

国际经济学

劳动力的跨国流动：移民模型

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- 1 Motivation
- 2 Overview of Global Migration
- 3 An Application of the Specific Factors Model: Migration

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Memories of Mariel

- 面对日益增强的不同政见、住房和工作短缺以及急剧衰退的经济, 古巴总理菲德尔·卡斯特罗于 1980 年 4 月 4 日从在哈瓦那的秘鲁大使馆撤走了卫队。.....在卫队撤走后不到 48 小时, 大群的古巴人涌入了郁郁葱葱的秘鲁大使馆庭院, 要求避难.....4 月中旬, 卡特总统签发了一份总统备忘录允许最多 3 500 名难民在美国避难.....但当 4 月 21 日难民开始抵达佛罗里达海滩时, 卡特政府被惊呆了——难民数量最终达到了 125000 人。
- Mariel 移民会不会压低迈阿密其他工人的工资?



Thousands of Cubans packed aboard boats of all kinds and made the journey to a new home in the United States in 1980. The exodus was dubbed the "Mariel Boat Lift". photograph credit Miami Herald

Russian Jews to Israel after 1989

- the emigration of Russian Jews to Israel after 1989, when the Soviet Union relaxed its restrictions on such departures.
- From late 1989 to 1996, some 670,000 Russian Jews emigrated to Israel, which increased the population in Israel by 11% and its workforce by 14%.
- the Russian immigrants were more highly skilled than the existing Israeli population.
- 问题：这些高技能的犹太人当地工资水平会产生怎样的影响？



30 年来有多少中国人移民美国-《2015 胡润中国投资移民白皮书》

- 中国人海外移民最想去哪里？
- 海外移民的主要 Motivations
 - 资产配置
 - 分散风险
 - 子女教育
- 220 万中国出生者居住在美国
- 30 年间 160 万人获得美国绿卡
- 中国人靠什么途径移民美国？
 - 直系亲属移民 19.2%。
 - 非直系亲属移民 34.1%。
 - 职业性移民 25.3% What's the meaning of Brain Drain
 - 通过庇护获得美国绿卡 21%
- 华人在三大领域就业人数最多
 - 1 管理和职业性领域 53.4%
 - 2 销售和办公室文员领域 20.8%
 - 3 服务业领域 15.4%
- 八成华裔移民属于工薪阶层

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International migrants: numbers and trends

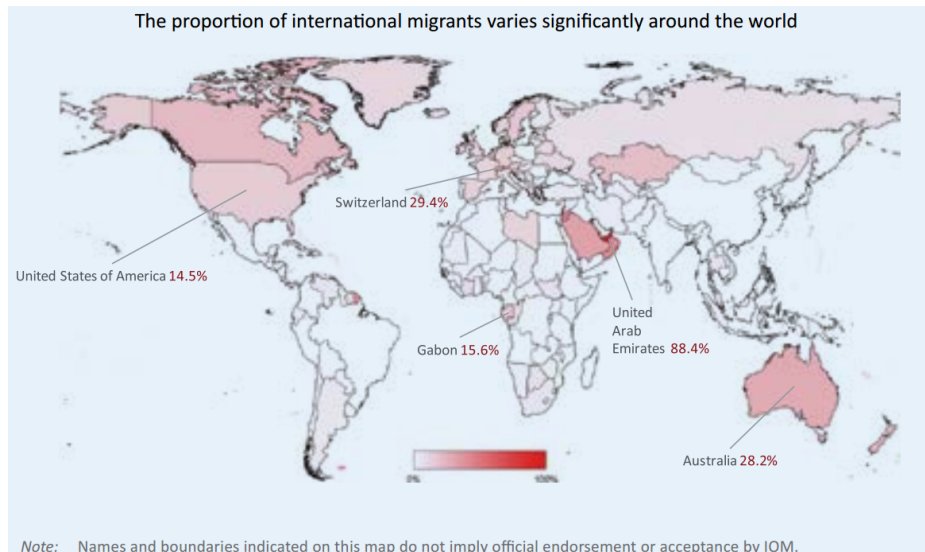
Table 1. International migrants, 1970–2015

