The Economics of International Migrations: Introduction, Some facts and Concepts

Giovanni Peri
(University of California, Davis and NBER)

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Lecture 1

The Economics of International Migrations: Overview

- **0) Introduction:**
  - **A Global Issue, History and Geography**
  - **Immigration to the US and Europe**
  - **Projecting future trends: Three Irresistible Forces for International Migrations.**
  - **Some simple preliminary Concepts and models**

- **1) Determinants of International Migration**
  - **A model of Optimal Choice**
    - **Volume of Migrants and selection of Migrants**
    - **Normal versus logistic specification and empirical implications**
  - **The Importance of Geographic, Economic, Demographic and Policy variables**
  - **Selection and Sorting by Education**

- **2) The Aggregate Effects of Immigration: can we identify them?**
  - **A Production Accounting Approach**
    - **On Employment**
    - **On Physical Capital**
    - **On Productivity**

The Economics of International Migrations: Overview

- **3) Labor Market Effects**
  - **The new "national" approach**
  - **Effects on Wages of Different types of workers**
  - **Complementarities and Substitutability**

- **4) Highly skilled Immigration and Innovation, Knowledge Diffusion and Entrepreneurship**

- **5) Task-Based approach to the international division of labor:**
  - **Manual and Communication continuum**
  - **Immigrants and Outsourcing**

Is Labor Mobile in the Global Era?

Export as % of World GDP	**27%**	Goods' price ratio richest/poorest	**1.9**
Foreign Investment as % of total investments	**15-20%**	Cost of capital ratio richest/poorest	**1.4**
Migrants as % of world population	**2.9%**	Wage differentials richest/poorest	**12**
International tourism/business arrival per year as % of world population	**14%**		

Source: Richard Freeman (2006) "People Flows in Globalization" NBER WP 12315
Period: early 2000's

"All but Labor" Globalization?

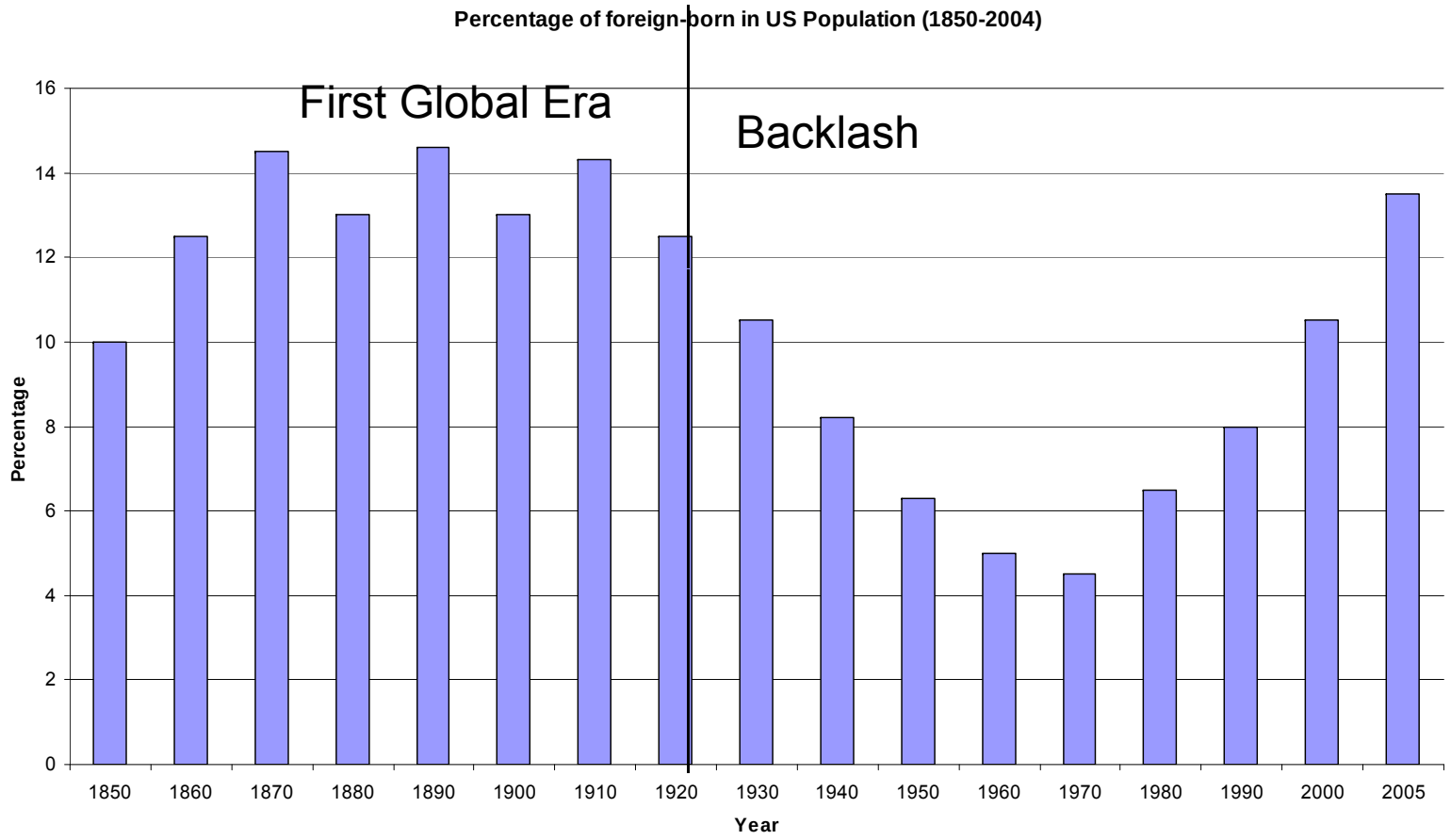
- Labor is much less mobile across countries than goods, capital and technology which are increasingly free to move.
- Migration costs are larger than trade but immigration laws are much more restrictive than trade and capital movement regulations.
- The notion that labor movements are not "necessary" or "desirable" to raise living standard of countries has dominated policy making across the world (Pritchett 2006).
- Possible exception: highly educated. Their migration rate in the world (as % of the tertiary educated population) was 6% in 2000.

