction linked). But there is also some mobility from casual non-farm towards regular, salaried employment

Pace of poverty decline in India has stepped up

Sharp fall in rural poverty...

And in urban poverty too



Intra-generational Mobility

(Dang and Lanjouw, 2015)

based on synthetic panels constructed from NSS data

Panel A: Vulnerability line corresponding to V-index= 0.2		2009			
		Poor	Vulnerable	Middle class	Total
2004	Poor	20.0	16.2	0.6	36.9
		(0.0)	(0.0)	(0.0)	(0.1)
	Vulnerable	11.6	35.1	6.6	53.3
		(0.0)	(0.0)	(0.0)	(0.0)
	Middle class	0.3	4.6	5.0	9.8
	(0.0)	(0.0)	(0.0)	(0.1)	
	Total	31.9	55.9	12.2	100
		(0.1)	(0.0)	(0.1)	
Panel B: Vulnerability line corresponding to V-index= 0.2		2011			
		Poor	Vulnerable	Middle class	Total
2009	Poor	12.8	14.0	3.4	30.2
		(0.0)	(0.0)	(0.0)	(0.1)
	Vulnerable	9.5	23.5	12.9	45.9
		(0.0)	(0.0)	(0.0)	(0.0)
	Middle class	1.5	8.2	14.3	23.9
	(0.0)	(0.0)	(0.1)	(0.1)	
	Total	23.7	45.7	30.6	100
		(0.1)	(0.0)	(0.1)	

Note: The vulnerability index is defined as $P(Y_1 < Z_1 | Z_0 < Y_0 < V_0) = 0.2$ for both periods yielding a monthly vulnerability line of 1,035 rupees per capita in the first period and 830 rupees per capita in the second period; both lines are in 2004 price for all rural India. The all rural India poverty lines are 446.68 rupees, 672.8 rupees, and 816 rupees respectively for 2004/05, 2009/10, and 2011/12 in each year's price. All numbers are estimated with synthetic panel data and weighted with population weights, where the first survey round in each period is used as the base year. Bootstrap standard errors in parentheses are estimated with 1,000 bootstraps adjusting for the complex survey design. Household head's age range is restricted to between 25 and 55 for the first survey and adjusted accordingly for the second survey in each period. Estimation sample sizes are 91,751 and 76,479 households for the first period, and 73,681 and 75,159 households for the second period.

Intra-generational Mobility

(Azam, 2016)

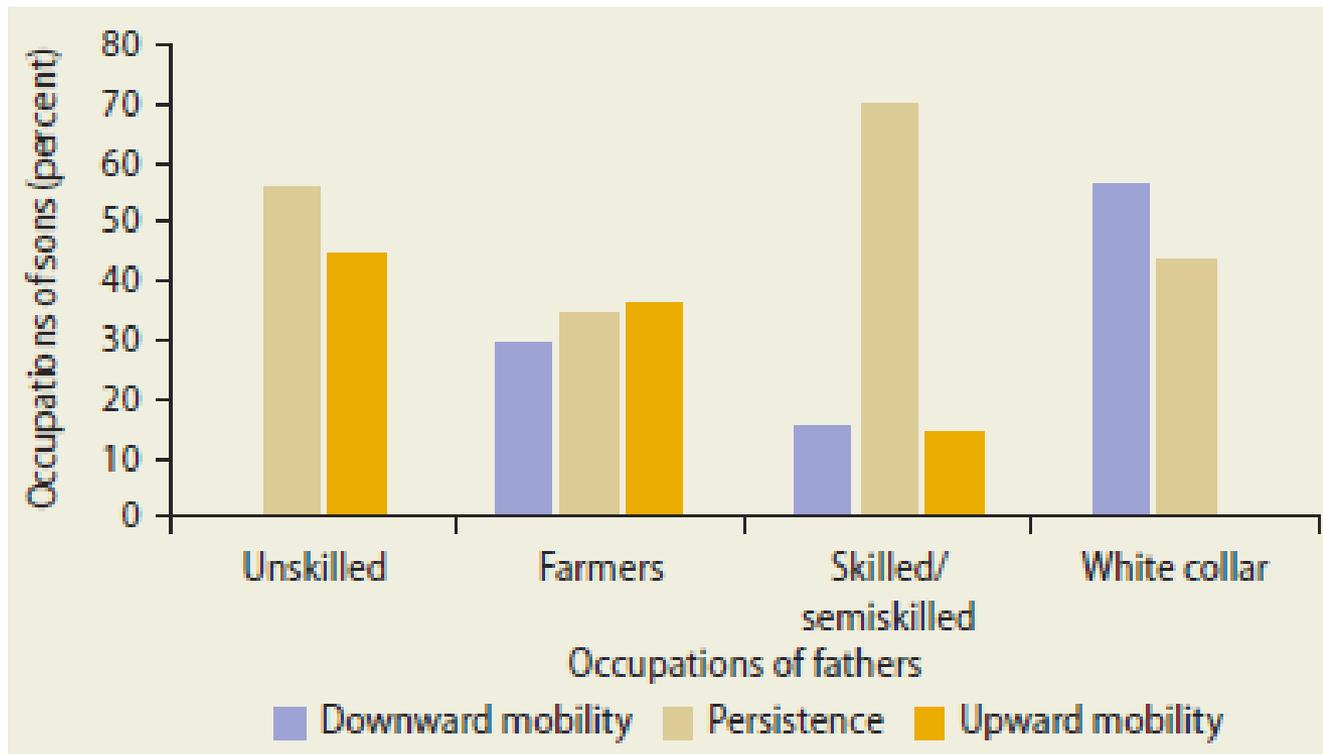
based on IHDS panel data 1993/4, 2004/5, 2011/2