Year	Number of migrants	Migrants as a % of world's population
1970	84,460,125	2.3%
1975	90,368,010	2.2%
1980	101,983,149	2.3%
1985	113,206,691	2.3%
1990	152,563,212	2.9%
1995	160,801,752	2.8%
2000	172,703,309	2.8%
2005	191,269,100	2.9%
2010	221,714,243	3.2%
2015	243,700,236	3.3%

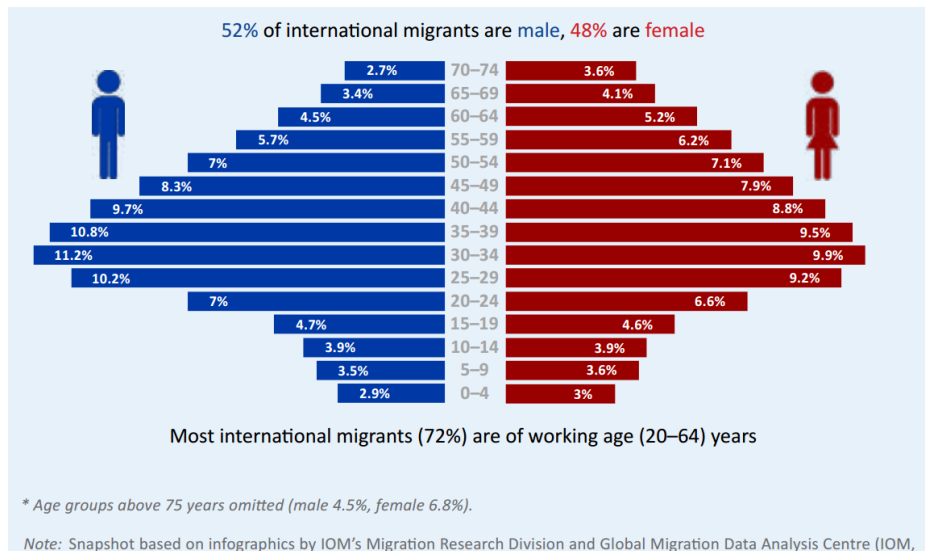
Source: UN DESA, 2008 and 2015a.

Note: The number of entities (such as States, territories and administrative regions) for which data were made available in the 2015 UN DESA *Revision of International Migrant Stock* was 213. In 1970, the number of entities was 135.

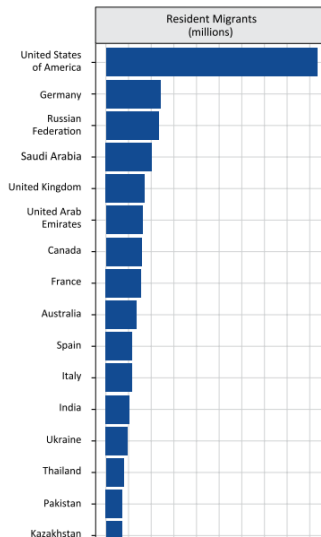
proportion of international migrants



sexual structure of international migration

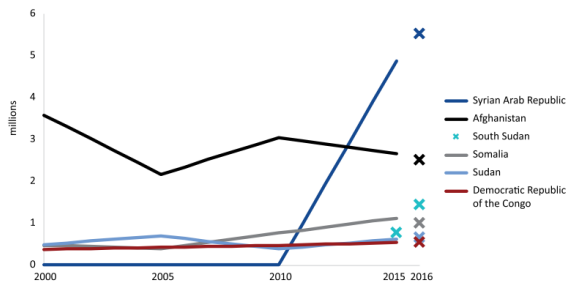


Main Destination and Main Origins



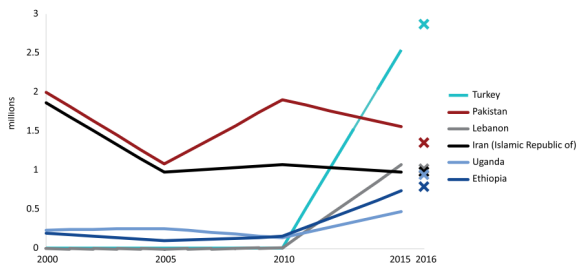
Refugees and asylum seekers

Figure 6. Number of refugees by major countries of origin as of 2016 (millions)



Source: UNHCR, n.d. (accessed on 18 July 2017).

