

Jobs and the Transformation of the Economic Lives of the Poor

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Introduction

- ▶ This is one of the most exciting periods in India's history – lift-off
- ▶ Big question for India and South Asia \implies can mass of population still working in unskilled, insecure, itinerant, unremunerative occupations (which have not changed much over time) be brought into more regular, higher return employment
- ▶ Not new question – see Gunnar Myrdal's 1968 Asian Drama
- ▶ Solow (1990) “Wage rates and jobs are not exactly like other prices and quantities. They are much more deeply involved in the way people see themselves, think about their social status, and evaluate whether they are getting a fair share out of the society.”
- ▶ “The misery of being exploited by capitalists is nothing compared to the misery of not being exploited at all” – Joan Robinson (1962)

Introduction

- ▶ Labor is the main (and often the only) endowment of the poor
- ▶ For example – agricultural workers
- ▶ Labor markets and poverty are tightly linked
- ▶ Transforming the economic lives of the poor requires us to think about occupational change
- ▶ Occupational change will typically not be achieved by transfers
- ▶ A key challenge therefore is to think about how to increase the returns to labor for casual laborers
- ▶ That is what i am going to talk about today

This Lecture

- ▶ I will do three things
 1. Provide some evidence on the (continued) vulnerability of casual laborers
 2. Look at new evidence on whether and how people who are employed in unproductive and insecure occupations in rural areas can take on new self-employment opportunities
 3. Look at factors that encourage or discourage movement of labor into formal industries which tend to be the engines of growth in developing countries

⇒ lecture will focus on occupational change both within rural sectors as well as between agricultural and industrial sectors

⇒ thinking about poverty in developing countries requires one to think about which policies can encourage people to move from the rural and informal sectors into formal sectors of employment

Context

- ▶ 1880 Famine Commission Report \Rightarrow agricultural laborers heavily represented in death tolls
- ▶ Burgess-Donaldson (2012) look at how railroad expansion affects excess mortality caused by rainfall shocks 1870-1930 \Rightarrow key role of investments in transportation infrastructure in protecting casual laborers
- ▶ Burgess-Deschenes-Donaldson-Greenstone (2015) look at how temperature variation affects mortality across Indian districts between 1957 and 2000
- ▶ Rural (but not urban populations) continue to suffer excess mortality in response to hot temperatures \Rightarrow key implications for climate change when number of hot days will go up
- ▶ Occupational change is thus not just about raising living standards but also about insurance

Figure 1: Impact of Daily Temperature on All-Age Mortality in India and the United States.

