Labor Markets in Developing Countries

Supreet Kaur

(UC Berkeley)

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Importance of the labor market for development

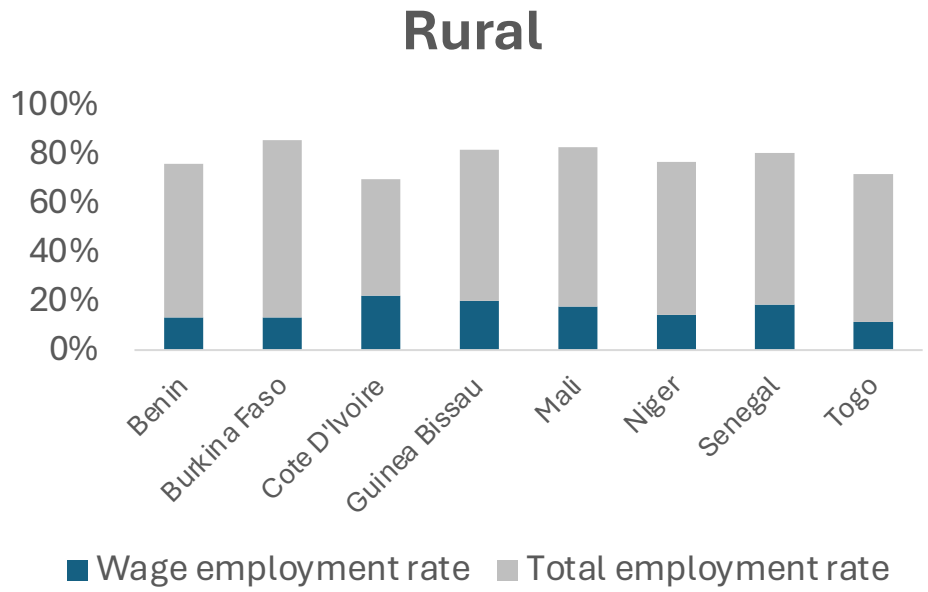
- Why do labor markets matter?
  - Labor is the most abundant resource of people in poverty
  - By far the largest factor input into production in poor countries
  - → Expect labor markets to play key role in development and growth [Lewis 1956, Harris Todaro 1970]

- What should well-functioning labor markets do?
  1. Provide wage employment to people who want it (welfare)
  2. Allocate labor to production: match the "right" workers to the "right" jobs (output)
  3. Enable labor to move from less to more productive sectors (growth)

- Today's (selective) focus: literature through the lens of these 3 goals

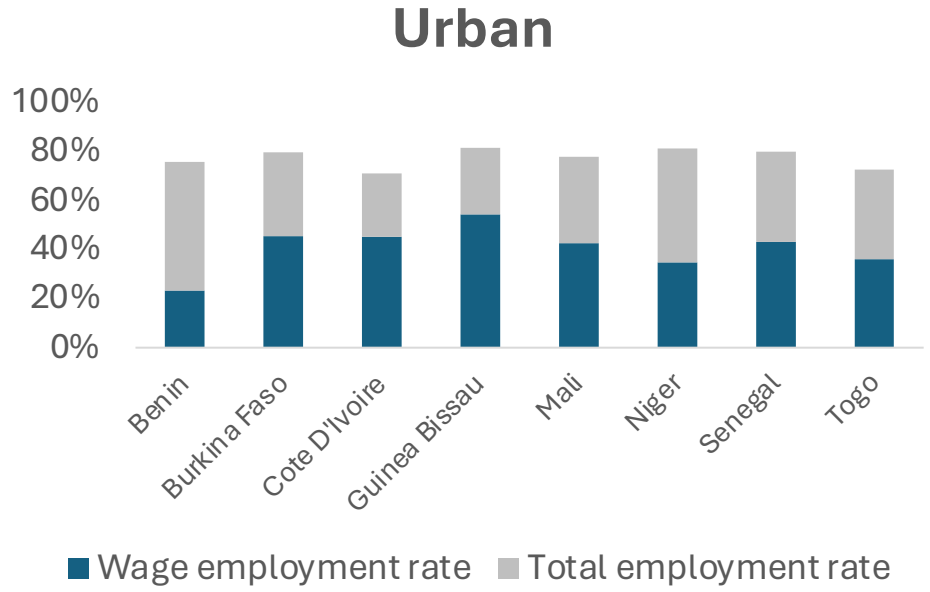
Low wage employment rates

- LSMS surveys: Fraction of days per month typically worked (primary, secondary)
- 2 notable patterns: low wage employment, high self-employment



Wage employment: 10-15%

Wage + self employment: 70-85%



Wage employment: 25-50%

Wage + self employment: 70-80%

How to interpret low wage employment?

1. Outcome of reasonably well functioning labor markets?
   - — Workers prefer self-employment (or unemployment) to existing wage jobs
   - → Look elsewhere for growth (human capital, technological change, demand expansion)

2. Involuntary unemployment stemming from frictions?
   - — Self-employment is actually "disguised unemployment"
   - → May seriously undermine 3 goals of the labor market

Evidence for frictions?

- Early development labor literature
  - Many theories of involuntary unemployment [Dasgupta Ray 1986, Shapiro Stiglitz 1984, Rosen 1985, Osmani 1990]
  - Some tests for distortions (separation failures) [Rosenzweig 1988, Behrman 1999, Benjamin 1992, Udry 1996]
  - Scant direct empirical evidence for involuntary unemployment, or its potential micro-foundations
  - → Difficult to distinguish between 2 views of the labor market

- Substantial progress in testing for and understanding (some) frictions

- 2 primary sets of approaches
  1. New methodological approaches to assessing labor market equilibrium
  2. Active labor market programs

Involuntary unemployment?