The public opinion seems more adverse to immigration than trade, in part for non-economic reasons (cultural homogeneity, security issues)

- PEW global attitude report (2007)

	USA	France	UK
Percentage saying "trade is good for the country"	59%	78%	78%
Percentage saying "we should further restrict immigration"	77%	67%	78%

Are Immigration Pressures new? Not for the US



What are the likely trends for the future?

- Three Irresistible forces will continue to increase the migration pressures between poor and rich countries.
- In the short-run the recession is likely to reduce international migrations but not for long
- The response of policies will be important: currently there is a mixed evidence in terms of immigration policies

First Irresistible force driving International Migrations

- The **real wage gaps** between potential sending and receiving countries are in the order of 17,000 US $ per year as of 2005 and growing, up from 10,000 $ in 1980.

- This is much higher than the real wage gap between sending and receiving countries in the first global era (which was closer to 2-3,000 $ per year in 2000 PPP) and likely to increase further.

Second Irresistible force for Migrations

- Different demographic Future.

  - **The current rich countries of Europe, north America and Japan have an ageing (and some a shrinking) labor force.**

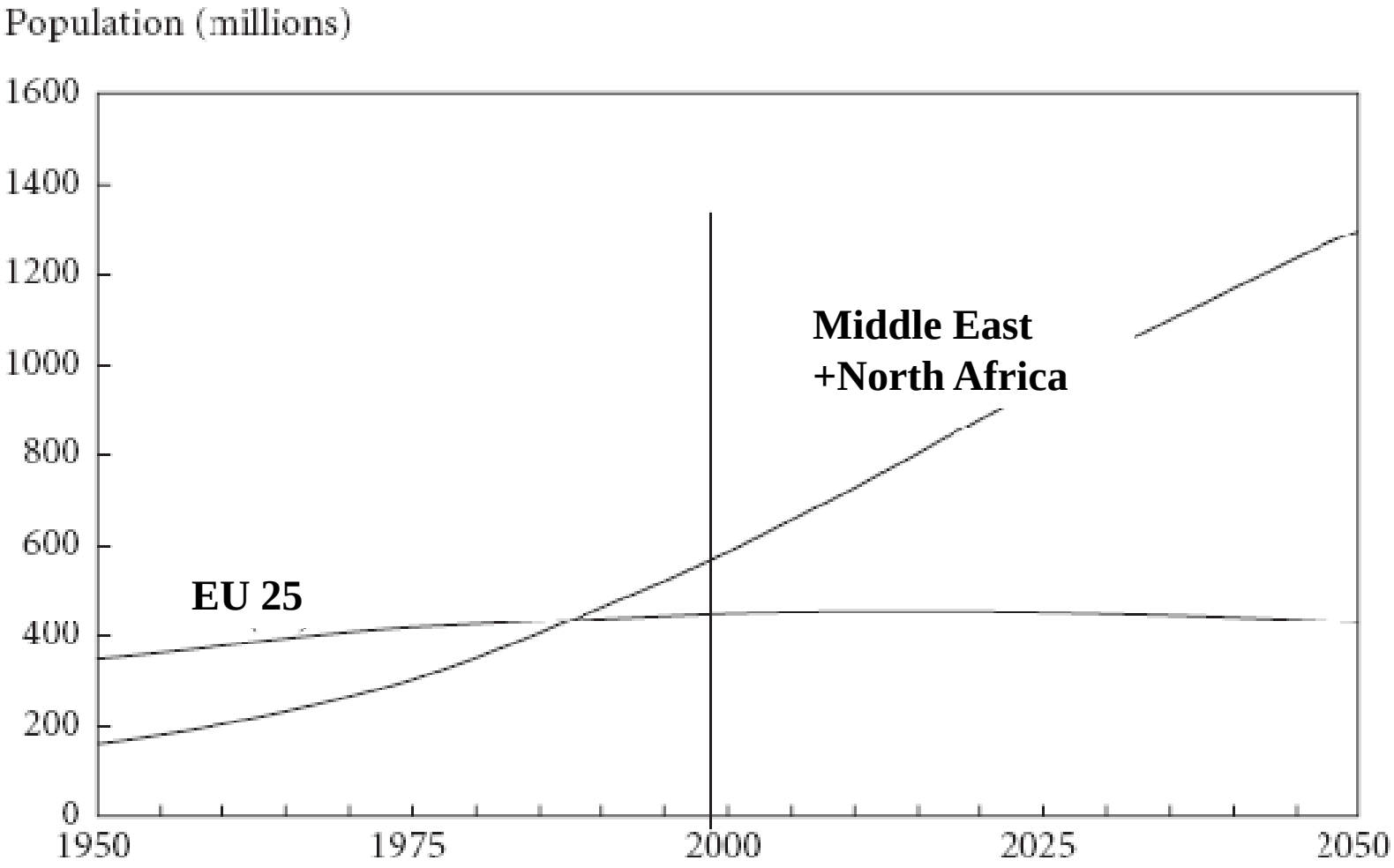
  - **Labor force of Latin American and Middle-East, South East Asia and North African countries are younger and growing faster.**

  - **This is more dramatic for Europe and Japan than for the US. Moreover this is a transition: as countries undergo demographic revolutions the imbalance will decrease (China has already experienced it, Mexico as well).**

Average values in countries of destination and origin, (from Ortega and Peri 2009)

variable	1980	1990	2000	2005
GDP per person Origin	7,944	9,442	11,198	12,018
GDP per person Destination	17,979	21,916	28,565	29,022
Difference	**10,000**	**12,000**	**17,400**	**17,000**
Share of population between 14 and 24 years, Origin	9.2%	8.6%	8.82%	8.81%
Share of population between 14 and 24 years, Destination	7.1%	6.1%	5.25%	4.99%
Difference	**2.1%**	**2.5%**	**3.5%**	**3.8%**

Figure 1-4. *The Relative Populations of the European Union (25 Members) and Its "Muslim Tier," 1950–2050*



Source: United Nations Department of Economic and Social Affairs 2002 (Paul Demeny seminar slides)

Third Irresistible force for Migrations

- Increasing demand for basic non-traded services and decreasing share of workers with low education in rich countries.
  - Women labor force participation, aging population, rising income and education has increased demand for some services
  - At the same time, the share of US workers with no high school degree has decreased (see below)
  - Technology has been better at substituting “routine production tasks” (bookkeeping, clerical work, manual routine tasks) than “manual non-routine tasks”. We will see more of this later.

