ECON 672: Economics of Development

Week 12: Labor markets and migration

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de Janvry & Sadoulet on the Employment Problem

With generally rapid population growth and insufficient new jobs, developing countries are facing a huge employment problem. Because labor is the main asset that poor people have, creating opportunities for them to use this asset productively is the main instrument for poverty reduction. It is no surprise, then, that providing employment opportunities in remunerative activities, elevating the skill level of the labor force, and pacing migration between rural origins and urban destinations to avoid the expansion of urban slums are major development issues.

— de Janvry & Sadoulet, p. 301

Labor Market Dimensions

Labor market dimensions:

- Size of informal vs. formal sector
- Ease of hiring and firing workers
- Amount of formal social assistance for the unemployed
- Trade-offs between wages and social assistance for the employed
- Disparities between "skilled" and "unskilled" workers
- Cyclicality or countercyclicality with recessions

Result: very little open unemployment in developing countries; the problem is more *under*employment than *un*employment.

Unemployment versus Underemployment

The **unemployment rate** is the ratio of people *without work* to those *in the labor force*, but this figure can be deceiving. This includes only those who have actively looked for work recently or been temporarily laid off.

A low unemployment rate can hide:

- "Discouraged workers" who have given up looking for work
- Underemployment of those working but not full time
- Underemployment of people working low-productivity jobs

Example: Colombia's unemployment rate in the 1970s was just 5%, but total unemployment and underemployment was roughly 33%.

The Informal Labor Market

Statistics on the **informal labor market**:

- 61% of world employment (about 50% excluding agriculture)
- 86% in Africa
- 68% in Asia and the Pacific
- 69% in Arab states
- 40% in the Americas

de Janvry & Sadoulet on Informal Employment

Some 93 percent of world informal employment is in the developing countries, and 70 percent of informal sector workers are self-employed.
— de Janvry & Sadoulet, p. 302

Patterns of Migration

Migration:

- Rural-rural, rural-urban mainly
- Urban-rural in times of shocks (crisis, unemployment)
- Seasonal, short-term, long-term, permanent
- Push factors: home adversity
- Pull factors: opportunity
- Chief goal: **remittances**
- Accompanies **structural transformation** we saw before

The Migration Decision

From our models, we would expect labor to chase higher marginal product and thus higher wage.

Thus, the migration decision should be driven by the *expected* wage differential between the rural and urban labor markets. However, we have also seen that beliefs can be incomplete or incorrect. Migrants may also face liquidity constraints, excessive (uninsured) risk, and a lack of information.

The *accessibility* of consumption in urban versus rural environments may also be a draw: not just how much money is earned but how easily it can be spent.

Evaluating Migration Constraints

Impact evaluation of migration constraints: pick a constraint, ease it for potential migrants, and see what happens to migration

- Information asymmetry: provide (better) information on wages in the city
- Excessive risk: offer an insurance product to reduce risk exposure for potential migrants
- Liquidity constraint: offer a cash grant to offset migrating costs (Bryan et al., 2014; Lagakos et al., 2023)

Key outcome: changes in migration patterns

My Simple Model Sketch of Migration Decision

I migrate if the urban benefit B_u, net of migration costs c, exceeds the rural benefit B_r already in hand: $B_u - c > B_r$.

Notice that B is not necessarily exclusively monetary: it could include access to public goods, quality of life, or other non-monetary benefits related to rural or urban life.

But urban benefit B_u is uncertain because I have not yet been to the city. Given my (possibly incorrect) beliefs, it instead has a distribution with mean $E[B_u] = \mu_u^*$ and variance $V[B_u] = \sigma_u^2$.

My Simple Model Sketch of Migration Decision, pt. 2

The **certainty equivalent** (CE) of an uncertain outcome is the sure amount that leaves me exactly as well off as the gamble (or *indifferent* between taking the gamble and the sure thing).