Approach 1:

Empirical approaches for assessing labor market equilibrium

Theory-based reduced form tests using causal inference methods

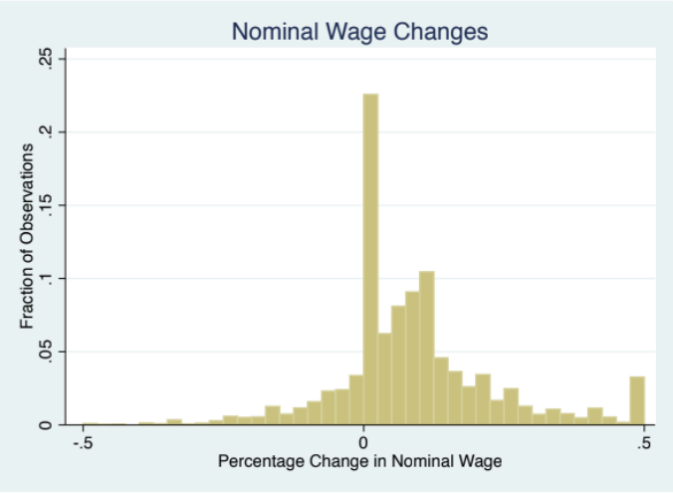
+

Autarkic labor markets enable well-identified equilibrium analyses [e.g. Jayachandran 2006]

Do wages clear the market?

- Econ 101 reason for involuntary unemployment: wages above market clearing
- Begin by testing for downward wage adjustment

Traditional approach to test for wage rigidity in labor/macro



Impossible to look at employment effects

Kaur (2019)

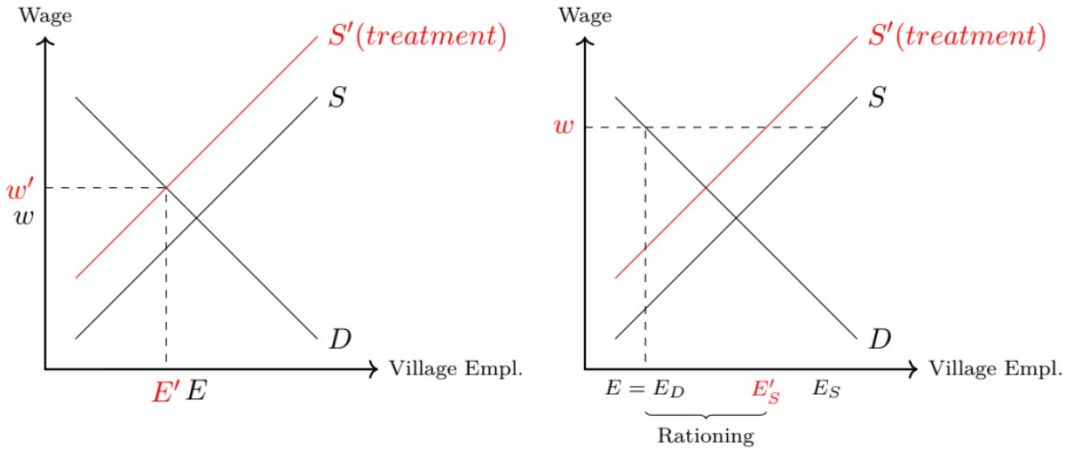
- If wages clear market: should move with shocks
- Asymmetric adjustment: wages ↑ but don't ↓
- Methodology enables explicit test of employment effects
- When wage rigidity binds: employment ↓
- Disguised unemployment: self-employment ↑

Note: Microfoundations may help explain heterogeneity (India, Africa) [Breza Kaur Shamdasani 2018, Breza Kaur Krishnaswamy 2024]

How severe is lack of market clearing?

Breza, Kaur, Shamdasani (2022)

- Transitory hiring shocks: "remove" 24% of workers from village economy
- Local labor market response allows us to infer equilibrium (revealed preference)



(a) H_0 : No Rationing ($E_D \geq E_S$) (b) H_1 : Rationing ($E_D < E_S$)

Figure 1. : Effects of a Negative Labor Supply Shock

- Findings
  - Peak season: agile, responsive labor market
  - Lean season: ≥ quarter of labor force is rationed
  - Disguised unemployment: abandon agri and non-agri businesses when wage jobs become available
- Donovan (49 countries, 2023)
  - Developing country workers treat unemployment and self-employment symmetrically

Implications for labor market analysis

- 2 core assumptions of well-functioning markets are no longer true
  1. Workers are not always on their labor supply curve (Goal 1)
  2. Wage does not always allocate labor to production: wage ≠ MPL (Goal 2)

  [Separation failures: Singh Squire Straus 1986, Benjamin 1992, Udry 1996, LaFave Thomas 2016, Magruder 2022]

- Logic of many labor market analyses requires these assumptions to hold
  - Sectoral wage gaps, misallocation, urban (spatial) analyses, value added estimates
  - Need new theoretical and empirical approaches under rationing

Problematic implications for welfare (Goal 1)

- Labor supply changes: key lever for consumption smoothing
  [Kochar 1999; Jayachandran 2006; Fink Jack Masiye 2020; Augenblick Jack Kaur Masiye Swanson 2023]