Share of US-born workers with no high school degree (US census)

1960	1980	2000	2005
0.50	0.22	0.14	0.11

At the same time the employment share of “service occupations” has increased between 1980-2005 (Autor and Dorn 2007)

US Department of Labor forecasted in 2008 large employment increases in occupations such as

- Food preparation and service
- Waiters
- Vehicle Drivers
- Nurses Aids
- Building and Ground Cleaning jobs
- Home health aides
- Landscapers

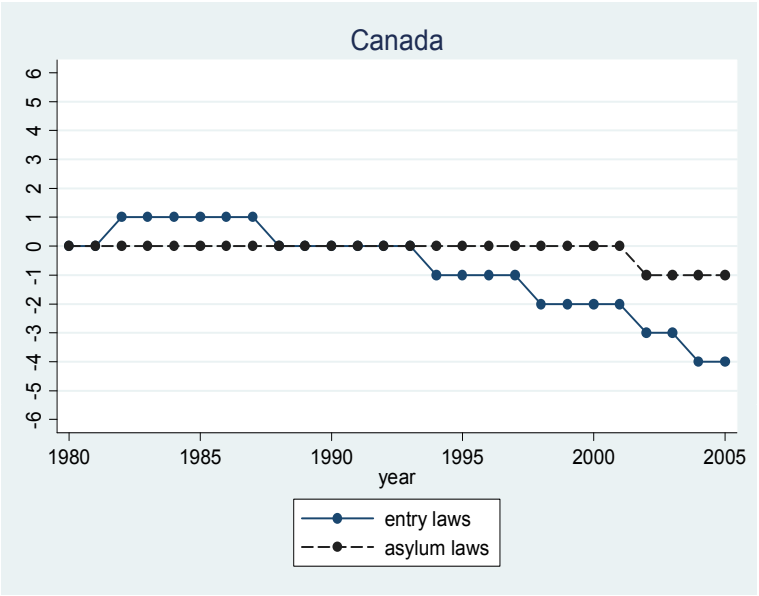
- Total creation of 5 million jobs by 2010 (Projections in 2007).

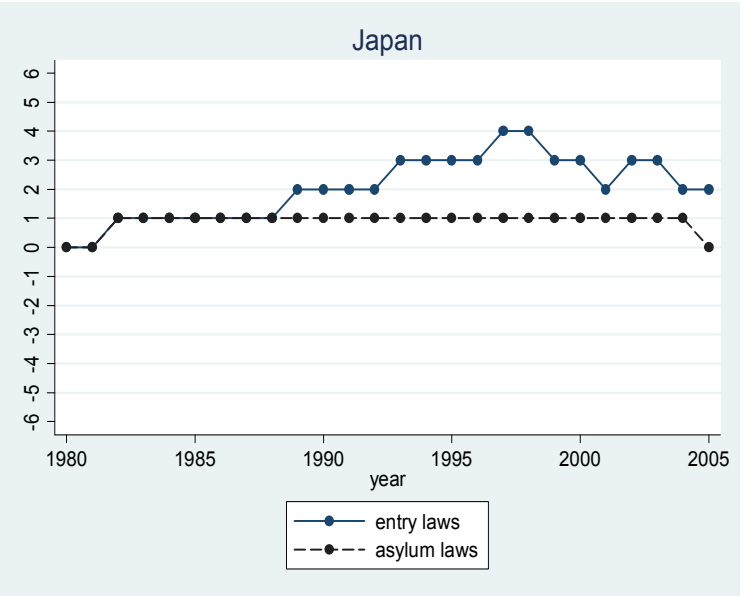
- Typically manual, Non Tradable occupations associated with low education. Less educated immigrants specialize in these jobs.

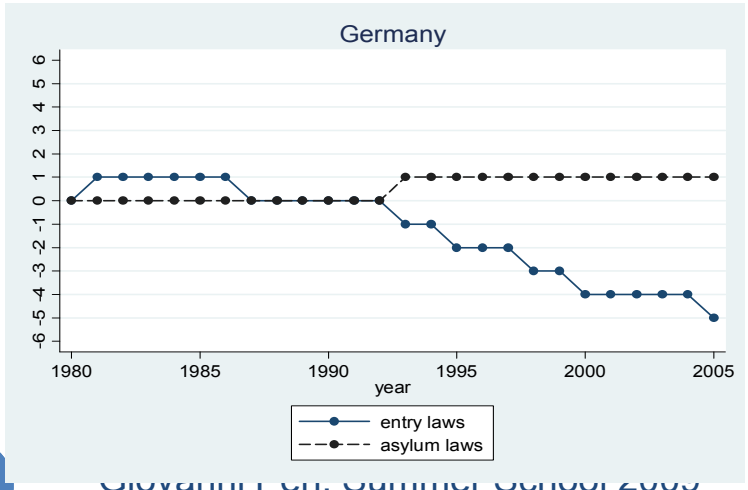
What was the Policy Response?
How did receiving countries laws changed?

