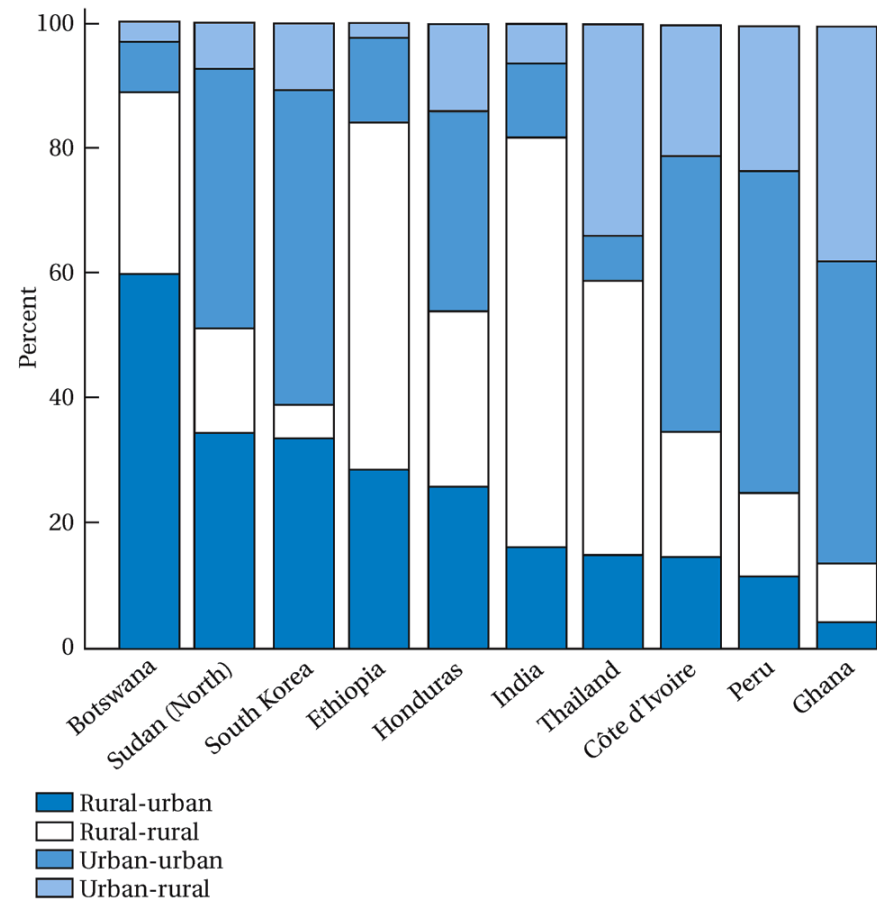# MIGRATION AND DEVELOPMENT

- rural-urban migration plays an important role in economic development (remember Lewis' model; or the economy sectoral structure of LDCs vs. HICs from lecture 1)

- potential issue of urban underemployment (but why people migrate then?)

- any economic policy affecting rural or urban incomes will have a direct impact on the migration process (labor, credit, international trade, social)

- why do people move and what are the consequences of migration for rural and urban development

- rural-urban migration important because

  - largest contributing factor in growth of cities in LDCs
  - potential development benefits due to agglomeration economies

- but other migration also exists (fig. 7.10)

- Migration motives: rural-urban income differential; relocation due to marriage; joining family members; famines/disease/violence

- could be also a form of insurance: settle some members in other areas who can help financially in bad times

# Figure 7.10 Components of Migration in Selected Countries

Source: Robert E. B. Lucas, "Internal migration and urbanization: Recent contributions and new evidence," background paper for World Bank, *World Development Report, 1999–2000* (New York: Oxford University

Towards an economic theory of rural-urban migration (the Harris-Todaro model)

- motivation: why do people move to the city even when there is rising level of urban unemployment?

- why do urban wages persistently stay significantly higher than rural wages for the same required skill level?