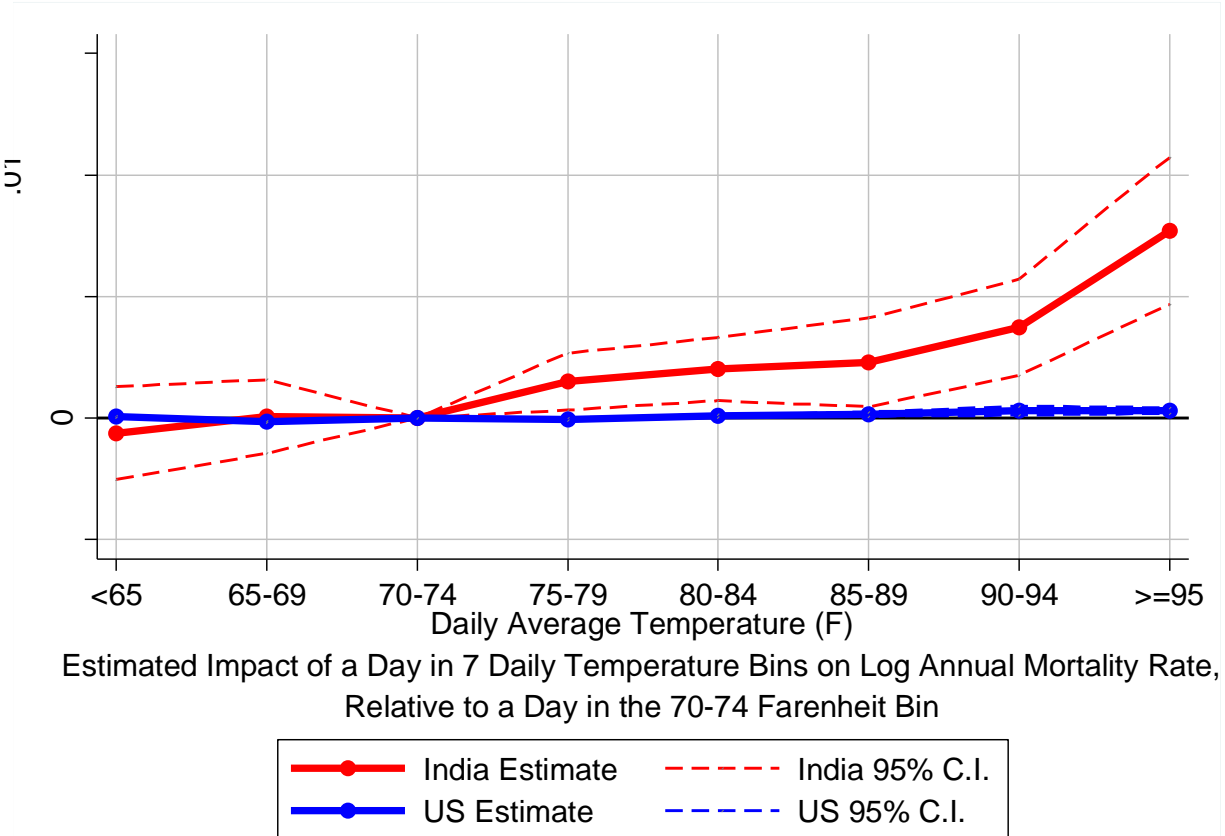
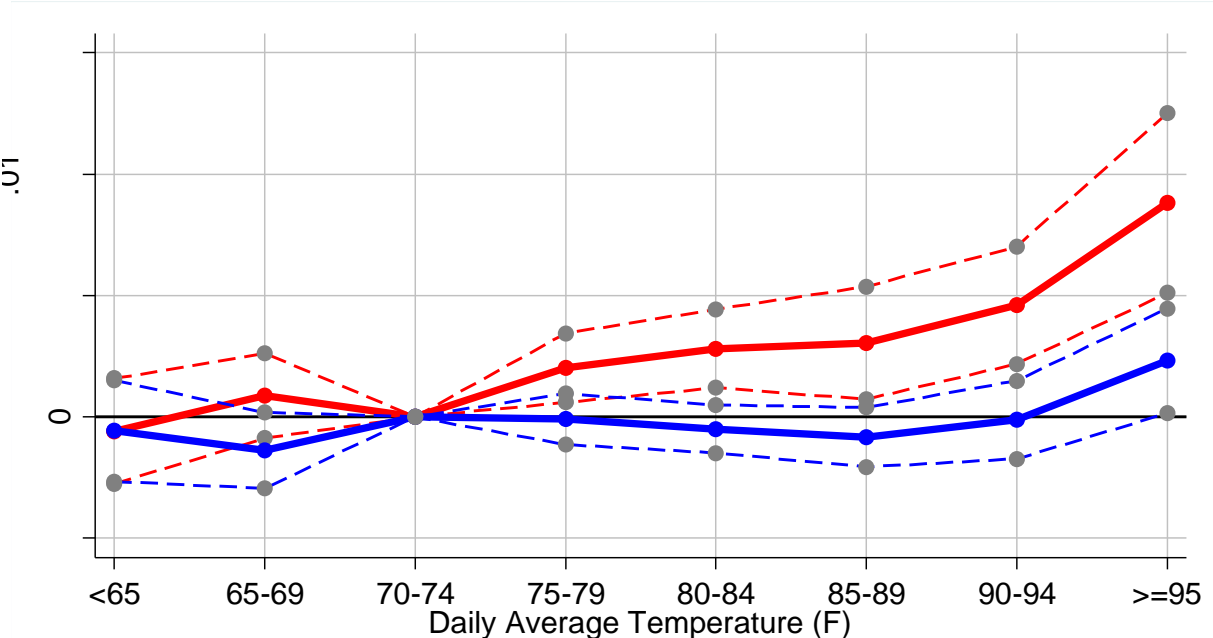
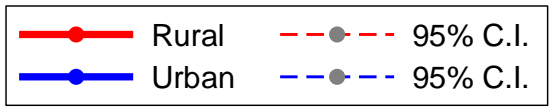


Figure 2: Impact of Daily Temperature on All-Age Mortality in Rural and Urban India.