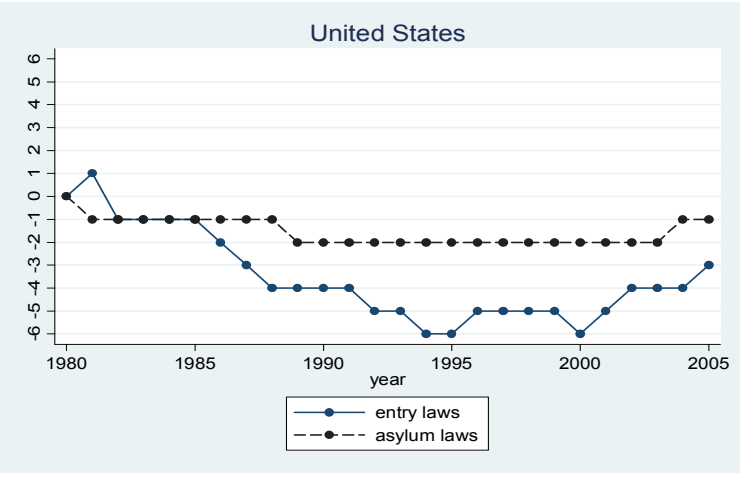
- We need to Collect all immigration laws changes 1980-2005 in 14 OECD receiving countries (total 250 reforms)
- Define some measure of :
  - **Tightness of Entry laws**
    - **-1 (+1) if lower/increase requirement-documents-fee for entry**
    - **+1 (-1) Decrease/increase the number of visa, temporary entries**
  - **Tightness of Stay Laws**
    - **(-1/+1) Decreases (increases) the number of years needed for permanent stay**
    - **(-1/+1) Eliminates/introduces residence, registration constraints**
  - **Tightness of Asylum**
    - **Same a Entry, for Asylum seekers**