- Labor market earnings potential may fall when need is highest
  1. Rationing (neg shocks) → Jobs harder to find when you really need them
  2. Correlated smoothing across people → General equilibrium effects on real wages
  3. High rate of health shocks → Hard to undertake manual labor (limited work here)

→ Countercyclical force on labor market returns
  - Problematic covariance with marginal utility of consumption
  - Much more to be done here

Active Labor Market Programs

Approach 2:

Use policy interventions in labor market to boost wages/employment

Impacts (or lack thereof) offer insights on relevance of different frictions

Active labor market programs

- Workfare: impacts from zero, to negative, to positive [Beegle Goldberg, Imbert Papp, Muralidharan Niehaus Sukhtanker]
- Demand-side: short-run employment subsidies: Impacts disappear once subsidy removed
  [Groh et al. 2016, de Mel McKenzie Woodruff 2019, Bruhn 2022]
- Supply side: short-run skills training (vocational, on-the-job): Typically small effects, persistence unclear
  [Card et al. 2011, Ibarraran et al. 2014, Blattman Ralston 2015, Hirshleifer et al. 2016, Attanasio et al. 2011, 2016, Acevedo et al. 2017]
  Notable exceptions: Maitra Mani 2016, Alfonsi et al. 2020
- Search, matching, and information frictions: Evidence for impacts here
  - Evidence for effects: Job placement [Jensen 2012, Wu 2023], Skill certification [Groh et al. 2015, Alfonsi et al. 2020, Bassi and Nansamba 2020, Abebe et al. 2021, Carranza et al. 2022], Commuting costs [Grosset 2024]
  - Little impact: Transport subsidies [Franklin 2015, Abebe et al. 2021], Job fairs [Abebe et al. 2016, Beam 2016]
  - Puzzle: Job seekers' overoptimistic beliefs [Banerjee Sequeira 2022, Alfonsi 2023, Abebe et al. 2023]
- When we do see positive effects, unclear much of this isn't simply displacement (Evidence gap)
- Excellent reviews: McKenzie 2017 (development), Card (ALMPs in rich countries 2016)

Human Capital?

Possibility:

Wage employment is low because workers are not "employable" for good jobs.

Implies need for investment in human capital.

What is the evidence base?

Human capital?

- Primary school investment:
  - Duflo (2001): School construction raises adult wages
  - Miguel Kremer (2004), Hamory et al. (2021): De-worming raises adult earnings

- Secondary school completion: limited labor market impacts
  - Duflo, Dupas, Kremer (2023): no impacts on men, civil service jobs for women (nothing else)
  - Ozier (2016): ↓ in self-employment, suggestive ↑ in formal employment (only men)

- Surprising dearth of evidence on labor market impacts of schooling
  - Limited evidence overall; results in existing work are not particularly inspiring

- What is the right measure of human capital for low-skilled workers? (need surveys)
  - Bowles Gintis Osborne (JEL 2001): employers in US/UK state non-cog traits as most important

Recall 3 goals

- What should labor markets do?
  1. Provide wage employment to people who want it (welfare)
  2. Allocate labor to production (output)
  3. Enable labor to move from less to more productive sectors (growth)
     - Transition from agri to non-agri sectors, casual to formal jobs [e.g. Harris Todaro 1970]
     - Obviously important roles for technological change, firm growth
     - Is there something in labor market that may inhibit from happening more rapidly?

The Labor Supply Puzzle

Workers often don't want full-time stable jobs

(at least not the ones they can get)

Cote D'Ivoire

[Donald Grosset 2024]

- Young workers interested in full-time factory job at baseline
- Pays twice as much per hour (relative to baseline earnings)
- 25% take-up

India

[Cefala Kaur Schofield Shamdasani 2024]

- Urban casual workers (construction)
- Mean tenure at stand: 10 years
- Mean employment rate: ~3 days/week
- Likelihood of taking up long-term job if offered: 31.5%

Jordan

[Groh McKenzie Shammout Vishwanath 2015]

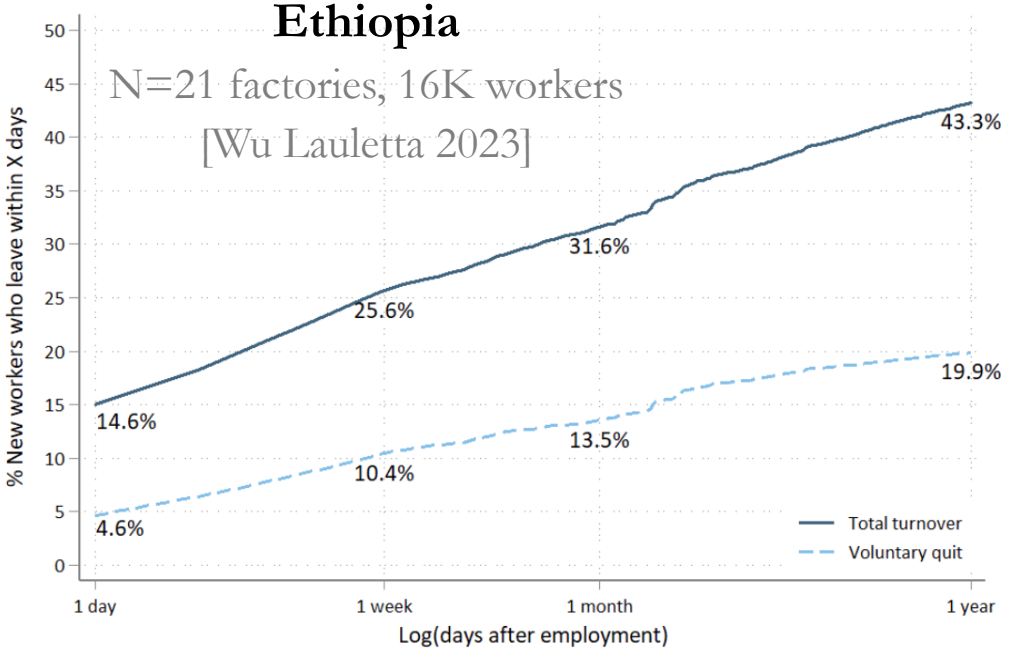
- 1,000 job matches made
- Youth rejected job interview 28% of the time
- When job offer received: youth rejected offer or quit quickly 83% of time
- Only 9 hires lasting ≥ 1 month

