INTERNATIONAL MIGRATIONS: ECONOMIC OPPORTUNITIES AND POLITICAL CHALLENGES

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Questions

- How did immigration affect the economies of advanced countries in last 30 years (US and Europe major receivers)?

- Did it cause Nationalist backlash? Always?

- Can/will immigrants offset/help with the demographic decline and aging of advanced economies? What policies can help in this direction?

Outline

- Some important facts.
- **US and Europe**.

- A simple Framework to think about economics effects.
  - Labor Markets
  - Innovation, productivity
  - Entrepreneurship
- Did it drive Political Backlash?
  - Depends on what type of immigration and local conditions.

- Will immigration replace declining population? Some feasible policy Ideas.

US is interesting reference: Long history, and conflicting sentiments
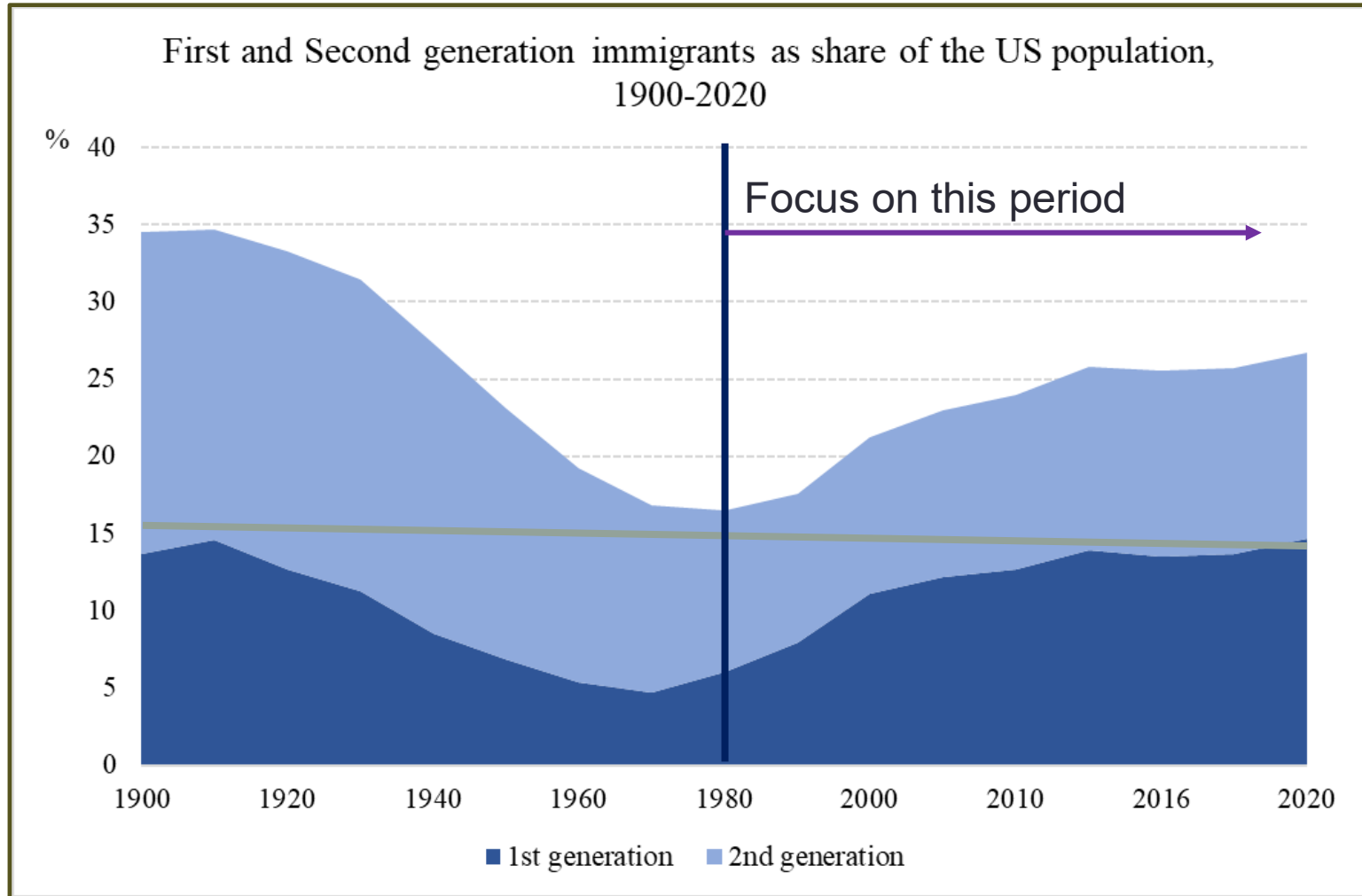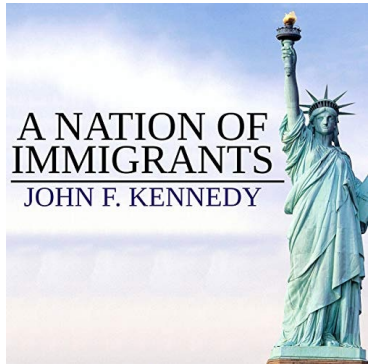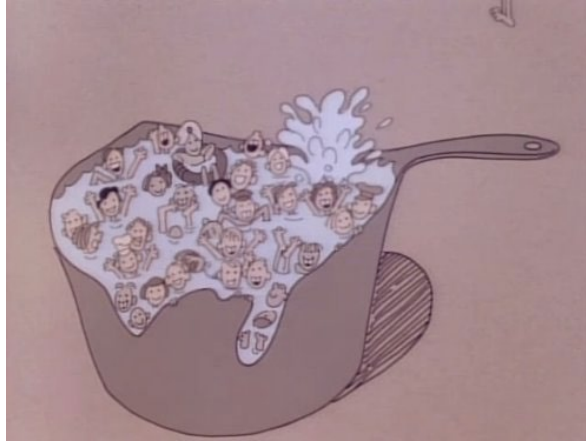Europe has only the last 40 years