- Substantial mobility across all three survey rounds
 - Study finds no strong evidence of increased mobility over time
- Analysis suggests that “forward” castes have seen greater upward and downward mobility
 - But scheduled castes, scheduled tribes and muslim groups have also been seeing significant upward and downward mobility
 - “churning”

Intergenerational Occupational Mobility in India

(World Bank, 2015)

FIGURE 4.1 Considerable occupational mobility exists across generations in India

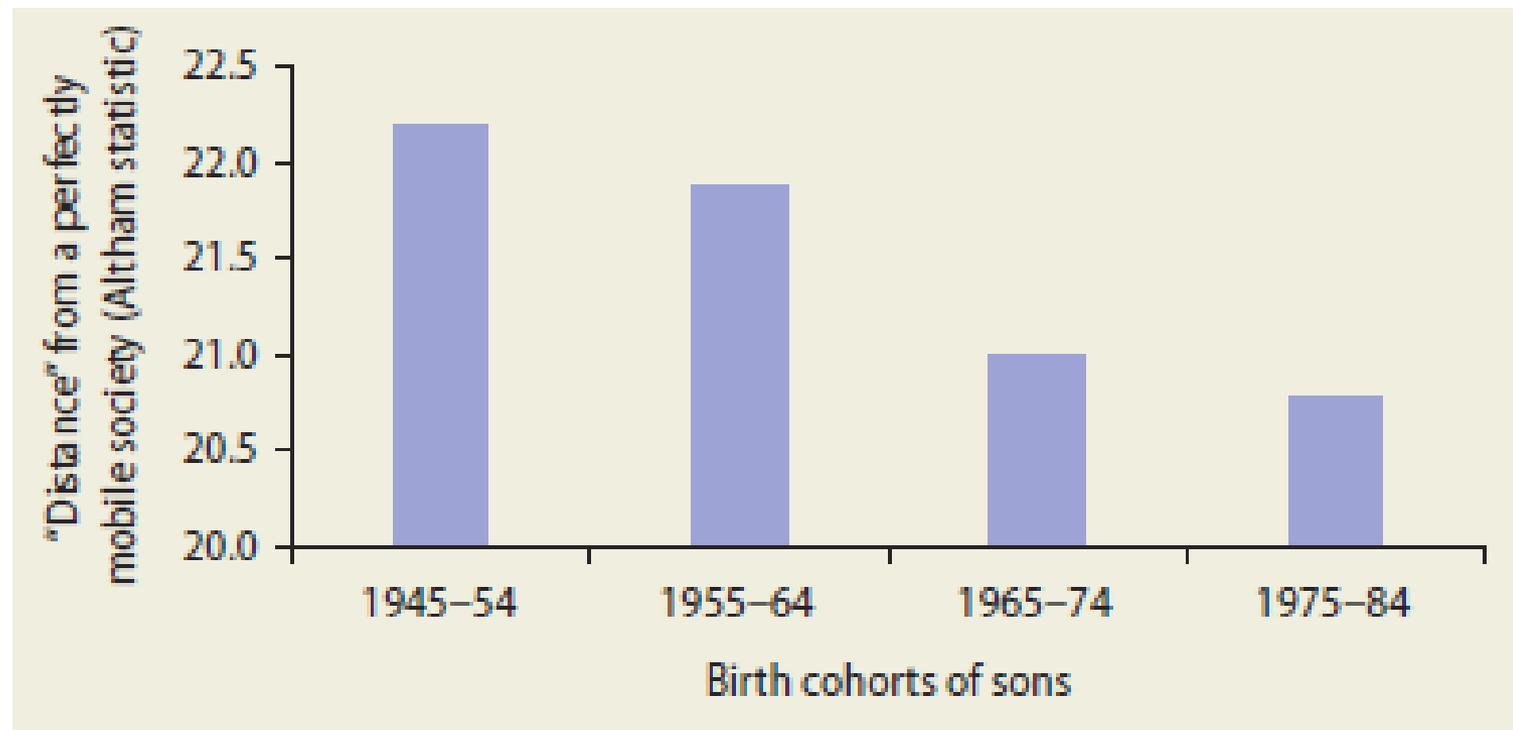


Source: Based on India Human Development Survey (IHDS) 2004–05.