High turnover among those who accept jobs

Ethiopia

N=21 factories, 16K workers

[Wu Lauletta 2023]

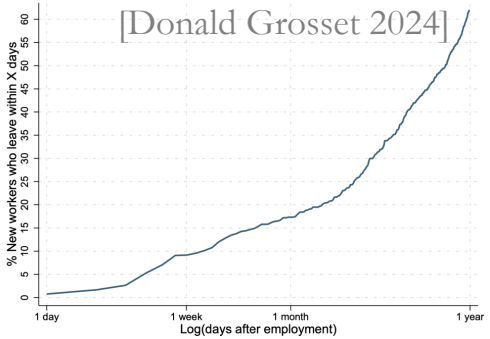


Cote D'Ivoire

Turnover in first year: 60%

N=1 factory, 1K new workers

[Donald Grosset 2024]

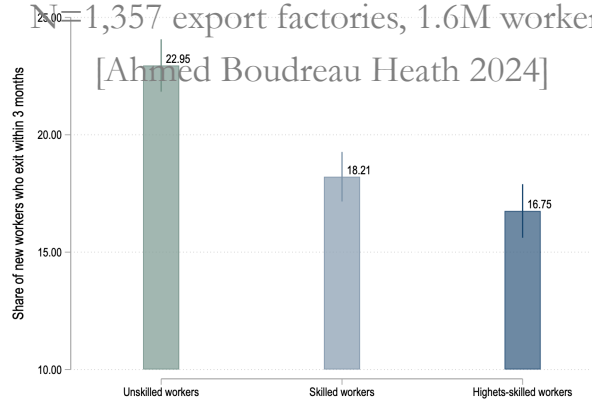


Bangladesh

E[turnover] in first 3 months: 23%

N=1,357 export factories, 1.6M workers

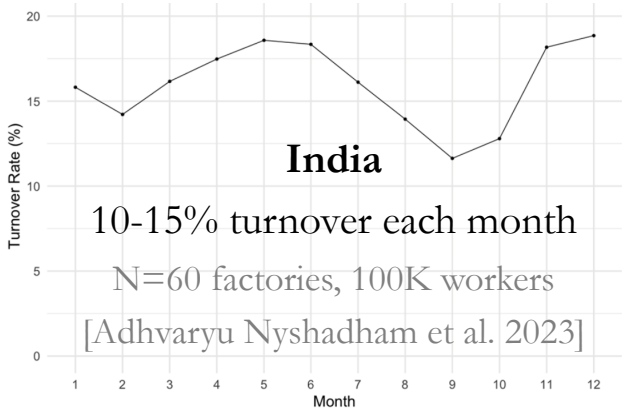
[Ahmed Boudreau Heath 2024]



Blattman Dercon (2018):

1/3 quit in month 1, 77% in year 1

Negative health effects

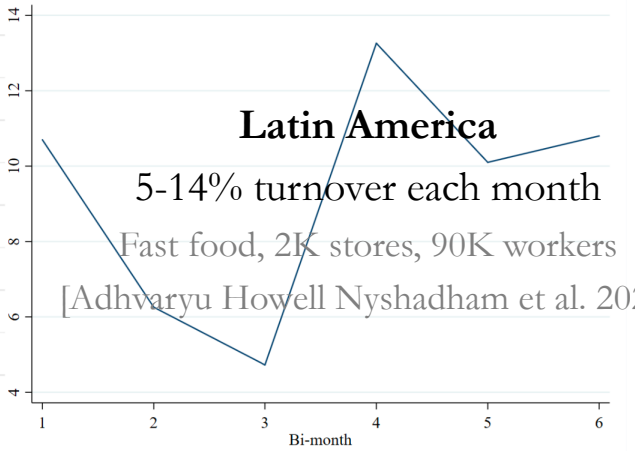


India

10-15% turnover each month

N=60 factories, 100K workers

[Adhvaryu Nyshadham et al. 2023]