First and Second generation immigrants as share of the US population, 1900-2020

Focus on this period

■ 1st generation ■ 2nd generation

Figure 1

ONE US SENTIMENT: WE ARE A NATION OF IMMIGRANTS

EUROPE…ONLY OCCASIONALLY

- Give us your poor…
- The American Melting Pot

France football national team

Spain during Syrian crisis

Denmark welcomes Ukrainians

ANOTHER US SENTIMENT: IMMIGRANTS ARE THE ROOT OF OUR PROBLEMS

EUROPE HAS THIS ONE TOO

- 1891: ""If Immigration was properly Restricted you would no longer be troubled with Anarchy, Socialism, the Mafia and such kindred evils!"

The immigrant tide, 1900

New York, 2018

San Francisco, 2017

FACT 1: HAS INTERNATIONAL MIGRATION GROWN?

- Migrants (people residing/working in a different country from where they were born)
- As % of world population have grown a bit:
- **2.3% in 1980**, about **3.5% in 2020**.

- Migration from **Developing/Emerging to Advanced Economies** has been growing much more in the last 30 years: **4% in 1990, about 10% in 2020,** as share of receiving countries population.

1960-2020:

Immigrants from Developing Countries to Europe-US tripled as % of Population
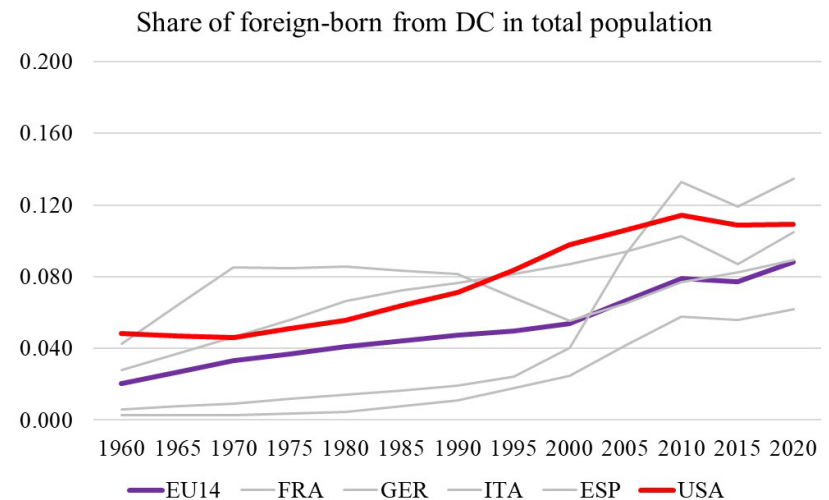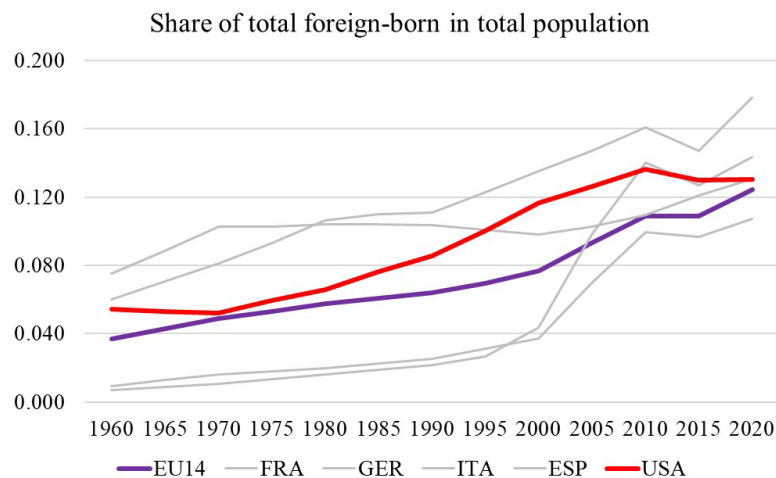

Figure 2

GLOBAL FACT 2: WHERE DO IMMIGRANTS TO ADVANCED ECONOMIES COME FROM?

- **Largest migration** not from poorest countries, but **from countries with intermediate income levels**, into countries with high income levels.

- There the relation between migration rate and log income per person is an inverted U

- Why? Simple model of incentives (desire to move) and liquidity/information constraint (able to move) generates this pattern.