Intergenerational Occupational Mobility in India

(World Bank, 2015)

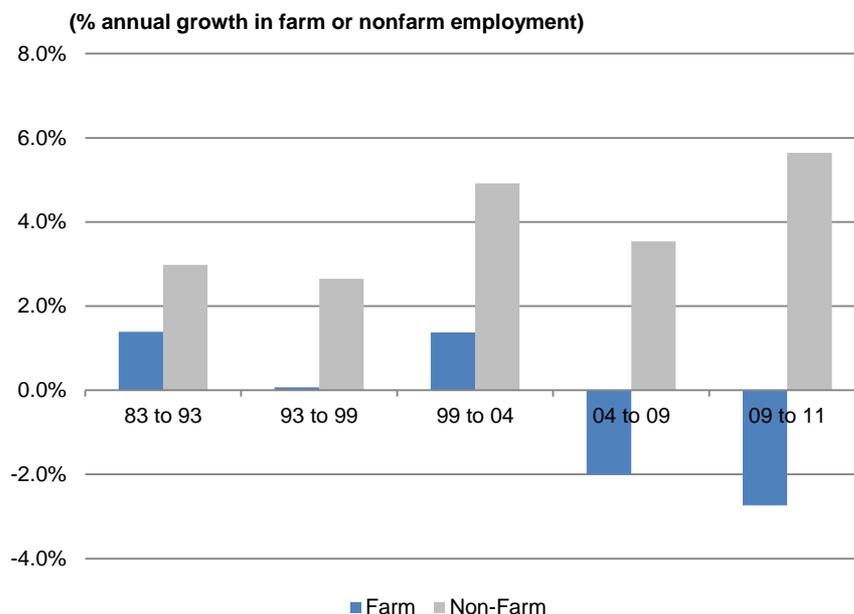
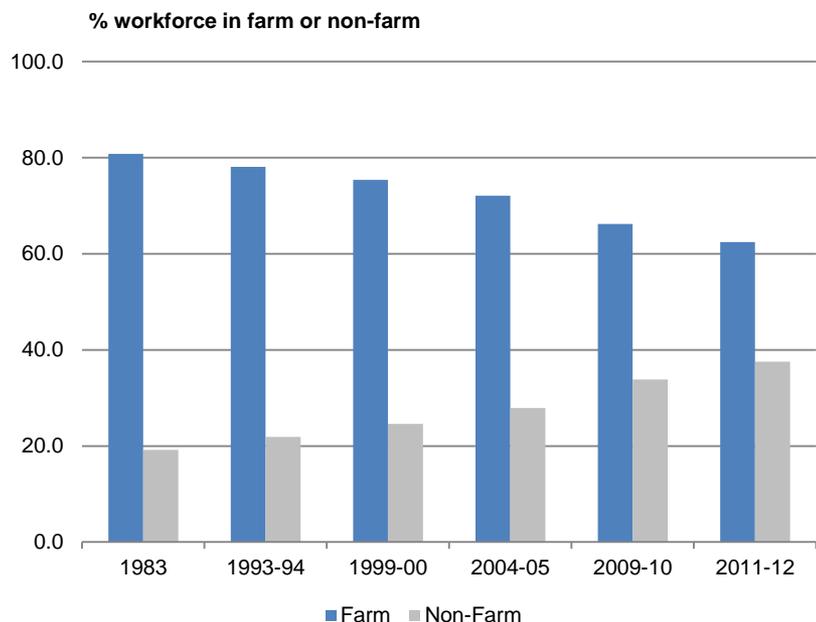
FIGURE 4.2 Occupational mobility is higher for younger generations



Source: Based on IHDS 2004-05.

Note: "Distance" is measured as the Altham statistic comparing the actual transition matrix to that of a hypothetical, perfectly mobile society.