For the lottery $L = (\$0, 0.5; \$M, 0.5)$[1], with expected value $EV = \sum_x p(x)x = \frac{1}{2}(0) + \frac{1}{2}(M) = \frac{1}{2}M$:

- $CE < EV$: I am risk averse (I pay a premium to avoid risk)
- $CE > EV$: I am risk loving (I pay a premium to take on risk)
- $CE = EV$: I am risk neutral (I do not care about risk)

We know most households to be (highly) risk averse[2], so we would expect $CE_u < \mu_u^*$.

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[1] This lottery pays \$0 with probability 0.5 (50%) and \$M with probability 0.5.

[2] "Poor people are risk-averse because a negative shock can have devastating consequences for them, operating as they are at the margin of survival." — de Janvry & Sadoulet, p. 270

My Simple Model Sketch of Migration Decision, pt. 3

If I am risk averse with coefficient $\rho > 0$, I value B_u at approximately $CE_u = \mu_u^* - \frac{\rho}{2}\sigma_u^2$, so I migrate if and only if:

$$\mu_u^* - \frac{\rho}{2}\sigma_u^2 - c > B_r$$

- Risk: $\partial CE_u / \partial \sigma_u^2 = -\rho/2 < 0$, so insurance (lower σ_u^2) encourages migration by raising CE_u
- Liquidity: c is paid up front, so if I cannot borrow, I can migrate only if my cash on hand $A \geq c$; a cash grant G of up to c encourages migration by letting $A + G \geq c$
- Information: better information moves my belief μ_u^* toward the true expected benefit μ_u and encourages migration if $\mu_u > \mu_u^*$ (I was underestimating the benefit of migration)

Simple Model of Migration: Harris-Todaro

Current rural wage W_A, formal-sector urban wage $\overline{W}_M$, expected urban wage W_M^*. P is probability of finding an urban job, urban employment rate; $1 - P$ is the urban unemployment rate.

Thus, $W_M^* = P\overline{W}_M$ and migration happens if and only if:

$$W_M^* = P\overline{W}_M > W_A \quad \text{or} \quad P > \frac{W_A}{\overline{W}_M}$$

This implies that whenever (beliefs about) the urban employment rate P are higher than the wage ratio between rural and urban sectors, migration will occur (even if employment is not very likely, $0 < P \ll 1$). Even with just a 1:2 wage ratio, $P > 0.5$ will cause migration (despite a roughly 50% chance of unemployment)!

Policy Implications of Harris-Todaro

This model generates some thorny policy implications:

- Increasing urban employment (without changing wages) will increase urban unemployment, since each new job draws in the reciprocal of the wage ratio: with a 1:4 wage ratio, migration continues until only 1 in 4 people find a job, so if we introduce 1 new job, we bring $(1/4)^{-1} = 4$ new migrants and only 1 of them gets this job!
- Closing the wage gap $\overline{W}_M - W_A$ would mean either lowering formal wages (pull), often difficult due to union power and a high *efficiency wage*, or raising W_A (push), making rural agricultural work more profitable. However, this may also have the consequence of *easing liquidity constraints on migration*, meaning the overall effect is ambiguous (Bazzi, 2017).
- Regulating urban migration overtly, e.g. China's Hukou system