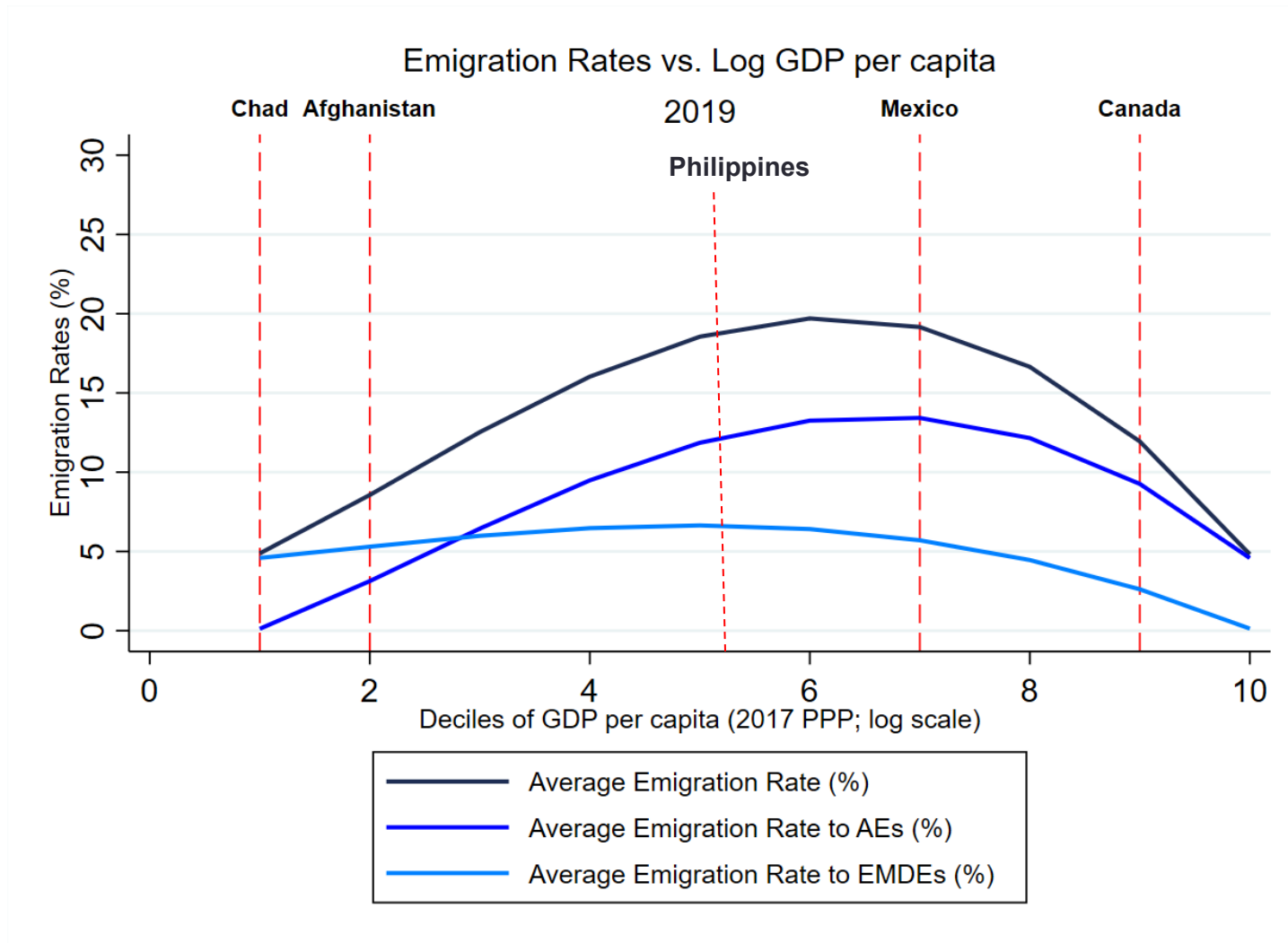# The Hump shape of Emigration rate and Development level

Figure 4

GLOBAL FACT 3: SELECTION OF MIGRANTS FROM DEVELOPING ECONOMIES

- **Strong positive selection in education and skills, of migrants** from all countries of origin.

- High skilled have highest benefits (in pure income) and possibly lower costs (better information, higher chances).

- Also positively selected in other important characteristics: **risk-taking, adaptability, curiosity, health.**