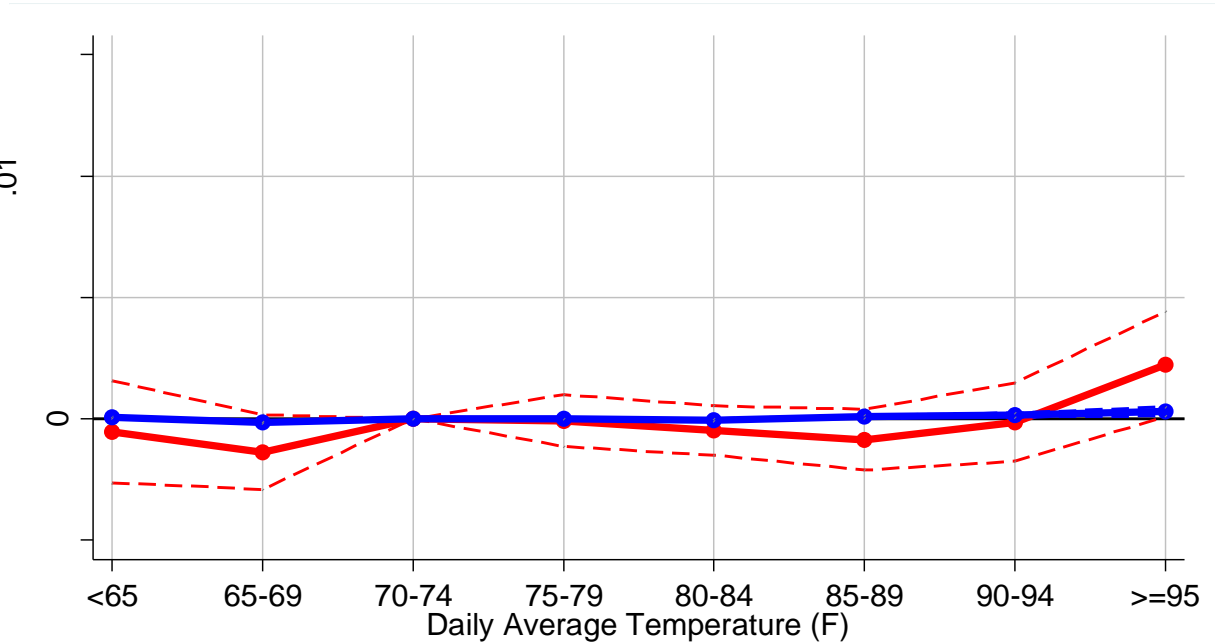


Estimated Impact of a Day in 7 Daily Temperature Bins on Log Annual Mortality Rate, Relative to a Day in the 70-74 Fahrenheit Bin

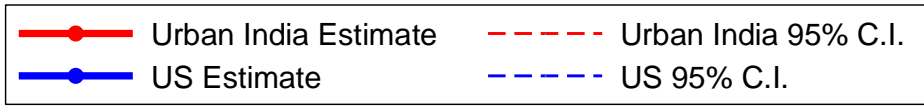


Note: The F-statistic testing the hypothesis of no difference in the temperature-mortality relationships in rural and urban India is 4.00 (p-value < 0.001).

Figure 3: Impact of Daily Temperature on All-Age Mortality in Urban India and the United States.



Estimated Impact of a Day in 7 Daily Temperature Bins on Log Annual Mortality Rate, Relative to a Day in the 70-74 Fahrenheit Bin



Context

- ▶ Even today 67% of rural landless workers in India rely on casual employment (Kaur 2015)
- ▶ 46% of female labor workforce have agricultural wage labor as main occupation (Kaur 2015)
- ▶ 98% of agricultural wage employment is through casual wage contracts (Kaur 2015)
- ▶ Interesting \Rightarrow huge mass of people for whom the nature of work has not changed much over time
- ▶ Those at the bottom of the employment ladder left behind by modern economic growth
- ▶ These are a difficult to reach group – demonstrate limited demand for capital or human capital
- ▶ Encouraging occupational change amongst unskilled, assetless workers whose only endowment is labor is critical to achieving SDG of eliminating extreme poverty by 2015

The Employment Ladder

- ▶ formal salaried employment (private and public) – services, manufacturing, government
- ▶ informal manufacturing and services
- ▶ self-employment (e.g. livestock rearing, cultivation, subsistence entrepreneurs, family enterprises) – K-intensive
- ▶ casual laborers (e.g. agricultural laborers) – L-intensive

⇒ female workers tend to be particularly disadvantaged

⇒ as you move up the ladder need for human capital tends to increase

⇒ want to get people into formal, salaried employment but this will take time

Focus on the Bottom End of Employment Ladder

- ▶ Why?
 1. casual labor (and basic self-employment) dominant sources of employment
 2. w/p - vulnerable group
 3. unskilled and assetless
 4. misallocation of talent
- ▶ Occupational change \Rightarrow key to transforming the economic lives of the poor?

Innate Talent and Occupational Choice

- ▶ US \Rightarrow 1960-2008 \Rightarrow occupational convergence across blacks and whites, women and men \Rightarrow accounts for 15-20% of total increase in aggregate growth (Hsieh et al, 2015)
- ▶ Unless we believe that innate talent is higher amongst whites versus blacks, men versus women then need to get at barriers to occupational convergence
- ▶ Same issues in India where we are trying to encourage occupational convergence between poor and non-poor
- ▶ Why cannot poor take up the occupations of the non-poor?

Innate Talent and Occupational Choice

- ▶ What are the key barriers?
- ▶ Many barriers seem relevant here:
 1. Access to human capital
 2. Access to capital
 3. Regulatory and other barriers
 4. Labor market discrimination
- ▶ Better allocation of talent \Rightarrow scope for considerable productivity and growth gains for India and across South Asia

Labor Markets and Poverty in Village Economies

- ▶ Bandiera, Burgess, Das, Gulesci, Rasul, Sulaiman (2015)
- ▶ Randomised evaluation of new breed of program pioneered by BRAC which transfers both assets and skills to the poorest people in rural areas to facilitate in situ occupational change
- ▶ Called ultra-poor program, graduation program
- ▶ Data on labour market choices of 21,000 poor and non-poor women in over 1,300 villages in rural Bangladesh for 2007, 2009, 2011, 2014 – detailed data on hours worked, days worked, earnings, expenditures, savings, investments
 1. Look inside labor markets within village economies to look at link between occupational choice and poverty
 2. Does large transfer of capital and skills enable the poor to take on the occupations of the non-poor?