Figure 7. Number of refugees by major host countries as of 2016 (millions)



Source: UNHCR, n.d. (accessed on 18 July 2017).

Note: Lines indicate five-year trends and crosses indicate a single year's data.

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International Factor Movements

- Movements in factors of production include
 - labor migration (today)
 - the transfer of financial capital through international borrowing and lending (International Finance, another course I taught)
 - transactions of multinational corporations involving direct ownership of foreign firms (the following sections)
- As we will see, the Specific Factors model is useful to conceptually analyze the causes and consequences of migration

A One-Good Model of Migration

- Suppose there are two countries in the world, Home and Foreign
- They produce the same good, so there is no motive for trade in goods in equilibrium
- This good is produced by combining land T and labor L using a neoclassical production function $F(L, T)$
- $F(L, T)$ features constant returns to scale and diminishing marginal products
- The supply of land in each country is fixed (T and T^*)

Real Wages

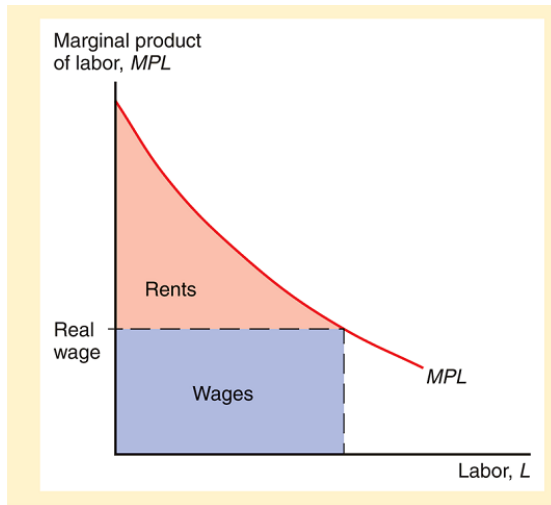
- Real wages will be equal to the marginal product of labor in the production of the good

$$w = \partial F(T, L) / \partial L$$

- Diminishing returns to scale imply that wages are decreasing in L
- Complementarity between land and labor also implies that w is increasing in T
- Furthermore, $w > w^*$ if and only if $T/L > T^*/L^*$

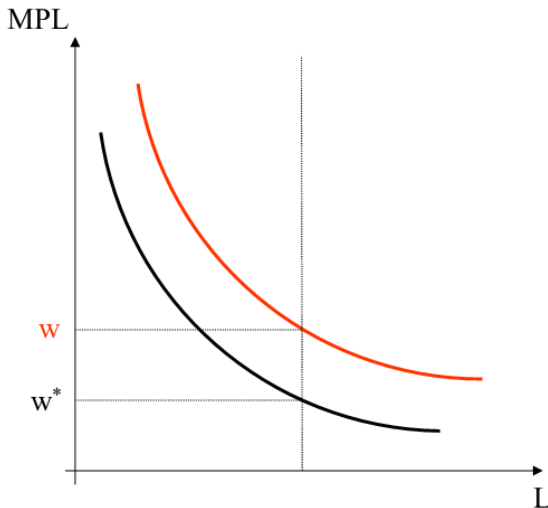
Graphical Analysis

- The total wage bill is given by $w \cdot L$
- The remaining output (i.e., income) accrues to land -owners in the form of land rents
- In the figure this is the area below the MPL curve and above the real wage level



