

Applied Research in Public Policy Making
Fall 2024

Benefits and costs of migration
Week 2

Martin GUZI

martin.guzi@econ.muni.cz

Outline

1. Theory of migration
2. Push and pull factors of migration
3. Benefits and costs of migration
4. Remittances

THEORY OF MIGRATION

Adam Smith (1776) was the first economist to write on migration:

... the wages of labour vary more from place to place than the price of provisions. The prices of bread and butcher's meat are generally the same or very nearly the same through the greater part of the United Kingdom. These and most other things which are sold by retail, the way in which the labouring poor buy all things, are generally fully as cheap or cheaper in great towns than in the remoter parts of the country ... But the wages of labour in a great town and its neighbourhood are frequently a fourth or a fifth part higher than at a few miles distance. Eighteen pence a day may be reckoned the common price of labour in London and its neighbourhood. At a few miles distance it falls to eight pence, the usual price of common labour through the greater part of the low country of Scotland, where it varies a good deal less than in England. Such a difference of prices, which it seems is not always sufficient to transport a man from one parish to another, would necessarily occasion so great a transportation of the most bulky commodities, not only from one parish to another, but from one end of the kingdom to the other. After all that has been said of the levity and inconstancy of human nature, it appears evidently from experience that a man is of all sorts of luggage the most difficult to be transported.

An Inquiry into the Nature and Causes of the Wealth of Nations, 1776

Adam Smith (1776) was the first economist to write on migration:

... the wages of labour vary more from place to place than the price of provisions. The prices of bread and butcher's meat are generally the same or very nearly the same through the greater part of the United Kingdom. These and most other things which are sold by retail, the way in which the labouring poor buy all things, are generally fully as cheap or cheaper in great towns than in the remoter parts of the country ... But the wages of labour in a great town and its neighbourhood are frequently a fourth or a fifth part higher than at a few miles distance. Eighteen pence a day may be reckoned the common price of labour in London and its neighbourhood. At a few miles distance it falls to eight pence, the usual price of common labour through the greater part of the low country of Scotland, where it varies a good deal less than in England. Such a difference of prices, which it seems is not always sufficient to transport a man from one parish to another, would necessarily occasion so great a transportation of the most bulky commodities, not only from one parish to another, but from one end of the kingdom to the other. After all that has been said of the levity and inconstancy of human nature, it appears evidently from experience that a man is of all sorts of luggage the most difficult to be transported.

An Inquiry into the Nature and Causes of the Wealth of Nations, 1776

- Smith found trade to be more intense than migration. The reason is that migration is hampered by certain barriers that trade is not.
- Regional differences in commodity or factor prices provide opportunities for arbitrage.
- Intercity movements of goods (trade) arbitrages away commodity price differentials, whereas intercity movements of people (migration) arbitrages away wage differentials.
- Smith suggested that migration is a response to spatial differences in the returns to labor supply.

Theory of migration: migration as human capital investment

- Becker (1964) argues that migration is an investment because it involves the incurring of direct and indirect costs up-front in order to realize an (uncertain) payoff in the future.
- The migrant's goal is to maximize utility by choosing the location that offers the highest net return to human capital.
- People can migrate for reasons other than income maximization (e.g. family reunification, political asylum).

Empirical observations by Becker (1964)

- Imperfect transferability of human capital, especially in high-skill areas, across borders limits migration
- Younger persons are more likely to migrate than older persons
- Temporary migrants have less incentives to invest in skills than permanent residents
- More able people tend to migrate more
- Migration is relatively low despite huge real international earnings differences

DETERMINANTS OF MIGRATION

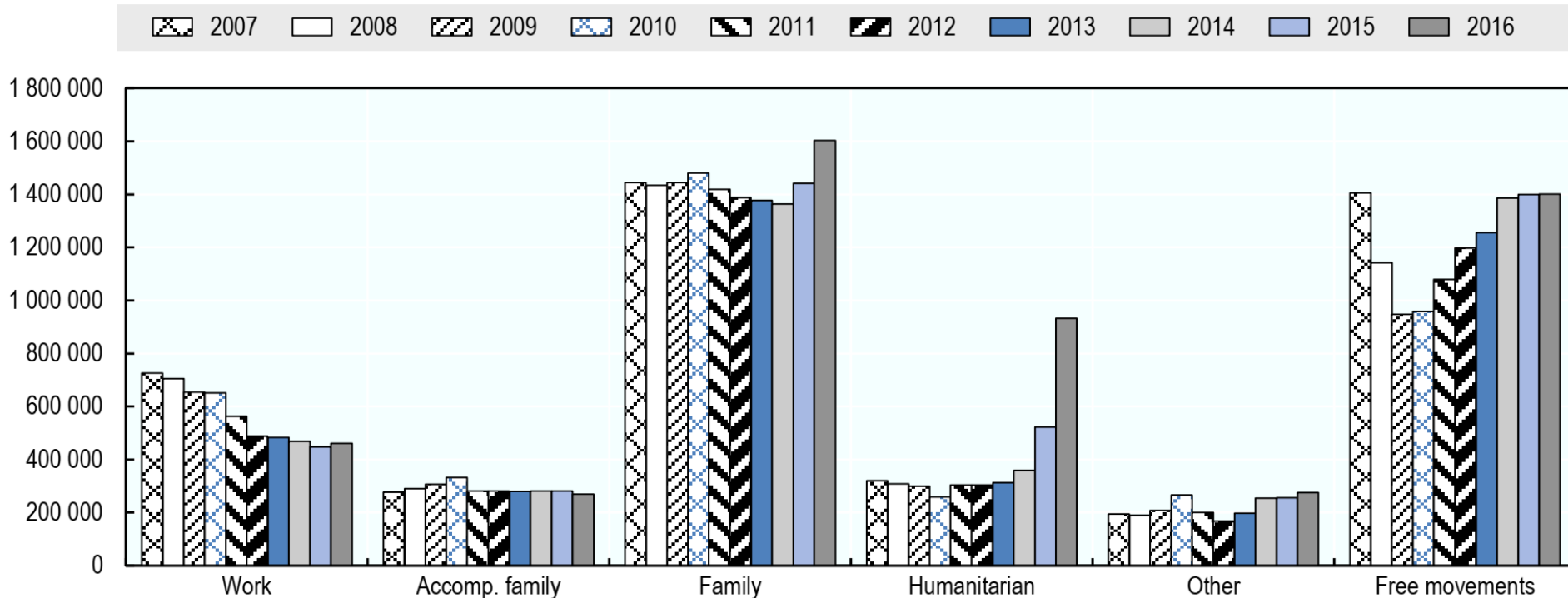
Why people **do** migrate (relocate)?

- For work
- For study
- Marriage
- Retirement
- Housing amenities
(e.g. air quality, culture, university)



Figure 1.2. Permanent migration flows to OECD countries by category of entry, 2007-16

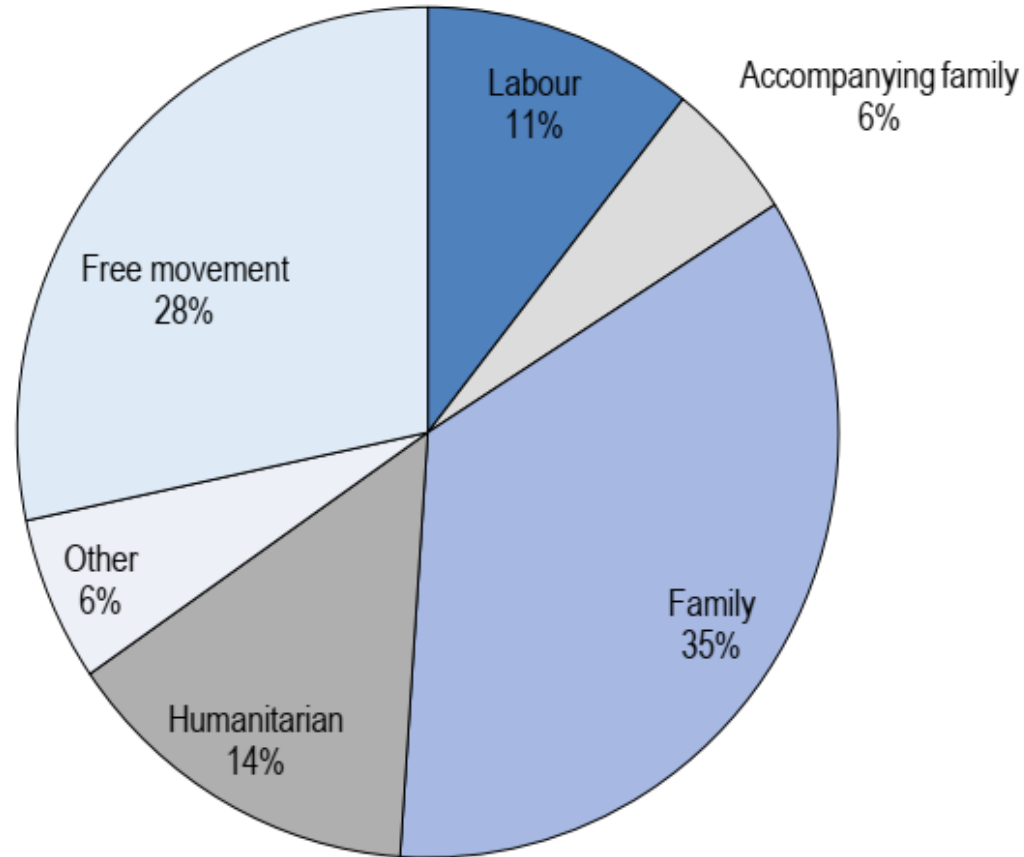
A. Variations in categories of entry



- One out of five permanent migrants in 2016 was a humanitarian migrant (900,000 people).
- United States (17%) and Germany (50%) were main destinations.