SHARE OF HOURS SPENT ON ACTIVITIES, BY WEALTH CLASS



Characteristics of Labor Markets in Village Economies

- ▶ **Simple labor market:** 3 occupations – agricultural laborer, domestic servant and livestock rearing account for more than 80% of all female labor hours worked in a year
- ▶ **Strong correlation between poverty and occupational choice:** poor women engage mostly in casual wage labor and wealthier women specialize in livestock rearing
- ▶ **Earnings differ strongly across occupations:** on average, hourly earnings in livestock rearing are more than double hourly earnings for wage labor.
- ▶ **Demand for casual labor highly seasonal:** average woman working in agricultural labor works 127 days, in domestic service 167 days, whilst for livestock rearing it is 334 days

⇒ poor women have very different working lives than non-poor women ⇒ is this because they are less talented or able or because capital and skill constraints prevent them from taking on the occupations of the non-poor?

Shocking Village Economies with Capital and Skills

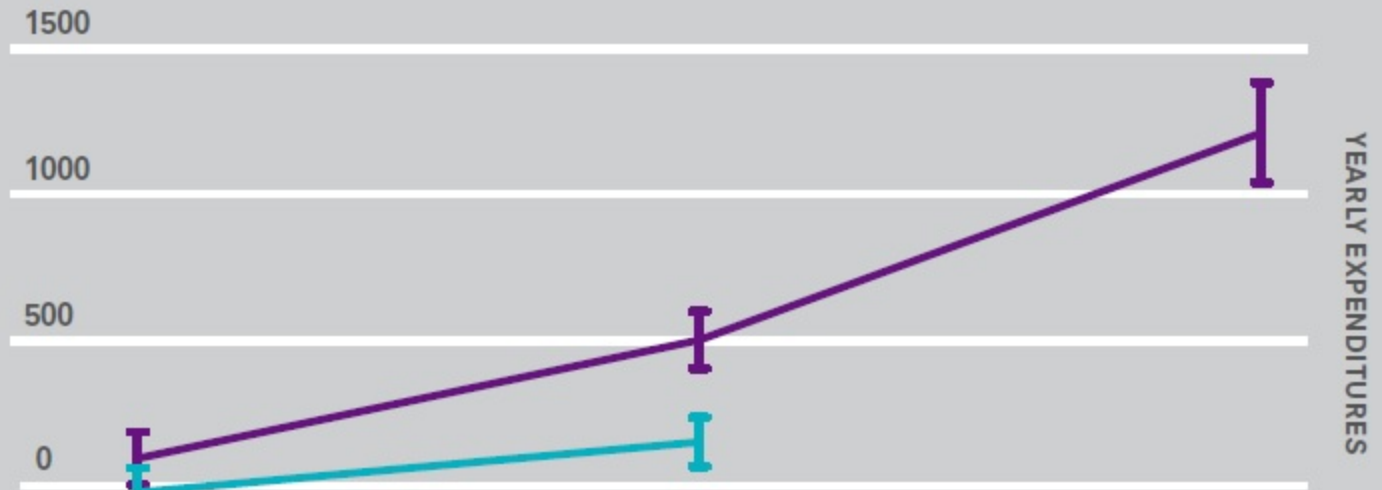
- ▶ \$300 per household program – half assets, half training – almost all household choose livestock (cows, goats) as asset
- ▶ Poorest women targeted – 93% illiterate, assetless, not receiving any assistance from government or microfinance organizations, median age around 40, almost all have kids,
- ▶ Big push program to transfer capital and skills to poorest in treatment villages to see if occupational change can be engendered
- ▶ All assistance stops after two years
- ▶ Baseline 2007, looking at results in 2009, 2011 and 2014 – 2, 4 and 7 years out
- ▶ Evaluation done in collaboration with BRAC
- ▶ One of the largest randomized evaluations done to date

Shocking Village Economies with Capital and Skills

- ▶ Earnings for treated women increase by 37%
- ▶ Driven by large increase in total labor supply as poor women dramatically expand self-employment hours and earnings from this activity increase manifold
- ▶ Poorest women work almost two months more during the year – spread labor supply across year rather than focussing it in periods when there is demand for casual laborer
- ▶ Expenditures on durables and non-durables increase and poverty falls
- ▶ Savings, borrowing and lending also increase dramatically
- ▶ Poorest households also begin to own and rent land and to acquire productive assets
- ▶ Evidence of diversification into assets that were not transferred by the program

ULTRA-POOR HOUSEHOLD EXPENDITURES AND LAND ACCESS

NON-DURABLE EXPENDITURES (USD)



YEARLY EXPENDITURES

LAND ACCESS



CHANGE IN LAND ACCESS

— TREATMENT GROUP OUTCOMES — CONTROL GROUP OUTCOMES

Please note: In 2011, the programme was scaled up to all eligible study households, including those previously serving as controls. As such, land access and expenditure outcomes from 2011-2014 are illustrated without a control group comparison.

