

# **The Economic Value of Cultural Diversity: Evidence from US Cities**

*Speculations and Ideas partly based on work done by*

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# Main (Old) Question

- Are foreign-born residents of the a country (a.k.a. immigrants) an asset or a liability to native-born people? Do they benefit or hurt the domestic economy (from an economic point of view)
- Is there a way of aggregating meaningfully their different effects? Can European Learn looking at other countries?
- The Answer is very relevant for several policies (on immigration).
- **Our Definition of diversity:**
- Cultural Diversity=Difference in countries of origin (easy to define) which implies differences in skills and abilities of people.
- **Our Findings:**
- Diversity enhances productivity of native-born as foreigners provide skills (especially when educated) that complement those of natives.

# Overview

- US versus EU: why is the US and interesting case and how is it different from the EU. Some Facts about “diversity” .
- Our Cross-city analysis for the U.S.: what can we learn on the “value of foreign born” and on the value of their diversity?
- Does everybody benefit among the native people or are there “winners” and “losers”?
- Is it diversity to drive the effects or is it “selection” of talented migrants?

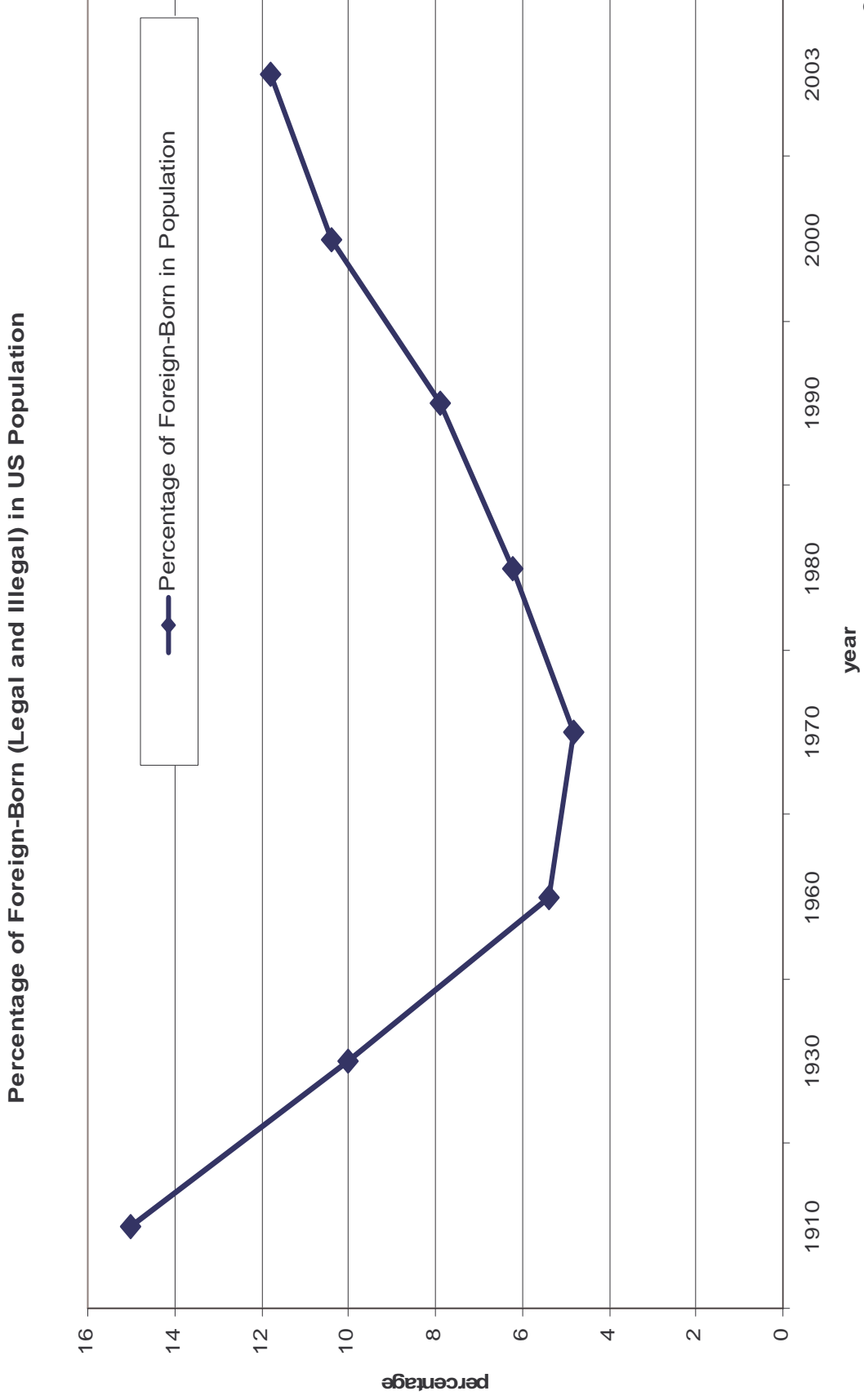
# USA versus EU

- **USA**: 50 states, largest economy in the world, experienced waves of immigration and successive assimilation of them. Immigration has dramatically increased in the last 10 years.
- **EU 15**: **Belgium, Denmark, Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, Netherlands, Austria, Portugal, Finland, Sweden, UK**. Traditionally a place of emigration now experiencing immigration. Free labor mobility since 1992, similar levels of development, size comparable to the US in population and GDP. European Labor Force Survey covers EU 15.

