

Chapter 9

Labour Mobility

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Introduction

- Existing allocation of workers and firms is not efficient (workers and firms do not instantaneously acquire all the information needed for the optimal match).
- Labour mobility is the mechanism that labour markets use to improve the allocation of workers to firms.
 - Basic drivers: Workers want to improve their economic situation; firms want to hire more productive workers.
 - Relocation of workers within countries.
 - Migration of workers between countries.

Introduction ctd.

- Closer look at questions such as:
 - What are the determinants of migration?
 - How do migrants differ from non-migrants?
 - How do migrants self-select?
 - Do migrants gain from migration?
- Note that the questions of the labour market impact of immigrants and the gains from immigration for the host country have already been addressed in chapter 5, sections 5.5 and 5.6.

9.1 Geographic Labour Migration as Human Capital Investment

- Migration as a human capital investment. The chapter deals with ‘economic migration’, not migration for other reasons (i.e. political refugees).
- Mobility decisions are guided by comparing present value of lifetime earnings in alternative employment opportunities (e.g. at home versus abroad).
- A worker decides to move if the net gain from the move is positive:

$$\text{Net gain to migration} = \text{PV}^{\text{Move}} - \text{PV}^{\text{Stay}} - M$$
- Do potential migrants really have all the necessary information to do this? M also includes “psychic costs” of moving.

Geographic Labour Migration as Human Capital Investment ctd.

- The ‘migration as human capital investment’ model leads to a number of testable propositions:
 - Improvements in economic opportunities available in a destination (residence) increases (decreases) the net gains to migration and raises (lowers) the likelihood a worker moves.
 - An increase in migration costs lowers the net gains to migration, decreasing the probability that a worker moves.
- Migration occurs when there is a good chance the worker will recoup his human capital investment.

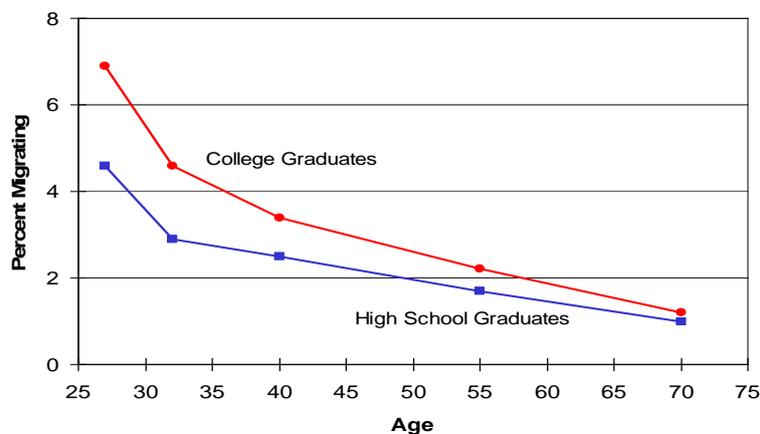
9.2 Internal Migration in the US

- Many studies for the US and other countries test whether ‘internal migration’ is consistent with the human capital investment model. They find that:
 - The probability of migration is sensitive to the income differential between the destination and origin (higher income differential, higher likelihood of migrating).
 - There is a negative correlation between improved employment conditions at home (origin region) and the probability of migration.
 - There is a negative correlation between the probability of migration and distance, where distance is taken as a proxy for migration costs.
 - There is a negative correlation between a worker’s age and probability of migration (the probability declines over the working life).
 - There is a positive correlation between a worker’s educational attainment and probability of migration.

Internal Migration ctd.

- Internal migration tends to lead to regional wage convergence (remember chapter 5).
 - However, note the vertical axis in Figure 9.1: Most people do not move much, even in the US, and only about half of the regional wage gaps disappear after 30 years! Therefore, migration costs must be high for most people (see p. 327/8). However, if you cannot get a job where you live, the opportunity cost of migrating are a lot lower!
- Workers that have migrated are more likely to return to the location of origin (**return migration**) and are more likely to migrate again (**repeat migration**).
 - Return & repeat migration possibly due to 'error correction' (the initial migration decision turned out to be a mistake).
 - Return & repeat migration can fit the human capital model if it is part of a stepping-stone career path (e.g. post-docs, or managers working overseas for companies for a while to gain experience and knowledge).