Linking Formal and Informal Wages

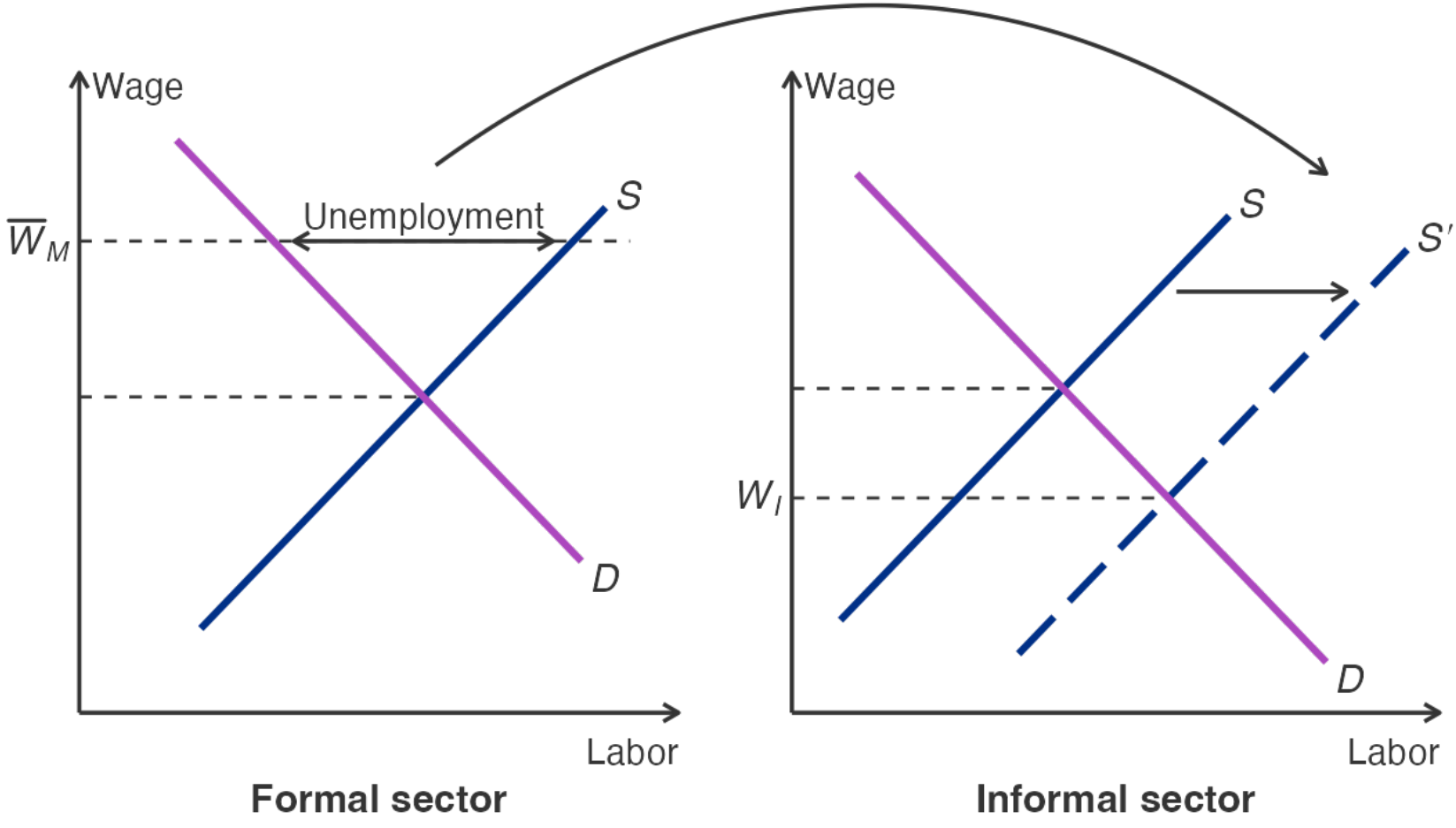


Figure 1: After de Janvry & Sadoulet, Figure 12.1

Banerjee & Duflo on Creating Good Jobs

How then can more "good jobs" be created? Clearly, it would help if it were easier to migrate to cities, so policies on urban land-use and low-income housing are obviously vital. Less obviously, effective social safety nets, consisting of both public assistance and market insurance, can make migration easier by reducing dependence on social networks. But because not everyone will be able to move to the city, it is also important that more good jobs be created not just in the largest cities but in smaller towns all over the country.

— *Banerjee & Duflo, p. 249*

Extensions of the Harris-Todaro Model

Extensions of the Harris-Todaro model:

- Present discounted value (PDV) of migration over a long time horizon with migrant age and differential costs
- Social networks increasing P or urban-resident bias decreasing P. Migration networks and the employment benefits they offer can be stable and durable, e.g. Mexico to US.
- Credit constraints and risk aversion may trap migrants who wish to migrate (and could improve their lives by doing so), also preventing them from accessing information on the benefits of migration. Do I migrate this year (with a subsidy) *and then continue to do so after the subsidy goes away?* (Bryan et al., 2014)
- Urban returns to skill/education may also induce positive selection in who migrates, though advances in agricultural technology will decrease the urban skill premium

Migration as a Household Strategy

But...migrants are part of households driven by a desire to receive remittances: payments can offset local market failures (e.g. insurance or credit) for the household.