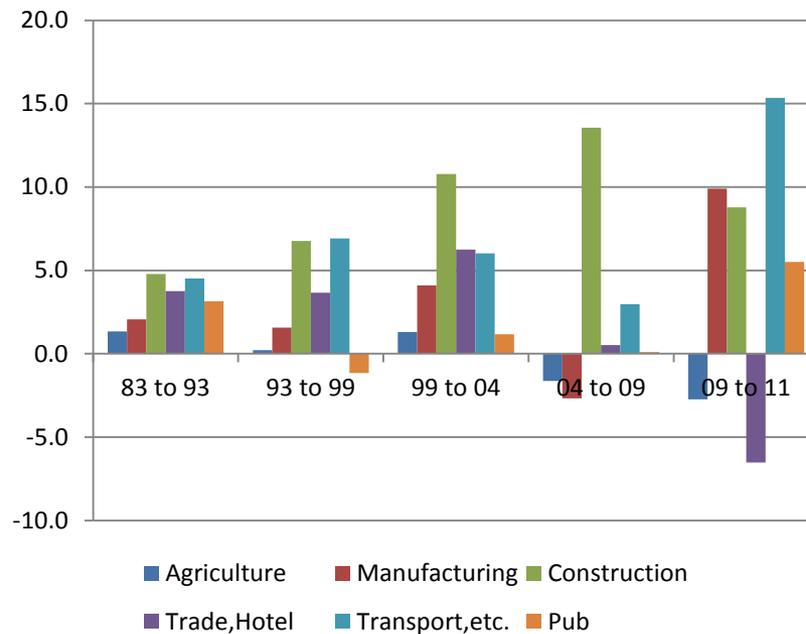
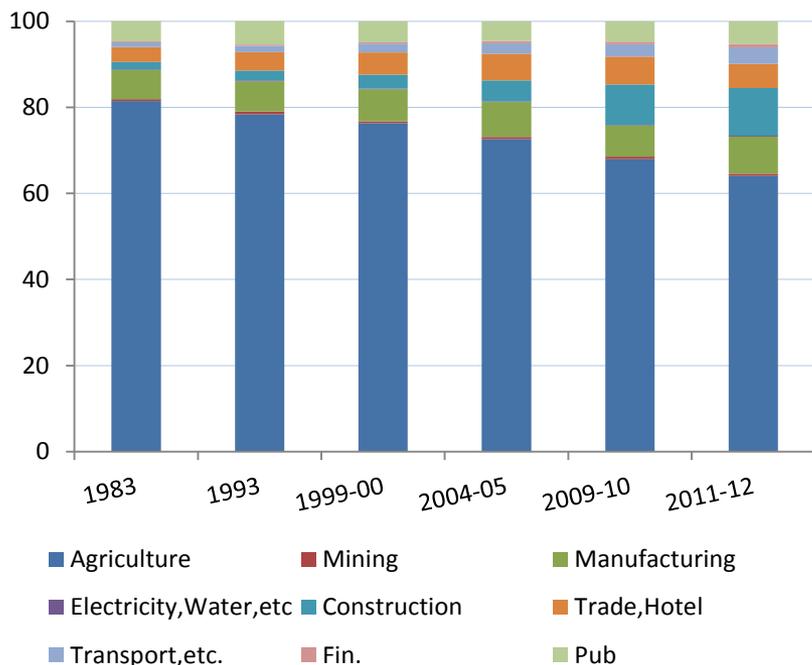
Income Mobility: A story of Structural Transformation: Workers shifting out of agriculture



For the first time, absolute numbers of agriculturalists (cultivators and wage labor) started declining. Shifts are sharper for women.

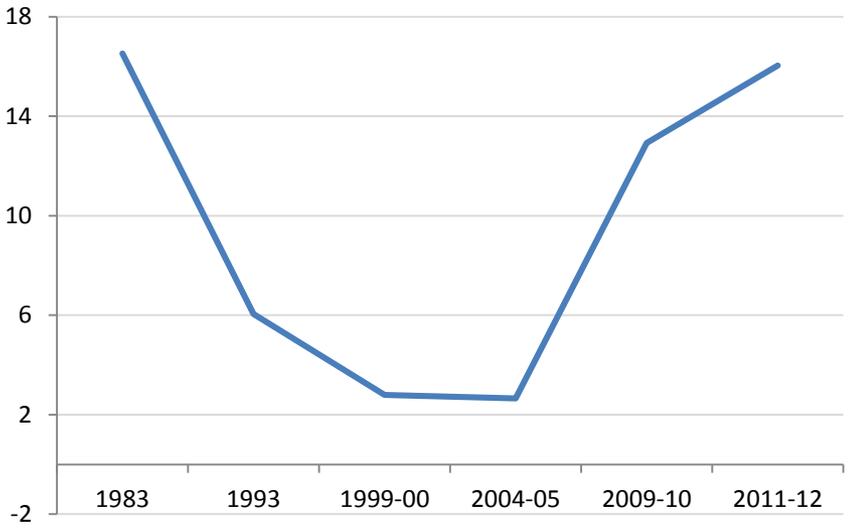
... into construction (and other)