Figure 9.1: Probability of Migrating across State Lines in 2003-2004, by Age and Educational Attainment



9.3 Family Migration

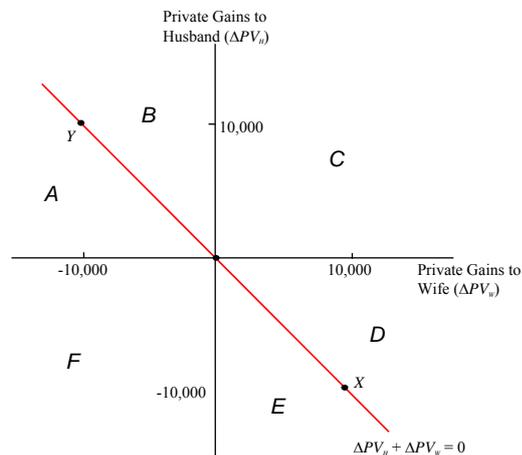
- Most migration decisions are made by families, not individuals.
- The family unit will move if the net gains to the family are positive.
- The optimal choice for an individual member of the family may not be optimal for the family unit (and vice versa).
- A simple 'husband and wife' model:
 - ΔPV_H is the change in the husband's earnings stream if he were to migrate (his 'private gains to migration').
 - ΔPV_W is the change in the wife's earnings stream if she were to migrate (her 'private gains to migration').
 - If they were not a couple, either one would migrate if their ΔPV were positive.
 - Being married, they will move if the net gain for the couple is positive, i.e. if:

$$\Delta PV_H + \Delta PV_W > 0 \quad (9.7)$$

Family Migration ctd.

- Figure 9.2 illustrates the basic ideas of this model.
- **Tied stayer** – a person who sacrifices better income opportunities elsewhere because the partner is much better off in their current location.
- **Tied mover** – a person who moves with the partner even though the person's employment outlook is better at the current location.
 - Evidence shows that women often lose out when they migrate as part of a couple or family.
 - Today there are more two-worker (e.g. professional or 'power') dual-career couples. Less likely that they will move?! Some 'creative labour market arrangements' have emerged.

Figure 9.2: Tied Movers and Tied Stayers



If the husband were single, he would migrate whenever $\Delta PV_H > 0$ (or areas A, B, and C). If the wife were single, she would migrate whenever $\Delta PV_W > 0$ (or areas C, D, and E). The family migrates when the sum of the private gains is positive (or areas B, C, and D). In area D, the husband would not move if he were single, but moves as part of the family, making him a tied mover. In area E, the wife would move if she were single, but does not move as part of the family, making her a tied stayer.

9.6 The Decision to Immigrate

- Dispersion of earnings across national-origin groups of migrants.
 - Positive correlation between an immigrant's country of origin GDP per capita and earnings in new country.
- There will also be a dispersion in skills among national-origin groups because different types of immigrants come from different countries.
 - Which types of workers, i.e. skilled or unskilled, find it worthwhile to migrate?
 - General rule: Workers decide to migrate to another country if earnings in the destination country exceed earnings in the source country.