Strong selection of emigrants among highly educated, non-OECD countries

Figure 5

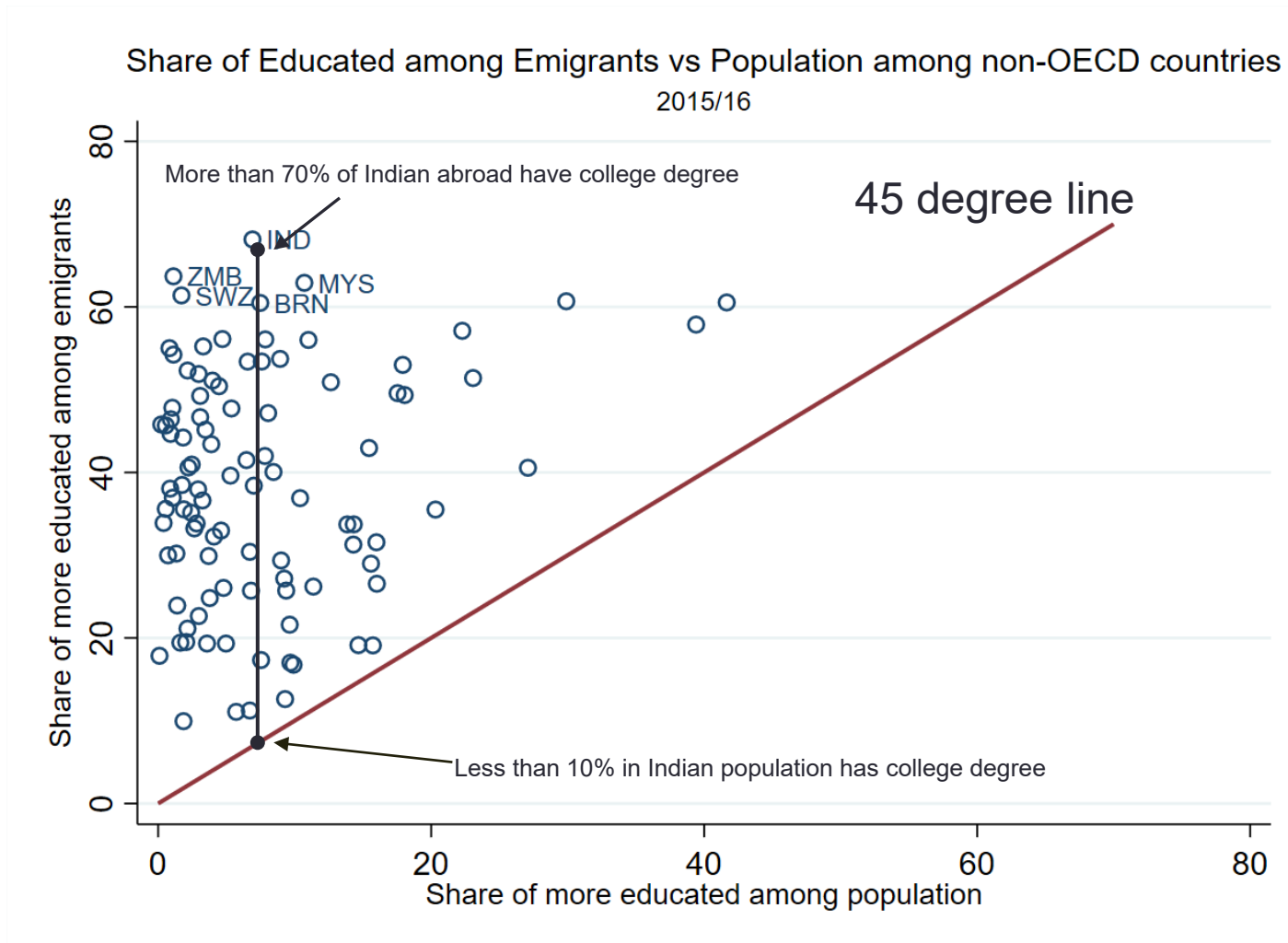# Fact 4: developed countries vary in their ability to attract High Skilled immigrants

- US (Canada, Australia) stronger attractors of high skilled than Europe.

- Us has strongest pull, at the highest level of STEM.
  - Higher education institutions
  - Highly dynamic companies attracts a disproportionate amount of top skilled.

- This generates great innovative-productive potentials of immigrants in the US.

US receive many more high-skilled immigrants than Europe, same unskilled.
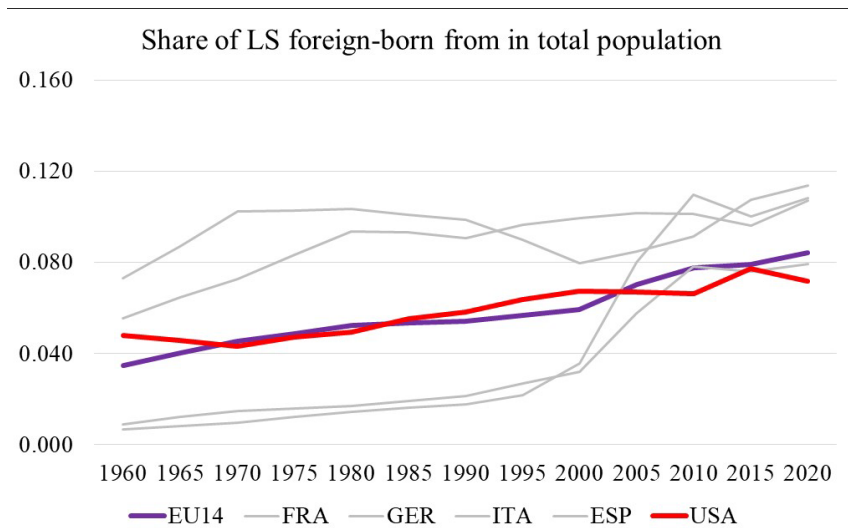
Non college educated immigrants
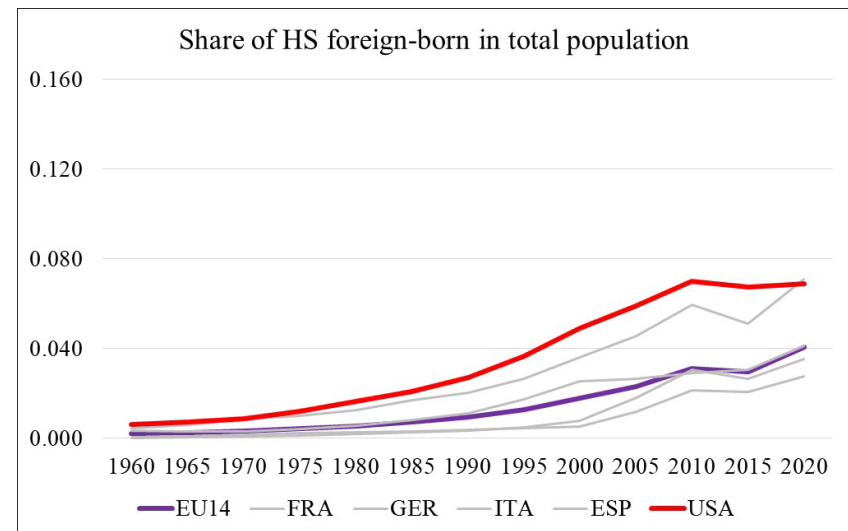
College-Educated Immigrants