Latin America

5-14% turnover each month

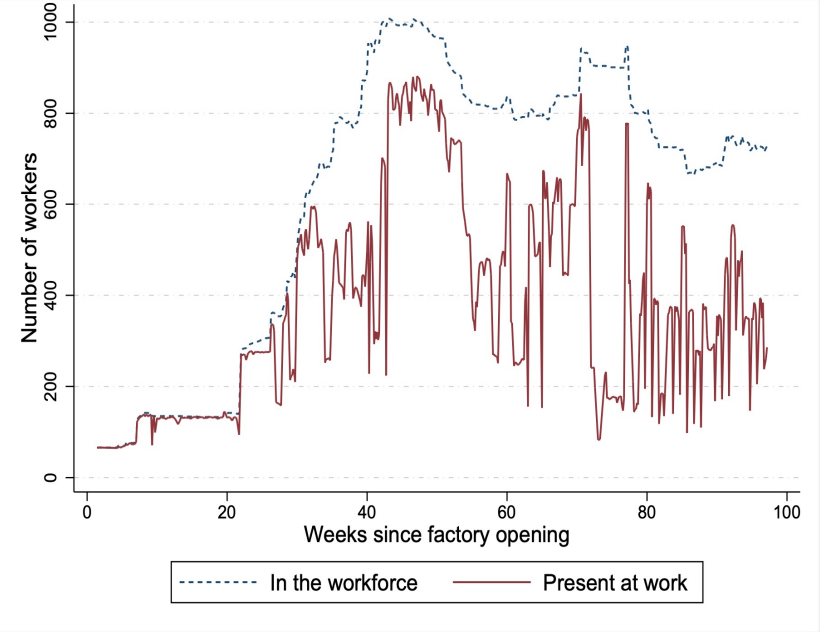
Fast food, 2K stores, 90K workers

[Adhvaryu Howell Nyshadham et al. 2023]

High absenteeism: formal firms

Cote D'Ivoire

[Donald Grosset 2024]



Mean absenteeism rate: 40%

No firing for absences

N=1 factory, 1K new workers

(Note: "Social Tax": 37% absenteeism)

Tanzania

[Ho 2024]

Mean absenteeism rate: 10.5%

Workers fired for excessive absences

N=1 factory, 4K workers

India

[Adhvaryu Nyshadham et al. 2023]

Mean absenteeism rate: ~15%

Workers fired for excessive absences

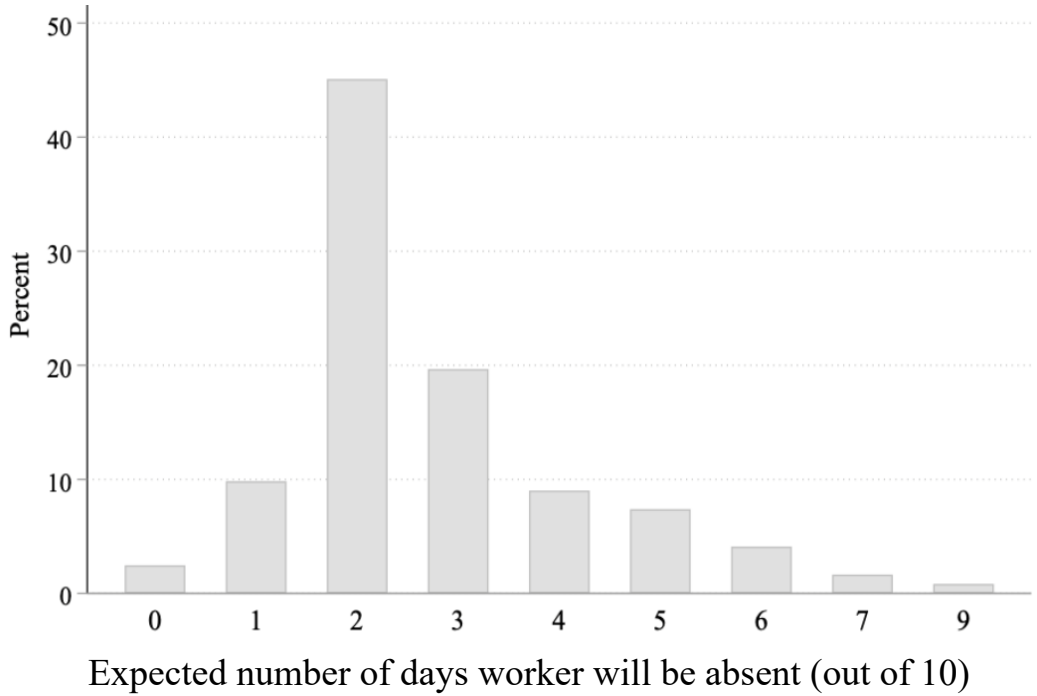
60 factories, 100K workers

High absenteeism: informal casual jobs

Urban labor stand workers: India

Employers expect 20-30% absence rate

[Cefala Kaur Schofield Shamdasani 2024]



Agricultural casual workers

Rural spot labor (village employers)

Burundi:

- 25% of workers don't show up on workday
- N=1,343 employers (farmers), 4,284 hiring contracts
- [Cefala Naso Ndayikeza Swanson 2024]

India: Employers (farmers) expect:

- Peak season: 34% absenteeism
- Lean season: 19% absenteeism (despite 50% unempl rate)
- Attendance probability: prominent x in "productivity" rating
- N= 227 employers (farmers)
- [Breza Kaur Krishnaswamy Shamdasani]

Parallel with early industrial revolution

Factory Discipline

GREGORY CLARK

The Journal of Economic History, Vol. 54, No. 1 (Mar., 1994), pp. 128-163 (36 pages)

Why Isn't the Whole World Developed? Lessons from the Cotton Mills

GREGORY CLARK

The Journal of Economic History, Vol. 47, No. 1 (Mar., 1987), pp. 141-173 (33 pages)

Could "low" labor supply be a consequence of under-development?

Hypothesis:

The structure of institutions and society in low-income economies may create conditions that depress labor supply

(Not about the worker, but about the environment)

Under-development and labor supply?