FIGURE 2 IMPACT OF GRADUATION: PERCENT CHANGE IN PER CAPITA CONSUMPTION BY COUNTRY

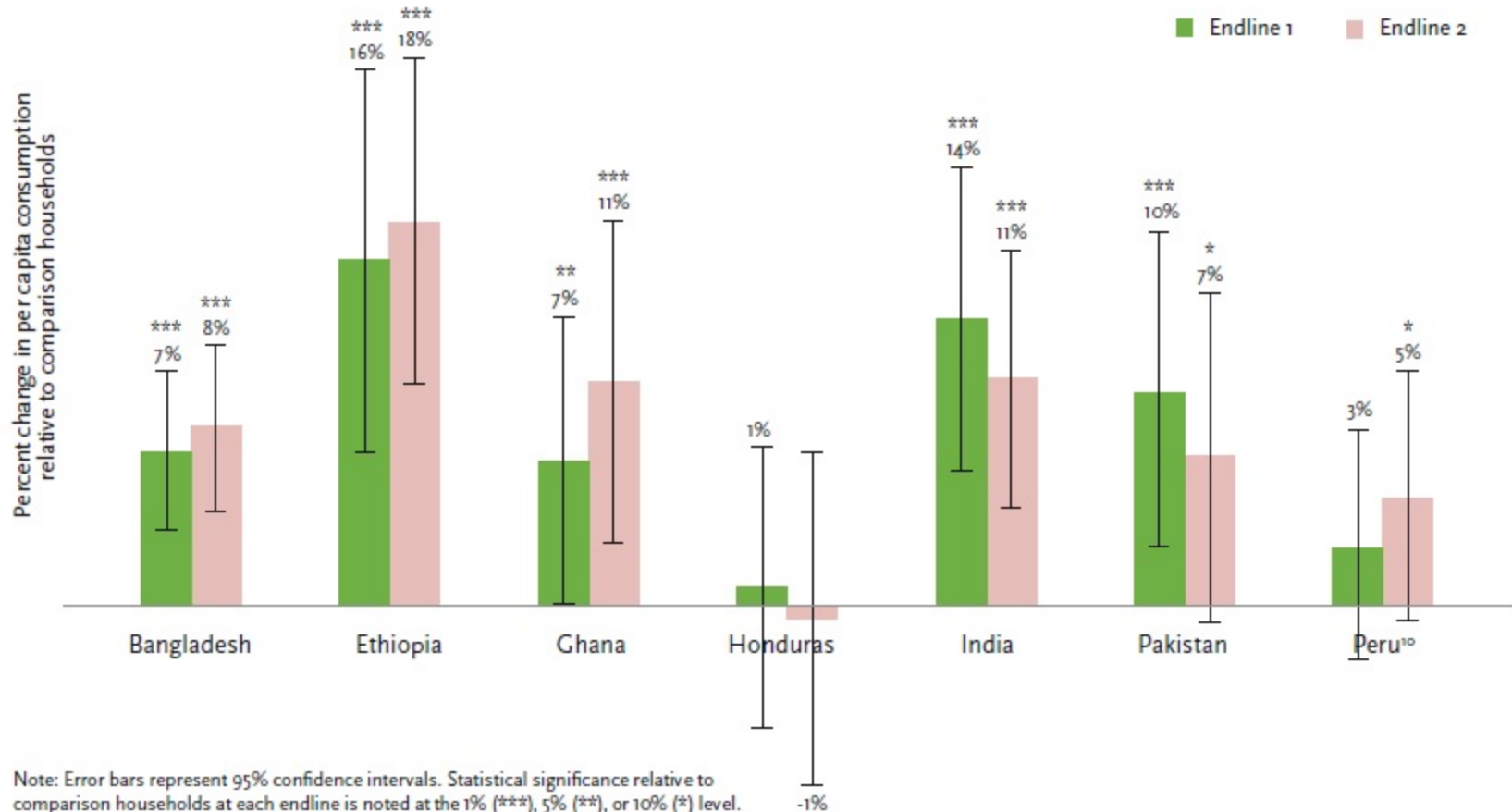


Table 7: Comparison with Pilot Results from Six Countries (Banerjee et al 2015)

Standard Errors in Parentheses, Clustered by BRAC Branch Area

	(1) Total per capita consumption, standardized	(2) Food security index	(3) Asset index	(4) Financial inclusion index	(5) Total time spent working by main woman, standardized	(6) Total time spent working by both respondents pooled, standardized	(7) Incomes and revenues index	(8) Physical health index	(9) Mental health index	(10) Political Awareness index	(11) Women's empowerment index
Treatment effect - four year endline	0.314*** (0.034)	0.256*** (0.079)	0.327*** (0.029)	0.313*** (0.040)	0.122* (0.065)	0.065 (0.047)	0.627*** (0.074)	0.108*** (0.027)	0.077* (0.043)	0.269*** (0.091)	0.077 (0.056)
<i>Treatment Effect in Banerjee et al (2015) -three year endline</i>	0.120*** (0.024)	0.113*** (0.022)	0.249*** (0.024)	0.212*** (0.031)	<i>n/a</i>	0.054*** (0.018)	0.273*** (0.029)	0.029 (0.020)	0.071*** (0.020)	0.064*** (0.019)	0.022 (0.025)

Following Banerjee et al (2015), we estimate ITT by regressing endline outcomes on baseline outcomes and randomization strata (subdistricts). We construct indices first by defining each outcome so that higher values correspond to better outcomes. Then we standardize each outcome into a z-score, by subtracting the control group mean at the corresponding survey round and dividing by the control group standard deviation (SD) at the corresponding survey round. We then average all the z-scores, and again standardize to the control group within each round. The variables used for each index are described in the Appendix. All indexes but Physical Health and Political Awareness are directly comparable.