Tightness of immigration laws

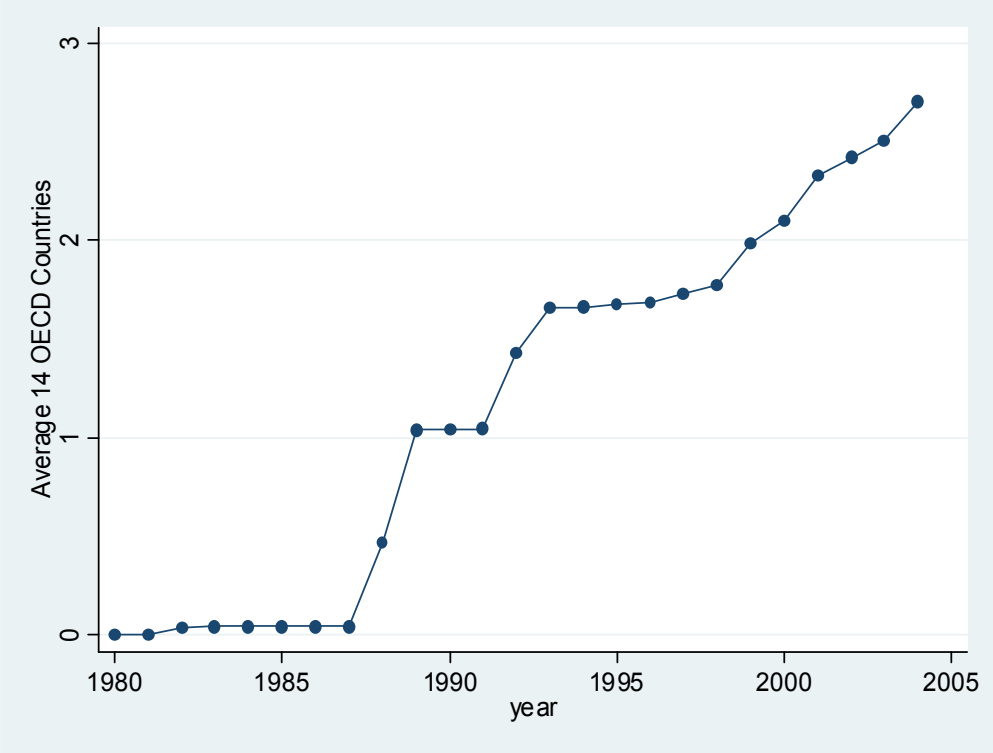






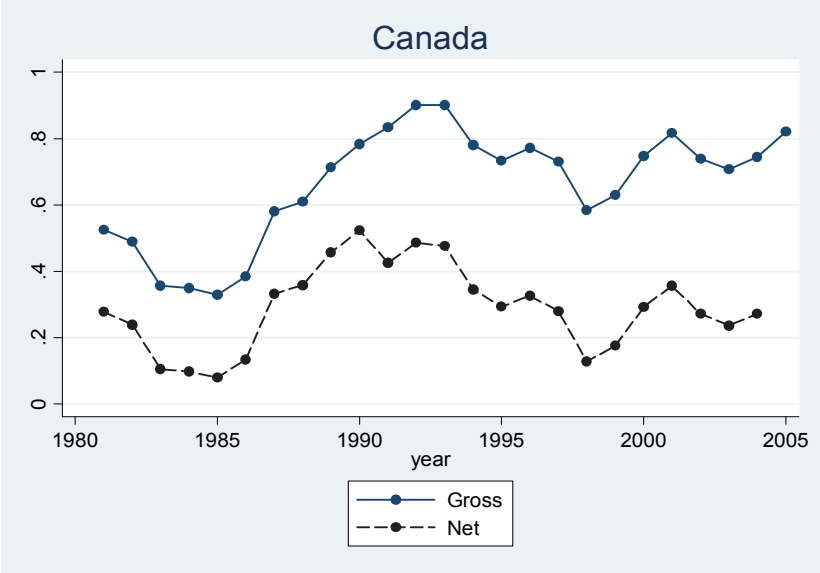


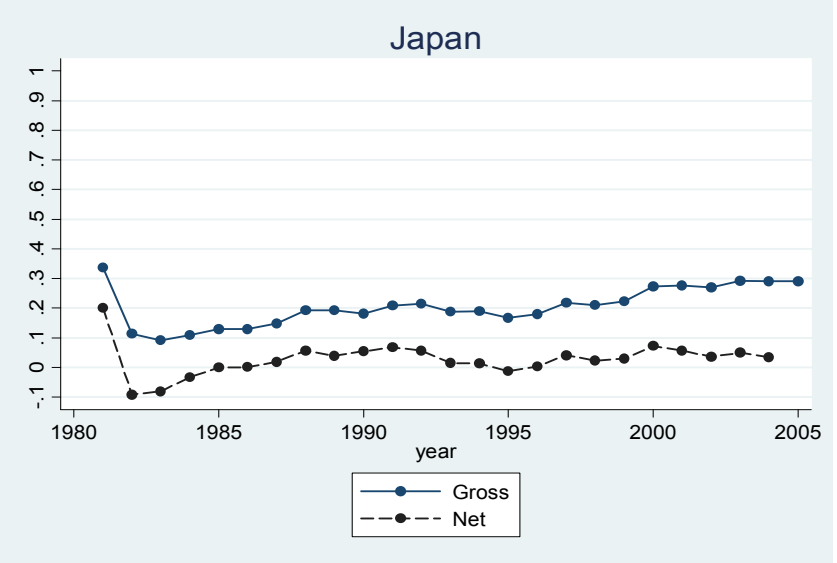
Possible commonality: emergence of laws with a tendency to prefer highly educated

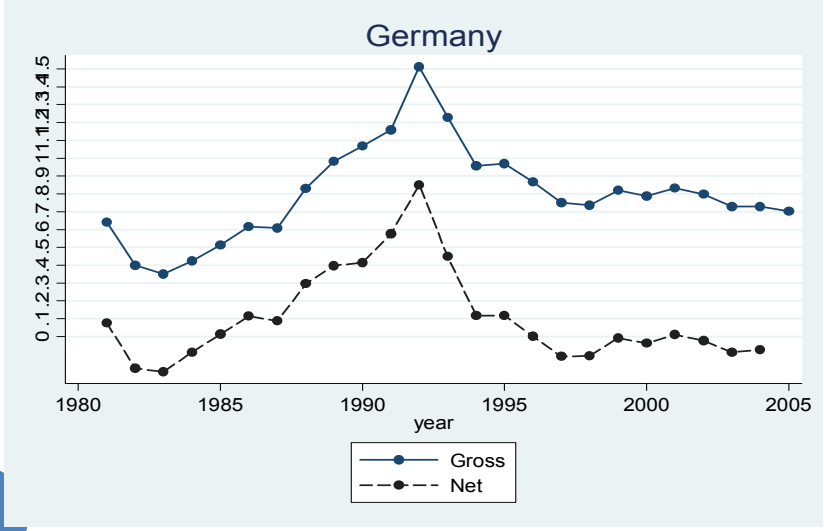


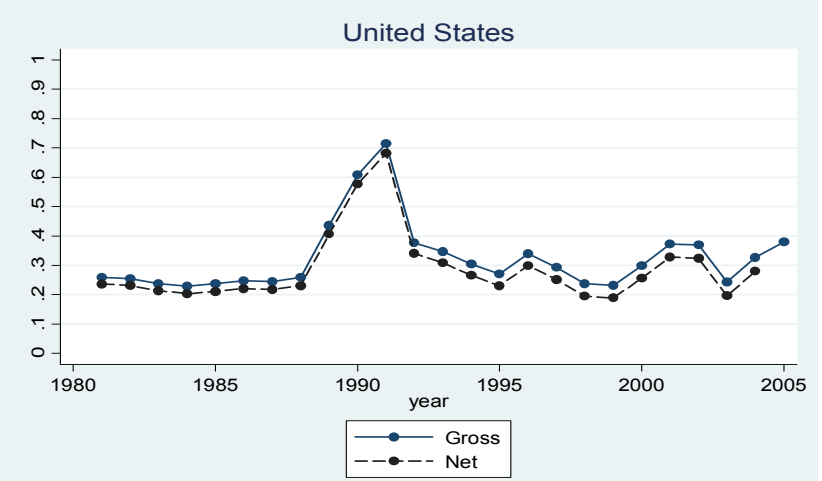
Index increasing by 1 each time a pro-kill reform is passed in one of the 14 OECD countries, weighted by population of the country.

Size of immigration rates: very different and fluctuating across countries









The multiplicity of Determinants of Migration flows requires an organizing model

- How do we model the migration choice?
- What are the most important determinants of such a choice? How do they affect quantitatively the flows?
- Once we have identified the determinants of these flows can we analyze their consequences on the receiving country?

Reference: Migration in the Classic Factor Endowment model

- In the simple Hekscher-Ohlin model, migration is a movement of labor.
  - The focus is on understanding its consequence on wages, return to other factors and specialization.

- Main Predictions:
  - In the short-run (with capital as a sector-specific factor) immigration would reduce wages and increase return to capital in both industries
  - In the long run, no effect on wages and rental price of capital, only on specialization, expansion of the labor-intensive sector and downsizing of the capital-intensive sector.
  - The predictions on wages and rental rate of capital are also shared by the classical one-sector model (Solow)

Illustration of the short-run effect of Immigrants in a two-sector specific factor model