- unlike in the Lewis model where rural residents 'wait' until called by expanding employment in urban areas due to capital reinvesting

- HT model migration as a rational decision by an individual in response to rural-urban differences in **expected income**.

- people compare their expected incomes for a given time horizon in the village vs. city and decide whether to move or not

- migration can be costly

- list of possible factors – fig. 7.11

- Example: think or a unskilled person who can earn 50 in his village or 100 in the city.

- the choice seems obvious...

- BUT, HT acknowledge the possibility of urban unemployment – get 100 only if you find a job – must consider the probability/risk of staying unemployed for a while

- if one period time horizon and prob. of finding a job $= 40\%$ the person's expected urban income is 40 and so he'll rationally decide not to migrate

Figure 7.11 Schematic Framework for Analyzing the Rural-to-Urban Migration Decision
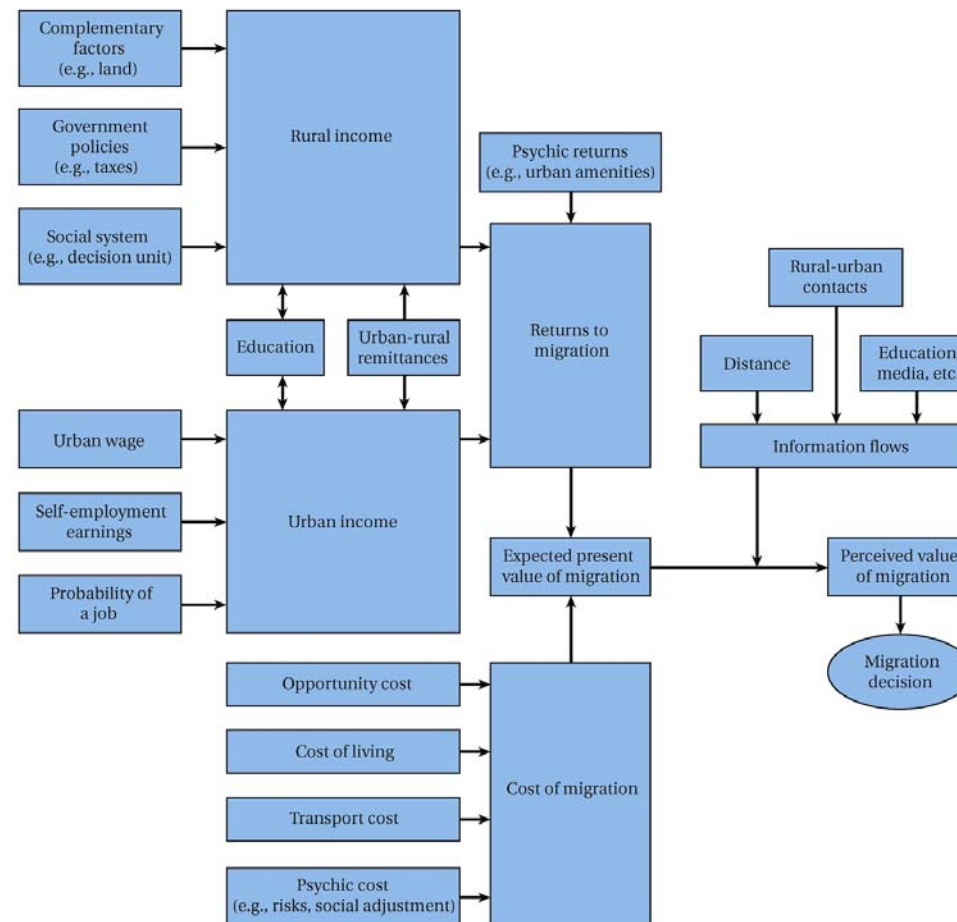
Source: Derek Byerlee, "Rural-urban migration in Africa: Theory, policy, and research implications," *International Migration Review* 3 (1974): 553. Reprinted with permission.