## Definition of Foreign-Born Residents (useful for a comparison to the US)

- People residing in a EU15 country and born outside the EU15. This should be compared to foreign-born residing in the US
- Internal mobility should be considered as well but is a separate issue. People born in a EU15 country and resident of another EU15 country. This should be compared, however, to inter-state or inter-census regions mobility of US residents.

# Fact 1: Foreign Born are a growing Share of US population



# Estimate for EU15 year 2000

- They are based on Labor Force survey.  
First calculate the foreign-born in each country and then identify those (among the 33 millions of foreign born in EU15 countries) who are born outside EU.
- In year 2000, the percentage of people in the EU labor force born outside the EU was **4.8%**.

Therefore...

- The share of foreign born in the US was almost three times as large as the share of foreign born in Europe in 2000.
- It took the US 40 years to go from 5.4% (1960) to 12.5% (2000) even with very fast growing immigration since 1970.



# How Mobile (Internally) are Europeans as compared to Americans?

- US 2000 (my calculations using Census 2000 IPUMS data):
  - Inter-Regions (9 census regions) mobility. Percentage of people living in a census region different from the one of birth: **26% (among college graduates 37%)**
  - Inter-State Mobility: Percentage of people living in a state different from the one of birth: **36% (among college graduates 49%)**
  - Inter-State Mobility: Percentage of people moving each year between states: **3%** (OECD source 1999)
- EU15, 2003 (from European Labor Force)
  - Inter-country mobility Percentage of people living in a EU15 country different from the one of birth: **3.8% (among college graduates 1.6%)**
  - Inter-region (within country) mobility: Percentage of people moving each year between regions in a country (**0.6% Italy, 1% Germany, OECD Source 1999**)