Permanent migration flows to OECD countries by category of entry

B. Categories of entry in 2017 (%)



The family migration accounts for more than a half of all migration excluding free movement.

Note: Includes only countries for which data on permanent migration are available.

Source: OECD International Migration Database, <https://doi.org/10.1787/data-00342-en>.

PUSH AND PULL FACTORS

Immigration push and pull factors

Push factors

Economic

Political and social

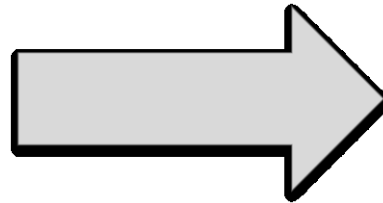
Other

Pull factors

Economic

Political and social

Other



Immigration push and pull factors

Push factors

Economic

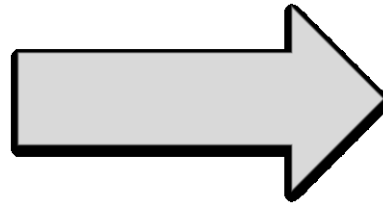
High unemployment
Poverty
High taxes
Poor health care
Overpopulation

Political and social

Discrimination
War or oppression
Corruption
Crime
Compulsory military service

Other

Natural disaster
Famine
Climate change



Pull factors

Economic

Demand for labor
High wages
Strong economic growth
Opportunity for advancement
Schooling
Technology
Generous welfare benefits
Low cost of living

Political and social

Family and friends
Rights and freedoms
Law and order
Safety

Other

Amenities

Source Country

“Push” Factors

famine
poverty
low wages
unemployment
overpopulation
high taxes
discrimination
religious persecution
civil war
violence and crime
forced military service
social immobility

“Stay” factors

family ties
friendships
social status
cultural familiarity
employment
property
familiarity
certainty
political privileges



Costs of Moving

transport costs
dangers of the voyage
time of travel
lost income during move

Formal Exit Barriers

Exit Visa
Exit Tax
Prohibition
Imprisonment
Penalties on Family

Formal Entry Barriers

Entry Visa
Quota
Prohibition
Imprisonment
Fines

Destination Country

“Pull” factors

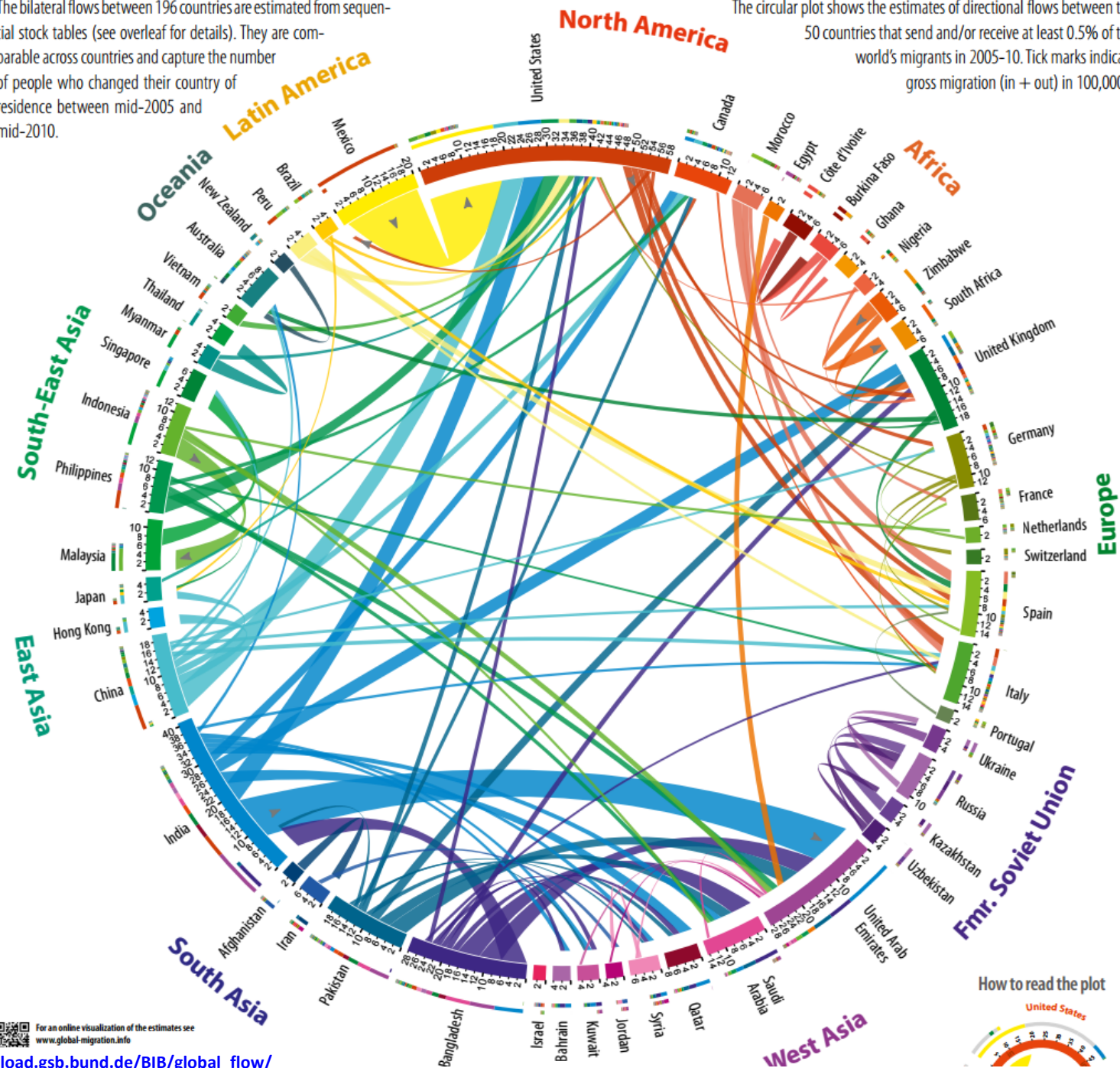
high wages
employment
property rights
personal freedom
economic freedom
law and order
peace
religious freedom
educational opportunity
social mobility
low taxes
family reunion

“Stay away” factors

language barriers
cultural barriers
discrimination
low social status
unemployment
low wages
lack of political rights
unfamiliarity
uncertainty
war
crime

The bilateral flows between 196 countries are estimated from sequential stock tables (see overleaf for details). They are comparable across countries and capture the number of people who changed their country of residence between mid-2005 and mid-2010.

The circular plot shows the estimates of directional flows between the 50 countries that send and/or receive at least 0.5% of the world's migrants in 2005-10. Tick marks indicate gross migration (in + out) in 100,000's.



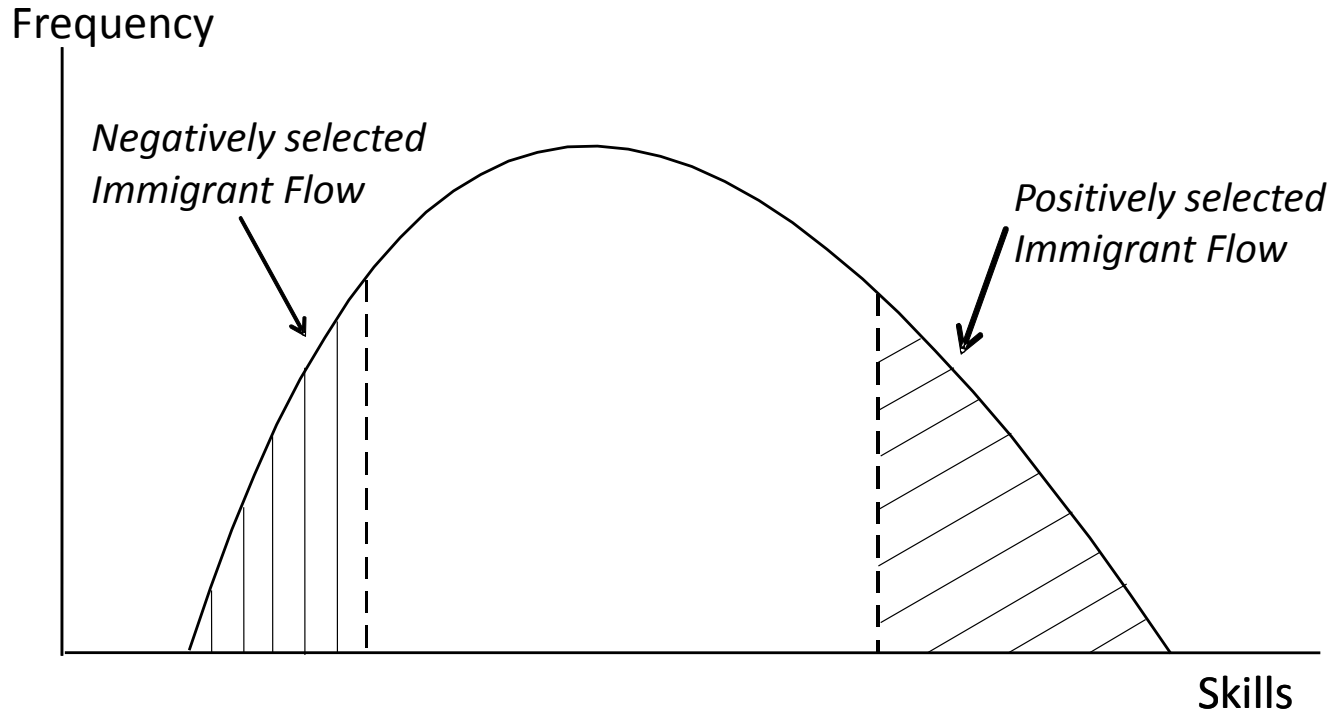
For an online visualization of the estimates see www.global-migration.info