(distribution of rural employment, by industry)

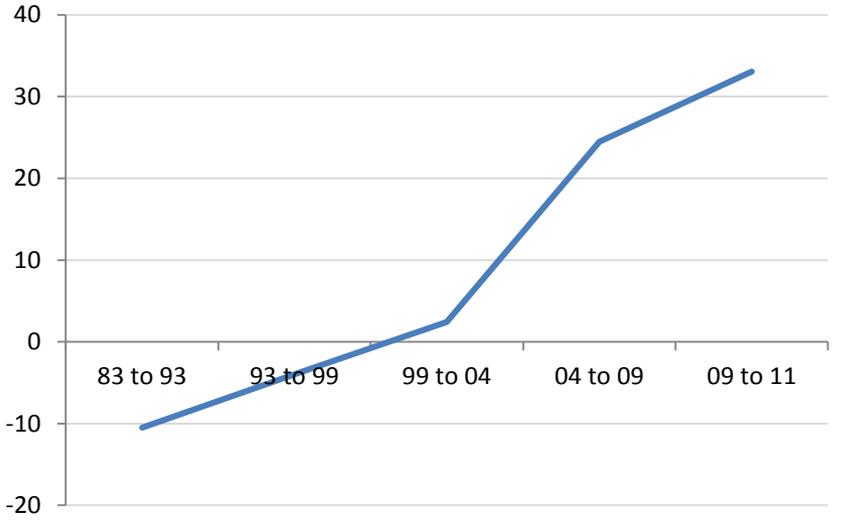


A significant part of the expansion is due to public works

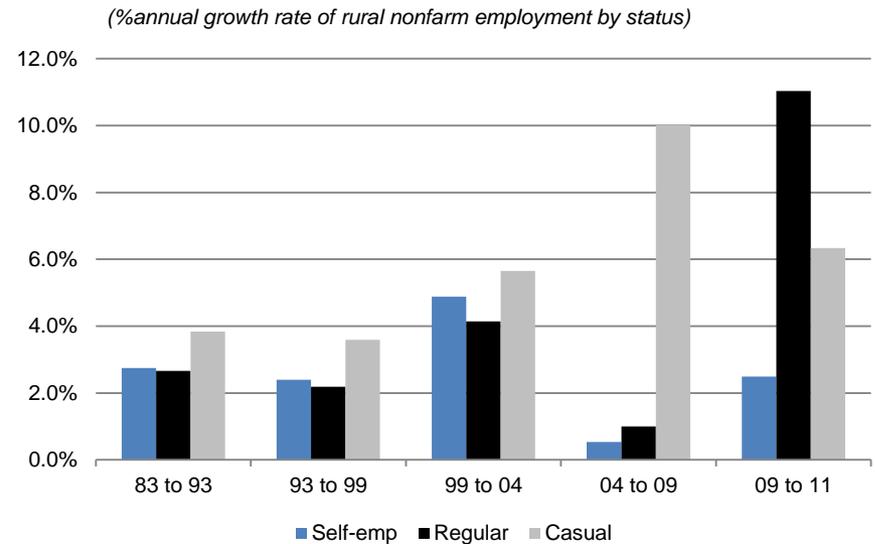
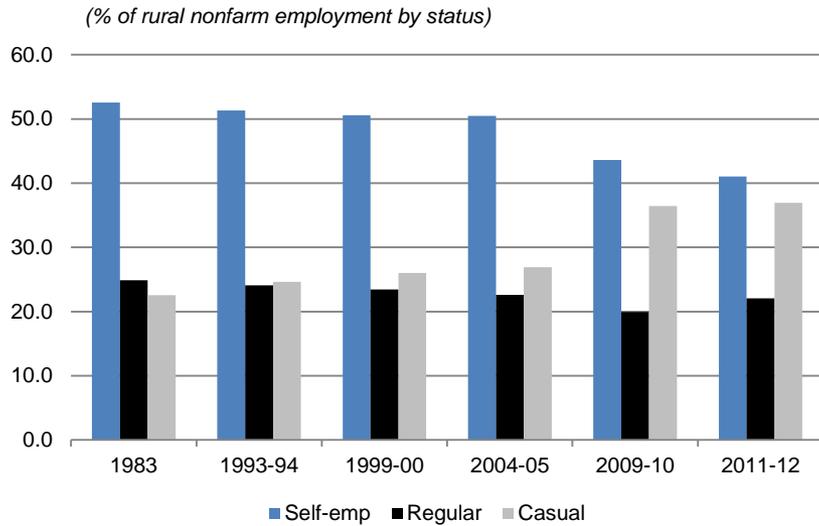
(Share of public works in construction, %)



