

Transitions between informal and formal employment

Results from a Worker Survey in Bangladesh

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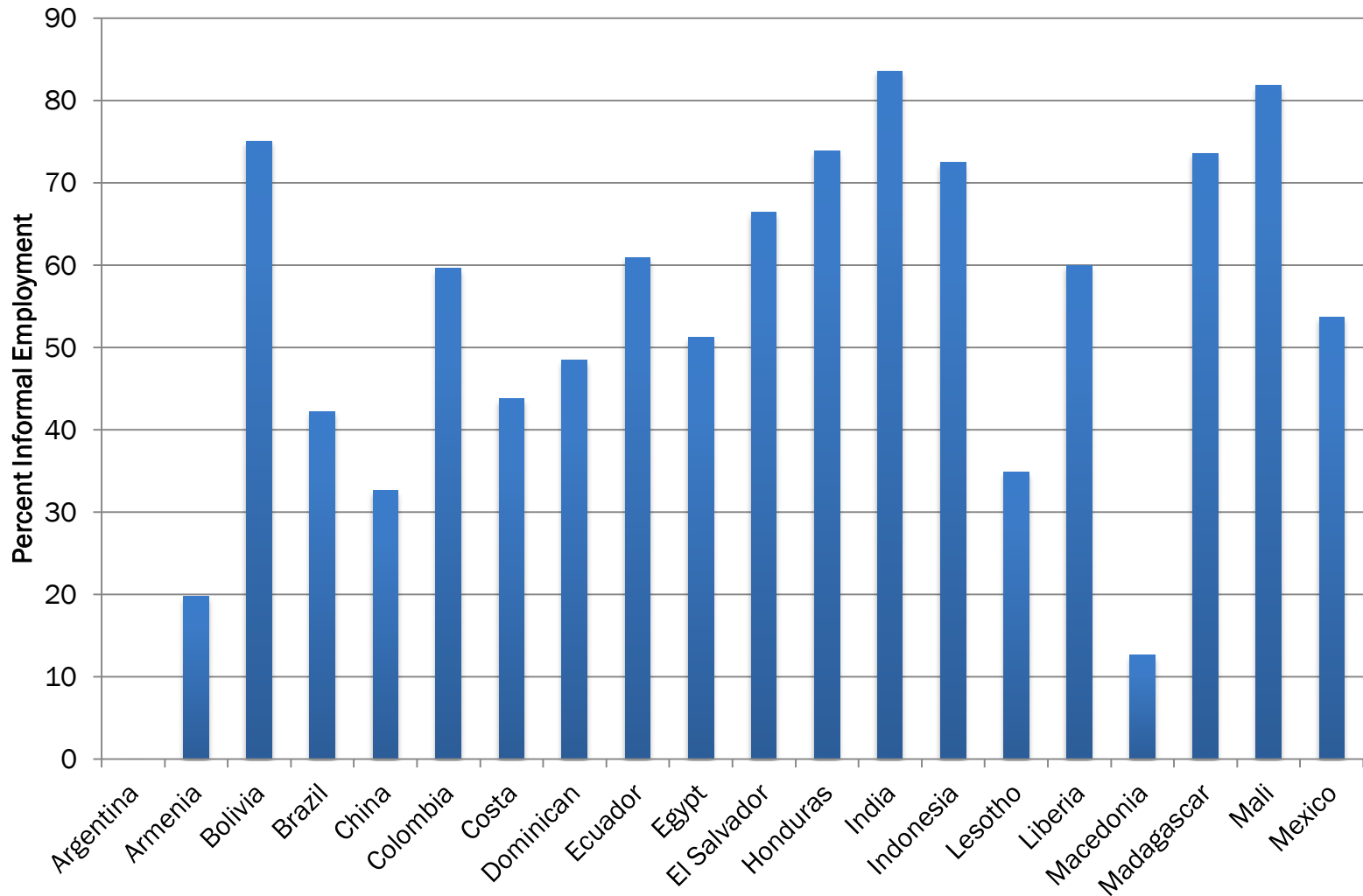
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The Informal Sector Accounts for the Majority of Employment in Many Low-Income Countries



Source: ILO, 2012

(In)Formality is a Continuum

Safe working conditions

Minimum wage

Sick leave

Paid holidays

Maternity leave

Termination notice

Written contract

Pension

Less formal

More formal



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The “informal sector” includes

- Workers employed with few benefits
- Self-employed
- Unpaid family members



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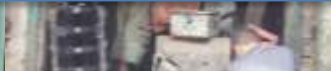
Pension

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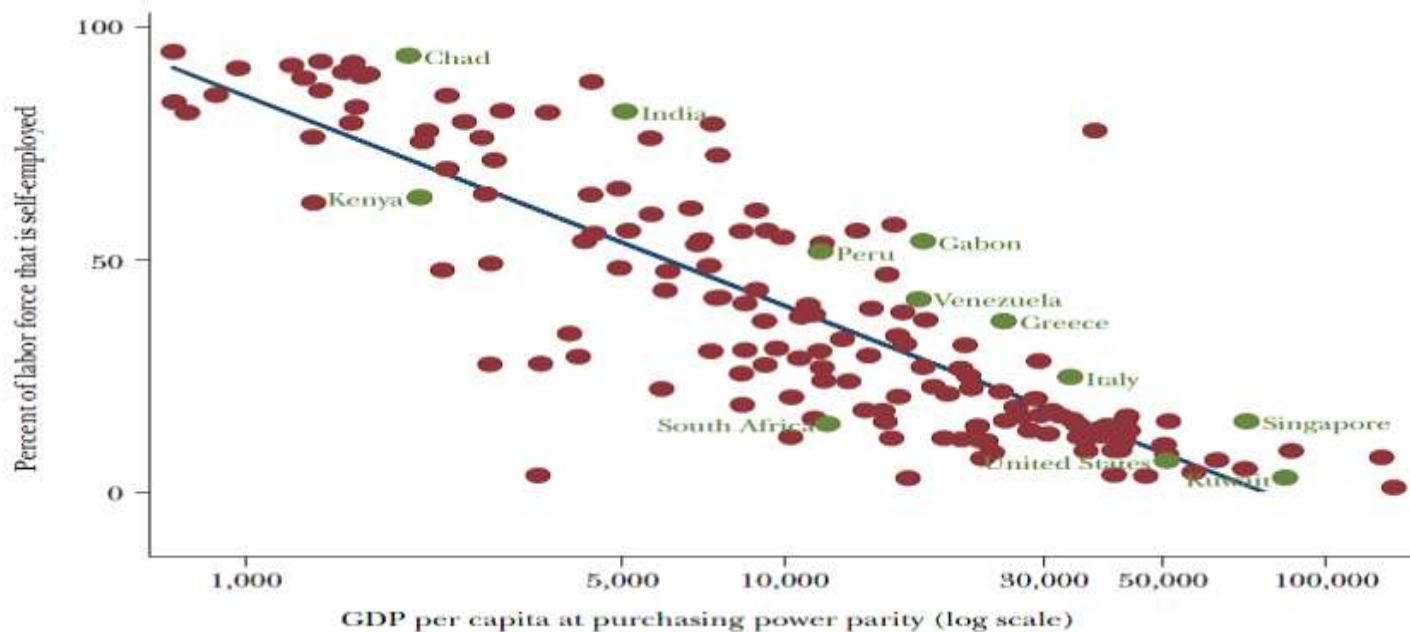
Informal firms