Percent of foreign-born in USA, 2018-19, ranked by skill

Foreign-born Share by Education Degrees

Share in population= 13.5%

Figure 6

In summary:

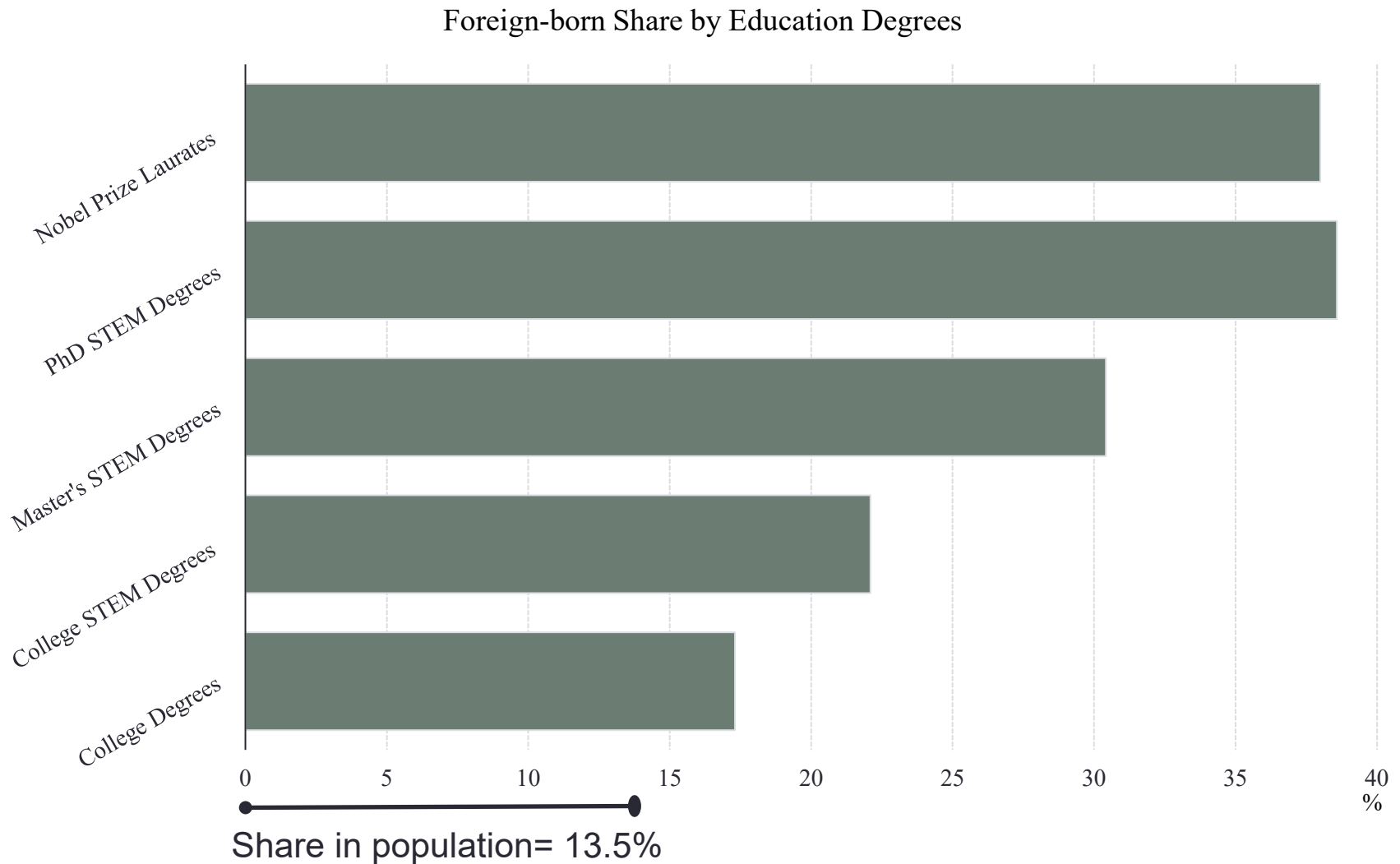- Increasing flow of people from emerging/middle income to rich economies;

- Highly educated for their origin, but differently selected across destination; Due to several factors.

- Europe and US at the receiving end of large numbers.

- The US has been in a special position in attracting high skilled, but several EU countries (UK, Switzerland, Norway, Luxembourg) did too.

How to think about their economic effect

- Macro framework, to organize in what productive roles (through what channels) immigrants affect the receiving economy **at the country level.**

- For these effects to occur immigrants need to be **integrated in productive role**s (labor, self-employment). We will analyze the probability of employment over time of immigrants.