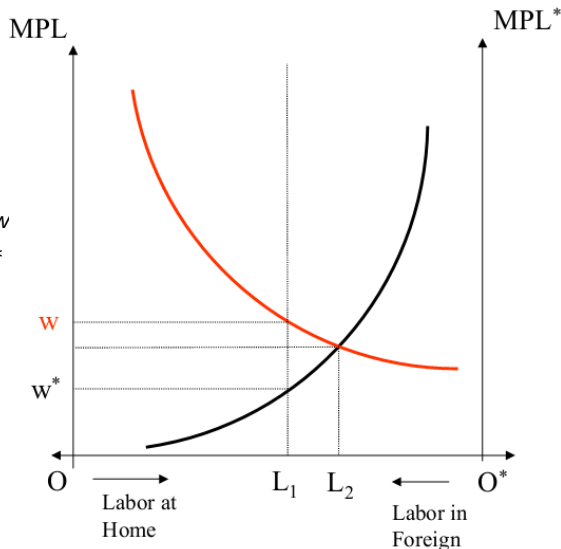
Incentives for Migration

- A land-abundant country (say Home) has a higher wage without migration
- Hence, workers might have an incentive to migrate from Foreign to Home
- More generally, workers have an incentive to migrate away from countries where they are **relatively abundant**



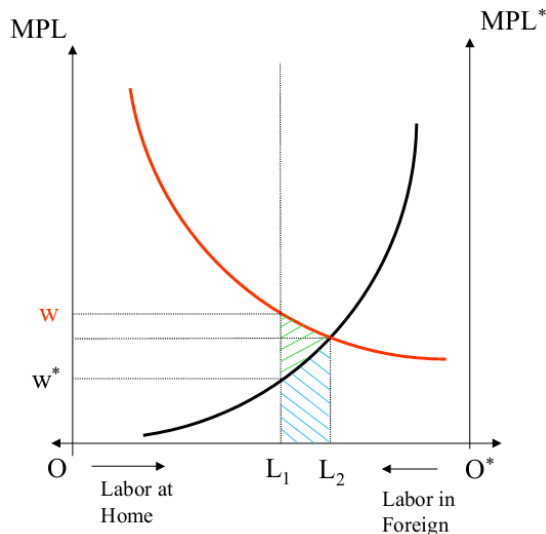
Level of Migration

- How much immigration will there be?
- Note that as L at Home increases, w falls, while as L^* in Foreign falls, w^* increases
- We can just flip around the Foreign MPL schedule
- Migration from Foreign to Home is $L_2 - L_1$



Effect of Migration on Output

- Note that output in each country is equal to the area below the MPL curve up to the level of employment
- Relative to the equilibrium in L_1 , the area in blue below the MPL^* between L_1 and L_2 is lost
- But this is gained at Home, as well as the extra area in green
- So world output goes up!



Distributional Effects

- Notice however that not everybody gains from migration
- Native workers in the labor - scarce country are worse off
- Landowners in the labor - abundant country are also worse off
- But these agents could (theoretically) be compensated so as to make migration Pareto superior

Some Caveats

- Although it seems intuitive that immigration will hurt native workers
- If the second factor is “skilled workers” rather than “land” , then these skilled workers in the recipient country will benefit from migration
- In the Heckscher - Ohlin model studied in the last lectures, wages might actually be predicted to show little sensitivity to migration

Impediments to Migration

- In the real world, wages do not actually equalize due to several factors
 - barriers to migration such as policies restricting immigration
 - differences in skill (perhaps due to language)
 - natural reluctance to move

Empirical Evidence

- Early migration wave: from low wage to high wage
- Wages subsequently grew faster in origin countries

	Real Wage, 1870 (U.S. = 100)	Percentage Increase in Real Wage, 1870–1913
Destination Countries		
Argentina	53	51
Australia	110	1
Canada	86	121
United States	100	47
Origin Countries		
Ireland	43	84
Italy	23	112
Norway	24	193
Sweden	24	250
Source: Jeffrey G. Williamson, “The Evolution of Global Labor Markets Since 1830: Background Evidence and Hypotheses,” <i>Explorations in Economic History</i> 32 (1995), pp. 141–196.		