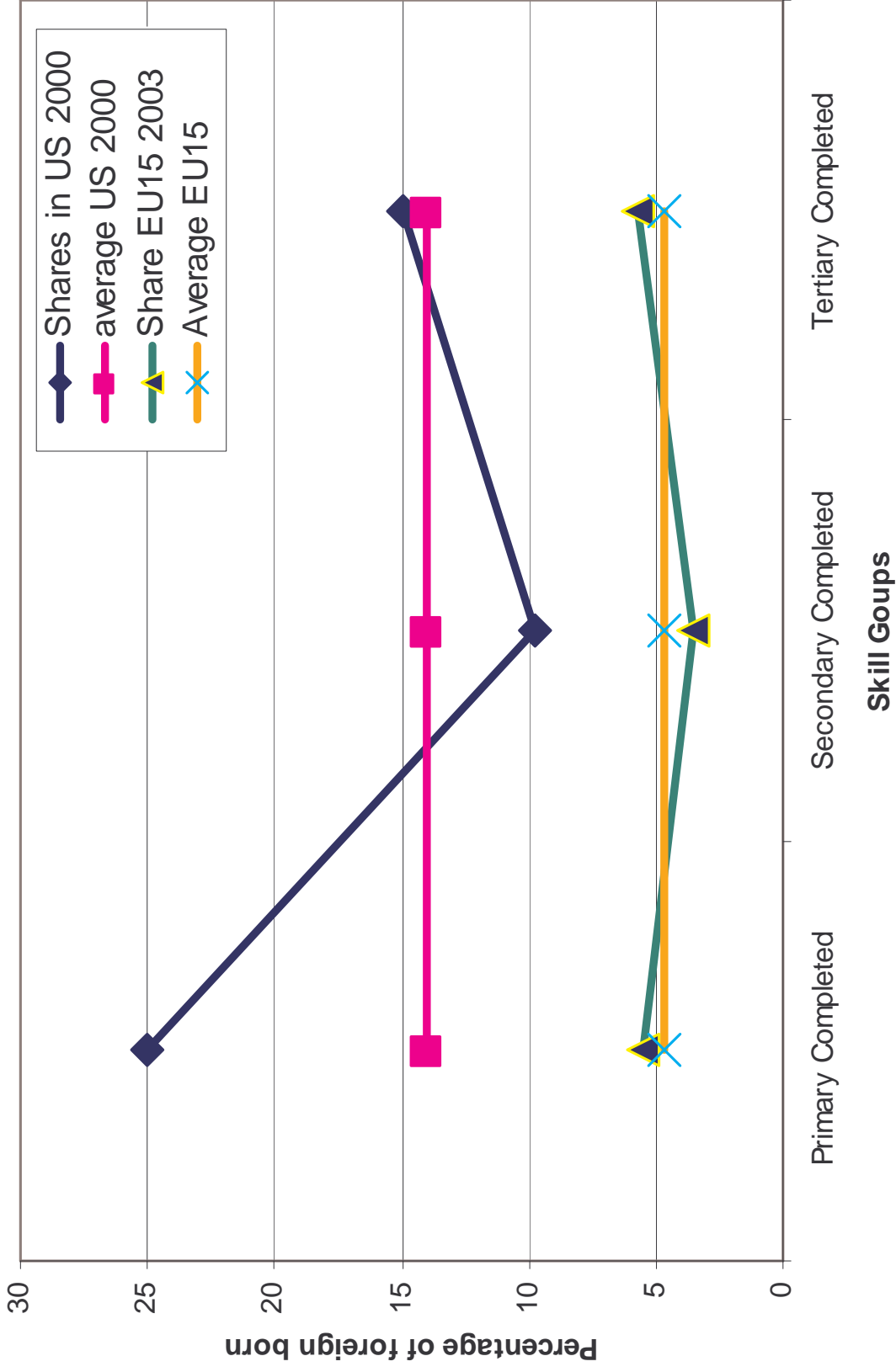
# Therefore...

- Difference Number 2:
- US has a population that is internally six to ten times more mobile than Europe.
  - Qualification 1: Mobility across countries is very low in Europe and mobility within countries is low too.
  - Qualification 2: College Educated workers (the most mobile group in the US) are less mobile than the average in Europe.
- This is relevant because internal mobility is a mechanism to redistribute the effects of immigrants on local population. Regions near the border need not carry all the consequences (positive and negative) if there is internal mobility.

## **Skill Composition of Migrants in the US and EU15**

- Migrants into the US maintained a U-shaped distribution of their skills (1970-2000) while their share grew dramatically.
- EU15 migrants also seem to display a U-shaped distribution of their skills, they are over-represented in the class of low skills (primary education) and high skills (tertiary education).