- if instead the probability was 60% he would (since 60 > 50)

- this choice becomes more nuanced if more than one period – then even if the initial probability is low if it is expected to improve with time (contacts, information, etc.) it may be still worth migrating (think of a **present value** of income comparison)

- in the HT model rural and urban wages are not equalized – instead **the rural wage will be equal to the expected urban income**.

- in the above numerical example and one period, a 50% urban unemployment rate is necessary to prevent migration.

THE HT MODEL IN DETAIL

- motivated by a policy in Kenya in the 1960s: aiming to raise urban employment 15% more urban jobs were created – however, soon after urban unemployment went up instead of down!

- why? people from rural areas moved to Nairobi to try secure these new jobs

- assumption: urban wages are downward rigid, set at w (unions, government, etc.) – higher than market clearing.

- as a result, more workers search for urban jobs than are hired

- on the other hand, in the rural areas (or informal sector) wages are fully flexible, say r

- the probability, π of finding an urban job is:

$$\pi = \frac{E_u}{L_u}$$

  where E_u is the level of urban employment and L_u is the total urban labor force (employed and not) $(= L - L_r = L - E_r$ − full employment assumed in the rural area).

- thus, the more people are searching for jobs the lower is π while the higher the number of jobs, the higher is π.

- The **expected rural-urban income differential** is

$$d = w\pi - r$$

where w is the urban wage; r is the rural wage. Assume above is inclusive of migration costs.

- Clearly if $d > 0$ people will want to move from the villages to the city.

- Equilibrium is achieved when $d = 0$, i.e. when $r = w\pi$ or,

$$r = w\frac{E_u}{L_u} = w\frac{E_u}{L - L_r}$$

- Notice that since $\pi < 1$ it must be that $w > r$ – the urban wage is higher than the current rural wage.

- also $\pi < 1$ means that there is unemployment in the city (the probability of finding a job is less than one) and yet people migrate there

- this is the main insight of the HT model – that **people can (rationally!) migrate even in the presence of substantial urban unemployment**.

- Also, from above,

$$
\begin{aligned}
L_r &= L - \frac{w}{r}E_u \\
\frac{dL_r}{dE_u} &= -\frac{w}{r}
\end{aligned}
$$

- In Nairobi in the 60s, they made E_u increase by 15%. Since $\frac{w}{r} > 1$ the HT model shows that L_r would *decrease by more than 15%*

- This means for each job created, more than 1 person from the rural areas comes to the city – urban unemployment actually increases (!) as a result

- The lesson: single policy (addressing just the urban sector, as proposed) is not sufficient to address unemployment – the incentives of rural people should be also considered (e.g. r needs to go up too or w should be allowed to adjust).

POLICY IMPLICATIONS

1. imbalances in urban-rural employment opportunities (e.g. caused by urban bias) must be reduced (e.g. the fact that the urban wage was rigid)

2. urban job creation alone is insufficient solution to the urban unemployment problem — can lead to the paradoxical result (as shown above) that creating more urban jobs leads to higher urban unemployment! This is due to induced rural-urban migration (2-3 rural people come for each new urban job due the income differential).

3. educational expansion may lead to further migration and unemployment — if years of education used as rationing device by urban employers; people with more education will be more likely to migrate and secure the jobs. People will try to get more and more education but eventually many of them still remain unemployed...[A bit of an extreme view — assumes education here is purely a signal, no productivity gains from it]

4. urban wage subsidy policies may be counter-productive

5. combination or both rural and urban policies is needed; removing the urban bias. better living conditions, income and infrastructure in rural areas would help alleviate the migration pressures on cities.