Shocking Village Economies with Capital and Skills

Results suggest that:

1. **Poor women were unable, rather than unwilling or unfit, to engage in the same occupations as their wealthier counterparts**
2. **The program relaxes the constraints that were preventing them from doing so**
3. **Their labor allocation at baseline was suboptimal**
4. **Program can successfully implemented in wide variety of contexts (Banerjee et al, 2015)**

It looks like a lot of poor women are not being able to achieve the best returns on their labor input even within a setting of very limited occupational choice. In terms of aggregate productivity and growth Bangladesh and other South Asian nations are leaving a lot of money on the table. New idea on poverty reduction originated in Bangladesh is spreading across the world.

Moving Further Up the Employment Ladder

- ▶ Formal industries tend to be the engines of growth in developing countries
- ▶ I discuss evidence on factors that encourage the transition from rural and informal sector occupations into formal employment in manufacturing
- ▶ The striking thing about manufacturing in India is that there is huge left hand tail of relatively unproductive firms (Hsieh and Klenow 2009)
- ▶ We want to resources (both capital and people) to move into larger more productive firms
- ▶ The average firm in the US has grown by a factor of five by the time it is 30 years old. By contrast, firms in India see very little growth over time (Hsieh and Klenow 2014)
- ▶ Working out what constrains firm size growth is critical to understanding how to get more people into formal employment

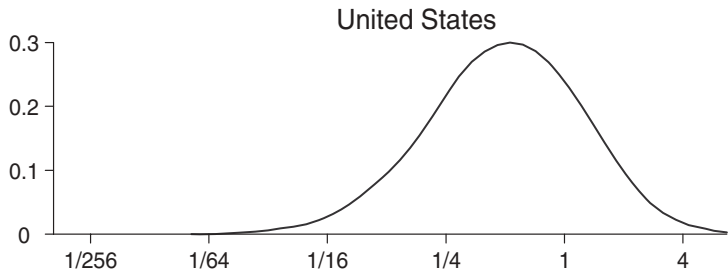
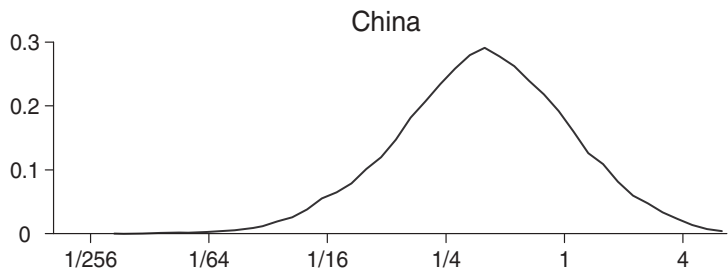
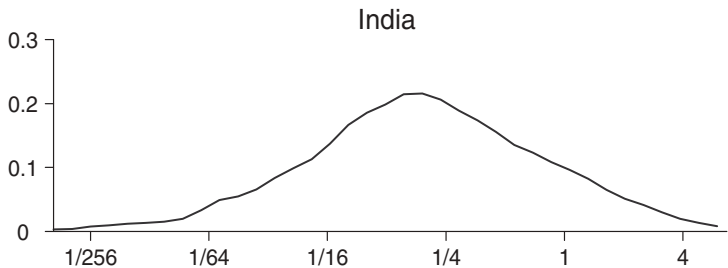
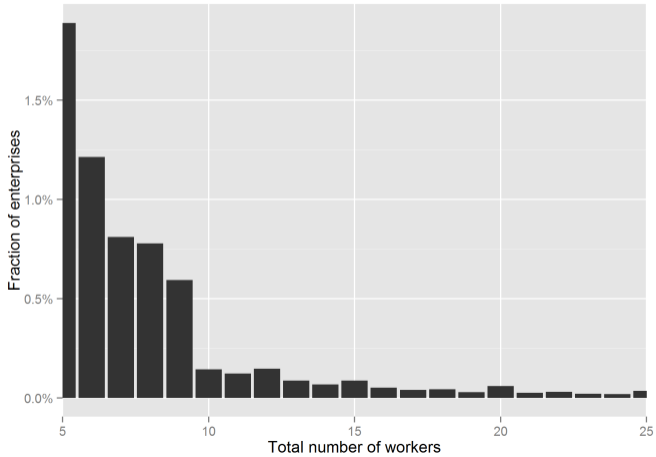