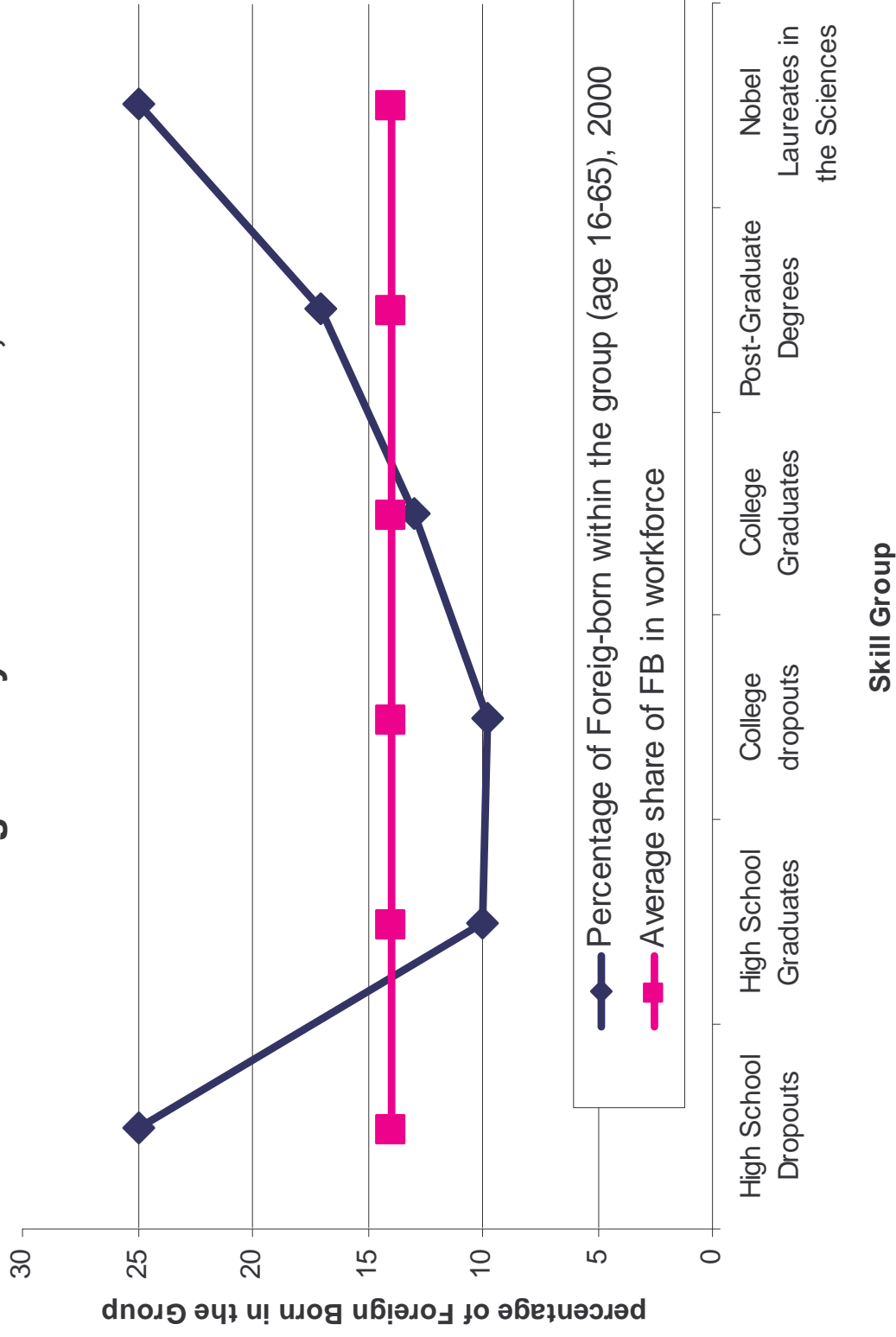
# Skill Distribution of Migrants: US and EU15