Two notable sets of changes accompany process of development:

1. Economic life becomes less inter-personal, more anonymous market exchange
   - Economic exchange: trade with people you know, encounter in multiple spheres
   - Social ties matter a lot: reliance on network (e.g. safety, insurance, referrals)
   - → Large scope for social considerations to affect economic actions ("social economics")

2. Life and informal institutions become more "regular"

Social complementarities in labor supply

- Donald Grosset (2024): Formal factory jobs in Cote D'Ivoire
  - Vary whether worker's network members are also offered formal factory job
  - Take-up: 16pp (63%) more likely to accept job offer
  - Turnover: 15pp (95%) more likely to still be at factory 4 months later (not simply match-quality)
  - Attendance: complementarity in attendance with network members (co-commuters)

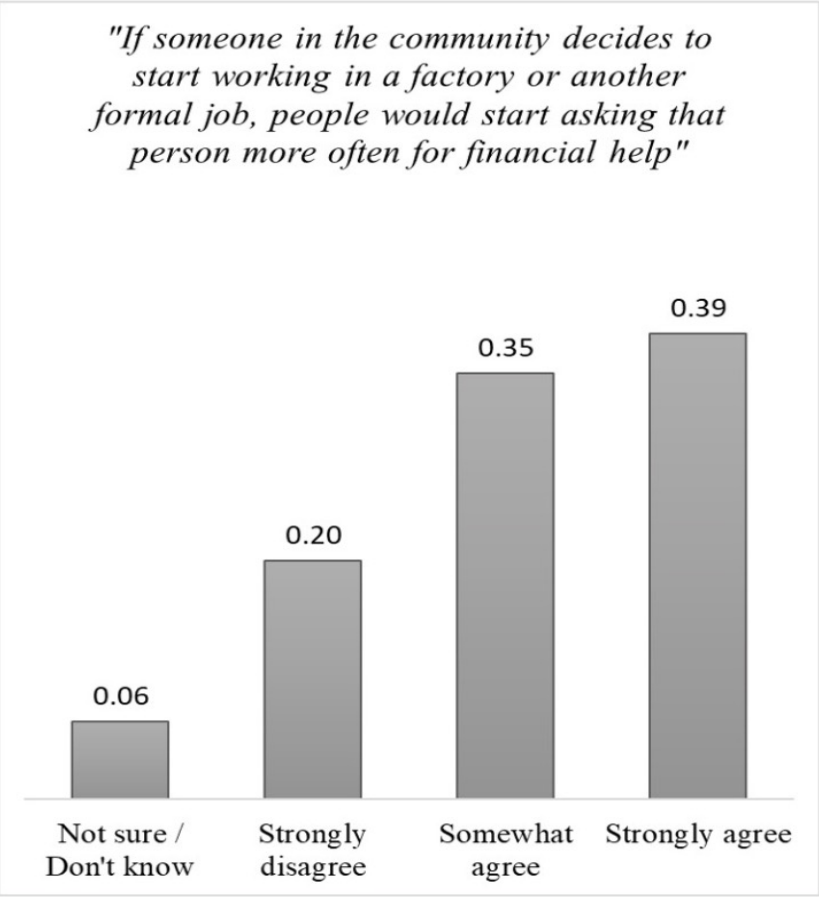
- Large rural-urban wage gaps: too little migration? [Harris Todaro 1970, Bryan et al. 2014]
  - Akram Chowdhury Mobarak (2018): Vary share of village that gets migration offer (bus ticket)
  - 12.7pp (34%) increase in *control group* sustained migration when many co-villagers migrate

→ People willing to drastically increase labor supply under right "social" conditions

→ Amenity value of network? Likely both utility and insurance benefits (need more work)

→ Possibility of multiple equilibria in aggregate labor supply [Hoff Sen 2011]

Informal insurance norms create "social tax"



Source: Carranza et al. (2023). N=420 factory workers.

- Strong pressure to share income with others
  [Platteau 2000, Jakeila Ozier 2016, Goldberg 2017, Squires 2021]

- Carranza Donald Grosset Kaur (2023) (Cote D'Ivoire)
  - Ability to shield income from redistributive requests
  - ITT: 10% ↑ in attendance, 11% ↑ in piece-rate earnings

- Swanson (2023) (Zambia)
  - Pressure to hire relatives distorts firm hiring decisions
  - Creates moral hazard problem that lowers productivity

→ At least some people want to work more than they do

→ Again: possible multiple equilibria in aggregate labor supply
[Hoff and Sen 2011]