FIGURE I
Distribution of TFPQ

Figure 2: Distribution of establishment size for establishments with 5-25 total workers, 2005



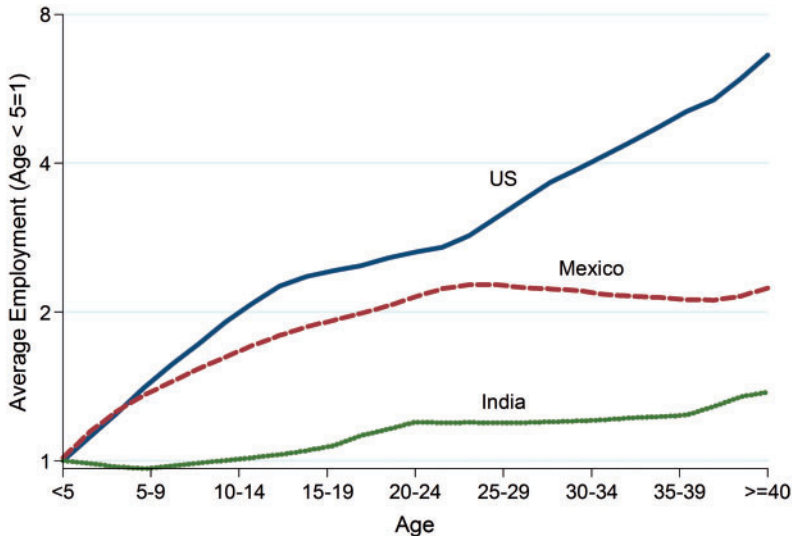


FIGURE I

Plant Employment by Age in the Cross-Section

Moving Further Up the Employment Ladder

- ▶ Again my focus will be on casual labor
- ▶ Work in manufacturing offers them a key route to increase their returns to labor
- ▶ Much of what I discuss concerns deregulation, flexibility and liberalization which have the advantage of being relatively cheap and quick to implement if they are (politically) within the choice set of government
- ▶ I will not focus much on investments in education, infrastructure, urbanization which take longer but which are clearly critical for people to move out of casual employment

Labor Regulation, Manufacturing Performance and Poverty

- ▶ Besley-Burgess paper published in 2004
- ▶ Labor market regulation frequently cited in explanations of poor growth performance in manufacturing: excessive bargaining power of organized labor blunts investment incentives and makes business climate less favorable.
- ▶ Significant variation across Indian states in growth of manufacturing output per capita from 1958-92:
 - ▶ Growth of 3.3% per annum in India as a whole.
 - ▶ Decline of 1.5% per annum in West Bengal
 - ▶ Growth of nearly 6% per annum in Andhra Pradesh.
- ▶ Besley-Burgess (2004) considers whether labor market regulation affected manufacturing growth and rural and urban poverty across states
- ▶ Data on labor market regulation come from state amendments to the 1947 Industrial Disputes Act, which are classified as pro-worker, pro-employer or neutral

Results

- ▶ States that amended the Industrial Disputes Act in a pro-worker direction experienced:
 - ▶ Lower output, employment, investment and productivity in formal manufacturing sector.
 - ▶ Increased output in informal manufacturing sector
 - ▶ Increased urban poverty
- ▶ Last result is really striking as shows that amending in a pro-worker direction is bad for workers outside the formal manufacturing sector \Rightarrow this constitutes the vast majority of workers
- ▶ Pro-worker regulation is putting a brake on the flow of these workers into formal manufacturing and holding back growth and productivity in this sector
- ▶ This is both because investment incentives are blunted but also because there are less incentives for firms to become formal

Industrial Relations Climate and the Effects of Liberalization

- ▶ Many developing countries liberalized their economies by dismantling government controls over industry and opening up to trade from the 1980s.
- ▶ In India, License Raj controls regulating entry and production activity in the registered manufacturing sector were dismantled nationwide during the 1980s and 1990s.
- ▶ Labor market regulations may also affect the response of states to these liberalization reforms.
- ▶ Aghion et al (2008) considers whether the effect of dismantling the License Raj on registered manufacturing output varies across Indian states with different labor market regulations

Results

- ▶ Following delicensing, industries in states with pro-employer labor market institutions grew more quickly than those in pro-worker environments
- ▶ Dropping barriers to investment and entry via delicensing magnified disadvantage of states with pro-worker labor market institutions
- ▶ Pro-worker state have enjoyed less of the gains from liberalization in India relative to pro-employer states

Increased Supply of Contract Labor

- ▶ Bertrand and Hsieh (2015) show that since late 1990s, Indian manufacturing firms have increasingly relied on contract workers supplied by staffing companies: accounted for 36% of total employment of firms with >100 workers in 2011.
- ▶ Greater availability of contract workers may change formal manufacturing landscape via several channels, e.g.:
 - ▶ Contract workers exempt from firing costs \Rightarrow employment among large firms that rely more on contract workers more responsive to productivity shocks.
 - ▶ Allow large firms to undertake risky investments because contract workers can be returned to staffing companies at lower cost if investment does not succeed