U.S. Immigration

- Two waves of immigration: early 20 th cent. (Eastern & Southern Europe) and last few decades (Central/South America and Asia)

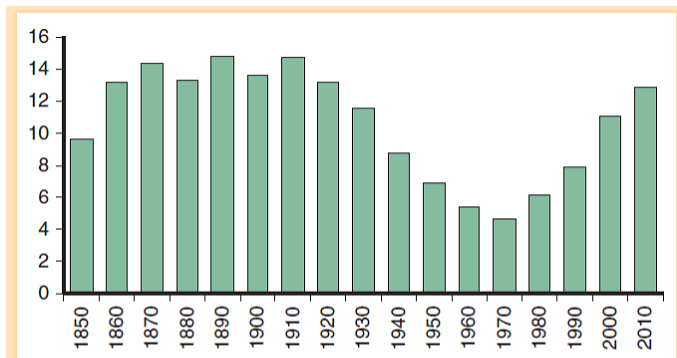


FIGURE 4-14

Foreign-Born Population as a Percentage of the U.S. Population

Recent U.S. Immigration

- Recent growth especially high among workers with the lowest education levels and the highest education levels

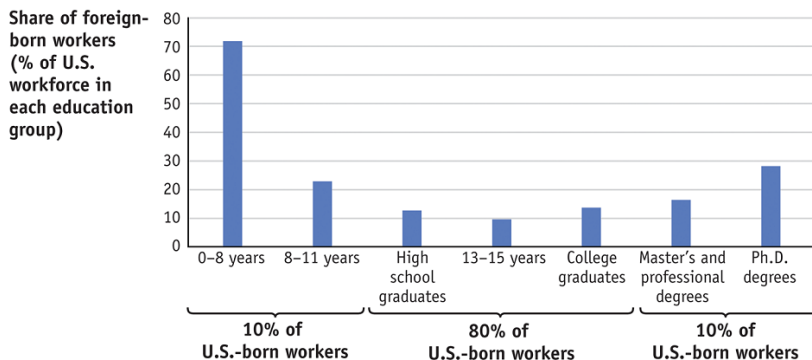


Figure 5.4 Share of Foreign-Born Workers in U.S. Workforce, 2008, Feenstra and Taylor: International Economics, Second Edition Copyright © 2011 by Worth Publishers

Borjas, Freeman and Katz (1996)

- BFK use variation across U.S. regions in the distribution of the immigrant population to analyze the effect of immigration on wages
- For 1980 and 1990, they estimate separately for men and for women the equation:

$$\ln w_{ijk} = \alpha_t AGE_i + \beta_t EDUC_i + \gamma_t (I/N)_{jk} + e_{ijk}$$

- i is individual, j is education group and k is region
- I/N is the ratio of immigrants to natives in the relevant region and education category

BFK (1996)

- They find that the coefficient is not robust (sometimes +, sometimes —)
- **Problem of selection** : do immigrants choose to move to regions with high wages, and are people with skills in high demand more likely to migrate?
- When regressing changes in wages on regional changes in I/N , they find generally (though not always) negative coefficients

TABLE 1—CROSS-SECTIONAL IMPACT OF IMMIGRATION ON NATIVE WAGE [DEPENDENT VARIABLE = $\ln(\text{WEEKLY WAGE})$]

Independent variable	Regression coefficients			
	Male natives		Female natives	
	1980	1990	1980	1990
Relative number of immigrants in metropolitan area j (I_j/N_j)	-0.0173 (0.0813)	0.2869 (0.0721)	0.4525 (0.0941)	0.5588 (0.1059)
Relative number of immigrants in metropolitan area j and education group k (I_{jk}/N_{jk})	-0.0119 (0.0410)	0.1346 (0.0293)	0.2876 (0.0621)	0.2865 (0.0622)
Sample size	312,446	299,202	268,649	288,620

A Natural Experiment: Mariel Boatlift

- Mass movement of 125,000 Cubans who departed from Cuba's Mariel harbor for the United States between April 15 and October 31, 1980



A Natural Experiment

- Most Cubans ended up in Miami (increased Miami labor force by 7%)
- Empirical strategy (Card, 1990): how did the inflow affect Miami wages and employment relative to **comparable** cities (Atlanta, Houston, Los Angeles, Tampa)?
- Answer: virtually no effect
- Concerns about whether Cuban immigrants were “representative” of typical immigrants

The Bigger Picture

- Of course, even when only focusing on economic considerations, the case for immigration needs to take other factors into account
 - For instance, effects on tax revenue and government spending
- Swiss author Max Frisch: **"We asked for labor, but people came"**