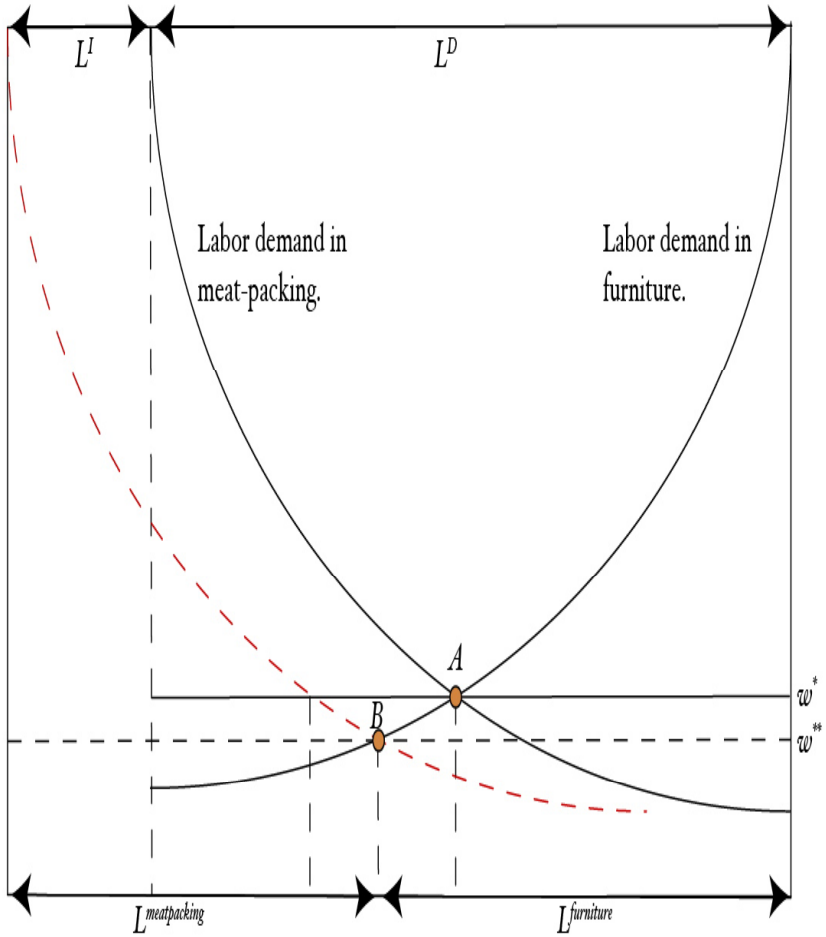


Figure 12.1: Immigration, Assuming Foreign Labor *Substitutes for* Domestic Labor.

Two sectors, One type of Labor. Immigrants and natives are identical. Each sector has a specific type of capital
Short run effects: decrease in Wages, Increase in the return to Capital in both sectors

Illustration of the Long-run effects:

Increase in Home Labor due to Immigrants

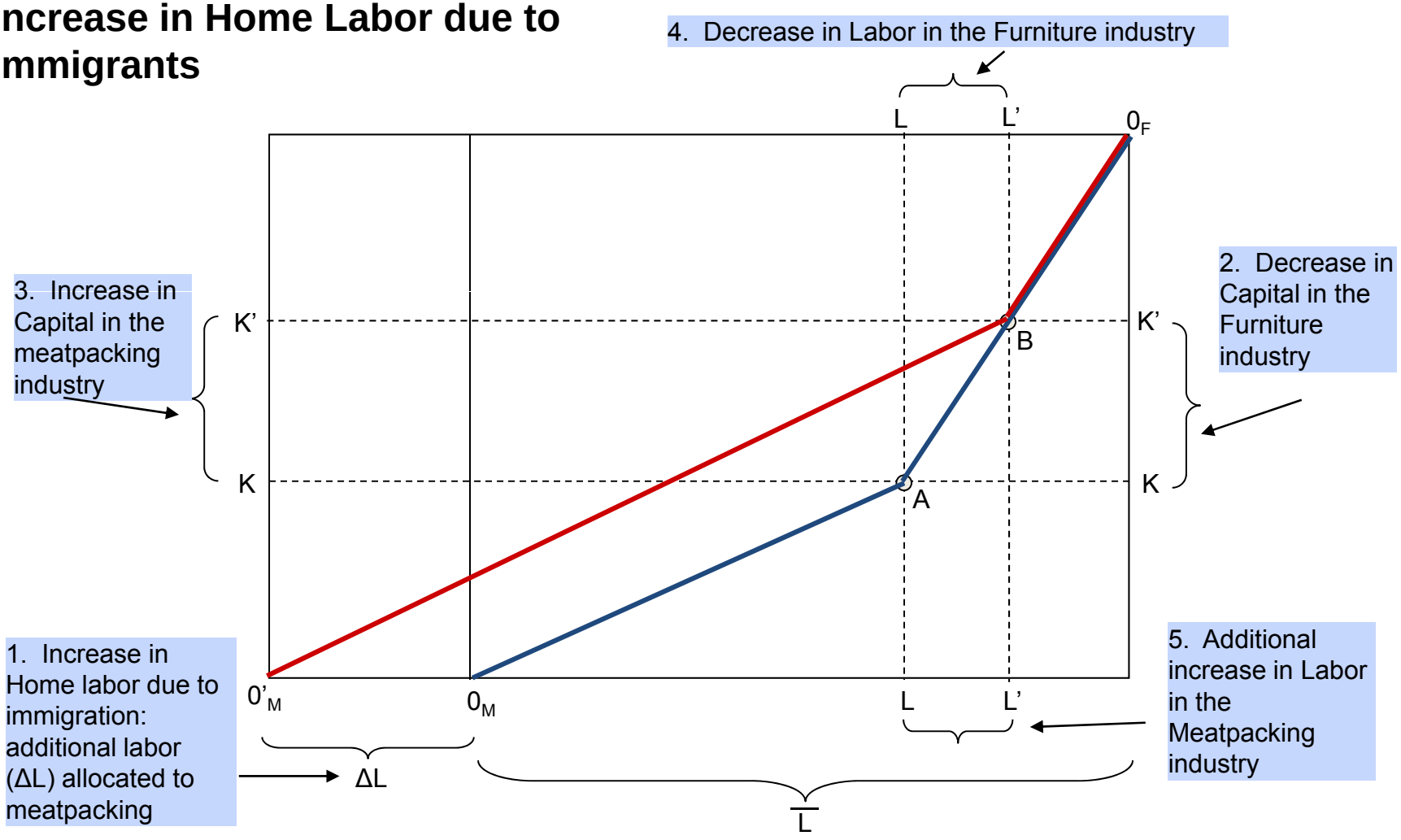
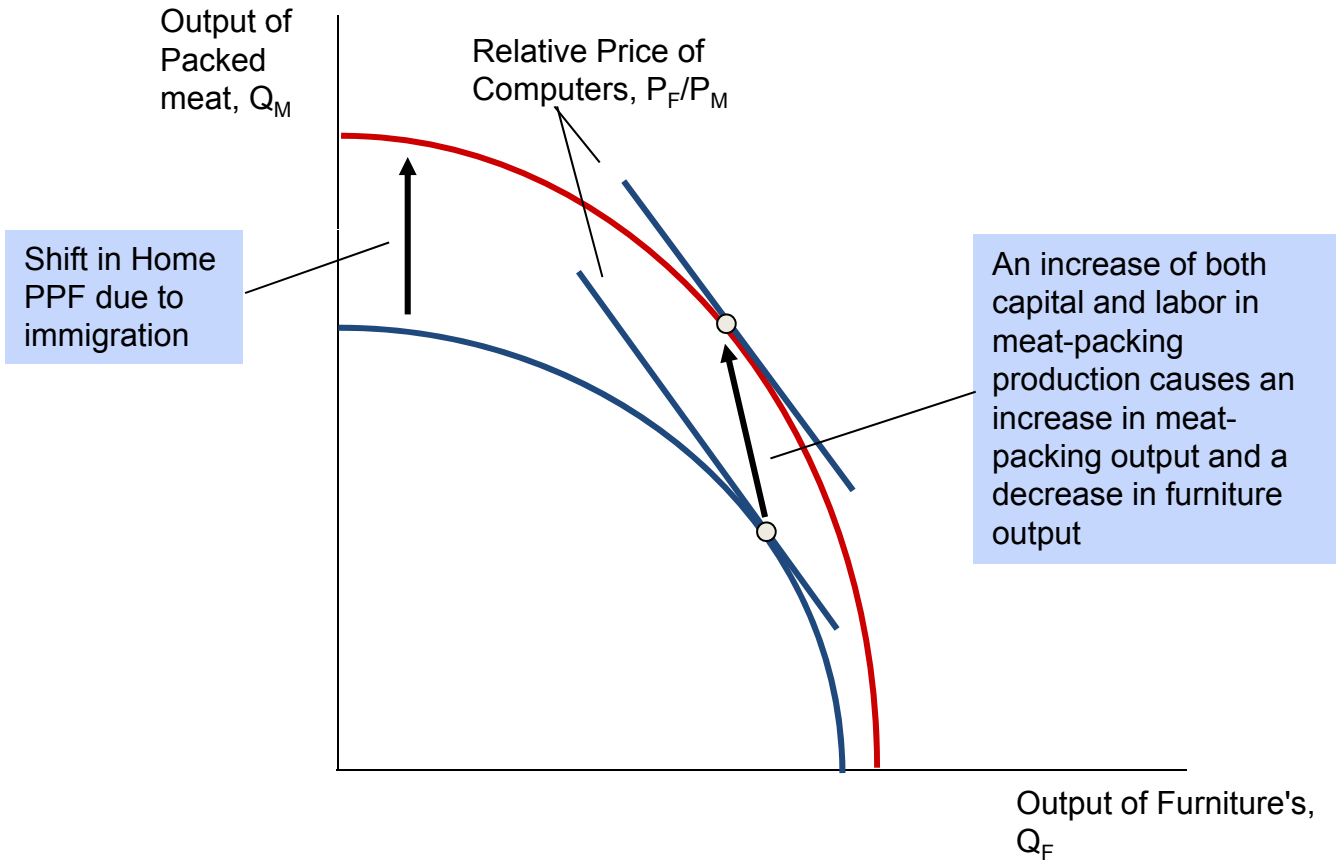