Roy-Borjas Model – Selection of immigrants

- Roy (OEP 1951); Borjas (AER 1987)
- Consider two countries, A and B
 - Identical mean earnings
 - Different income distributions: returns to human capital higher in A
- Individual returns to migration depend on one's skills
- In which country can skilled workers earn more?
Migration patterns:
 - Skilled migration to A and unskilled migration to B

The Self-Selection of the immigrant

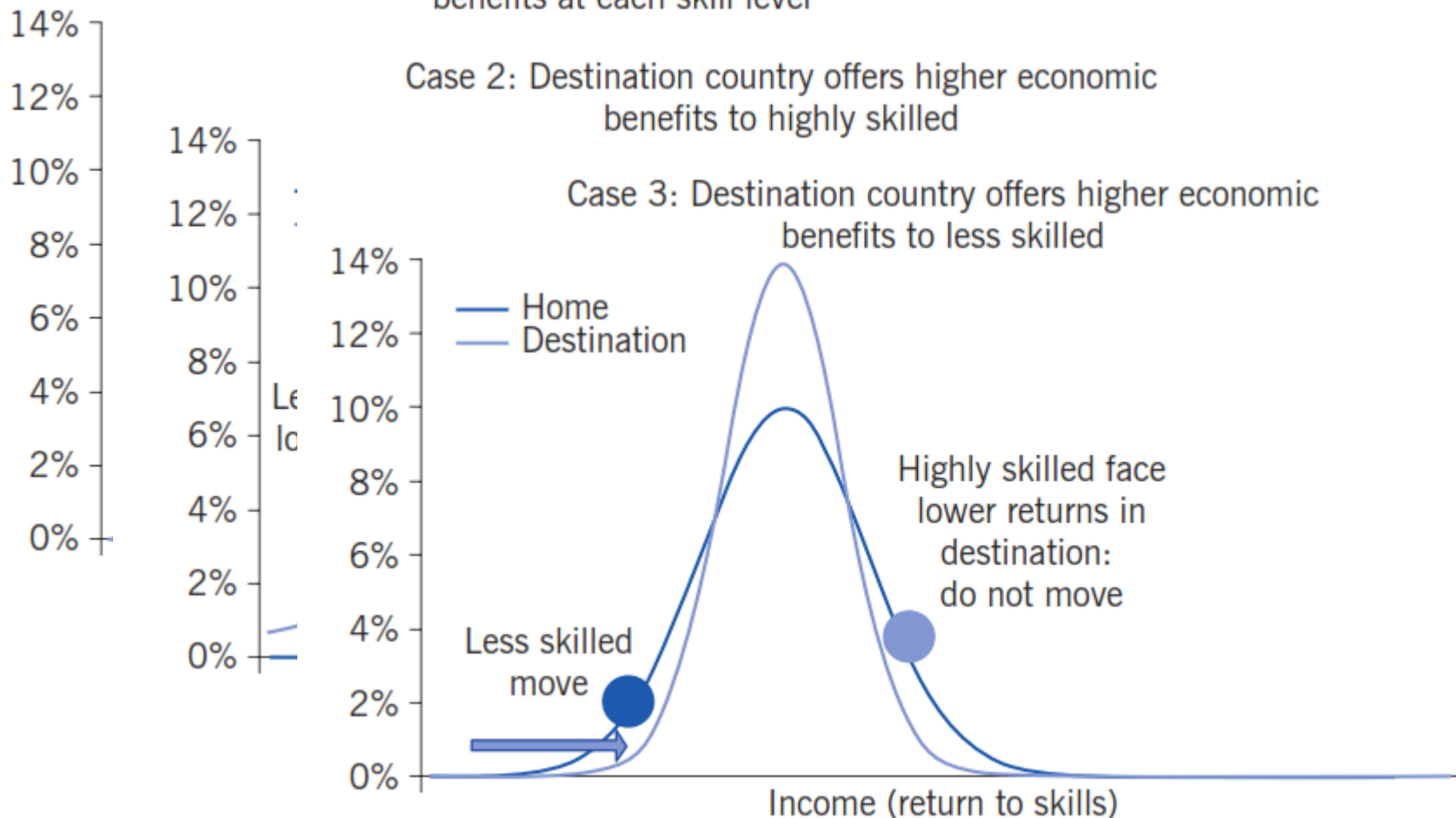


If immigrants have above-average skills, the immigrant flow is positively selected. If immigrants have below-average skills, the immigrant flow is negatively selected.

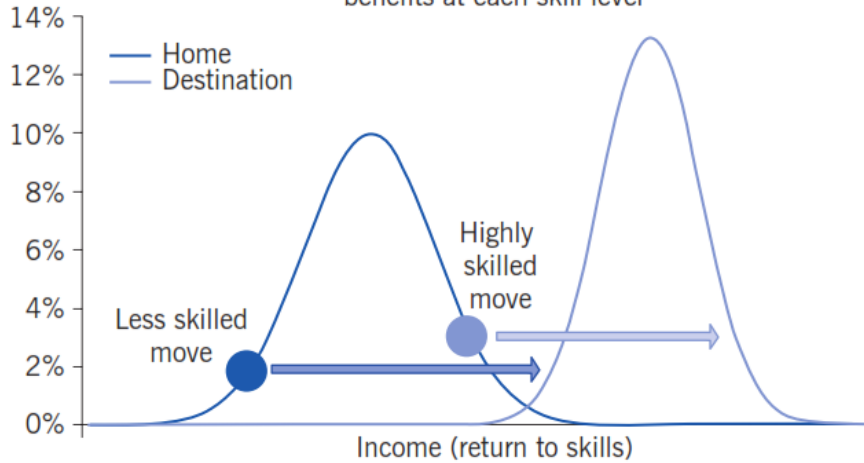
Case 1: Destination country offers higher economic benefits at each skill level

Case 2: Destination country offers higher economic benefits to highly skilled

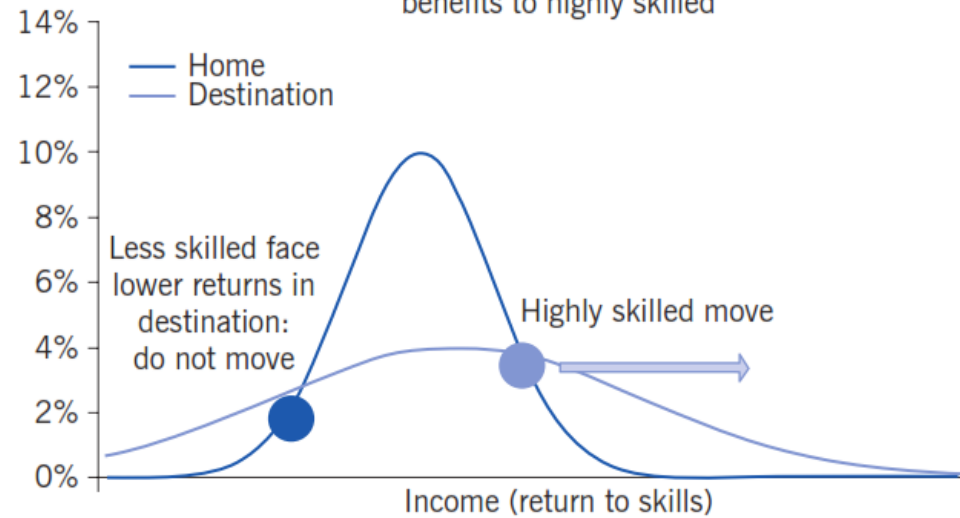
Case 3: Destination country offers higher economic benefits to less skilled