- Then support with **micro-focused empirical analysis**, looking at specific mechanisms and impact on labor markets, regions, firms.

Accounting Framework (Peri 2012, IMF 2020)

Aggregate Production $\qquad Y_t = K_t^\alpha (A_t N_t)^{1-\alpha}$

As capital responds to equal MP to real rate we can re-write: $\quad Y_t = \left(\frac{K_t}{Y_t}\right)^{\frac{\alpha}{1-\alpha}} A_t N_t$

Growth of output can be decomposed in:

$$\Delta\ln(Y_t) = \underbrace{\frac{\alpha}{1-\alpha}\Delta\ln\left(\frac{K_t}{Y_t}\right)}_{Capital\ intensity\ change} + \underbrace{\Delta\ln A_t}_{TFP\ change} + \underbrace{\Delta\ln N_t}_{Labor\ Composite\ Change}$$

Each term can be affected by immigration, $\frac{\Delta N_{c,t}^F}{N_{c,t}}$

Aggregate effects

- The effects on Labor Aggregate, N_t ,considering immigrants as labor supply. It depend on substitutability immigrant-natives in a (nested) CES aggregate.

- The effects on Capital intensity, $\frac{K_t}{Y_t}$,depend on the role of immigrants as creators of new firms, and in stimulating investments.

- The effect on TFP, A_t depends on STEM workers, innovators and scientific and technological change (productivity).

On each term we can estimate a causal effect

- Aggregate approaches estimate directly the effect of immigration on Capital intensity and on TFP, using a regression like:

$$\Delta ln(x_{c,t}) = Controls + \beta \left(\frac{\Delta N_{c,t}^F}{N_{c,t}}\right) + \varepsilon_t$$

- OLS is biased→ 2SLS, where IV are usually "shift-share instrument" using past settlements and changing origin groups flows; or push-drive immigration episodes (refugees, climate crisis) representing quasi-experiments.

Effects of increase in foreign-born by 1 percent of receiving country population

	Peri (2012), US states	IMF (2020), OECD countries
% Growth in Capital intensity	0.27 (0.23)	0.84** (0.23)
% Growth in TFP	0.97*** (0.36)	0.56** (0.23)
Notes:	1960-2000, 50 US states plus DC, 10-year response; 2SLS and shift-share IV	1980-2018, OECD countries, 5-year response; Local projection method identifying sudden migration episodes
Source	Table 2, column 3, Peri (2012)	Figure 4.17, IMF (2020)

In the long run these are effects on average wages:
+ 2% over 2000-2020 from TFP, +0.5% from capital intensity in US.

Additional Labor-Market effects

- In a national approach, and we model the competition-complementarity across skills in the composite labor term N_t.

- Key parameters is elasticity of complementarity between natives and immigrants.

$$ln\left(\frac{w_{st}^D}{w_{st}^F}\right) = Productivity + \frac{1}{\sigma}\,ln\left(\frac{N_{st}^F}{N_{st}^D}\right) + \varepsilon_{st}$$

- Refined by distribution across skills (college –non college)

Estimates of elasticity of complementarity 1/σ

- Around 0.05 to 0.10. Statistically significant.

- (Ottaviano Peri 2012, Caiumi and Peri 2023)

- Imply +0.5% extra positive effect on wages of natives in US, 2000-2020.

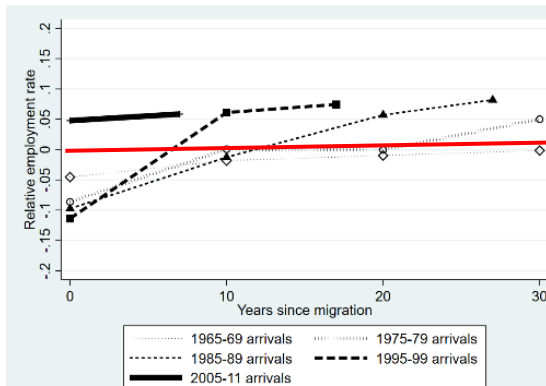- Accounting for college non-college and their elasticity +2% positive for non-college.

Figure 1: Evolution of immigrant population by education group (1960-2022)
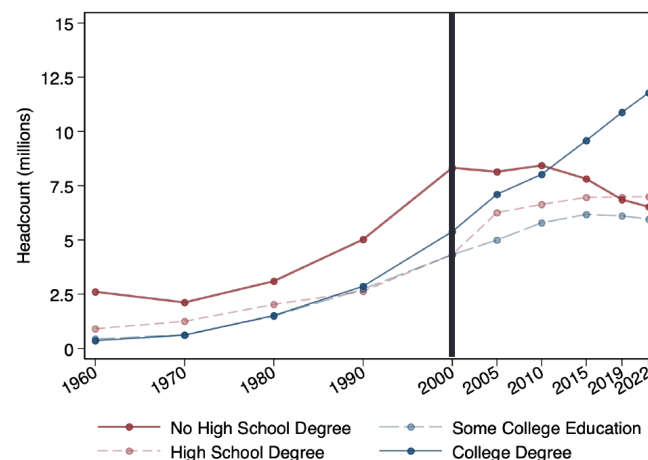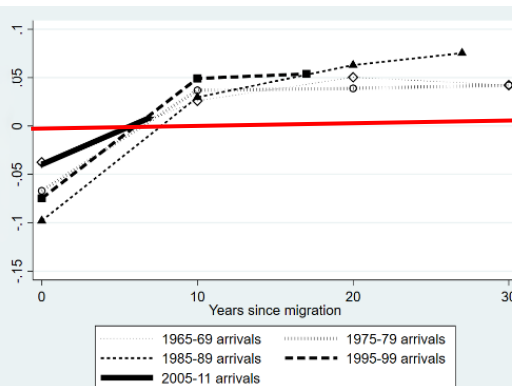
Did immigrants fully integrate in labor markets?