Illustration of the Long-run effects:

Figure 5.9 **The Long-Run Effect on Industry Outputs of an Increase in Home Labor due to Immigrants**



Summing up:

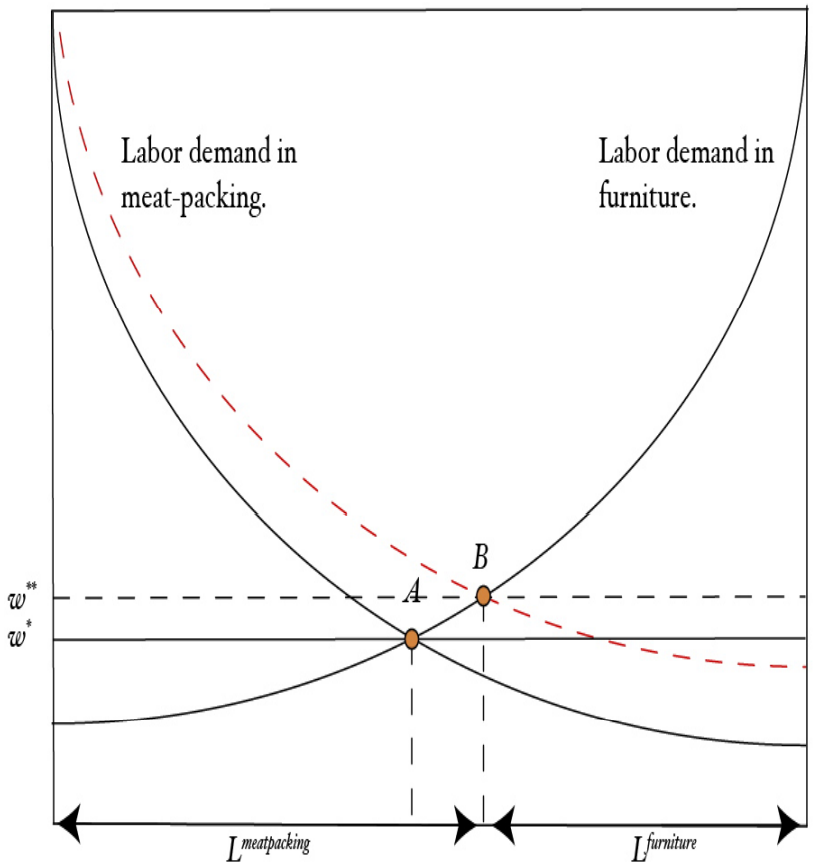
In the short-run wages decline, real rental price of capital increases. In the long-run Wages and rental price of capital are unchanged (international factor price equalization).

Important issue: how long does it take for capital to adjust (flow) passing from the short-run to the long-run consequences?

