Urbanization and Rural-Urban Migration
(rough notes, use only as guidance; more details provided in lecture)

• focus on the process of movement (migration) of large amount of people from rural to urban areas that accompanies development
• also on cities: in 2007 for first time in history the world became more urban than rural

Urbanization: Trends and Projections

• positive association between urbanization and GDP per capita (fig. 7.1, Gapminder) – one of the “stylized facts” of development
• urbanization over time and across income levels, 1970-1995 (fig. 7.2)
  – each line segment is the trajectory of a country, 1970-1995
  – urbanization associated with economic growth on average
  – urbanization occurring everywhere (high/low income; positive/negative growth)
  – correlation or causation between urbanization and development?

fact: rapid growth of cities in developing countries

• 1950: 275 mln in cities in LDCs (38% of total population)
• 2003: 2 bln people living in LDC cities
• fig. 7.3: in 2030 projected 63% of all people in cities;
• most rapid urbanization occurring in Asia and Africa (more than 50% of people will be in cities by 2025 or so)

• fact: most megacities (15 out of 19 cities above 10 mln) are in LDCs (fig. 7.4)
  – 4 more to be added by 2015
• most of the world population growth will be due to increase in urban population in LDCs (fig. 7.5)
  – high birth rates
  – rural-urban migration (35-60% of the total city growth)
  – the latter will become the driving force as birth rates fall with development

• How will the cities cope? Positive vs. negative externalities of city life.

Another phenomenon related to urbanization: slums (shantytowns, favelas)

• 1/3 of urban population in LDCs
• fig. 7.6 – almost all of urban growth in SSA is in slums; most in Western Asia
• why? rapid rural-urban migration
• government policy: ‘forcing’ people to have illegal dwellings (hard to legalize, outdated/unrealistic building codes)

THE ROLE OF CITIES
• What explains the strong association between urbanization and development?
• **agglomeration economies**: cities provide cost advantages to producers and consumers
  – linkages/externalities between industries
  – transportation costs, network externalities
  – large pools of workers with specific skills (mutually advantageous for firms and workers to be at the same place)

What is a city?
• economic definition: a geographic area with high population density that contains a set of closely related activities
• spillovers from ‘industrial districts’ – firms watch each other (information); can contract out work, etc.
• examples: Silicon Valley (IT), Sinos Valley, Brazil (shoes); Bangalore, India (software)
• historically artisans grouped by village (or street in towns). Why? (information, customers)
• estimates of agglomeration benefits: if a plant moves from a location shared by 1,000 workers in the same industry to one with 10,000 workers output increases on average by 15% (World Bank)

Urban scale: if so many gains from urbanization – why not locate all industries in a country (or the world?) in a single city?
• there may be fewer gains in productivity for unrelated industries
• **congestion** costs:
  – real estate price (why are banks in downtown and not machine plants?); skyscrapers
  – longer and longer commutes for workers (higher wages needed to compensate)
  – higher costs of infrastructure (sewage, water)
  – trade-off between low rents / house prices but further away vs. high rents/prices close to city centre
• city scale eventually determined by the relative strength of the agglomeration (positive) externalities and the congestion (negative) externalities.
• depends on the industry – e.g. if agriculture is predominant – fewer/smaller cities, as opposed to financial industry (‘city states’ as Hong Kong, Singapore)

‘Urban gigantism’ and ‘first-city bias’
• if one city in the country is very large – hard to coordinate dispersion of activity to other areas (no incentive to single firm/industry to move)

• USA: NYC is 6% of total population vs. Toronto (14%), Mexico city (20%), Montevideo (40%), Buenos Aires (33%)...

• politics/policy (especially if capital city) and private investment may create ‘first-city bias’ - Table 7.1

• protectionism? (Krugman) – under import substitution policies incentives to concentrate in a single city to avoid transportation costs; not true if imports allowed (within-country distances are then small part of total transport costs)

• financial market imperfections: if the banks are in the largest city and information/enforcement problems – firms will tend to locate there too.

• political system? (fig. 7.7) – dictators provide ‘bread and circus’ for the first city citizens to remain in power/ prevent unrest – attracts more migrants, the city keeps growing; also true in unstable democracies – ‘buy off’ first city population by providing extra amenities, jobs, etc.

• corruption: gives incentives for most firms to locate close to government offices

**Urban informal sector**

• many migrants from the rural areas to the cities engage in self-employment or work in family-owned firms using labor-intensive technology

• these jobs are not formally reported and accounted for

• plays an important role for developing countries – employs a large fraction of urban population (fig. 7.8)

• employees in this sector usually have low education, are generally unskilled and lack access to financial capital

• entrepreneurship vs. survival

• if so bad, why do it? incomes in the informal sector are on average higher than rural incomes; also, perhaps better opportunities for upward mobility

• reasons? mostly due to government policies and regulations (‘red tape’) in registering formal businesses

• registering a new business can take up to 240 days in Ecuador, 310 in Venezuela, 525 days in Guatemala; in contrast in USA or Canada it takes a few hours to register a small business

• people forced to go through numerous applications and gov’t offices, often paying bribes at each stage (of course, this is the likely reason these regulations were created)

• access to credit – another important issue; these are poor people with no collateral; microfinance is a possible policy (more on this later in the course)

**Women in the informal sector**
formal sector jobs in many countries dominated by men so the only job opportunities for women are in the informal sector
rising proportion of urban female-headed households – tend to be poor, malnourished
microfinance and women

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

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 of 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

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 lifetime 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, \( \pi \) 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 \( \pi \) while the higher the number of jobs, the higher is \( \pi \).

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,
\[
 L_r = L - \frac{w}{r} E_u \\
 \frac{dL_r}{dE_u} = -\frac{w}{r}
\]

• In Nairobi in the 60s, they made \( E_u \) increase by 15%. Since \( \frac{\pi}{r} < 1 \) 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 barriers; ‘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.