Figure 5
Employment rate of Immigrants, relative to US-born, by cohort, 1965-2000
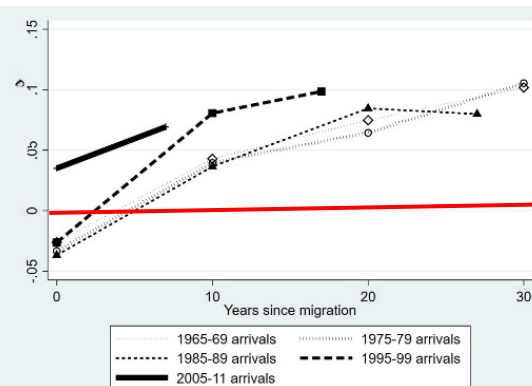
Mexican Immigrants **Chinese Immigrants** **Indian Immigrants**

All cohorts of immigrants, since 1965 have overtaken natives in employment probability.

In Europe on average **full convergence after 10 years** (Lee, Peri and Viarengo 2023)

Micro- Evidence on STEM Immigrants and Productivity/innovation

- In US→ looking at H1B visas→ more innovation → higher local productivity growth. Higher wages for college natives (firm, regions, universities).

- In Europe evidence from countries such as UK, Switzerland: Opening labor markets to EU skilled immigrants→ more R&D, more innovation, more firm creation.

foreign STEM and native college wage growth, 1990-2010
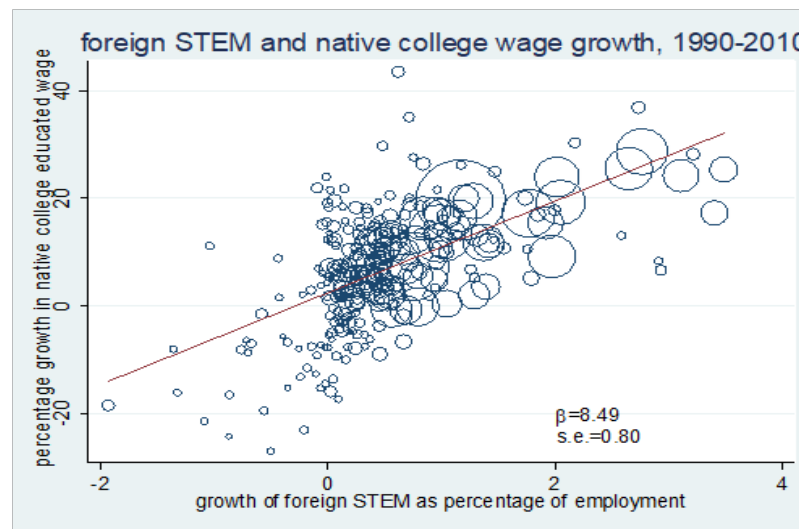
Evidence on Immigrants and firm-creation/start-ups

- In most OECD countries, and very strongly in US, immigrants have higher entrepreneurial rate than natives. Firm creation=job demand.

- Rate of start-up creation among US-born and Foreign-born master graduates in the US, 2000-2019:
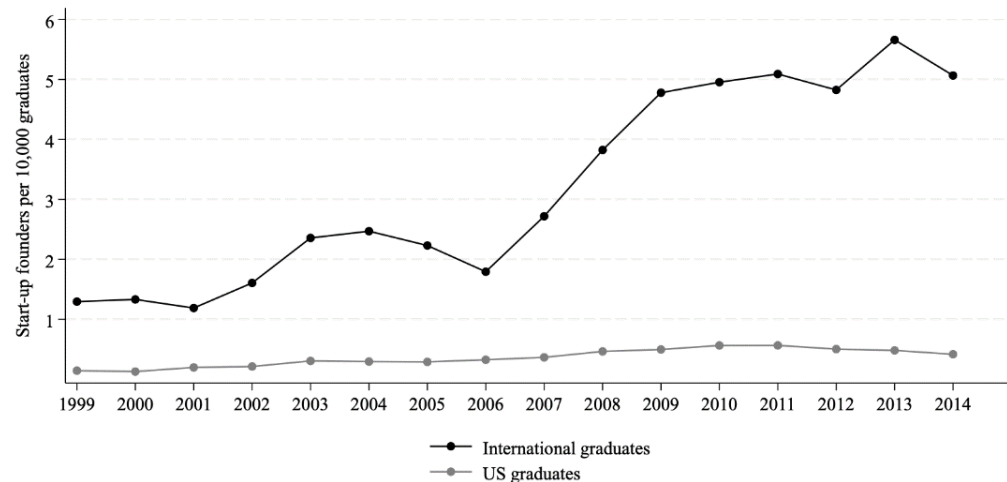
Overall:

- Immigrants contributed and integrated to US and European Economies.