- Are less productive than formal firms
- Pay their workers less
- May not provide benefits to which workers are entitled



There are Divergent Views on How the Informal Sector Responds to Growth

- One view characterizes the sector as stagnant, unproductive with few links to the formal sector (e.g., Chandra and Khan, 1993; Fields, 1975)
 - Predicts that the informal sector will disappear as the economy develops (formal and informal labor are substitutes)
 - Consistent with the cross-country evidence on informality and income

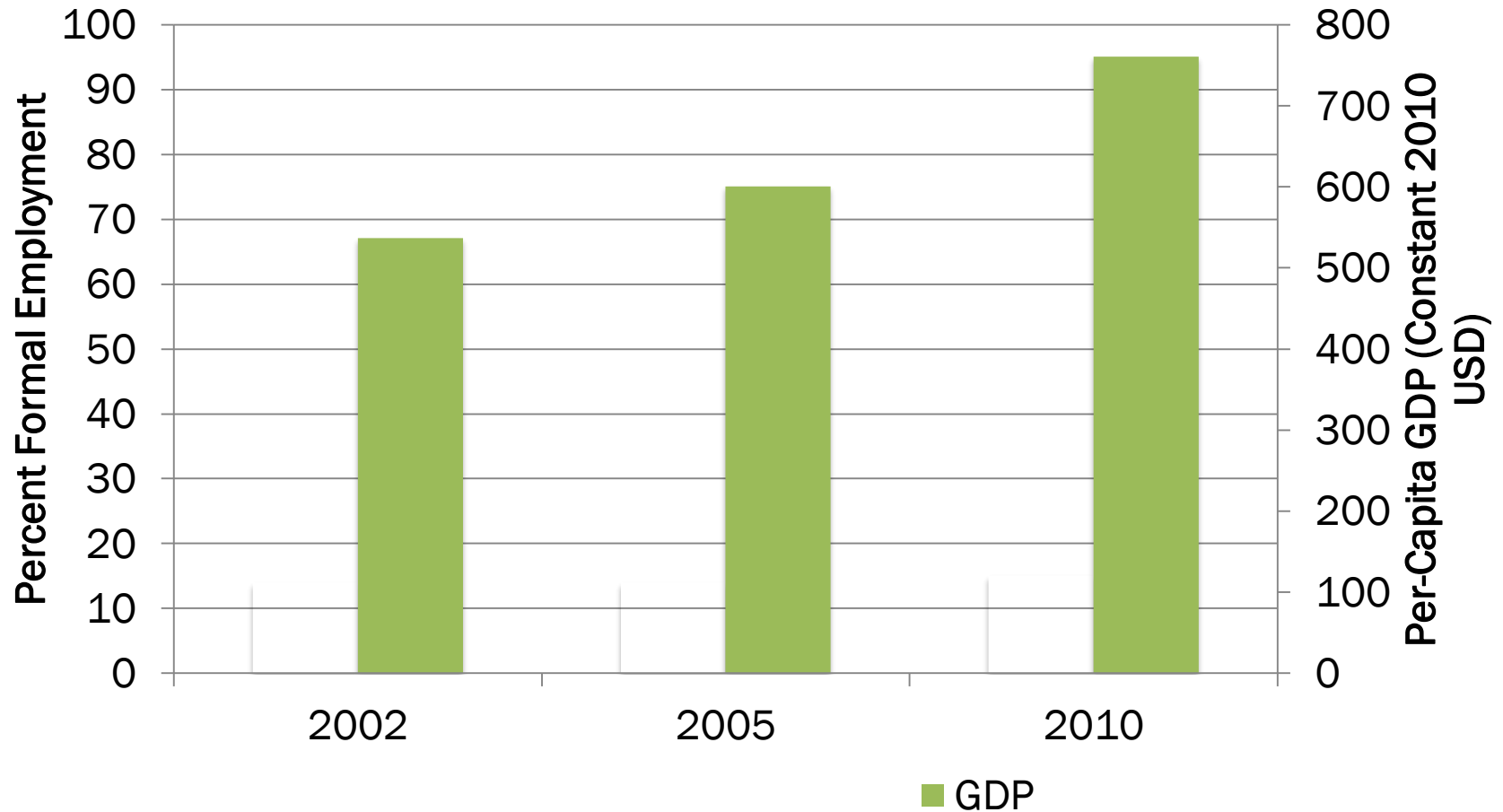


Source: LaPorta and Shleifer (2014)