INTERNATIONAL MIGRATION

- The basic HT model logic also applies to international migration from LDCs to HICs

- potential emigrants will weigh their current (certain but low) incomes vs. the (higher but uncertain) incomes in HICs

- Other factors specific to international migration

  - legal – international migration is not freely allowed anymore (but see also China's hukou system); if the potential gains are high – leads to illegal migration; people smuggling, etc.
  - psychological, cultural shock costs of moving to another country; language, employment, financial sector bariers; 'chain migration' as a method to deal with these

- **brain drain** – the gains for high-skilled people may be relatively higher

(and adjustment costs, or unemployment lower) so proportionally more of them may migrate

- is this good or bad? The question is **for whom**.

  - if a person decided to migrate – definitely good for them (revealed preference); obviously better allocation of labor for the world as a whole
  - also good for the receiving country (young, educated, net taxpayers)
  - the sending country – should think why are such people leaving; but remember the Kremer model; a possible case for privately paid education?
  - remittances (fig. 14.5)

- Canada too has a 'brain drain' – in 1990s about 10,000 specialists per year migrate to the USA; 'offset' by about 18,000 from the rest of the world.

Foreign talent

Share of foreign-born highly skilled employment (last year available)
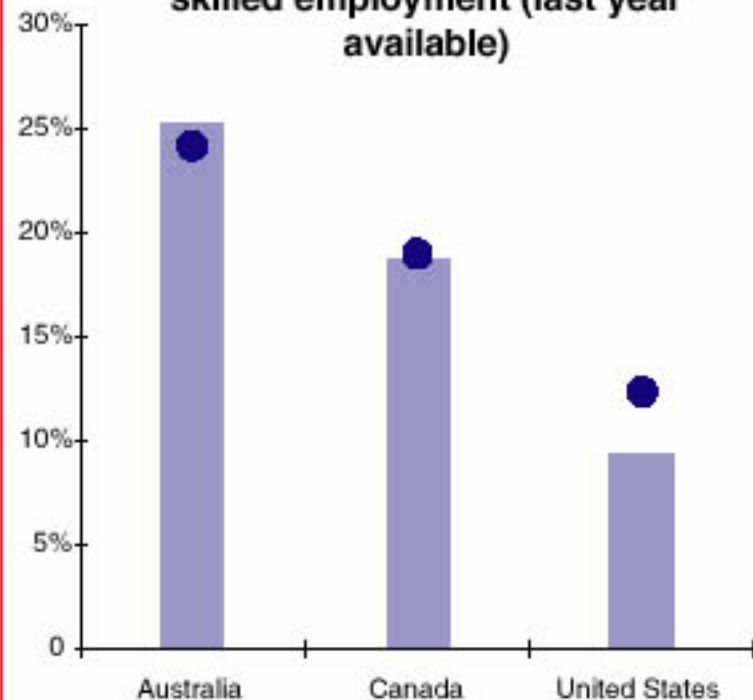
Australia · Canada · United States

Share of highly skilled foreign workers in employment in European member countries, 1998

