

# L11: Urbanization and Migration

## The Harris-Todaro Model

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# Introduction

- Key aspect of structural transformation of developing countries: urbanization
- Rate of growth of urbanization in LDCs is far higher than in DCs
- World's largest cities are progressively in LDCs
- **Readings:** DR text Ch 10, Section 3

# Key Policy Issues

- urban unemployment, social unrest
- large urban informal sector: slums, unproductive workers
- urban public services: housing, sanitation, transport
- rural-urban migration:
  - too little or too much?
  - controlling migration flows

Table: UN Projections for Changes in Urban and Rural Populations between 2011-2050 (millions)

Region	Urban Population	Rural Population
Africa	851	295
Asia	1414	-480
Europe	52	-72
LAAC	178	-24
N America	110	-11
Oceania	14	4

Table: Annual Growth of Urban and Slum Populations, 1990-2001

Region	Slum Population	Urban Population
SE Asia	1.3	3.8
West Asia	2.7	3.0
South Asia	2.2	2.9
East Asia	2.3	3.4
S-S Africa	4.5	4.6
LAAC	1.3	2.2

Table: World's Largest Cities: Population (millions)

	2011	2025 Projected
Tokyo	37.2	38.7
Delhi	22.7	32.9
New York	20.4	23.6
Mexico City	20.4	24.6
Shanghai	20.2	28.4
Sao Paulo	19.9	28.8
Mumbai	19.7	26.6
Beijing	15.6	22.6
Dhaka	15.1	22.9
Kolkata	14.4	18.7

# Harris-Todaro Model: Backdrop

- Critique of the Lewis Model:
  - unemployment is primarily in urban areas, not rural areas
  - no noticeable surplus labor in rural Africa in late 60s (land abundance relative to population)
- Lack of coherent explanation of migration motives and consequences in Lewis model:
  - Altruism within rural households
  - Household benefits from migration

# Harris-Todaro Model: Backdrop, contd.

- Lewis model suggests the problem is too little rural-urban migration, so policy-makers should focus on increasing migration flows
- But many urban migrants do not get 'good' jobs and remain in unproductive informal sector, besides raising social tensions and straining urban facilities: maybe there is too much migration?
- If so, what can policy-makers do to reduce migration and overcrowding in urban slums?



# Harris-Todaro Model: Building Blocks

- Unemployment arises in urban areas owing to *minimum wage regulations* set above the market-clearing level
- Those unemployed in urban areas work in unproductive informal sector, and keep searching for good jobs
- No unemployment in rural areas, owing to land abundance, flexible labor markets with no minimum wage regulation
- Urban formal sector (minimum) wage  $\bar{w} = MP_L^U$  exceeds rural wage  $w_R = MP_L^R$

# Harris-Todaro Model: Migration as a Lottery

- Rural workers earn  $w_R$ , are attracted to the 'bright lights' of the city where they would earn  $\bar{w}$  if they succeeded in getting a formal sector job
- But they are not guaranteed a formal sector job if they arrive in the city: get it with a probability  $p$
- $p$  equals 1 minus the urban unemployment rate
- If they are unlucky and don't get a good job, they work in low productivity occupations in the informal sector

# Harris-Todaro Migration Equilibrium

- Migration to the city is therefore a risky proposition
- For simplicity assume:
  - earnings in urban informal sector are zero
  - $w_R$  is constant, owing to flat  $MP_L^R$  schedule
- Migration equilibrium condition: rural wage  $w_R$  equals *expected* wage in the city =  $p * \bar{w}$

# Harris-Todaro Migration Equilibrium, contd.

- Migration equilibrium condition determines the urban unemployment rate

$$u = 1 - p = 1 - \frac{W_R}{\bar{W}}$$

- This implies that without coercive controls on migration, there will always be a sizeable urban informal sector comprising unemployed people in unproductive occupations
- The size of this sector depends on the ratio of the urban minimum wage to the rural wage, *and nothing else*

# The Paradox of Urban Job Creation

- Suppose the government tries to address the urban unemployment problem by creating/inducing additional jobs in urban areas (e.g., public sector investment, subsidy for private industry)
- *Far from reducing the number of urban unemployed, it would actually increase*
- Because every new job created will attract  $1 + u$  migrants from rural areas
- Transport analogy: effect of new highway or bridge on traffic congestion

# Other Policy Options to Control Migration Flows

- Lowering the urban minimum wage: violates fairness/legal norms, politically unpopular, could increase worker shirking/turnover
- Offer private employers a wage subsidy equal to  $\bar{w} - w_R$ : enlarges number of urban unemployed, costly for government
- Raise agricultural productivity (and hence  $w_R$ ) would be a solution, if feasible