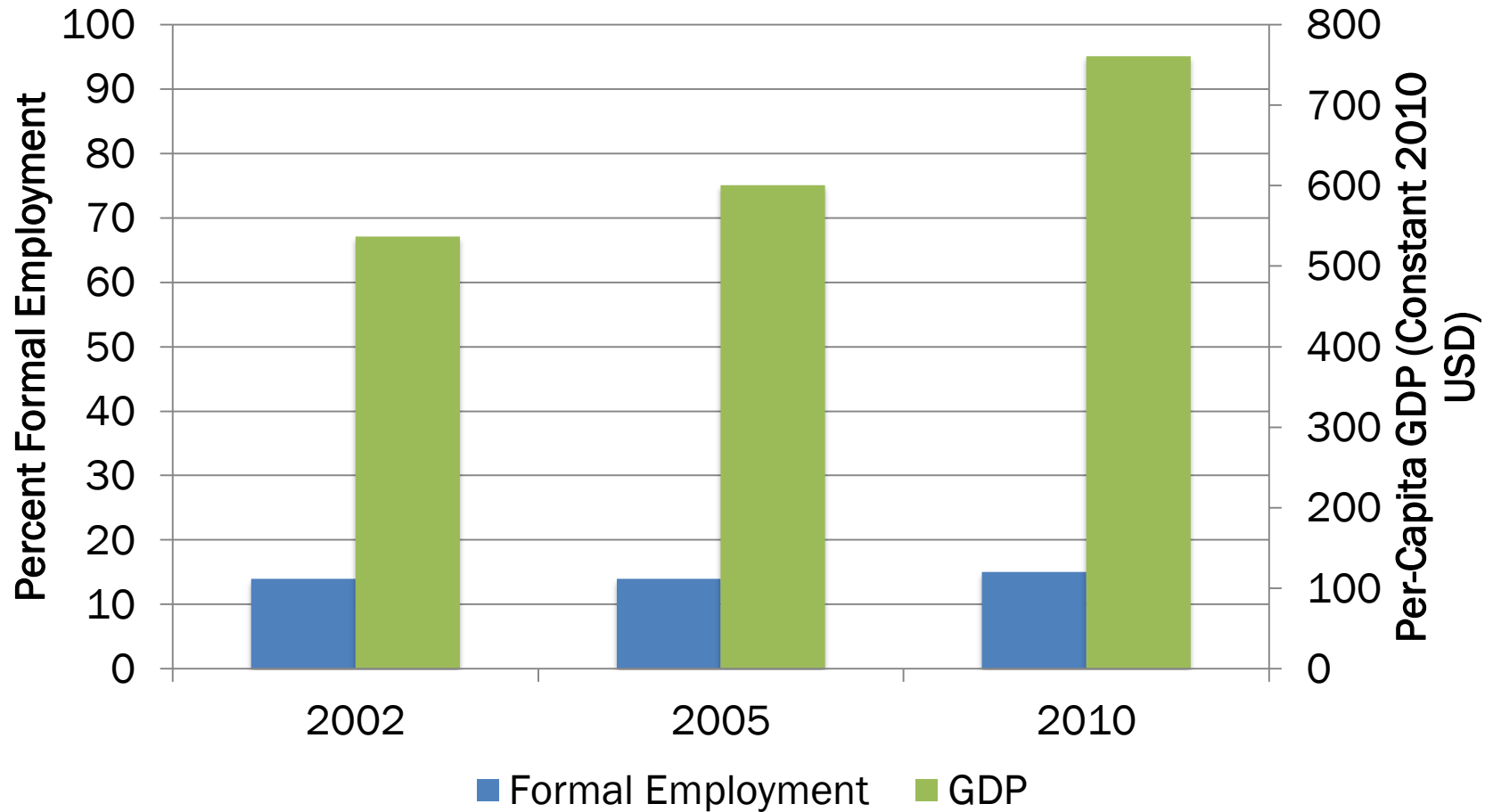
There are Divergent Views on How the Informal Sector Responds to Growth

- One view characterizes the sector as stagnant, unproductive with few links to the formal sector (e.g., Chandra and Khan, 1993; Fields, 1975)
 - Predicts that the informal sector will disappear as the economy develops (formal and informal labor are substitutes)
- Alternative view characterizes the sector as allowing entrepreneurship, providing flexible work hours/locations and providing supply links to the formal sector (e.g. Fajnzylber, Maloney and Rojas, 2006; Bennett and Estrin, 2007)
 - Predicts that the informal sector will exist (maybe even thrive) as the economy develops (formal and informal labor are complements)