33.4

Luxembourg · Austria · Belgium · United Kingdom · Germany · Sweden · EU-14 · Netherlands · France · Denmark · Portugal · Spain · Greece · Italy · Finland
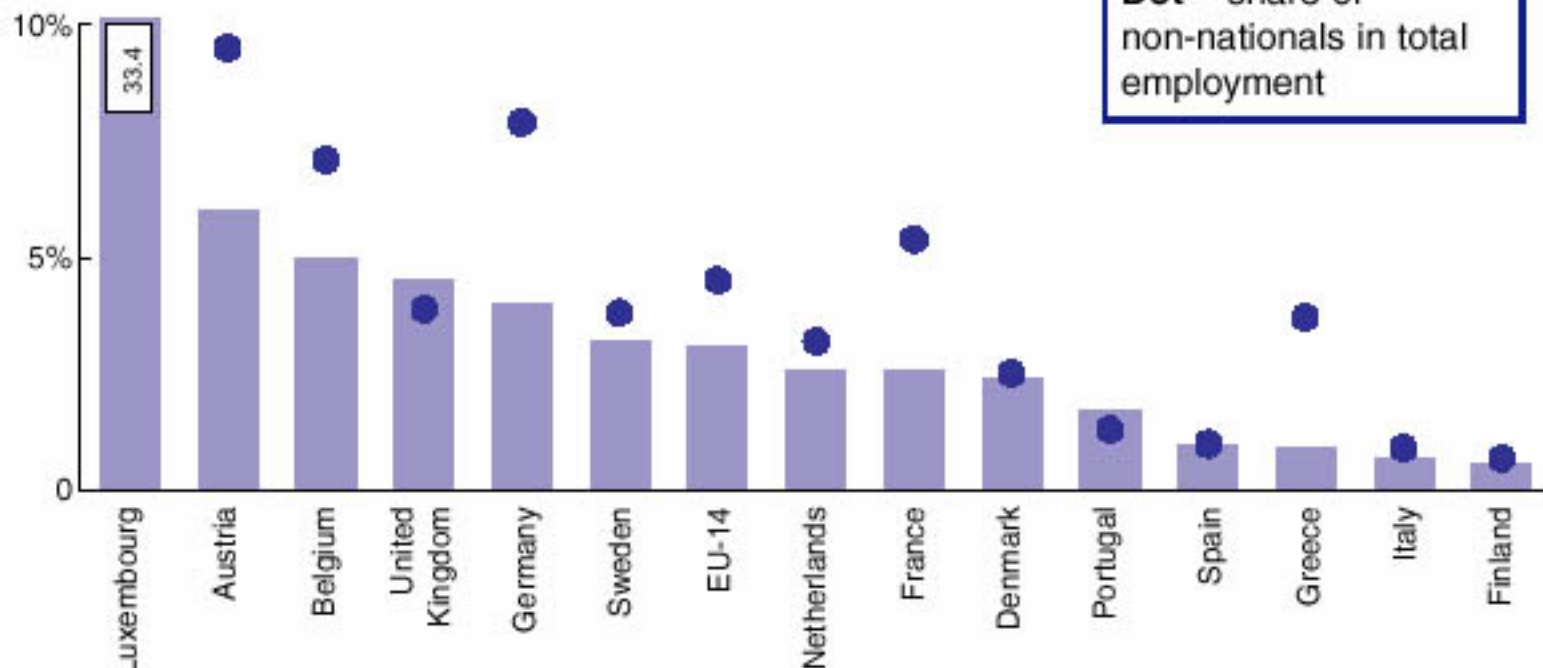
Bar – share of non-nationals in highly skilled employment