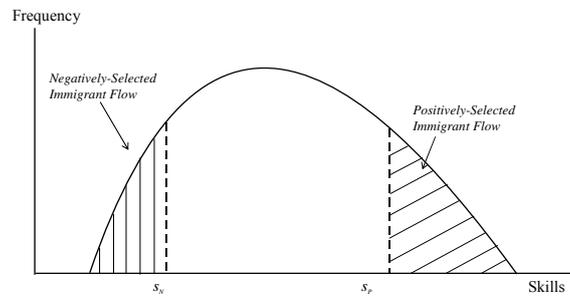
The Roy Model

- This model considers the position of skilled versus unskilled workers across countries and how workers sort themselves among employment opportunities.
 - If skilled workers in the source country do not earn much more than the unskilled (e.g. Sweden, or developed countries in general), there will be **positive selection** in terms of migrants ('brain drain' for the origin country).
 - If skilled workers get a high rate of return to human capital in their home country (i.e. like in many poorer countries with very unequal income distributions), taxes for them are likely to be higher in the destination country, e.g. they do not migrate, but the unskilled will (**negative selection**).
 - Positive selection – immigrants who are very skilled do well in their new country.
 - Negative selection – immigrants who are unskilled do not do as well in their new country (compared to other immigrants and the native population).

The Roy Model ctd.

- The model analyses the question whether a person should migrate or not.
- Assume that earnings in the new and old country only depend on skills, which are assumed perfectly transferable.
 - A worker has s number of efficiency units.
 - Frequency distribution of skills in the source country (Fig. 9.8).
- Will the skilled or unskilled migrate?
 - Assume prospective migrants compare their earnings in both countries.
 - Assume we can draw *wage-skill lines* for each country (their slopes indicate the \$ payoff for skills, i.e. to an additional efficiency unit). Zero migration costs etc. Figure 9.9.

Figure 9.8: The Distribution of Skills in the Source Country

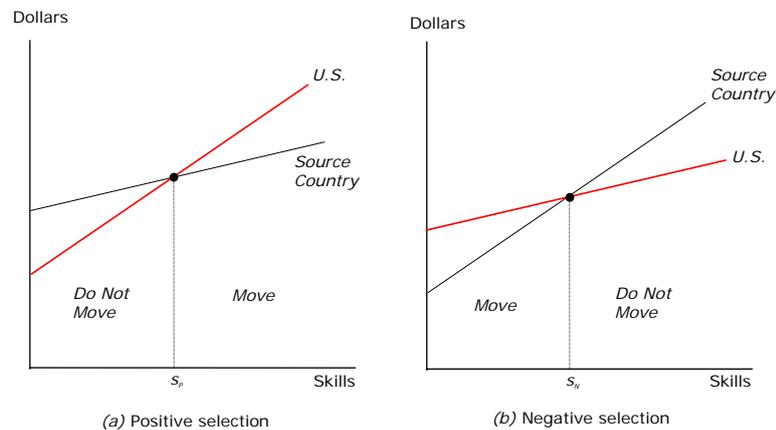


The distribution of skills in the source country gives the frequency of workers in each skill level. If immigrants have above-average skills, the immigrant flow is positively selected. If immigrants have below-average skills, the immigrant flow is negatively selected.

The Roy Model ctd.

- Figure 9.9a: Workers with fewer than s_P efficiency units will not migrate, workers with more than s_P efficiency units will migrate. Positive selection.
- Figure 9.9b: Workers with fewer than s_N efficiency units will migrate, workers with more than s_N efficiency units will not migrate. Negative selection.
- In short, the relative payoff for skills across countries determines the skill composition of the immigrant flow.

Figure 9.9: The Self-Selection of the Immigrant Flow

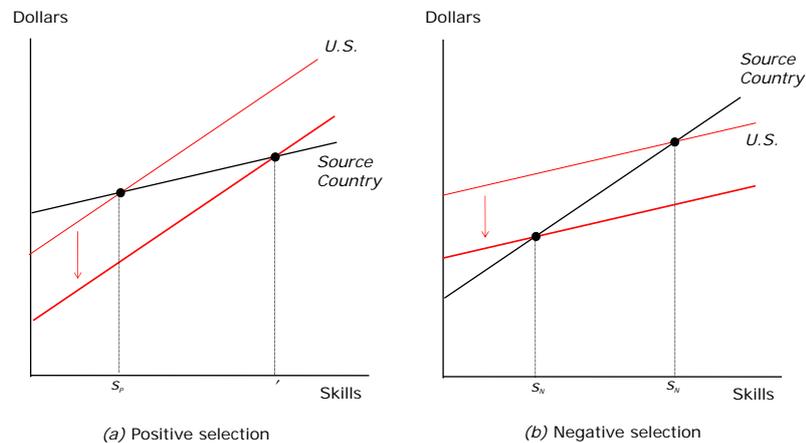


The Roy Model ctd.