Per-Capita GDP Has Grown Substantially in Bangladesh



But the Share of Formal Employment Has Remained Stubbornly Low



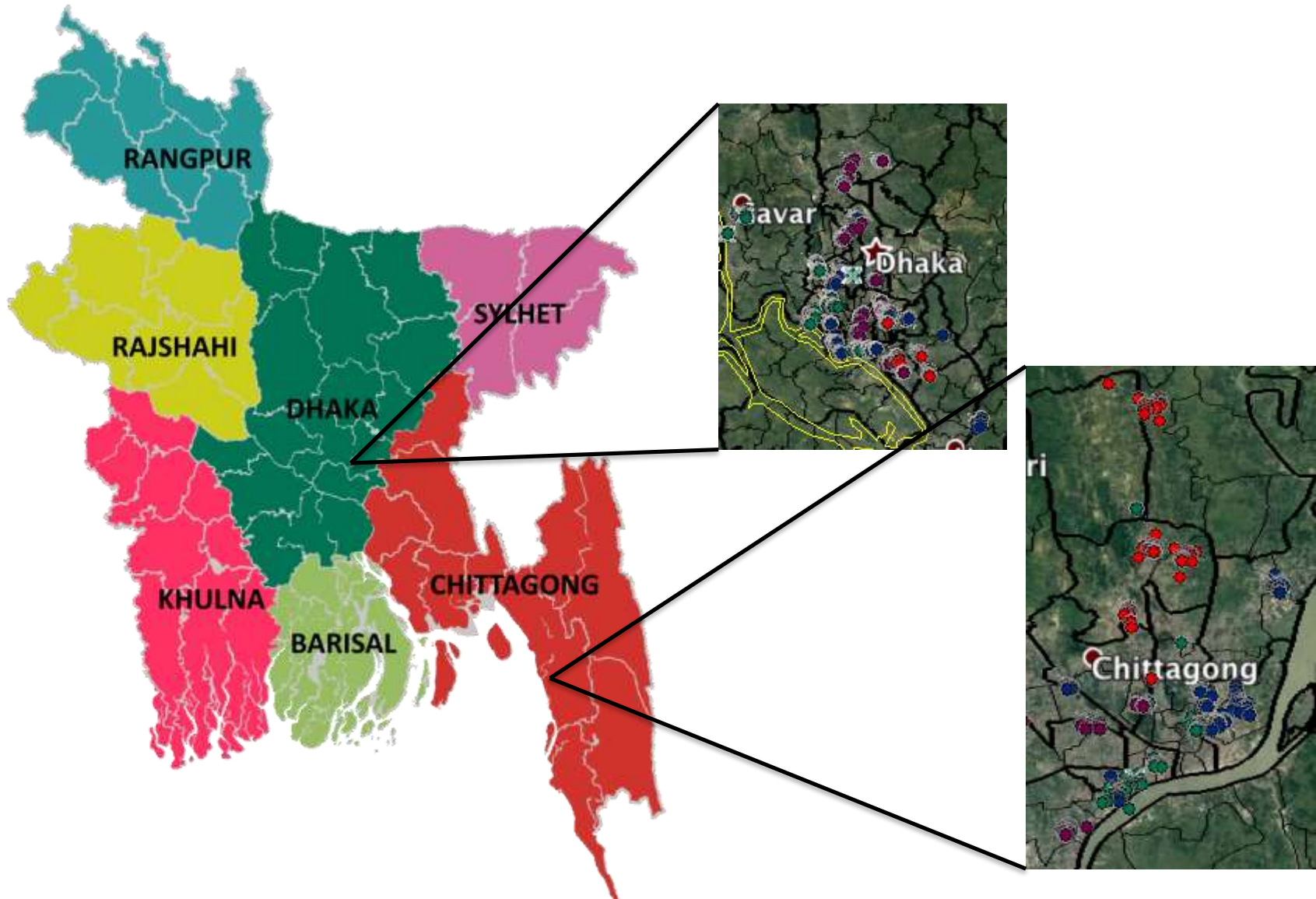
This paper

- The key question we address today
 - Are workers “locked” into informal employment?
 - How and whether workers transition between different types of employment?

We Conducted a Survey of Workers from April-June 2016

- ~2,000 workers in Dhaka, Chittagong and surrounding urban areas of these districts
- Survey modules
 - Basic demographics
 - Job history (current + 2 previous jobs in past 15 years)
 - Benefits (for wage workers)
 - Business characteristics (for self-employed and family members)
 - Working conditions
 - Choice experiment to elicit valuation of different aspects of formality

Survey Locations

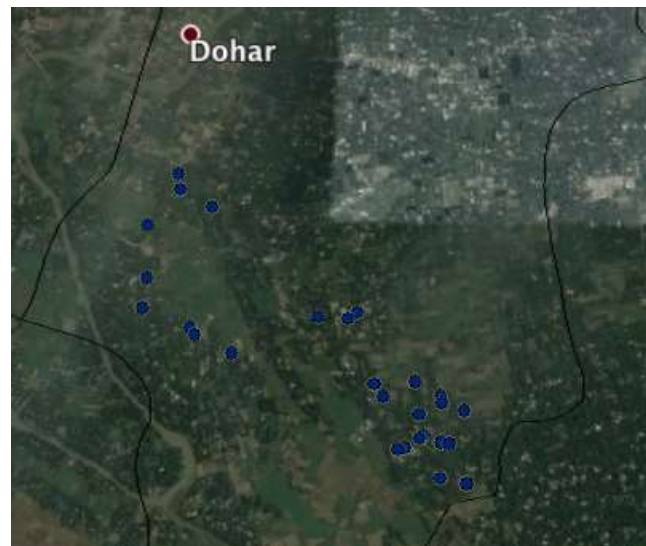


Sampling Methodology: First Stage

- PPS draw of 80 “mouzas” in Dhaka, Narayanganj, Gazipur, Chittagong
- Random walk method to find households
- First stage enumeration of *all* HH members



Matuail, Jatrabari Thana



Nurpur, Dohar Upazila

Sampling Methodology: Second Stage

- Sample of working adults stratified by gender, type of worker
 - Surveyed *all* women
 - Surveyed *all* men in relatively small employment types (starred below) and randomly sampled men in larger employment types

Government employee	Self-employed, no employees
Private employee	Self-employed, hiring only family members
Domestic worker*	Self-employed, hiring non-family members
Day laborer	Family member in HH business (paid or unpaid)
Seasonal worker (grouped with day laborer for analysis)*	
Apprentice / Intern / Trainee / Other*	

Sample characteristics

Variable	%
Female	17.8%
Age	
18-25	21.9%
26-35	35.6%
36-45	22.8%
46-55	12.7%
56+	7.1%
Education	
Pre-school or less	16.6%
Some primary (Class 1-5)	22.7%
Some secondary (Class 6-9)	19.6%
Class 10 or SSC	15.9%
HSC or Diploma	9.6%
Bachelors degree or higher	15.4%
Missing	0.3%
Vocational Training	
No vocational Training	89.0%
Vocational training without certification	3.2%
Vocational training with certification	7.9%
Employment Type	
Government employees	6.4%
Private employees	40.3%
Casual workers	11.7%
Self-employed alone/with family	25.8%
Self-employed (with non family)	12.7%
Family worker	3.1%
Industry	
Garments	20.5%
Other Manufacturing	15.5%
Trade/Transportation	27.8%
Other services	36.3%
Total	1,966