Sector receiving all immigrants also attracts capital and more labor and expands (Rybczinsky theorem).

The other sector, the one not receiving the immigrants and that is capital intensive, shrinks.

Small modification: foreign labor is complementary to native labor in the two-sector model, short run



- If immigrants are absorbed in Meatpacking and they are assigned to different tasks because of different skills it is as if meatpacking uses more of another factor and marginal productivity in the sector increases.
- Wage increases
- If immigrants are not perfect substitutes nor perfect complement both effects are at work: total supply of L in meatpacking increases, but demand for native L also increases

Second reference: the monopolistic competition (variety) model

- If immigrants increase the size of the labor force in a world where differentiated goods are produced, they can start their own enterprise and add to produced varieties.

- Larger economies have more services and this has a positive "productivity" effect or positive "consumption variety" (real income) effects.
  - Impact of immigrants on variety of consumption services (restaurants, theatres, landscaping and house remodeling) can be important and hard to measure.

Gains from Immigration and Winners/Losers in the classical, modified and monopolistic competition model

- Immigration Surplus to national factors in all three models is positive. In the first model it is second order. In the second model it is first-order for natives. In the third model it depends on the substitutability across goods.

- Distributional effects are different:
  - in the first native labor looses and capital gains. Immigrants gain assuming that they come from countries with lower wages.
  - in the second native labor and capital gain and immigrant also gain (but less than in the first).
  - In the third all native factors gain and immigrants gain more than in the first case.

Immigration surplus

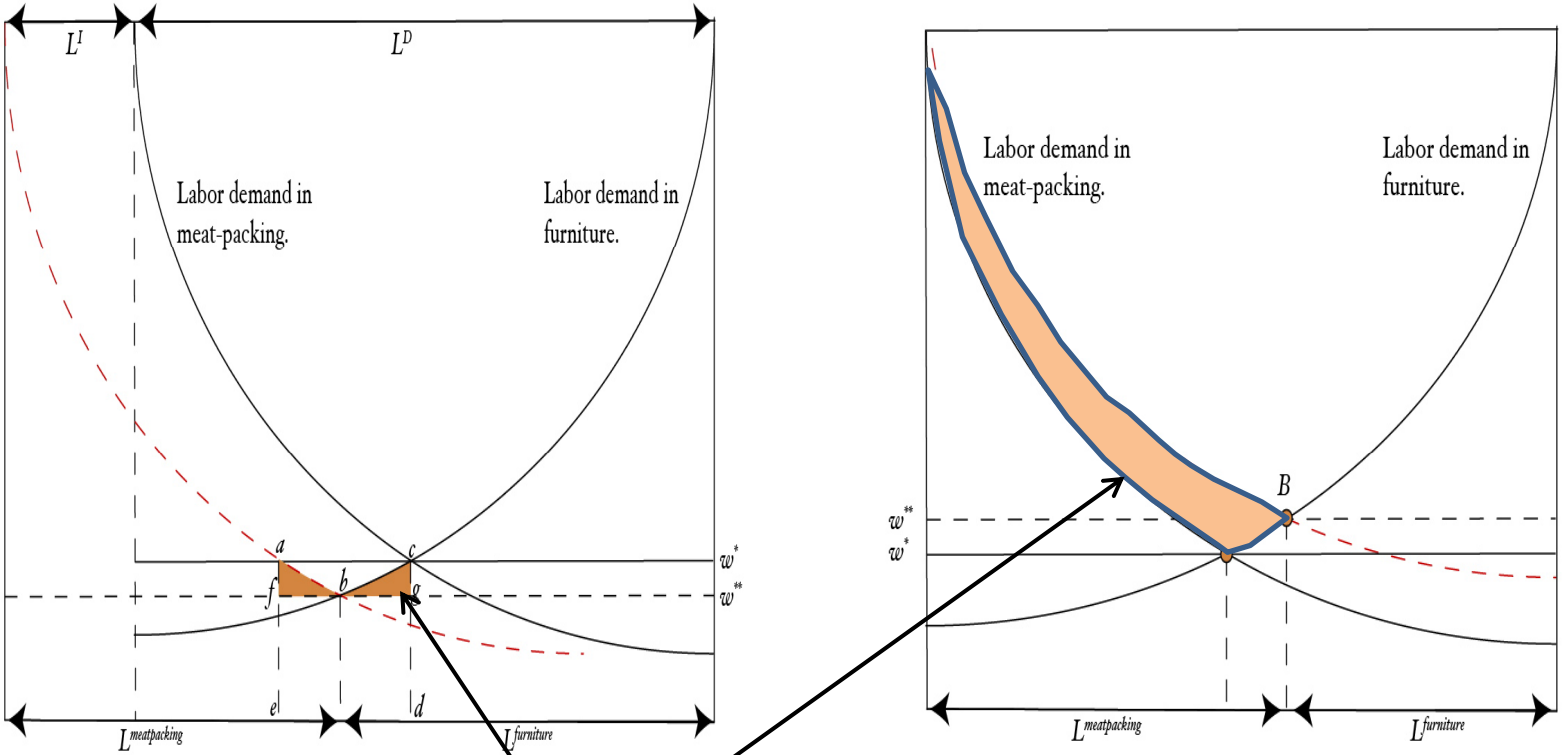


Figure 12.3: The Rise in Income to the Native-born Population.

What did we learn?

- 1) Labor mobility is still much smaller than mobility of goods, capital, technology.
  - In large part due to immigration restrictions
  - With the possible exception of highly educated

- 2) The pressures producing international mobility of labor are likely to grow:
  - Real wage differentials
  - Aging of the rich world
  - Demand for manual non tradable tasks, and decreasing supply in rich countries.

- 3) Simple classical, modified and monopolistic competition model suggest no negative effects from immigrants in the long-run for wages and total income of native factors, possibly positive.

- 4) In the short-run some distributive (relative) effects can take place but the absolute effect on wages of natives depends on how “different” are immigrants as labor inputs, and how “differentiated” are the goods-services they produce.