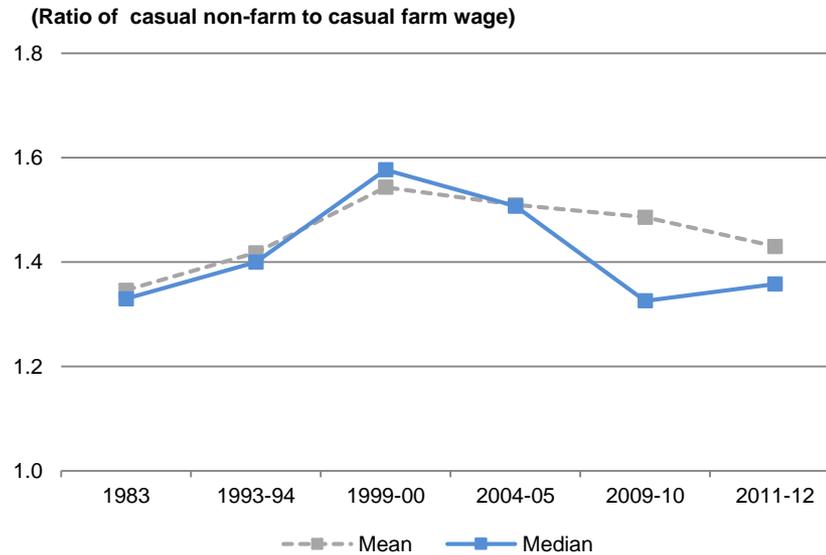
(Contribution of public works to construction growth, %)



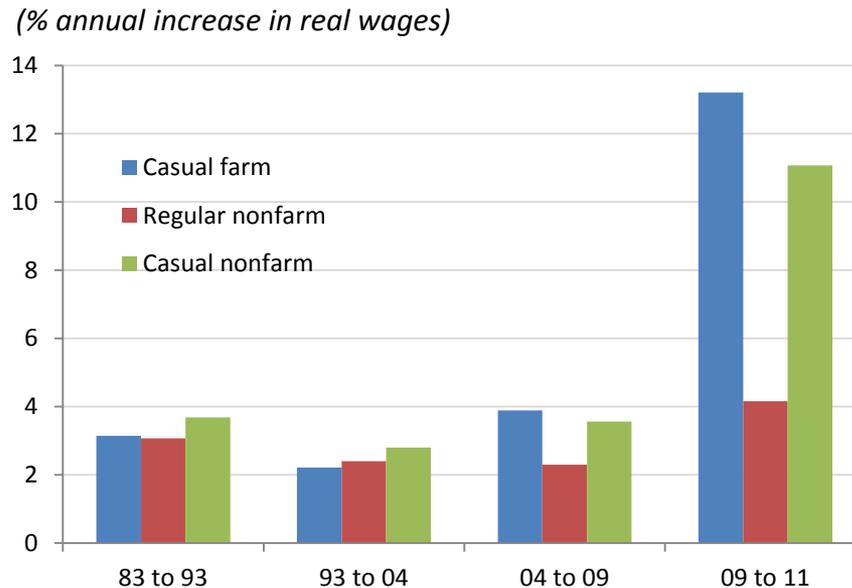
As a result, nonfarm jobs are increasingly casual.



But even poor quality nonfarm jobs still command a premium over agricultural wage labor....