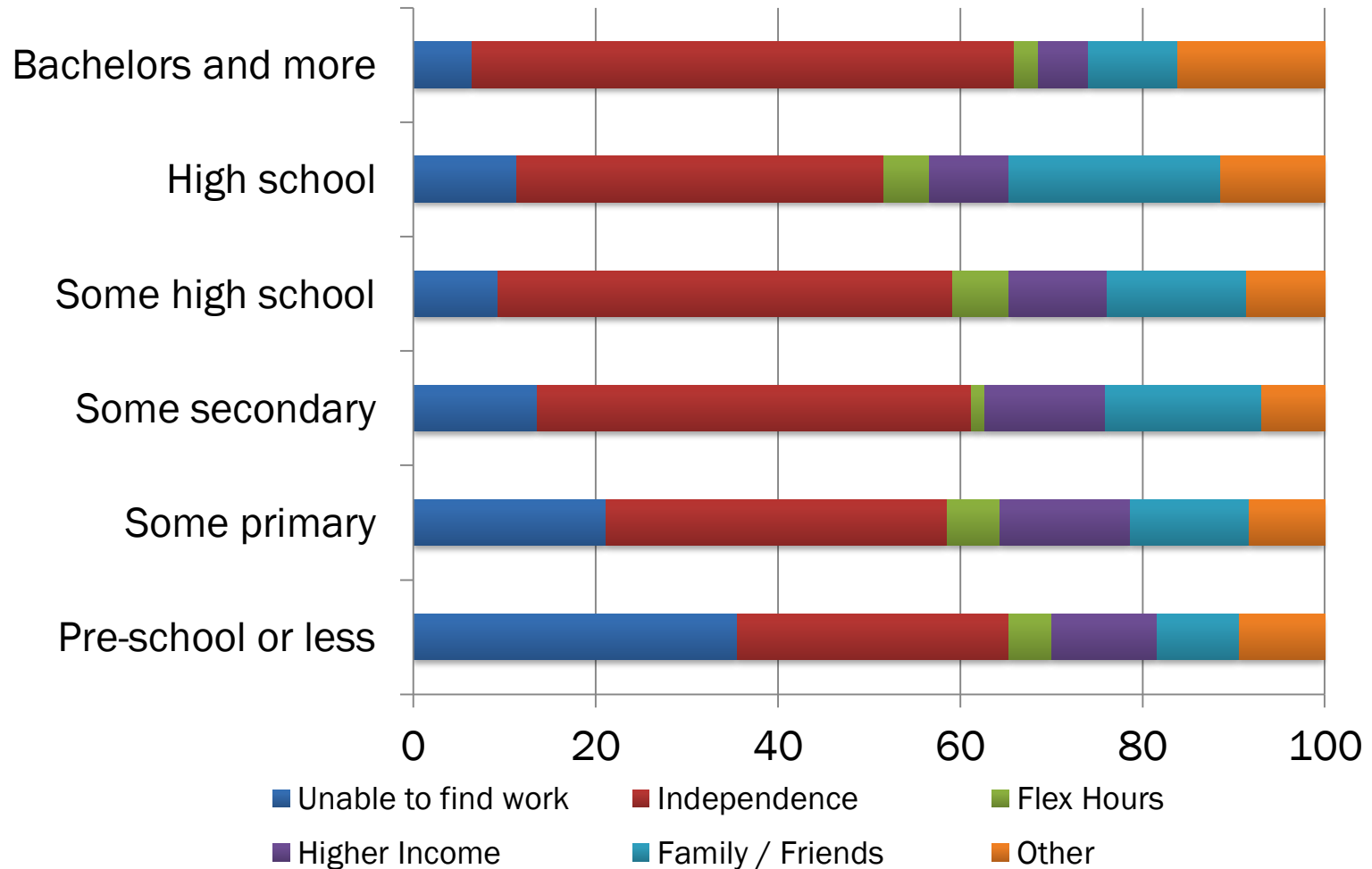
Note: Summary statistics from sample of 1,966 working adults who completed the survey. Employment type and industry are based on current employment type at the time of the survey. Sampling weights are applied.

Reasons for Self Employment

Reason	%
Because I was unable find other work	18.2%
Because I wanted independence/ be my own boss	45.3%
Because I wanted to have flexible working hours	4.5%
Because I wanted higher income	12.2%
Because I wanted to be close to home	3.3%
Because parents, relatives or friends have their own business	6.4%
Because I wanted do grow professionally	1.8%
Because I wanted to have job security	0.3%
Because family members wanted me to work in the business	3.6%
Other	4.4%
Total	100.0%

Note: Reported reasons for self-employment among self-employed individuals. Sampling weights are applied.

Desire for Independence is More Commonly Cited Among Those with More Education



Note: Sampling weights are applied.

Benefits by Employment Type

	Government Employees	Private Employees	Casual Workers
Written contract	91.9%	25.0%	1.6%
Verbal Contract	5.0%	48.1%	51.3%
Sick leave	98.5%	87.8%	63.7%
Casual leave	96.6%	61.2%	26.0%
Holiday leave	87.9%	83.0%	17.0%
Maternity leave	93.8%	85.1%	27.0%
Paid overtime	19.3%	33.5%	7.3%
Bonus	95.8%	86.1%	26.1%
Provident Fund	93.5%	12.6%	0.6%
Gratuity	72.6%	6.4%	0.6%
Pension	82.8%	0.7%	0.8%
Termination notice	73.6%	45.2%	14.4%

Note: Reported benefits by employment type, based on current employment type at the time of the survey. Casual worker category includes day laborers, seasonal workers, domestic workers, and apprentices, interns or trainees. Sampling weights are applied.

Earnings by Employment Type

(a) Monthly Earnings (2016 Taka)

Employment Type	25% percentile	50% percentile	75% percentile
Government employee	15,200	25,000	35,000
Private employee	7,000	9,500	15,000
Casual worker	6,000	7,500	12,000
Self-employed (alone/with family)	7,500	15,000	20,000
Self-employed (with non family)	15,000	20,000	35,000
Family worker	2,500	7,500	15,000

(b) Hourly Earnings (2016 Taka)

	25% percentile	50% percentile	75% percentile
Government employee	303	480	837
Private employee	114	166	267
Casual worker	111	143	222
Self-employed (alone/with family)	111	222	370
Self-employed (with non family)	222	370	519
Family worker	91	178	286

Note: Monthly earnings (Panel (a)) and hourly earnings (Panel (b)), by employment type. Hourly earnings are calculated based on reported monthly earnings and working hours. Earnings information is based on current job at time of survey. Casual worker category includes day laborers, seasonal workers, domestic workers, and apprentices, interns or trainees. Sampling weights are applied.