Some other implications of the Roy model:

- A changing income level in the source or destination country affects the size of the migration flow, but not the type of selection.
 - Assume income in the US falls (or we take migration costs into account): The wage-skill line shifts down:
 - Figure 9.10a: s_p moves up, i.e. fewer (skilled) people migrate, but there is still positive selection.
 - Figure 9.10b: s_N moves down, i.e. fewer (unskilled) people migrate, but there is still negative selection.

Figure 9.10: The Impact of a Decline in U.S. Incomes



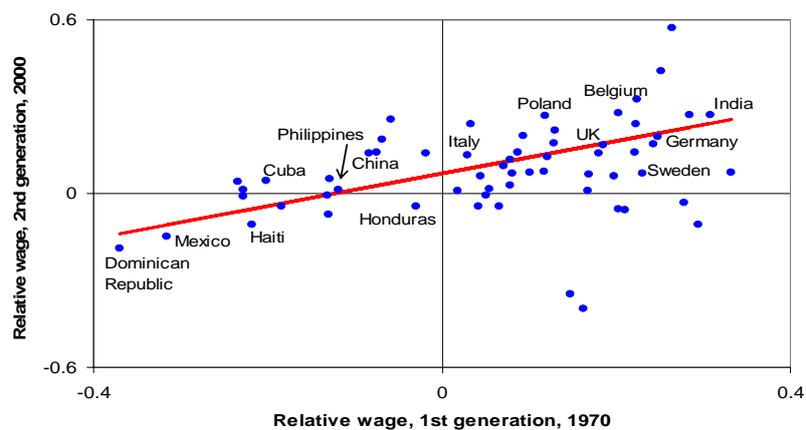
Some NZ evidence

- For some NZ evidence, see the 'Supplementary Reading List', p. 6/7. In lectures, I read from A. Garces-Ozanne and C. Weatherston (2007):
 - Economic and non-economic determinants of economic migration to NZ (1997-2001, from 56 origin countries).
 - They find robust evidence that migrant applications to NZ per head of origin population are positively related to:
 - Corruption in the origin country.
 - Origin country sharing a common language with NZ.
 - Stock of previous migrants from the country already in NZ.
 - NOTE: Explicit cost-benefit factors not statistically significant:
 - Relative GDP per worker, returns to education, travel cost.
 - **Conflicting evidence for NZ whether Roy model applies or not!**

9.7 Policy Application: Intergenerational Mobility of Immigrants

- Children of immigrants often do better in terms of earnings than their parents.
- Differences in earnings by ethnicity of original immigrant persist over time, at least to a certain extent (US evidence: intergenerational correlation of 0.56, see Figure 9.11).

Figure 9.11: Earnings Mobility between 1st and 2nd Generations of Americans, 1970-2000



Some other factors that might determine intergenerational mobility of immigrants

- Role of **social capital** in explaining income dispersion? Social capital defined here as “the set of variables that characterises the ‘quality’ of the environment where a person grows up or lives”.
 - Some argue that social capital helps to determine a person’s human capital.
 - There is a very large literature on social capital. It is often difficult to define it. Controversial topic. Here defined in terms of ‘role models’ and ‘peer pressure’. In many other applications it is ‘trust’.
 - Lots of factors beyond the influence of parents affect a child’s human capital accumulation, i.e. these factors have **human capital externalities**.
 - ‘Bad’ neighbourhoods & ghettos, membership in religious organisations, socio-economic background of a child’s classmates and friends etc.

End of Chapter 9