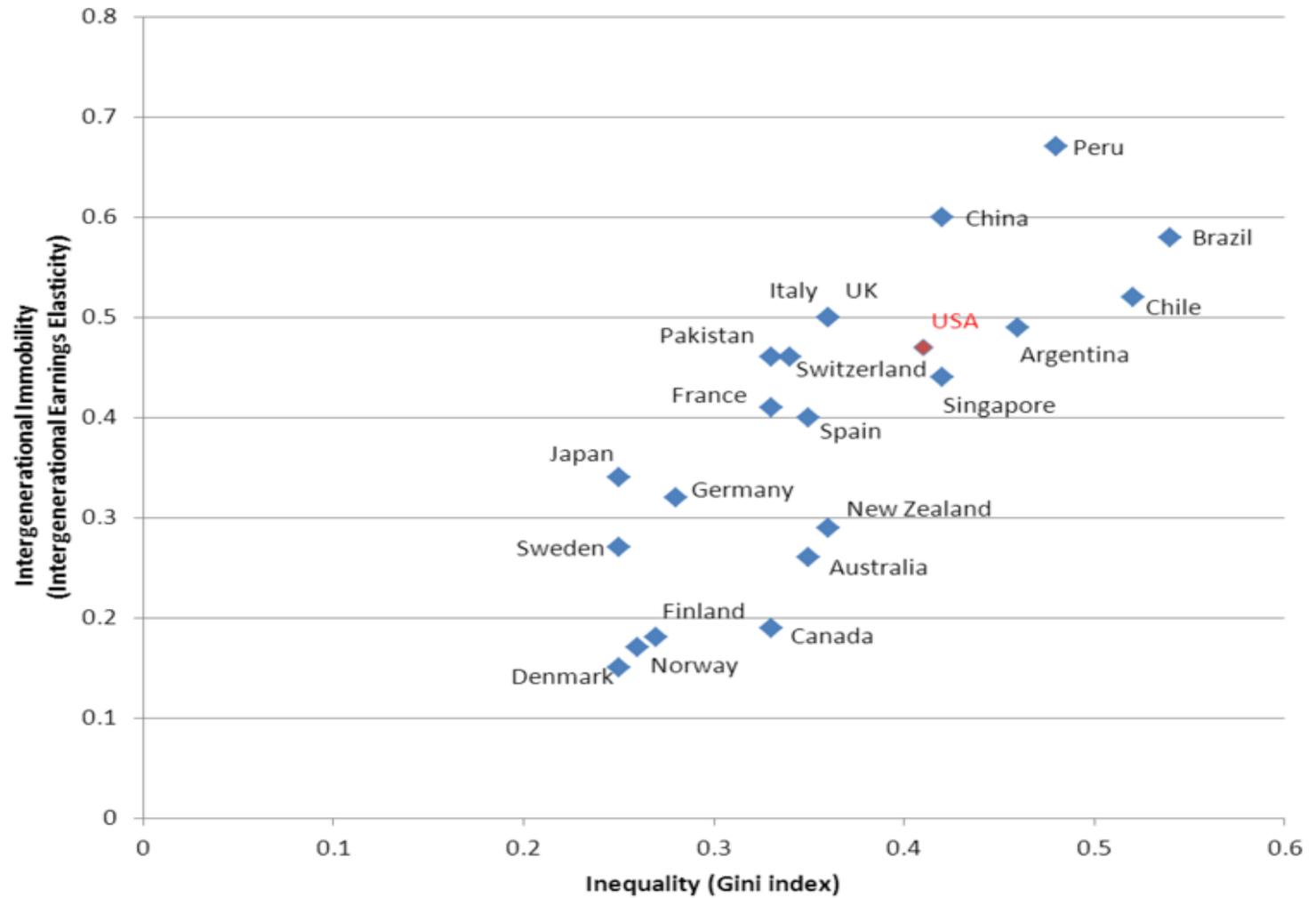
... and rural wages have shot up,
especially for casual labor



Confirmation, but also puzzles, from field studies

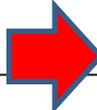
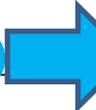
- Palanpur income data cover 6 decades: from 1957/8 – 2008/9 (Himanshu, Lanjouw and Stern, forthcoming)
 - Evidence points to greater intra-generational income mobility over time: transition matrices
 - Steady increase in off-diagonal entries in transition matrices
- BUT, also clear evidence of a rise in inequality between 1983/4 and 2008/10
 - Gini showed little trend change until 1983/4.
 - Gini rose from 0.310 to 0.379 between 1983/4-2008/9
- In addition, evidence suggests that intergenerational mobility has not increased, and may even be declining.
 - puzzle that needs to be investigated further.

"The Great Gatsby Curve"