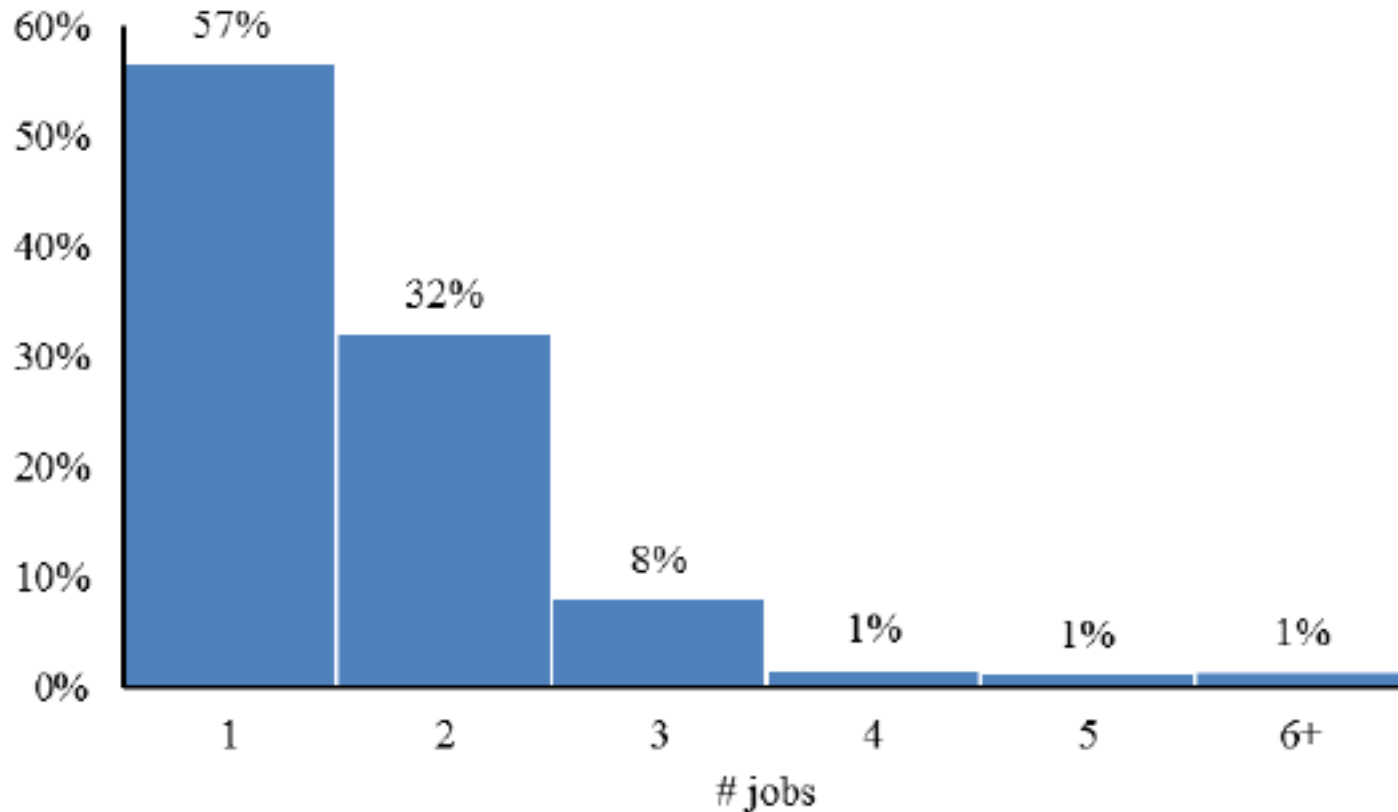
Median Duration of Employment in Current Job(Years)

	Median Duration
Government employee	14.8
Private employee	4.3
Casual worker	6.3
Self-employed worker (with no employees or with family employees)	8.3
Self-employed worker (with non-family employees)	10.1
Family worker	6.3

Note: Authors' calculations of median employment duration by employment type, based on current job. Casual worker category includes day laborers, seasonal workers, domestic workers, and apprentices, interns or trainees. Sampling weights are applied.

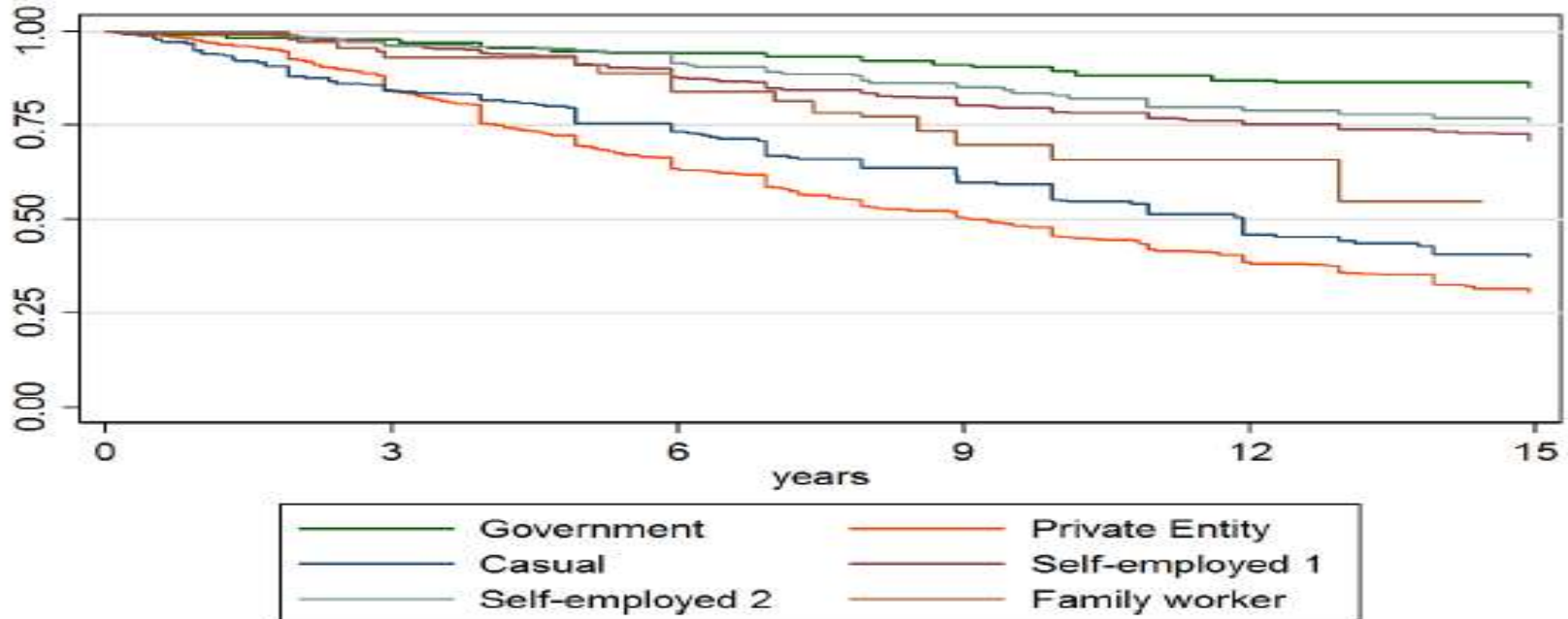
Job Turnover

(a) Cumulative Number of Jobs since 2000



Job Turnover

(b) Survival Curves by Employment Type



Self-employed 1: no employees or employ only family worker
Self-employed 2: employ non-family worker

Note: Panel (a) shows median duration of employment, by employment type. Panel (b) shows Kaplan-Meier survival curves by employment type. Calculations are based on all observed jobs. Casual worker category includes day laborers, seasonal workers, domestic workers, and apprentices, interns or trainees. Sampling weights are applied.