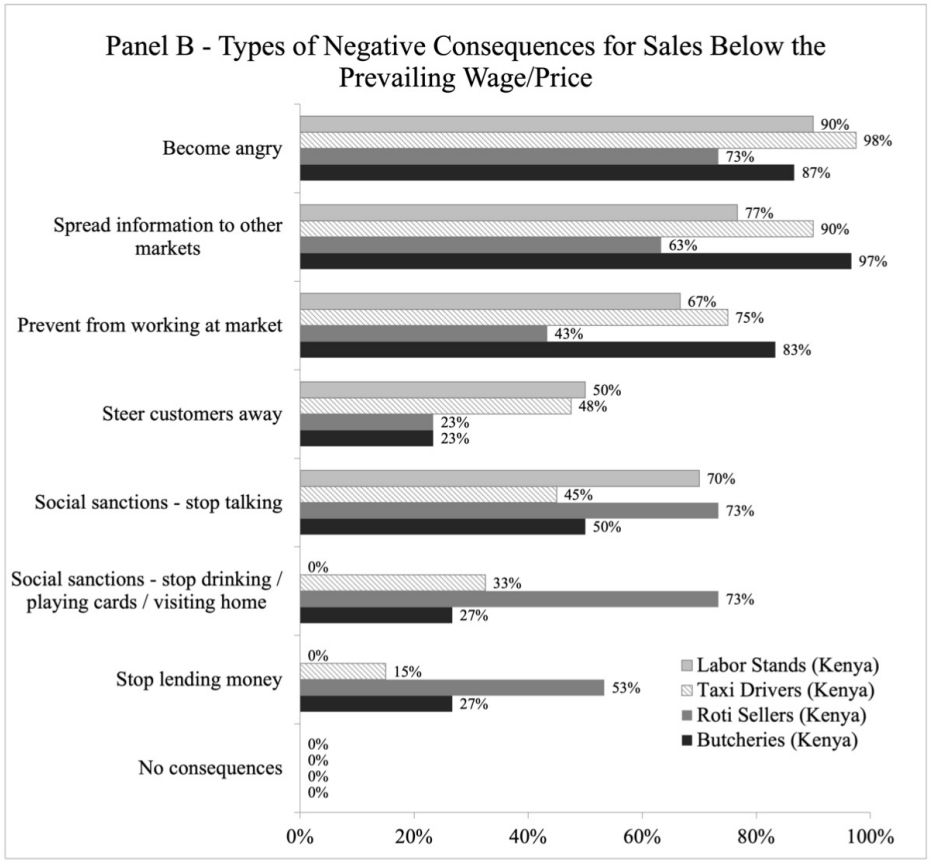
Social norms on acceptability of wage work

- Strong cultural connotations and norms around wage work
  - Real (perceived) social costs of violating norms
- Women working in labor force

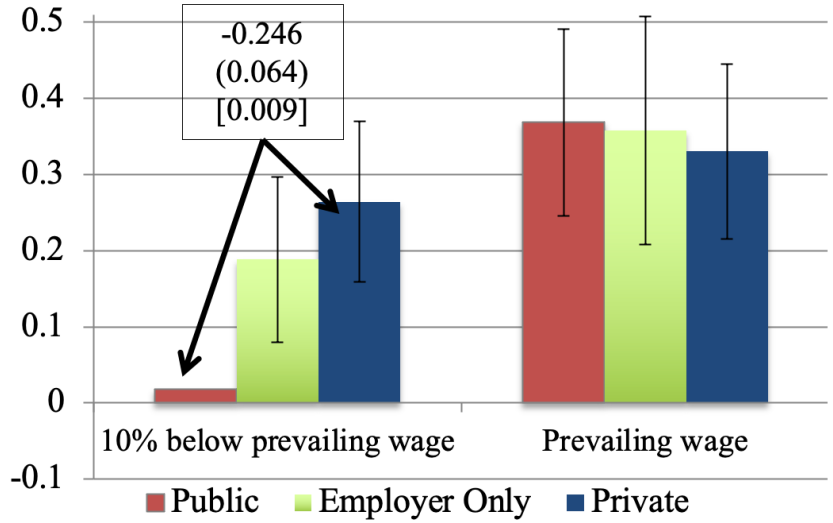
  [Bursztyn González Yanagizawa-Drott 2020, Field Pande Rigol Schaner Troyer Moore 2021]
- Crossing caste boundaries in occupational status [Oh 2023]
- Social status lower if work for co-villagers (limited work in economics)
  - Could this help us understand under-utilized labor markets in Sub-Saharan Africa?

Social norms: Aggregate labor supply curve

- Consequences for undercutting wage/price (India+Kenya)
- Casual agri workers, urban labor stand workers
- (Also taxi drivers, roti sellers, butcheries)



- Breza Kaur Krishnaswamy (2024) (India)
- 50% unemployment rate in lean season
- 183 employers offer jobs at varying wages



- Lower wage: 2% take-up if observable (vs. 26% when private)
- (Norm protects workers' bargaining power with employers)

→ Aggregate LS curve socially determined → wage floors

→ Market power may be more widespread than we realize

Under-development and labor supply?

Two notable sets of changes accompany process of development:

1. Economic life less inter-personal, more anonymous market exchange

2. Life and informal institutions become more "regular"
   - Personal volatility: health shocks, family shocks (need evidence: link to absenteeism?)
   - Discretion in labor supply (e.g. self-employment): scope for self control
     [Kaur Kremer Mullainthan 2010, 2015]
   - Institutions impose irrregularity: weddings on weekends, coordinated holidays
   - Less opportunity for habituation to regularity: less work seasonality, regular schooling
   - → Endogeneity of preferences for regular work?

Preference for flexibility

- Urban labor stand workers (Chennai, India) [Cefala Kaur Shamdasani Schofield 2024]
  - Casual construction work: primary source of employment
  - Mean employment rate: 2-3 days/week
  - Mean attendance rate: <4 days/week