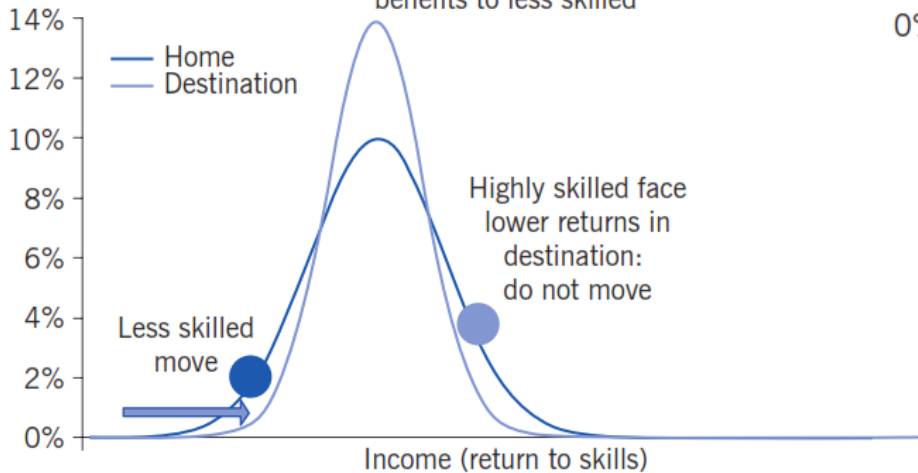
Case 1: Destination country offers higher economic benefits at each skill level



Case 2: Destination country offers higher economic benefits to highly skilled



Case 3: Destination country offers higher economic benefits to less skilled



The *Roy model* of migration illustrates the self-selection of migrants on skill. How can you describe the migration motives of the low-skilled workers?

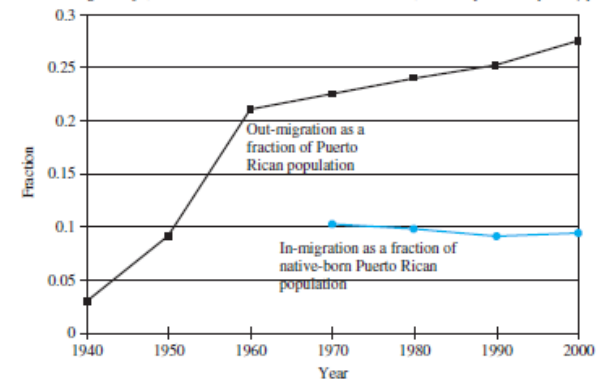
1. Low-skilled workers prefer to migrate to a country with higher income inequality.
2. Low-skilled workers prefer to migrate to a country with the more compressed income distribution (and lower income inequality).
3. Low-skilled workers prefer to migrate to a neighbouring country to minimize travelling costs.
4. There are no economic incentives to migration for low-skilled workers.

Migration between Puerto Rico and the US

- Puerto Ricans can move freely to the US without the legal restrictions. About 10% of the population born outside PR during 1970-2000.



Source: George J. Borjas, "Labor Outflows and Labor Inflows in Puerto Rico," *Journal of Human Capital* 2 (Spring 2008): 32-68.



- Return to skills is much higher in PR than in the US. The patterns of migration can be understood with Roy model – relative payoffs for skills across countries determine the skill composition of the immigrant flow.

TABLE 8-3 Labor Flows in and out of Puerto Rico in 2000 (in the sample of working-aged men)

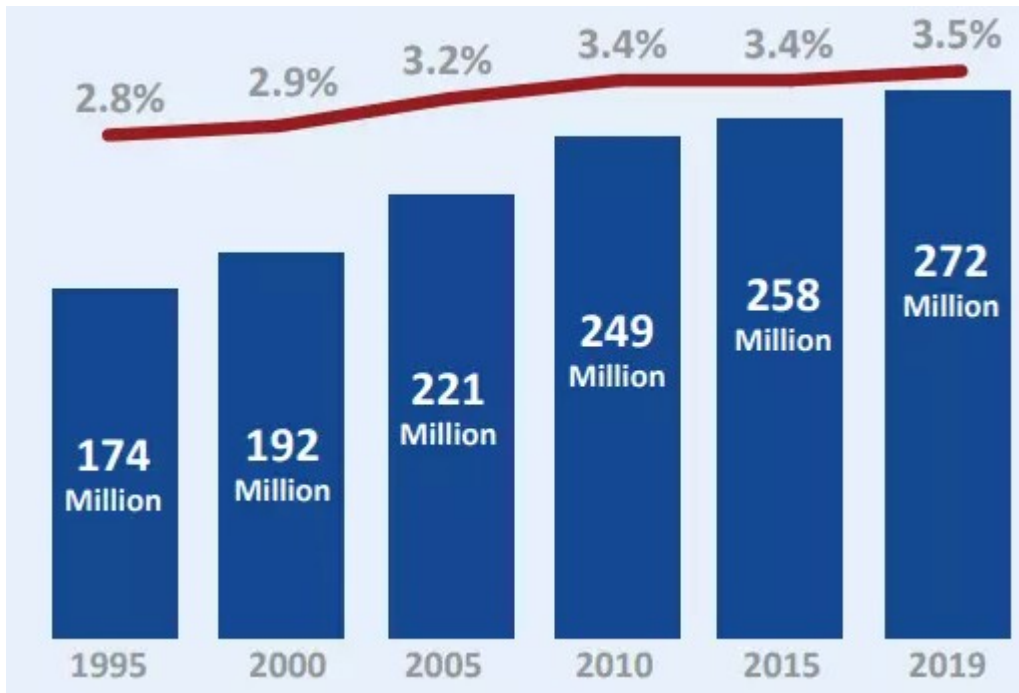
Source: George J. Borjas, "Labor Outflows and Labor Inflows in Puerto Rico," *Journal of Human Capital* 2 (Spring 2008): 32-68.

Years of Education	Fraction of Puerto Ricans That Moved to the United States	Fraction of U.S.-Born Persons with Puerto Rican Ancestry That Moved to Puerto Rico
Less than 12 years	0.447	0.069
12 years	0.401	0.086
13-15 years	0.364	0.121
At least 16 years	0.304	0.189

Migration flows

The international migrant population globally has increased in size but remained relatively stable as a proportion of the world's population

The number of people living in a country other than where they were born



Source: World Migration Report 2020

Migrants in 2019:

1 in every 30 people

48 % are females

14 % are children

74% are of working age 20-64

60 % are migrant workers

2 % are students

10 % are refugees

15% are displaced (BD, MM)

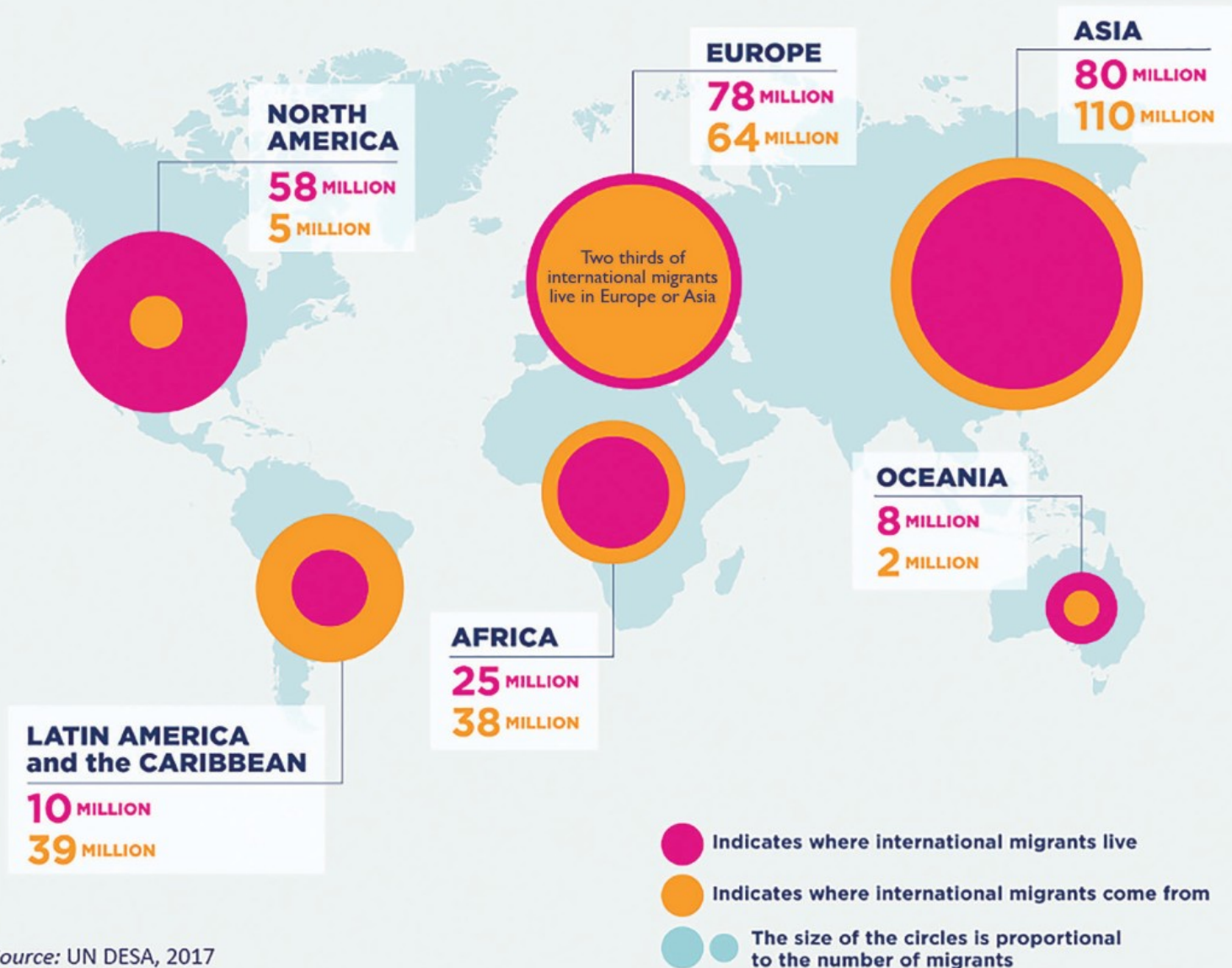
In last 5 years, more than 30,900 have died before trying to reach other country.