- Credit-constrained household: remittances can stand in for a loan if the market fails to provide one
- Risk-constrained household: remittances can stand in for insurance if the market fails to provide it

Motives for Remitting

Why remit? Motives may include:

- Repayment to parents for rearing costs
- Securing inheritance from parents
- Providing social security to aging parents
- Providing informal insurance during shocks
- Altruism, preference for generosity

International Migration and Remittances

International migration and remittances:

- 258 million migrants in 2017
- US$415 billion in remittance flows annually
- Smaller than only FDI and private capital flows
- Thirty countries derive more than 10% of GDP from remittances
- Remittances largely spent on consumption and land investment (not productively invested in businesses)

Impacts of International Migration

Impacts of international migration:

- Increased returns to education from larger employment opportunities abroad
- Impacts on sending-household consumption and income from losing a worker: do remittances offset this?
- Remittances (deposits) may provide liquidity to lenders to fund high-growth business projects
- Positive externalities of migrant experience and knowledge upon return home
- Positive externalities for non-migrants from reduced labor market competition

de Janvry & Sadoulet on Channeling Remittances

Given the extraordinary magnitude of remittance flows, it is no surprise that governments and development agencies are starting to experiment with ways of channeling remittances toward social infrastructure and local investments that can help create jobs and reduce poverty.
— de Janvry & Sadoulet, p. 320

Impacts of Migration on Receiving Countries

When absorbing large numbers of (international) migrants,

- is there sufficient safe housing and infrastructure to welcome families? If not, young men may move on their own.
- do migrants put downward pressure on "unskilled" wages for domestic workers?
- can illegal migration be controlled with policy? Not well.
- do migrants' economic activities create a net positive or net negative effect on their local economy?
- is there an increase in anti-immigrant sentiment or backlash in the domestic population?

de Janvry & Sadoulet on Managing Migration

Domestically, [migration] is the essence of structural transformation and internationally it is part of the globalization of a labor market. It can be an important force for development, with the potential for extensive benefits for both developing and industrialized countries. Remittances, in particular, create an extraordinary opportunity to finance development projects in some of the poorest emitting regions, if these regions have development potential and can channel the transfers toward productive investments. Yet migration is a difficult process to manage, both nationally and internationally, with a tendency for excessively rapid displacement of populations that are too often inadequately prepared to be absorbed productively in the receiving areas, and toward areas that are often not prepared to absorb them productively and culturally.

— de Janvry & Sadoulet, p. 322

5-minute Break

Lagakos, Mobarak, & Waugh (2023)

Randomly selected presenter: **Justine**

1. What is the research question?
2. How do the authors answer it?
3. What do they find?
4. Are you convinced by the design and results?
5. How does the paper connect to our other readings?

Group Discussion

Bringing together our lecture material and academic article, I have prepared the following suggested discussion questions:

- What are some key push factors that lead to migration? What are some key pull factors?
- How does migration fit into our earlier discussions of structural transformation, insurance, risk, and credit?
- Should we think of "migration" as a single issue, or break migrants into categories? Which of these categories might be most important to consider?

Roadmap

Looking Ahead to Week 13

What do we have on the horizon before next Tuesday?

- My office hours for ECON 672 will be held Tuesday before class, 12:15-2:15pm in MCL 108 or virtually by appointment
- Our thirteenth topic will be *Institutions, implementation, and political economy*. Our textbook reading will be Chapter 20 and Chapter 21. Our *Poor Economics* reading will be Chapter 10. Our required journal article will be Olken (2007), "Monitoring Corruption: Evidence from a Field Experiment in Indonesia," JPE.
- Our **Weekly Reading Response** assignment for this paper will be due Tuesday at 2:40pm before class. One student will be randomly selected to **present their response** to the class in 5-8 minutes.