- They complemented local workers, stimulating labor markets for natives.

- They contributed innovation, entrepreneurship and productivity growth.

- Why do people dislike immigrants so much?

Political consequences

- Recent growth of immigration → recent growth of populism/nationalism/mainly among right wing parties.

- Is there a causal relation? Actual evidence, key are skills:

- college educated immigrants → reduce populism-nationalism;
- non college educated immigrants→ increase populism-nationalism

- Both in Europe/US. Think of Brexit vote in London;
- Think of local governments in NY/California (where most immigrants are) vs Alabama/Louisiana (where very few are). But also Texas/Arizona, where more non college immigrants are.

Opposite effect of college and non college immigrants

On republican Vote, US

Figure 7

| Panel A | Panel B |

Republican votes and share of high-skilled immigration
Change between 1990/92 vs 2014/16

Republican votes and share of low-skilled immigration
Change between 1990/92 vs 2014/16

On Nationalism intensity of vote, Europe, US

Table 6
Nationalism intensity and immigrant share.

	(1) IV	(2) IV	(3) IV	(4) IV	(5) IV	(6) IV
Time	2007–2016	2007–2016	2007–2016	2007–2016	2007–2016	2007–2016
Dep var:	*Nationalism*					*Radical Right*
All migrants						
Share	0.01 (0.05)					
Share HS		−0.14* (0.07)		−0.17** (0.07)	−0.22*** (0.07)	−0.03*** (0.01)
Share LS			0.05 (0.05)	0.08** (0.04)	0.15*** (0.05)	0.01*** (0.01)

Implications: "antidote" of nationalism/populism is more skilled immigration.

Balanced immigration does not increase nationalism/populism

The positive effects of skilled immigrants (economic, fiscal) offset the potential hostility.

Some more detail

- Qualifications:
  - Rural, less educated natives responded more towards nationalism.
  - Location suffering from manufacturing decline responded more.
  - High skilled immigrants increased young pro-global attitudes.
  - Nationalist-reducing effect from college educated non-white immigrants as well.

- Additional Evidence: Anti-immigrant sentiment associated to large mis-perceptions. Correcting misperception can be promising.

While there are additional benefits of immigrants in an aging society…

- Prevent labor force shrinking, reduce shortages and mismatches.

- Reduce dependency ratio, make pensions system more sustainable.

- Support the 'silver' economy (health care, personal care, food, hospitality typically employ larger share of immigrants).

- Keep innovation, entrepreneurship and creativity alive. Younger generations. Diversity of approaches.

…there is no sign yet that aging/population decline associates with more immigration

Figure 9
Aging and net inflow of immigrants; OECD Countries 2000-2020

| Panel A | Panel B | Panel C |
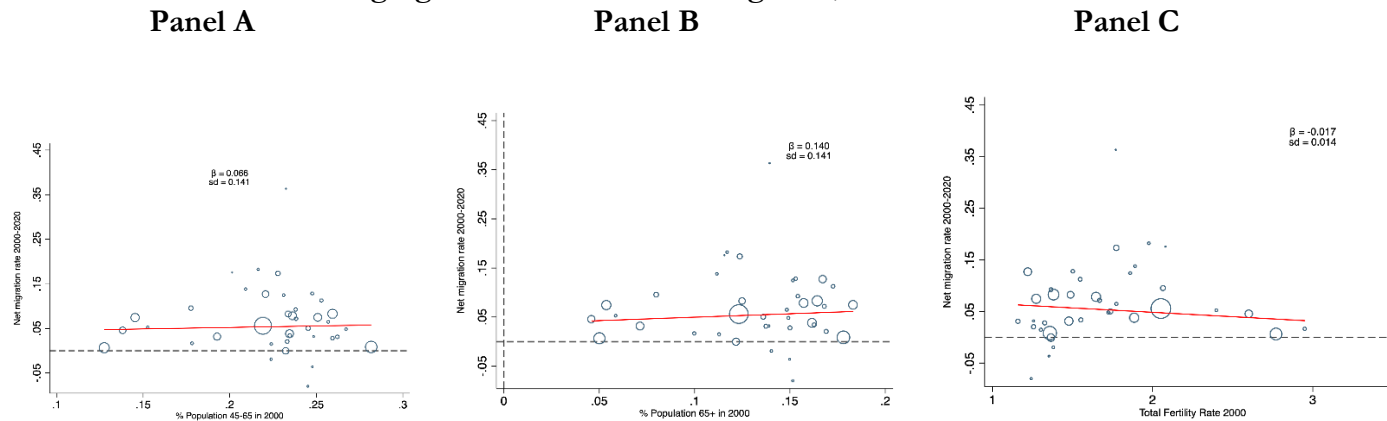
No correlation over last 20 years between measures of aging/population decline and net immigration. Similarly in US commuting zones.

Can we use policies to promote immigration in a sustainable way?

- **Plan** for balanced (college-non college) and sustained immigration

- Most college educated should be admitted **through college-education**. Right selection. Time to integrate.

- Most non-college should be admitted for **jobs related to the silver economy.** Solve shortages. Connect them to natives.

Conclusions

- It is hard to talk economic of immigration without generating strong "political sentiment".

- Large economic benefits from high and benefits from low skilled immigrants, especially in an aging society.

- High skilled immigration may attenuate the backlash.

- And we need better communication and information on immigration facts and immigration policies.