THERE ARE MORE
AND MORE
MIGRANTS !!

THAT'S NORMAL,
THERE ARE MORE
AND MORE PEOPLE...



Number of International Migrants in 2017



 **258 MILLION**

The number of international migrants reached 258 million in 2017. An increase of 85 million since 2000.

MEDIAN AGE 39

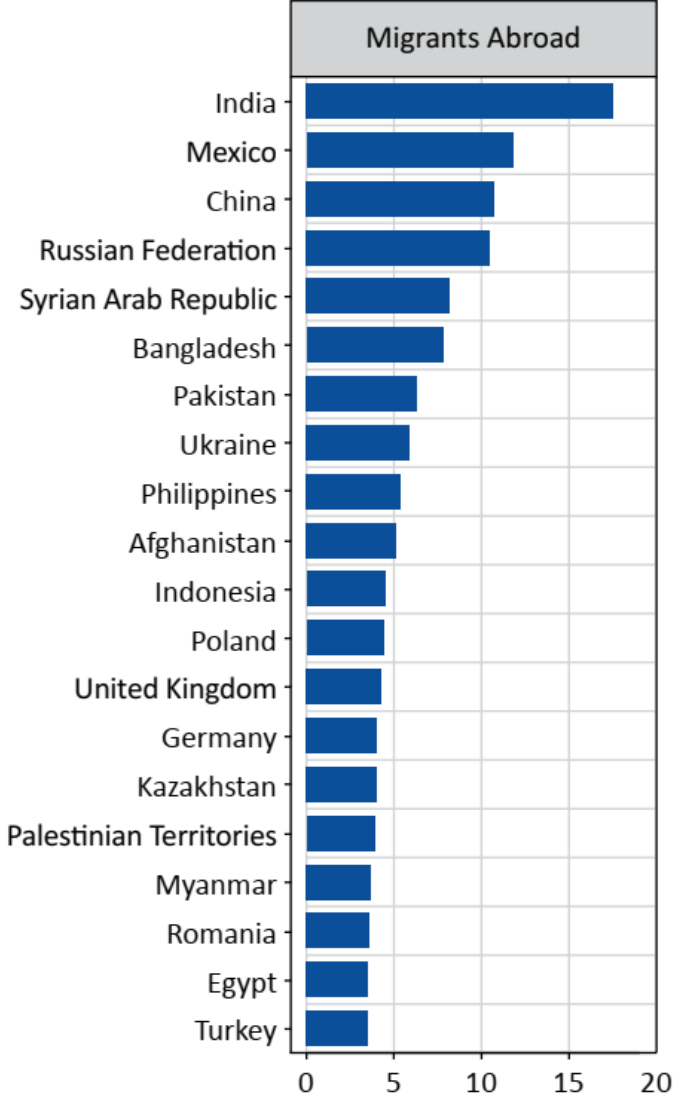
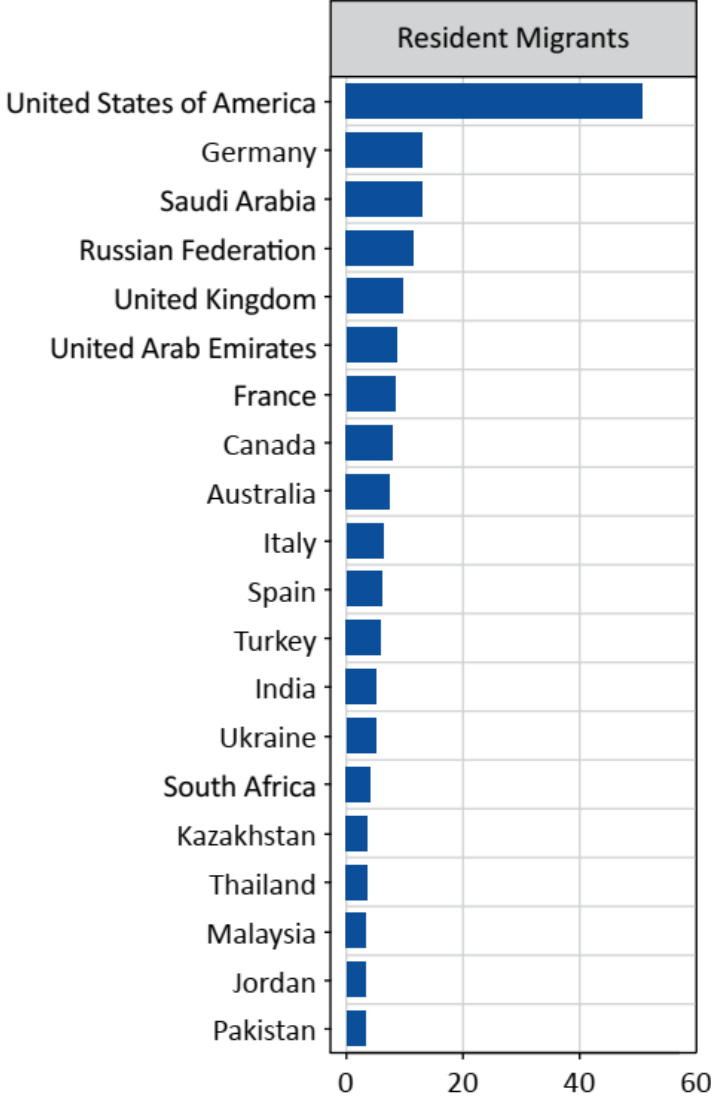
 **14% ARE BELOW 20 YEARS OLD**

 **48% WOMEN**

NOTES:

- All numbers are millions of people.
- Unknown residuals were redistributed proportionally to the size of groups for which data on international migrants were available by origin.

Top 20 world destinations (left) and origins (right) of international migrants in 2019 (millions)



Source: World Migration Report 2020

Legal barriers to mobility

- In medieval Europe (feudalism) serfs were prohibited to move without lord's consent
- Barriers to internal migration in Czarist Russia and the USSR
- China's internal passport system ("Hukou")
- State specific **occupational licensing** laws act as barriers to internal migration in the US
- Visa