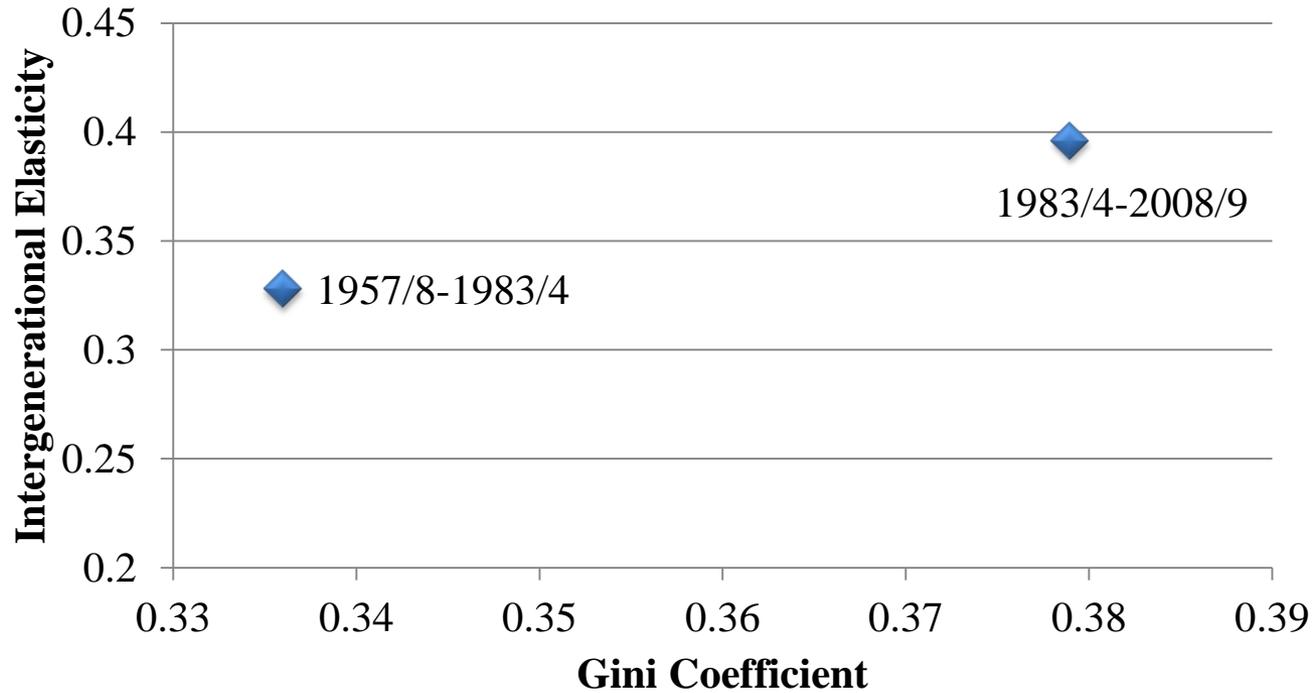


Palanpur: Declining Intergenerational Mobility

	1958-1983	1983-2009	1958-1974 (1983)	1974(1983)- 2009
Number of observations(in the age group 25-35 years)	58	100	58	100
Gini Coefficient in terminal year	0.336	0.379	0.235	0.379
Intergenerational Elasticity	0.328	0.396	0.294	0.441

Great Gatsby Curve (1957-2009) in Palanpur



Structural transformation in Palanpur

- The Palanpur study strongly echoes the structural transformation story emerging from the national-level studies.
 - Low castes are gaining access to casual non-farm employment for the first time
 - Evidence had previously been pointing to an ever growing cleavage between the lowest castes and the rest of the village population. This has been reversed.
 - Education, in Palanpur, does not yet seem to have played a critical driving force.
- Important caveat is that women's economic engagement outside the home and participation in diversification process is still very limited
- Migration has played only a very small part in the Palanpur story. A key factor has been daily commuting to nearby towns.
 - Long-term migration is seen as an expensive option – not likely open to the poorest segments
 - Daily commuting is an under-researched topic – likely to be a quite important in large parts of the country

Mobility and Policy

- Studies at the national level have highlighted the role of education (particularly in urban areas)
 - World Bank (2015), Azam and Bhatt (2014)
 - Important improvements have been achieved on the education front in recent decades (although there is still a very long way to go)
 - Breaking through to the regular, salaried, employment sector appears to be contingent on levels of education that are still beyond large segments of the population

Mobility and Poverty, cont.

Public Works

- National Rural Employment Guarantee Act (NREGA) offers guaranteed minimum level of employment to men and women in rural areas (at low wages)
 - Very large scale employment program that has provided employment to large numbers of rural population.
 - Program has delivered small infrastructure and other amenities (in Palanpur, a focus on rural road and village lane upgrading)
 - Facilitating commuting, rural non-farm diversification
 - Politically charged because of considerable cost of program and questions as to whether the program is fiscally sustainable

Mobility and Policy, cont.

Urbanization Policy

- World Bank (2014) pointed to important role of small towns in facilitating the economic diversification of the surrounding rural areas
 - The connection of small towns to rural hinterland appears stronger than that of large cities.
 - India's Urban strategy has seen some evolution with a shift away from an exclusive focus on a few major metropolitan areas towards greater attention to small and medium sized cities.
 - Urbanization of India driven to a considerable extent by changing classification of rural settlements into urban centers
- Urban development could be an important ingredient for a rural income mobility strategy:
 1. Urban poverty is higher in small towns than in large cities
 2. Per capita availability of basic services is lower in small towns than large cities
 3. Galvanizing small towns is a potent strategy for addressing urban poverty.
 4. Small town growth will stimulate rural nonfarm development in surrounding areas
 5. Non-farm diversification in rural India appears to be a key ingredient for rural poverty reduction and increased income mobility
- Pending issues:
 - Per capita cost of provision in urban areas may vary across large and small towns
 - Key bottleneck in urban development concerns city management and administration