Jobs and Migration Core Course

High Skilled Migration
Brain drain, gain, circulation, waste, etc. etc.

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Somethings never change..
Impacts of Migration …

In the destination labor markets:

- Key points of the economic and political debate on immigration
  - Examples: Brexit, U.S. Elections, …

- Key determinants of the overall welfare impact of labor mobility
Impacts of Migration …
Impacts of Migration ...

Papist immigrants are wrecking our economy with their fecundity! We must erect a wall of brass around the country for the exclusion of Catholics!

Japanese immigrants aren't assimilating... and if we let too many in, they'll undermine our economy!

1780

(“Wall of brass...” is quoted from John Jay, the first Chief Justice of the Supreme Court.)

1850

Now, I've got nothing against Jews... but the Jews are coming in huge numbers! The economy can't take it!

1920

We've got nothing against Mexicans, but they refuse to assimilate! They're ruining our economy!

NOW

History marches on; nativism marches in place.
Why high-skilled migration?

Development, growth, poverty......

It is all about human capital...
Why high-skilled migration?

Now to refresh your memory…

What were the three main points from last week?
Migrants originate from many countries…

Emigrant to Population Ratio (2010)
… but move to a smaller group of countries

Immigrant to Population Ratio (2010)
Migrants do not travel far, but steadily travelling further…

Cumulative Distribution Function of World Migration By Distance

*Contiguous countries treated as zero distance
Concentration of immigration stayed the same but declined for emigration over time.
High skilled Immigrant concentration

*Immigrants in the tertiary educated labor force in destination countries (%)*

Note: DIOCE 2000
Education versus distance travelled

Cumulative Distribution Function of World Migration By Distance

- High-Skilled Emigrants
- Low-Skilled Emigrants
- Refugees

*Contiguous countries treated as zero distance; year 2014 stocks used for refugees, year 2000 stocks used for general migration
Education versus distance travelled

Distribution of HS stock of emigrants and immigrants

Cumulative share

Country's ranking by HS emigrant/immigrant stock
Skill shares – emigrants versus immigrants

Skill Rates Across Emigrants, Immigrants, and Natives

Red dotted line represents 45-degree line and navy line show best fit with 95% confidence interval
Skilled defined as at least some tertiary education

Source: 2010 DIOC-E Bilateral Migration Database
Rich countries are more attractive to skilled migrants
Gender and High-Skilled Emigration, 1990-2010
Concentration – Nobel Prize Winner

- Since 1901, 80% went to 4 countries –
  - the United States (330), the United Kingdom (90), Germany (69) and France (33)

- Since 1901, 31% went to immigrants of whom 53% were in the US

- Between 1901-1940, 9% born in the US, 13% living in the US

- Between 1980-2017, 46% born in the US, 65% living in the US

- Only 4 Americans won while outside the US
Concentration-Distribution of High-Skilled Migrants in the US
Location of Education

Fundamental dilemma in measuring:

1 – Extent

2 – Impact

of high-skilled migration

Location of Birth versus Location of Education
Location of Education – African Doctors

BORN IN EGYPT

ACS

4,332

TRAINED IN EGYPT

AMA

4,062
Location of Education – African Doctors

TOTAL NUMBER OF “EGYPTIAN” DOCTORS IN THE US: 4,866
Location of Education – African Doctors

BORN IN EGYPT

- Trained in another African Country: 32
- Trained in the United States: 637
- Trained in the rest of the world: 133

73% of total

TOTAL: 4,866

TRAINED IN EGYPT

- Born in another African Country: 44
- Born in the United States: 125
- Born in the rest of the world: 365

16% of total

11% of total
South African Doctors in the US

**BORN IN SOUTH AFRICA**
- Trained in another African Country: 6
- Trained in the United States: 1,002
- Trained in the rest of the world: 290

**TRAINED IN SOUTH AFRICA**
- Born in another African Country: 181
- Born in the United States: 92
- Born in the rest of the world: 254

**TOTAL: 2,642**
Second dilemma of high-skilled migration:

Age of migration
How many nuclear engineers driving taxis in New York City?

The issue of “Brain waste”
Brain Waste
What matters the most is the long-term impact on educational outcomes:

Endogenous education outcomes in both origin and destination countries.
Long-term Impacts of Migration - Endogenous Education

Mexico – Both boys and girls have lower likelihood of completing high school when exposed to migration

Figure 1: School attendance and attainment by age and sex

McKenzie and Rapoport, 2011
Fiji – higher likelihood of completing university among Indians when exposed to migration

Clemens and Chand, 2011
Long-term Impacts of Migration - Endogenous Education

Malaysia – School attendance among natives increased with immigration of foreign workers.
FIGURE 3-1 Educational attainment of recent immigrants (those who entered in the 5 years prior), by Census year, 1970-2012 (in percentages)

FIGURE 3-4 Age and educational attainment of foreign-born residents, 1970-2012

SOURCE: 1970 Decennial Census and 2012 ACS, accessed through IPUMS.

NOTE: The 9.6 million foreign-born U.S. residents in 1970 constituted 4.7% of the total population. The 40.4 million foreign-born U.S. residents in 2012 constituted 13% of the total population.
Long-term Impacts of Migration – Female labor force participation

Hong Kong– Foreign domestic workers increase labor force participation of college educated women by 10-14%.

Source: Cortes and Pan (2013)
Conclusions

• Devil is in the details and data quality/measurement

• High Skill migration is all about concentration!!! This is what determines both the impact and benefits.

• We tend to focus on short term, but what matters is the long term impact on educational outcomes.
THANK YOU!

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