Dot – share of non-nationals in total employment

Figure 14.5 Top 20 Remittance Recipient Countries, 2004
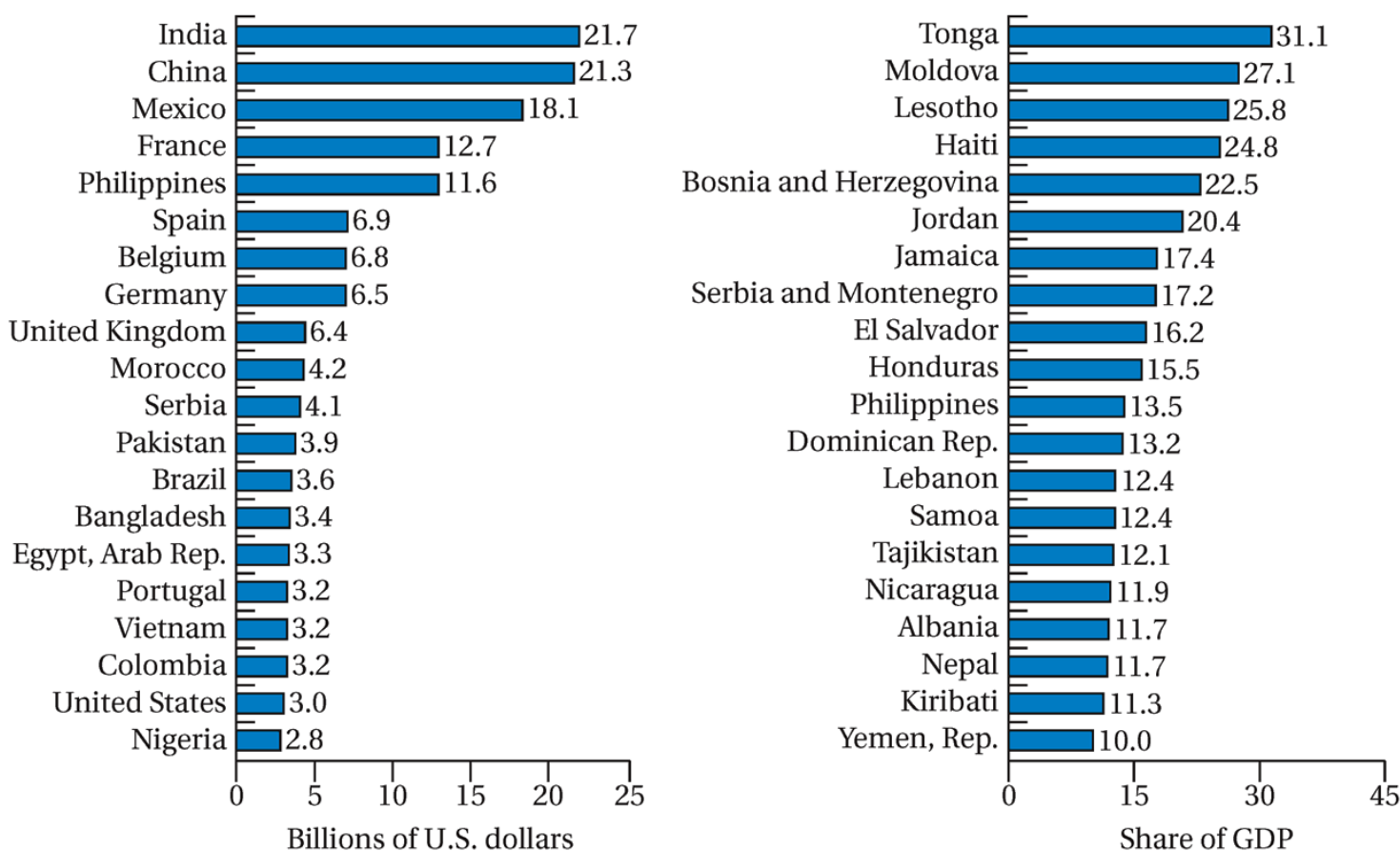

	Billions of U.S. dollars
India	21.7
China	21.3
Mexico	18.1
France	12.7
Philippines	11.6
Spain	6.9
Belgium	6.8
Germany	6.5
United Kingdom	6.4
Morocco	4.2
Serbia	4.1
Pakistan	3.9
Brazil	3.6
Bangladesh	3.4
Egypt, Arab Rep.	3.3
Portugal	3.2
Vietnam	3.2
Colombia	3.2
United States	3.0
Nigeria	2.8

	Share of GDP
Tonga	31.1
Moldova	27.1
Lesotho	25.8
Haiti	24.8
Bosnia and Herzegovina	22.5
Jordan	20.4
Jamaica	17.4
Serbia and Montenegro	17.2
El Salvador	16.2
Honduras	15.5
Philippines	13.5
Dominican Rep.	13.2
Lebanon	12.4
Samoa	12.4
Tajikistan	12.1
Nicaragua	11.9
Albania	11.7
Nepal	11.7
Kiribati	11.3
Yemen, Rep.	10.0

Source: World Bank, *Global Economic Prospects, 2006* (Washington, D.C.: World Bank, 2006), p. 90. Used with permission.