PROTECT YOURSELF FROM POSSIBLY BUT PROBABLY NOT UNQUALIFIED PROFESSIONALS

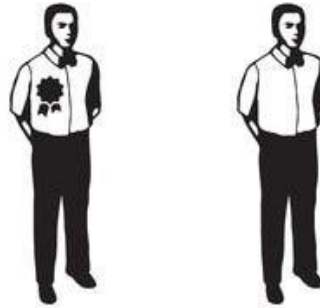
TELEPHONE SALESPERSON



LICENSED

UNLICENSED

PARKING LOT ATTENDANT



LICENSED

UNLICENSED

MIXED MARTIAL ARTIST



LICENSED

UNLICENSED

TRAVEL AGENT



LICENSED

UNLICENSED

Occupation licensing is a legal requirement in order to practice a profession

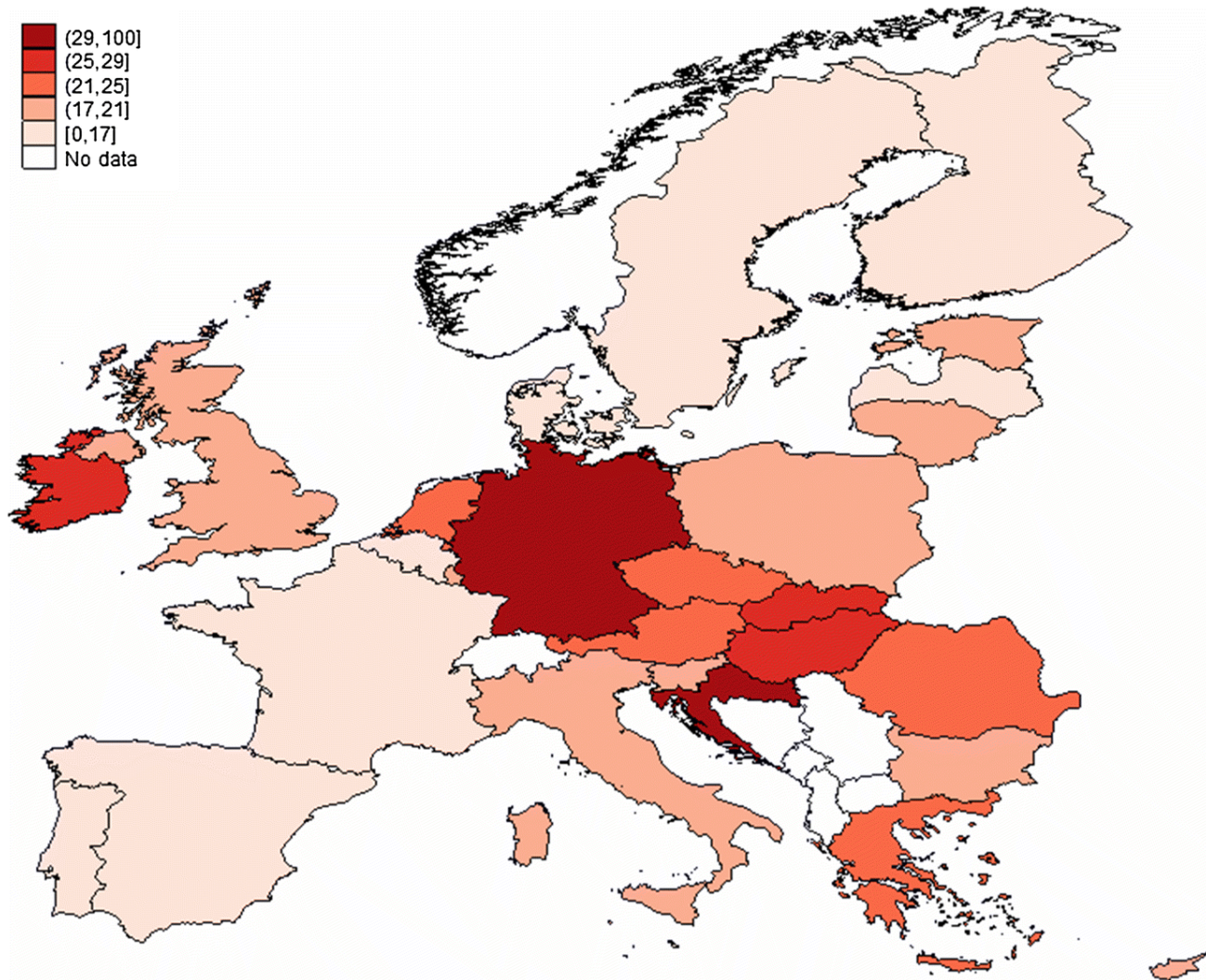
In the US in 1970s, about 10 percent of workers had to have licenses, but by 2008, almost 30 percent of the work force needed them.

Louisiana, requires licenses for florists, math teachers need to be relicensed every time they move from one state to another.

Workers with licenses must pay upfront costs and face limited geographic mobility.

<https://www.nytimes.com/2014/05/29/opinion/why-license-a-florist.html>

In the craft and related occupations, the proportion of licensed workers is 38% in Germany and 7% in Spain, while the average proportion of licensed workers at the state level is 33 and 17%

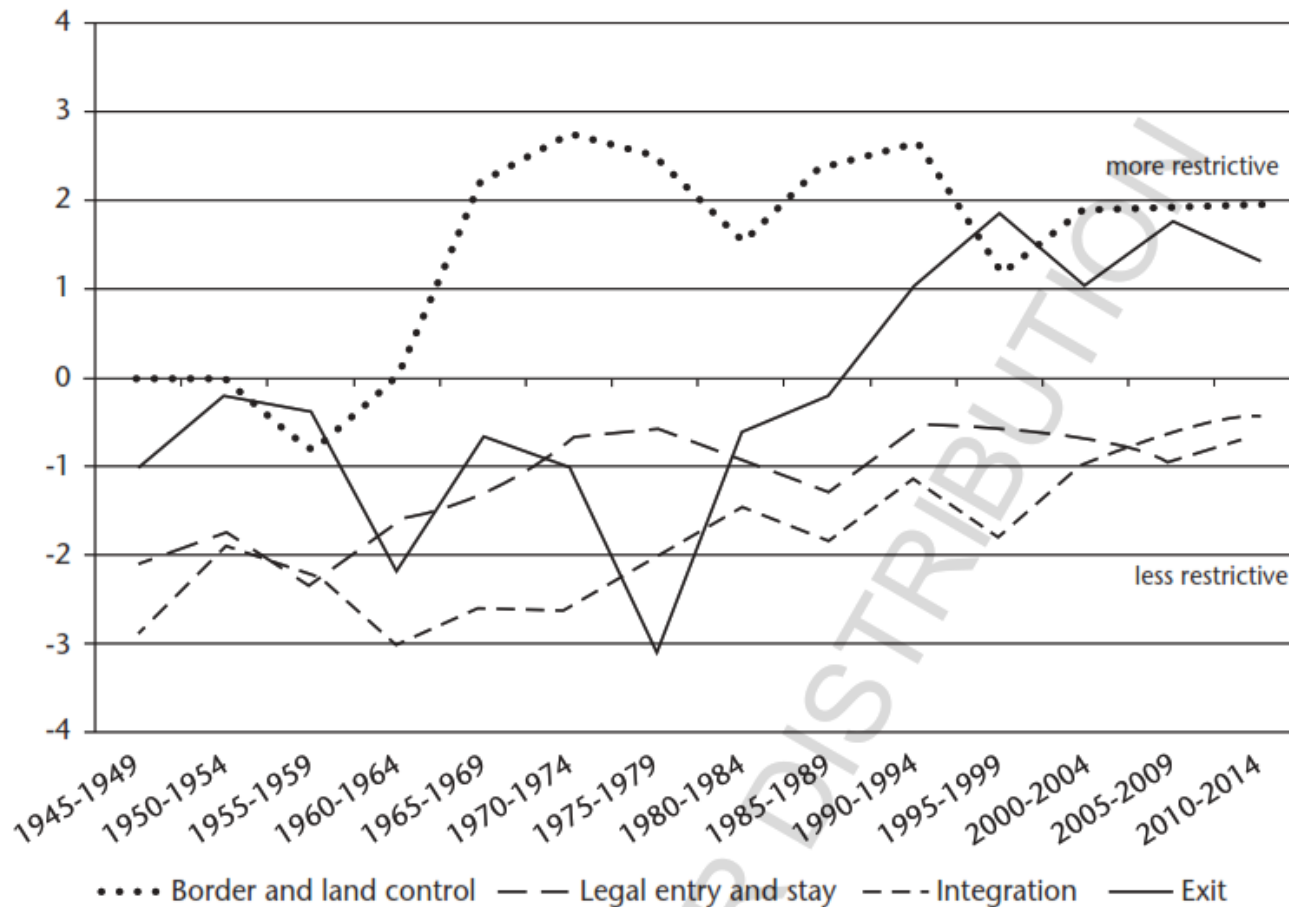


The prevalence of licensing varies significantly across member states: ranging between 14% in Denmark and 33% in Germany

Occupational licensing is least common in managerial occupations (e.g., managers, executives) and elementary occupations (e.g., food preparation, cleaners) and most common among plant and machine operators, technicians (e.g., electricians), and professionals (e.g., lawyers).

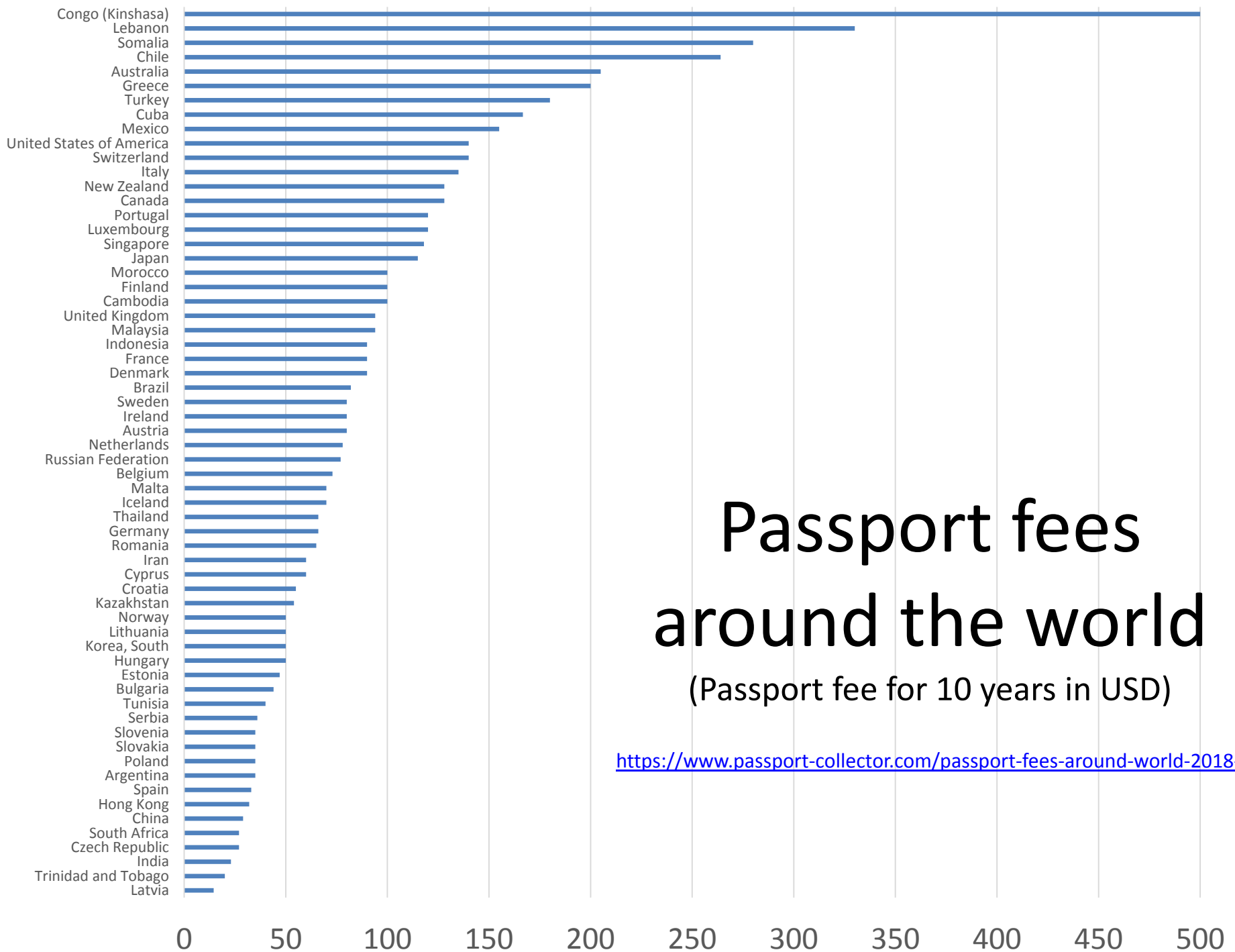
Changes in immigration regimes in 22 Western liberal states