Marginal Effects of characteristics on Median Duration

	Employment type:	
	Government, private, casual	Self- employment, family workers
Education: Middle grade	-2.588 (1.770)	12.63 (8.818)
Education: Some high school	-2.905 (2.204)	4.389 (7.086)
Education: High school	-8.378*** (2.143)	-0.729 (9.909)
Education: Bachelors or higher	-8.729*** (2.158)	-5.176 (9.124)
Vocational training w/o certification	-3.922 (2.554)	-17.05 (14.35)
Vocational training w/ certification	-2.794 (1.847)	-17.62 (11.31)
Male	-3.539** (1.541)	-22.55** (10.17)
Log(monthly wage)	1.598*** (0.599)	0.0632 (1.699)
Written contract	1.082 (1.933)	—
Verbal contract	0.172 (1.266)	—
Termination notice	6.020*** (1.639)	—
Retirement benefits	31.35*** (6.763)	—
Observations	1,967	902

Note: Marginal effects from a Weibull duration model of employment length. Casual worker category includes day laborers, seasonal workers, domestic workers, and apprentices, interns or trainees. Sampling weights are applied. Standard errors in parentheses *** $n < 0.01$ ** $n < 0.05$ * $n < 0.1$

Main reasons for leaving previous job

(a) Among Government Employees, Private Employees and Casual Workers

Main Reason for Separation	Government Employees	Private Employees	Casual Workers
Terminated	0%	5%	12%
Firm closed	5%	8%	2%
Job completed	21%	2%	3%
Found preferred job	32%	38%	26%
Decided to start my own business	5%	18%	16%
Decided to work for family business	0%	2%	2%
Retired	11%	2%	0%
Still work at this job but it is not longer the main activity	0%	1%	8%
Other (specify)	26%	23%	31%
Don't know	0%	0%	0%
Refused	0%	0%	0%
Total	100%	100%	100%

(b) Among Self-Employed and Family Workers

Main Reason for Separation	Self-employed (w/o employees or w/ family employees)	Self-employed (w/ non-family employees)	Family Worker
Firm did not make enough profit	39%	55%	10%
Found preferred job	13%	2%	10%
Decided to start another business	19%	11%	25%
Decided to work for another family business	2%	0%	5%
Retired	2%	0%	0%
Still work in this business but it is not longer the main activity	9%	11%	15%
Other	13%	21%	20%
Refused	3%	0%	15%
Total	100%	100%	100%

Note: Reported reason for leaving previous jobs, for wage workers (Panel (a)) and workers in household businesses (Panel (b)). Casual worker category includes day laborers, seasonal workers, domestic workers, and apprentices, interns or trainees. Sampling weights are applied.

Transition between employment Types

		Current Employment					Total
		Government employee	Private employee	Casual Worker	Self-employed	Family worker	
Previous Employment	Government employee	47.37%	36.84%	5.26%	10.53%	0.00%	100%
	Private employee	3.59%	57.57%	8.96%	28.09%	1.79%	100%
	Casual Worker	0.00%	22.54%	42.25%	30.99%	4.23%	100%
	Self-employed	0.60%	26.51%	12.05%	60.24%	0.60%	100%
	Family worker	0.00%	30.00%	20.00%	45.00%	5.00%	100%

Note: Rows show previous type of employment, while columns show current type of employment. Each cell shows the probability that a worker who leaves a previous job of a certain type (given by row headings) transitions to a new job of a certain type (given by column headings). Casual worker category includes day laborers, seasonal workers, domestic workers, and apprentices, interns or trainees. Sampling weights are applied.