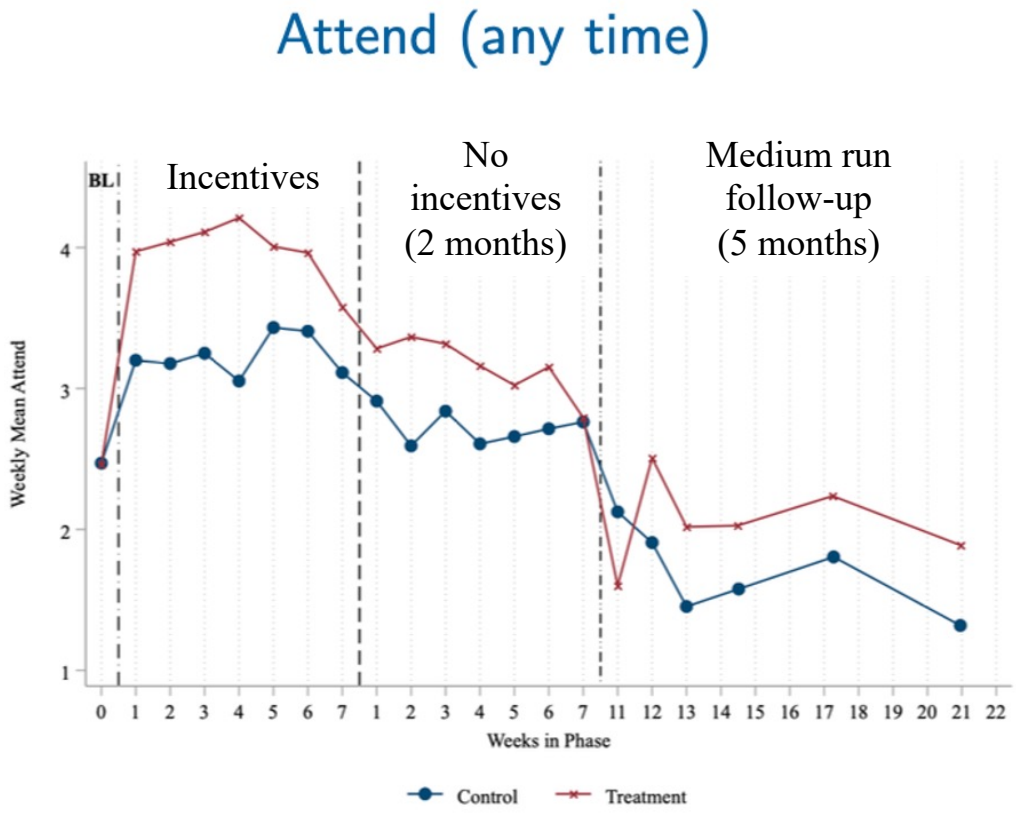
- Why do you prefer casual work to regular job?
  - 60%: Earn more money per day (even if less overall) (wages still first order!)
  - 32%: Don't want fixed schedule / prefer flexibility
  - 32%: Have more free time with casual work
  - 9%: Don't like having a boss
  - 7%: Don't think I have qualifications for regular job

Habit formation in labor supply?

- Cefala Kaur Schofield Shamdasani (2024)
  - Incentivize workers to come to labor stand for 2 months (boost LS)
  - Remove incentives
  - Persistent attendance increase for 2-5 months
  - 10pp (20%) more likely to take-up less flexible work contract (penalty for absence)

- Potential implications:
  - Not about workers, but about environment
  - Shocks make it hard to build "habit stock"

- Donovan (2023): move to non-agri jobs by new cohorts (HC: education expansion?)

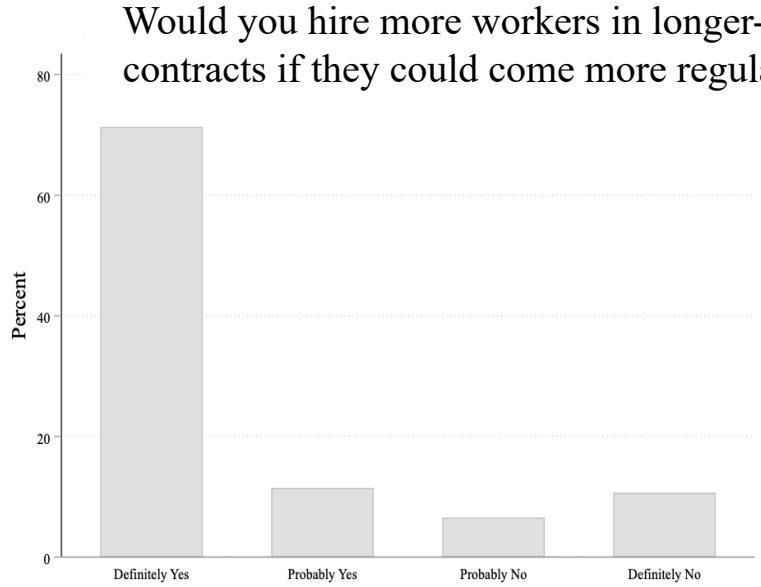


Endogenous labor market response?

- Potential bi-directional relationship with organization of production

- Workers may attend more if jobs were better
  - Wages
  - Amenities: working conditions, health, transport
  - Bad jobs makes it less likely you invest in human capital, develop regular LS

- Employers may offer better jobs if workers more productive (more regular labor supply)



Longer-term contracts (71-83%)
Provide training (33%) [Cefala, Swanson, et al]
Expand business (31%), Change biz type (18%)
Wages: Increase payments (76%)
Non-wage amenities: Loans (88%), insurance (17%)

Conclusion

- Much progress in last 20 years
  - Active, responsive labor markets
  - Substantial frictions that can impede welfare, labor allocation goals
  - Need work understanding micro-foundations for frictions, implications

- Barriers to structural transformation: Some research gaps
  - Evidence on human capital accumulation
  - Better measurement on labor supply in firm micro-data + surveys
  - Determinants of absenteeism, turnover (jobs vs under-development itself)
  - Possibility for multiple-equilibria?