Source: Hass et al. 2016



Over the past 70 years, immigration regimes (in Western countries) have been heavily concentrated on border control and more recently on exit and return measures (e.g. deportation). Policies have become more targeted on specific migrant groups providing multiple entry channels for low and high-skilled workers, permanent and temporary migrants, family members, students, entrepreneurs, and asylum seekers. Governments have liberalised entry for 'wanted' migrants, while policies have become more restrictive to prevent the entry and (irregular) stay of 'unwanted' migrants.





Passport fees around the world

(Passport fee for 10 years in USD)

<https://www.passport-collector.com/passport-fees-around-world-2018-2/>

REMITTANCES

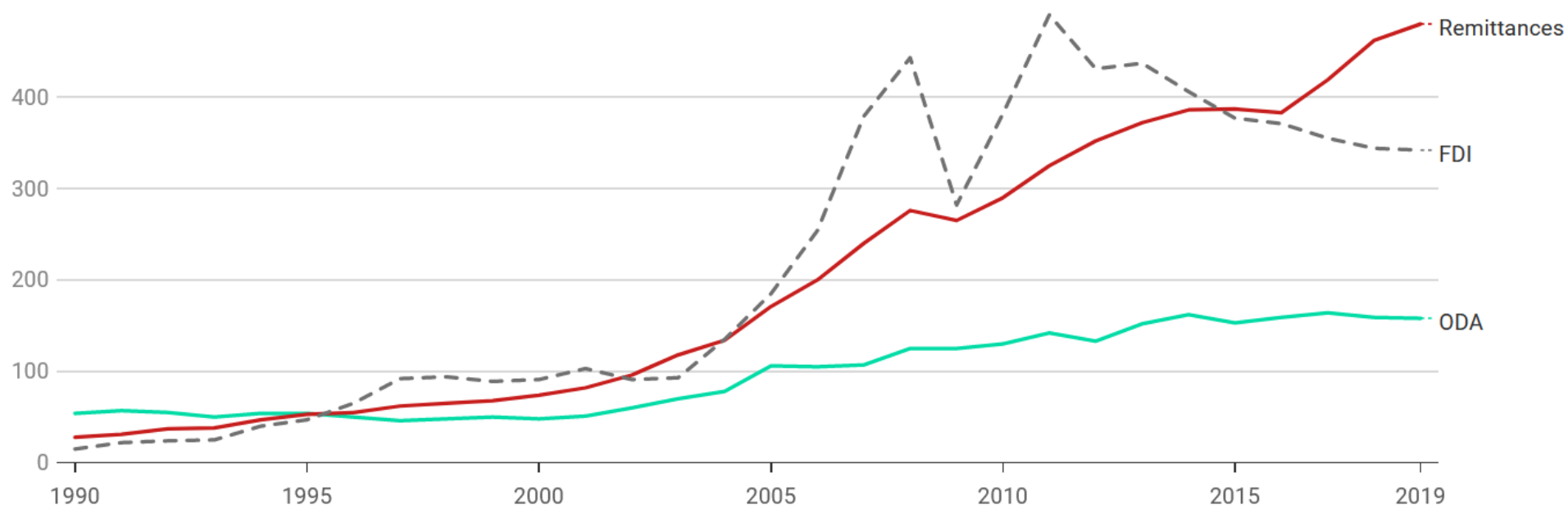
REMITTANCES

- Financial or in-kind transfers made by migrants directly to families or communities in their countries of origin.
- Official estimates (by World Bank) on the scale of remittances are likely underestimated.
- Globally, remittances are now more than three times the amount of official development assistance.
- The biggest beneficiaries are middle income countries.

706 billions USD

**Estimated volume of
remittances sent by
migrants in 2019
(up from 126 billion in 2000).**

Remittance flows to Low- and Middle-Income countries (excluding China) are now larger than FDI and Development Assistance



FDI = foreign direct investment. ODA = Official Development Assistance; Data for 2018 are estimates and data for 2019 are forecasts

Source: [Global Knowledge Partnership on Migration and Development \(KNOMAD\)](#)

Officially recorded remittances to developing countries amounted to a record \$550 billion in 2019.

Remittance Flows dropped during the pandemic

Remittances to Low- and Middle-Income Countries (LMIC) are expected to grow by 1.4 percent to reach \$656 billion in 2023, following a very strong 8 percent growth in 2022 and 10.6 percent in 2021.

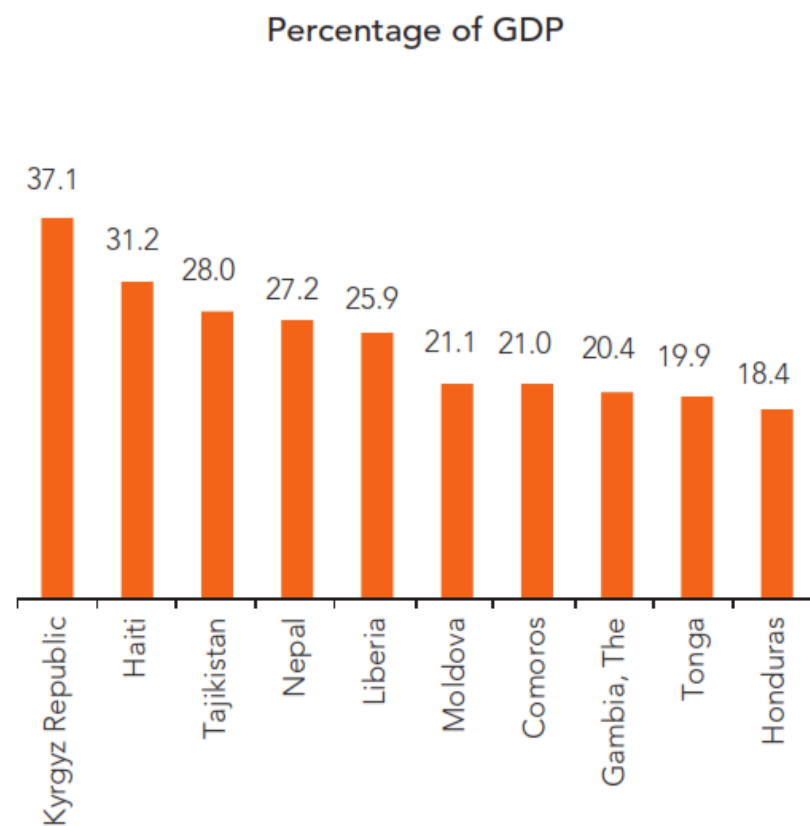
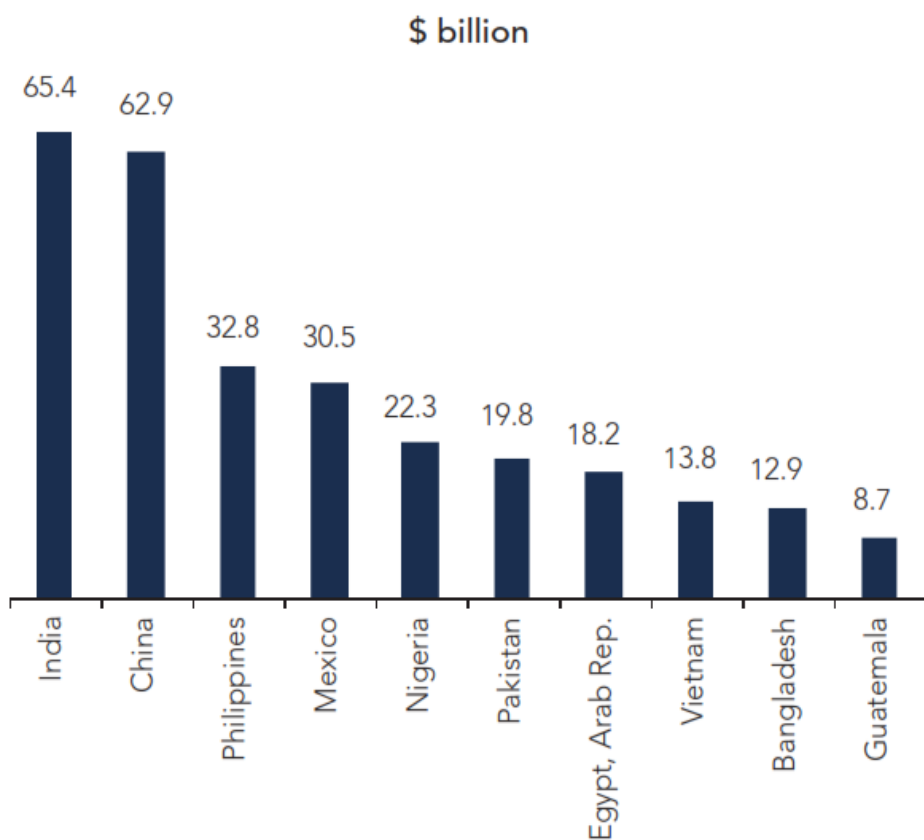
Remittances