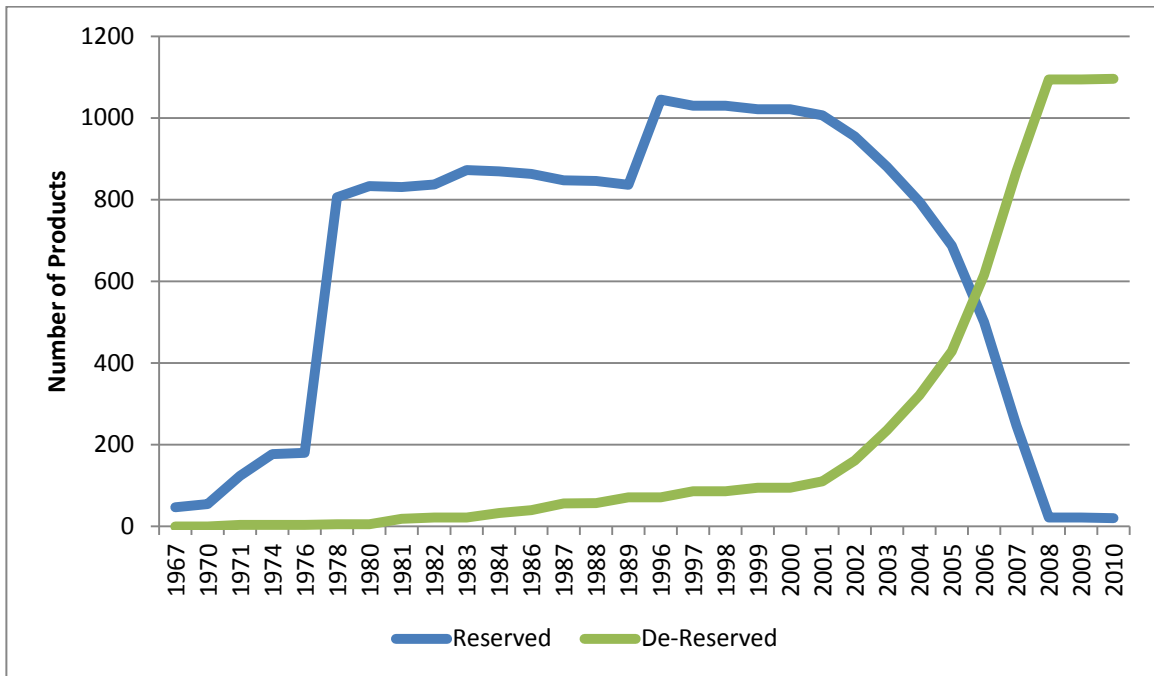
Results

- ▶ Expansion of contract labor has reduced the effects of employment restrictions on large Indian firms
- ▶ This is driven by the expansion of formal staffing companies that provide contract workers primarily to large firms
- ▶ Use of contract labor has allowed firms to respond to shocks to profitability, expand employment, and invest in new products and inputs.
- ▶ Availability of contract workers increased manufacturing GDP by 0.56% between 1998 and 2011.
- ▶ Has only acted as a partial solution: average product of labour in large firms still significantly higher than that of smaller firms, but manufacturing still dominated by small informal establishments

Dismantling Reservations for Small-Scale Industries

- ▶ For past 60 years, India has promoted small-scale industries by reserving certain products for manufacture by small and medium firms.
- ▶ Aim of policies to promote employment growth and income redistribution.
- ▶ Harrison et al (2014) identify consequences for employment growth, wages and output of dismantling these reservations.

Figure 1: De-Reservation Policy



Notes: Data for 1967 through 1989 taken from Table 6.3 in Mohan (2002). Data for 1996 onwards taken from various publications of the Government of India, Ministry of Micro, Small, & Medium Enterprises.

Results

- ▶ Districts more exposed to de-reservation experienced higher employment and wage growth
- ▶ Effects driven by growth of factories that moved into de-reserved product space, whose expansion more than compensated for the shrinking of smaller, incumbent firms.

Pulling Everything Together

- ▶ Today I have looked at two issues
 1. Occupational change within rural sectors
 2. Occupational change from agricultural to industrial sectors
- ▶ Both critical in terms of encouraging occupational convergence and for getting poor to make better use of their talents
- ▶ For 1. findings way to relax capital and skills constraints for the poor is critical. Idea underlying program I studied is ripe to be taken up by governments who can take it to scale. This could be a significant way to reach people who have been bypassed by modern economic growth.
- ▶ For 2. I have emphasized deregulation, liberalization and flexibility. These seem to be critical issues for the current government where there is a need to examine the full set of regulations surrounding employment, firm entry and formalization.

What I Left Out

There is also a bunch of stuff which I think is important for promoting occupational change and transforming the economic lives of the poor which I left out.

1. Education and higher education
2. Access to reliable energy
3. Transportation infrastructure and trade
4. Making cities more viable places for large manufacturing and service industries to establish themselves in \Rightarrow this may require giving city governments more powers so that they have a stake in promoting industrialisation

Thankyou!