Change in access to employment benefits between job transitions

(a) Contracts

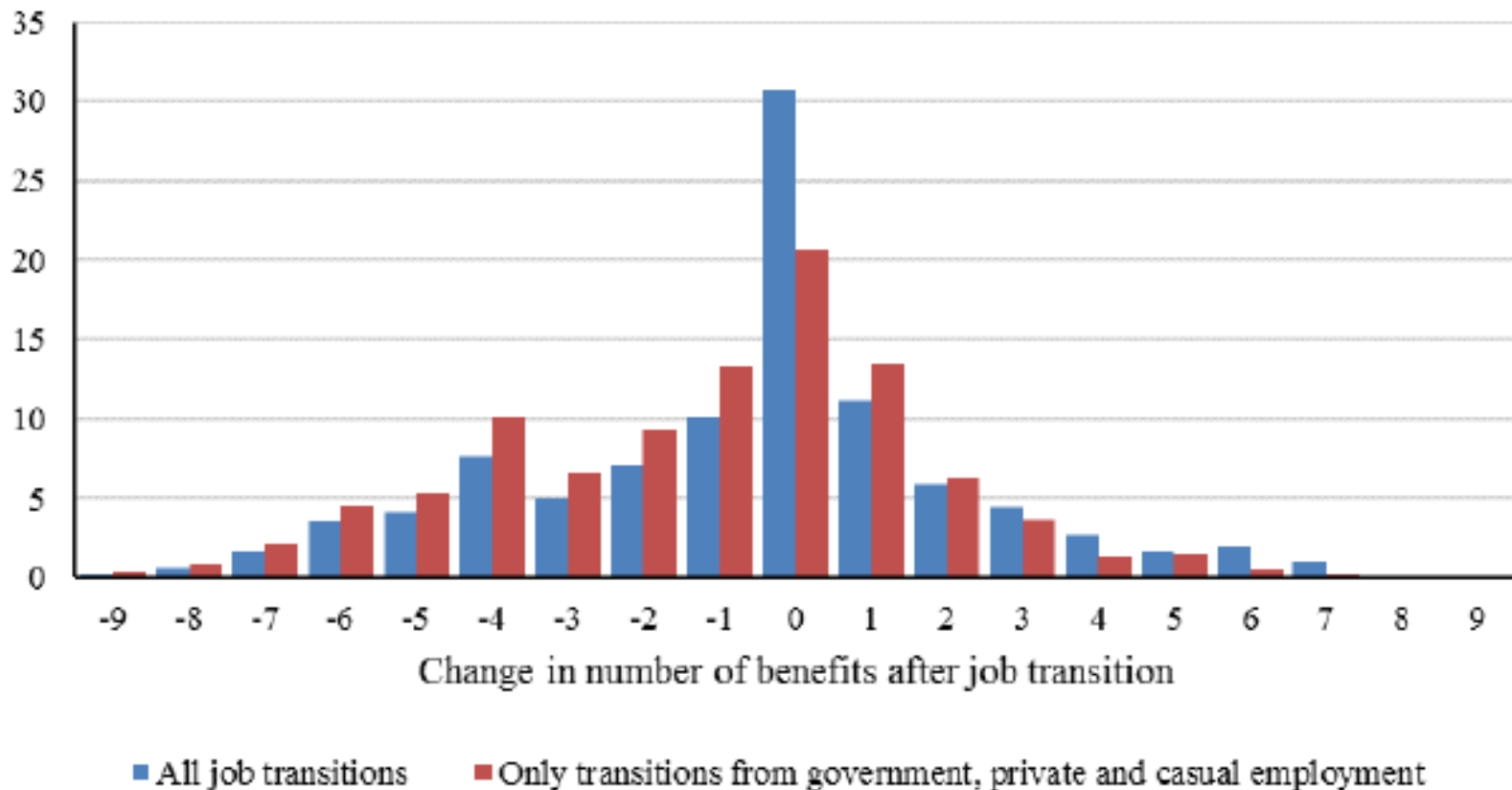
		Current job					Total
		Written contract	Verbal contract	No contract	Self-employment	Don't know	
Previous job	Written contract	48.60%	9.35%	3.74%	35.51%	2.80%	100%
	Verbal contract	9.66%	53.27%	5.92%	28.97%	2.18%	100%
	No contract	6.22%	14.22%	52.00%	24.00%	3.56%	100%
	Self-employment	7.83%	21.69%	8.43%	60.24%	1.81%	100%

(b) Termination Notice

		Current job				Total
		Termination notice	No termination notice	Self-employment	Don't know	
Previous job	Termination notice	44.44%	15.79%	31.58%	8.19%	100%
	No termination notice	12.57%	53.29%	26.65%	7.49%	100%
	Self-employment	15.66%	19.28%	60.24%	4.82%	100%

Note: Rows show level of job benefit in previous job, while columns show level of job benefit in current job. Panel (a) covers contracts, and indicates whether the job included a written contract, a verbal contract, or no contract, or was non-wage work (self-employment/ family worker). Panel (b) covers notice, and indicates whether the job included termination notice or not. Each cell shows the probability that a worker who leaves a previous job with a certain level of benefit (given by row headings) transitions to a new job of a certain level of benefit (given by column headings). Sampling weights are applied.

Change in number of benefits after job transitions



Note: Change in the number of benefits between the previous job and current job. Sampling weights are applied.

Correlates of changes in the number of employment benefits after job transition

	All job transitions	Only transitions from government, private and casual employment
Age: 26-35	-0.321*	-0.269
	(0.195)	(0.198)
Age: 36-45	-0.251	-0.365
	(0.257)	(0.269)
Age: 46-55	-0.0503	0.0532
	(0.362)	(0.376)
Age: 56+	-1.002*	-1.039*
	(0.532)	(0.585)
Education: Middle grade	-0.358	-0.431*
	(0.223)	(0.226)
Education: Some high school	0.0471	-0.298
	(0.253)	(0.275)
Education: High school	0.157	-0.301
	(0.325)	(0.337)
Education: Bachelors or higher	0.145	-0.472
	(0.273)	(0.289)
Vocational training w/o certification	-0.333	0.0465
	(0.439)	(0.437)
Vocational training w/ certification	-0.123	-0.0005
(base: female)	(0.312)	(0.305)
Male	-0.134	-0.177
	(0.272)	(0.265)
Log(monthly wage)	-0.175**	-0.299***
	(0.0881)	(0.110)
Tenure	-0.0186	-0.0325**
	(0.0157)	(0.0164)
Found preferred job	1.110***	2.021***
	(0.226)	(0.252)
Preferred self-employment	-3.691***	-2.712***
	(0.260)	(0.272)
Other reason for separation	-0.546**	-0.171
	(0.233)	(0.262)
Observations	788	638

Note: Dependent variable is the change in the number of benefits given an employment transition. Casual worker category includes day laborers, seasonal workers, domestic workers, and apprentices, interns or trainees. Sampling weights are applied. Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Conclusions

- We find active transition across different employment types and benefits; although workers transitioning from one job to another are most likely to remain in same type of employment, we do see substantial amount of churn between employment types
- Fully 30% of those leaving private employment move to self employment
- Transitions from private wage employment to casual work are more common among those with lower level of education whereas transition to self-employment are more common among prime aged workers and among those who have been in their jobs for longer duration
- When workers transition out of private employment they tend to exhibit gain in median earnings; about half of those leaving private employment retain same number of employment benefits
- Voluntary quits are related to access to larger benefits; higher turnover (and shorter employment duration) among private wage employees may be evidence of upward mobility
- We also find non-negligible risk of downward mobility; in terms of access to employment benefits, for those especially transitioning into casual employment (e.g. lower educated)

Discussion

- Informal sector contains elements of both traditional, segmented view and the dynamic entrepreneurial view
- There is substantial upward and downward mobility in terms of earnings and benefits
- Self employment is not an activity of last resort and moving from wage employment to self employment is associated with higher income
- Limitation: Observational study of employment transition suffers from the problem of unobserved heterogeneity issue; workers with greater abilities will sort into job with higher earnings/higher level of benefits making it difficult to tease out preferences for these benefits