- Moneys sent back home by immigrants (why?)
- Large inflows, esp. for developing countries
- Macroeconomic effects of remittances:
 - economic growth
 - employment
 - prices
 - exchange rate
- High remittances may create dependency, increase local prices, appreciate exchange rate

Microeconomic effects of remittances

- Remittances go directly to households in emigrants' home countries
- Reduce poverty and increase consumption
- Allow higher spending on education and health care, hence better life for children and people
- Help starting a small business (investment)
- Facilitate the return of migrants

FIGURE 1.3. Top Remittance Receivers in 2017

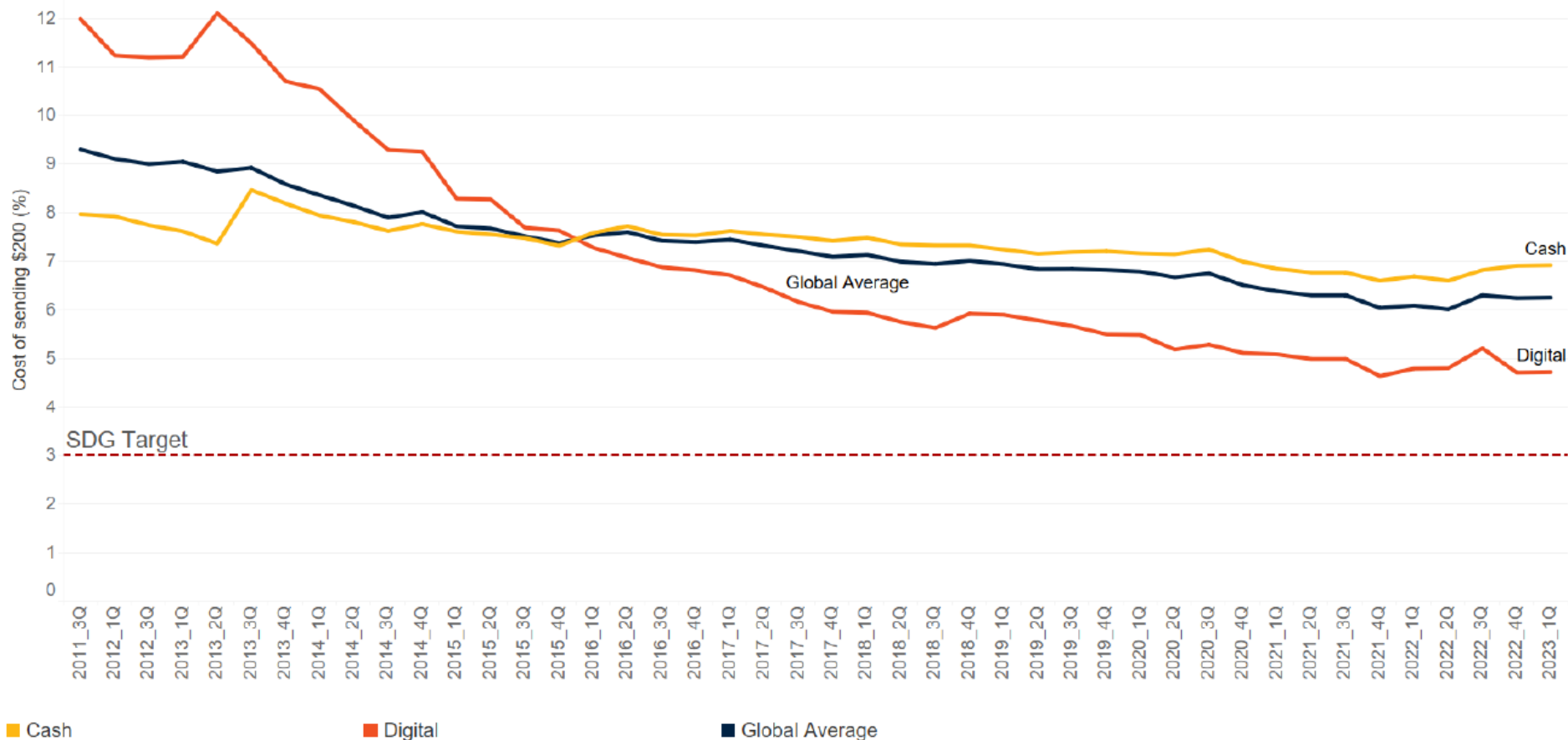


Sources: International Monetary Fund; World Bank's World Development Indicators; staff estimates.

Note: GDP = gross domestic product.

World bank monitors the cost of international remittance services since 2008 when the cost to send money was 10%. **G20 set a target to reduce costs to 5%.** Sustainable Development Goal (SDG) 10.c.1 aims to reduce this cost to 3% on average by 2030. Faster adoption of digital financial services, which make remittances cheaper and more convenient, should be a priority.

Figure 1 Trends in the global cost of sending \$200 in remittances³



250
MILLION
migrants

Send money home



Helping
700+
MILLION
families



make ends meet

In 2014

International remittances totaled:



\$523
BILLION

\$436
BILLION
of that amount
went to
DEVELOPING
countries

The cost of sending
remittances fell to 7.68%:



Putting

\$60+ BILLION
in migrants' pockets



Sources: Remittance Prices Worldwide, June 2015; Migration and Development Brief, April 2015.



International Day
of Family Remittances
16 JUNE

1 Increase families' disposable income

2 Drive investment in agriculture and increase access to food

3 Increase access to health care

4 Increase access to education

5 Enhance women's financial independence

6 Provide access to pay-as-you-go sanitation services

17 Strengthen domestic resource mobilisation

16 Increase transparency and sustain livelihoods in conflict

13 Build climate change resilience

11 Finance sustainable communities

10 Reduce the cost of international remittances

9 Facilitate access to the digital economy

8 Transform savings into investment

7 Provide access to pay-as-you-go energy services

INTERNATIONAL REMITTANCES VIA MOBILE MONEY ARE BUILDING RESILIENCE IN TIMES OF CRISIS TO HELP FAMILIES ACHIEVE THEIR OWN SUSTAINABLE DEVELOPMENT GOALS

Social remittances

- In addition to money, migration leads to the circulation of ideas, practices, skills, identities, and social capital.
- Research shows how emigrants influence social protests, elections, and calls for greater transparency or reform.
- Migration may affect traditional gender norms

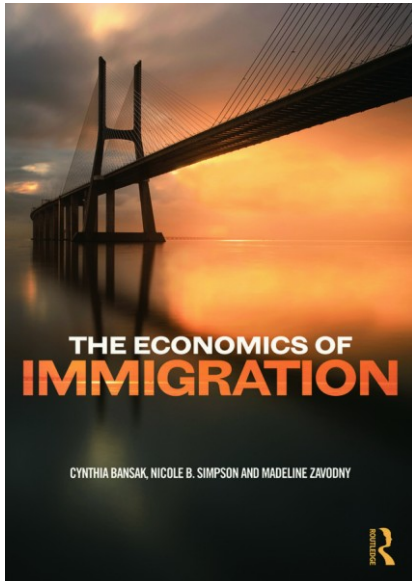
Which one is the push-factor of migration?

- A. Average income
- B. Ethnic conflict
- C. Democracy
- D. Unemployment benefits

Why do people migrate most?

- A. For work, family reasons and better living
- B. For political reasons
- C. For education
- D. All of above

Reading



- Chapter 2 - Why People Become Immigrants
- Chapter 3 - Where Immigrants go