

Luigi Zingales

**Discussion of
The Contribution of High-Skilled
Immigrants to
Innovation in the United States**

by

Shai Bernstein, Rebecca Diamond, Abhisit
Jiranaphawiboon,

Timothy McQuade and Beatriz Pousada

- There are two hot topics in Washington
 1. Immigration
 2. Innovation
- This paper succeeds in merging the two
- Providing new evidence that
 1. Immigrants contribute to 23% of all US patents
 2. Their spillover seems to be greater than the spillover of similarly innovative U.S. inventors
- The paper can be properly summarized in a sentence

Immigrants do IT better

- When of course it refers to innovation and technology

- The paper use high quality data
- State of the art methodology
- And it is very careful in not over claiming
- Thus, it is a difficult paper to discuss because it is so well crafted
- Nevertheless, to fulfill my obligation to Paola, I will have to say something
- Let me start with an analogy

An Analogy

- When I was a child Italy was a champion in soccer
 - 2nd in the 1970 World Cup
 - 4th in 1978
 - 1st in 1982
 - 3rd in 1990
 - 2nd in 1994
- After 1994, except for a lucky first place in 2006, Italy performed terrible at the World Cup, in fact it did not even qualify to the last two world cups
- Why?
- In 1996 the Bosman decision eliminated any restrictions on the number of foreign players in the national league

- An analysis 15 years after the Bosman decision shows that only 12.8% of the internally trained players make the first team.
- Last year, the first Italian striker in “Serie A” scorers ranking was only 13th.
- 77% of the goals were made by immigrants
- Fortunately, not very many soccer players die before 35, so I cannot apply Jarvel et al (2018).
- Yet, I bet that if this were possible, I would have obtained the same result, in fact even stronger results
- What does that mean?

- The analogy is not perfect
- Soccer is kind of a zero-sum game and there are no major positive spillovers
- One immigrant player crowds out a local one
- This analogy is simply meant to illustrate that it is difficult to interpret the results they obtain in any welfare sense
- In Italian soccer we have very similar results, but with very negative consequences
- I am not saying the same is true for the U.S. innovation
- But they cannot rule it out

- We care about the performance of the national team
- Do we care about nationality in innovation?
- I claim we should for two reasons
 - 1) Our ability to attract foreigners can dry up for many reasons; how resilient is our system?
 - 2) Imagine 100% of innovation in America was done by Chinese nationals, would it be ok?

Not Ambitious Enough

- The paper is very honest in recognizing that
- “our paper is unable to speak to whether immigrants crowd-out innovation of US-born inventors,
- our paper is unable to provide evidence on how total innovation would change from immigration reform that changes the number of immigrants in the US.”
- But those are the relevant questions
- The paper provides a nice sound bite for Google’s lobbying effort to increase the number of H1 visa, but it does not deal with the important trade-off issues in immigration and innovation

External Validity

- The paper does not notice an important fact: the period analyzed is the post-Berlin Wall Collapse when a lot of Eastern Block scientists became free to move to the West.
- How generalizable are these results?
- In this sense, the paper is similar to Borjas and Doran (2012), only for the world of science.
- Without the analysis of the crowding out
- Why don't they do it?
- The paper should separate Eastern Block scientists from the rest, or compare pre and post 1990

Neo Mercantilism?

- The paper oscillates between universalism and neo mercantilism
- A patent is an idea + a monopoly right
- Do we care whether an idea is developed in Seattle or Vancouver?
- Do we care whether an idea is developed in Google's Mountain View office or its Zurich one?
- Did the pull to the United States add to the stock of world knowledge or subtracted from it?
- Is the U.S. ownership of the patent right so important?

Policy Implications

- Until now, America has been able to attract the best talents from all over the world with a combination of
 1. Low taxes
 2. Highly tolerant society
 3. Free research environment
 4. Welcoming population
- In addition, for all this sample period America has benefitted from the fact other countries trained scientists and then let them go without imposing any penalty

- The four magic conditions are all disappearing
- My prediction is that foreign countries will become much more aggressive in retaining top scientists
- The combination can be devastating for the America business model.
- Particularly, for the Silicon Valley one.
- It is unfair to ask the paper to address all these complicated issues.
- Yet, it is fair to ask not to ignore them completely

Conclusions

- This is a very well-crafted paper on a very important and controversial topic.
- It has a very nice topline result
- I think the paper could be a bit more ambitious in tackling the big questions
- I appreciate that it will require not to have the perfect identification
- In this, I might be too old.
- I am of a generation of economists who prefer to try and fail, rather than to fail to try.