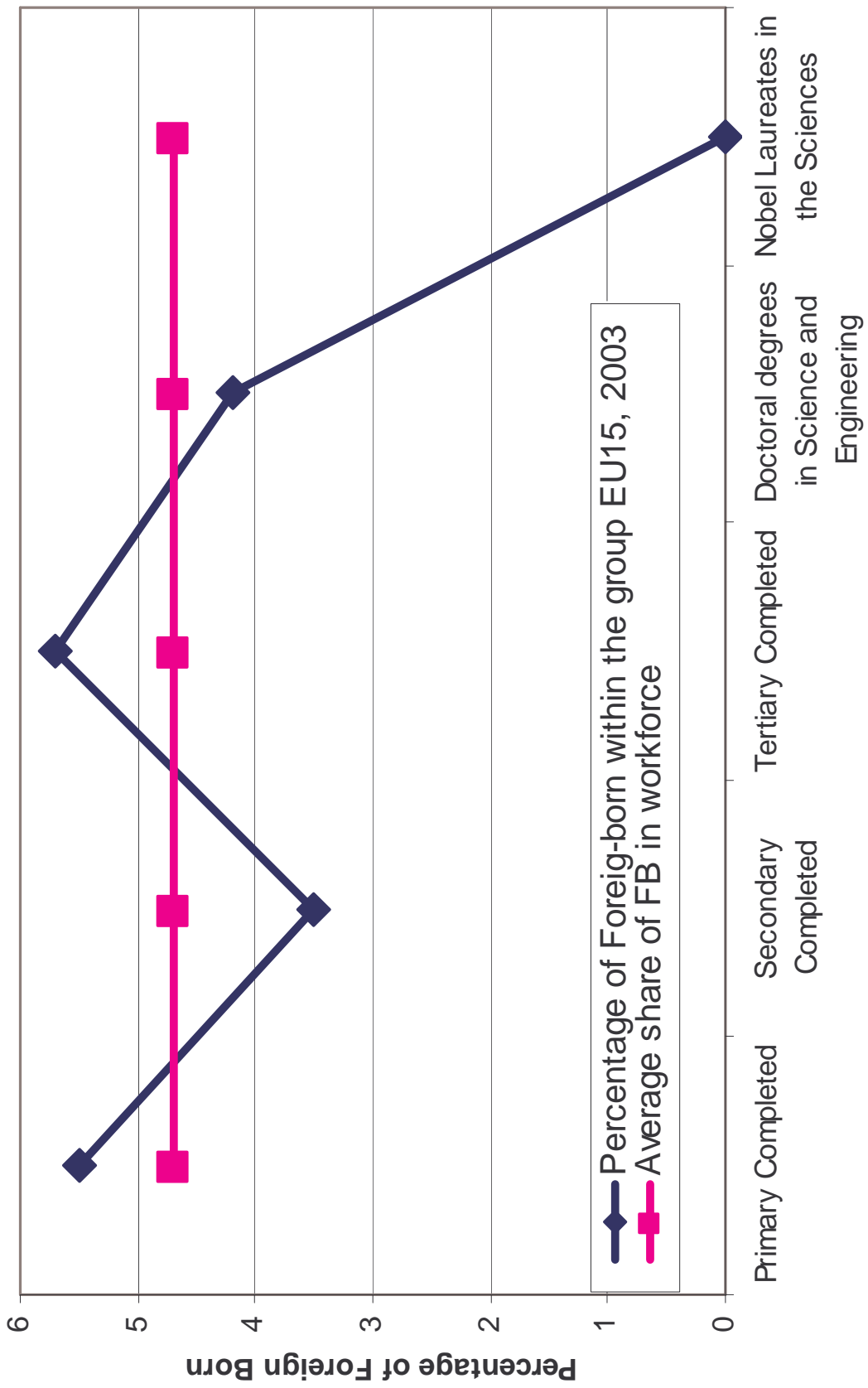
## However...

- Looking more in detail the US exhibits the ability of attracting the very best “talents” which does not seem true of Europe
- The contribution to production of High Skills has been growing dramatically in the US and weighted by their contribution to Labor production very high skills are more relevant than low skills

# Distribution of Immigrants by education level, USA 2000



# Distribution of Immigrants by education, EU15 2003



Skill Group

# Therefore

- **Difference Number 3:**
- While, like for the US, EU15 seems to attract a disproportionate share of less skilled workers, unlike the US there is not strong evidence that the EU15 is able to attract Talents.
- More investigation is needed but several recent reports (European Economy Advisory Group 2003, European Report on S&T indicators 2003, Canada Government 2004, OECD Science, technology, Industry Outlook 2002) suggest Brain Drain out of Europe not compensated by Brain Gain.



Percentage of Masters-Ph.D.'s among foreign born in the US

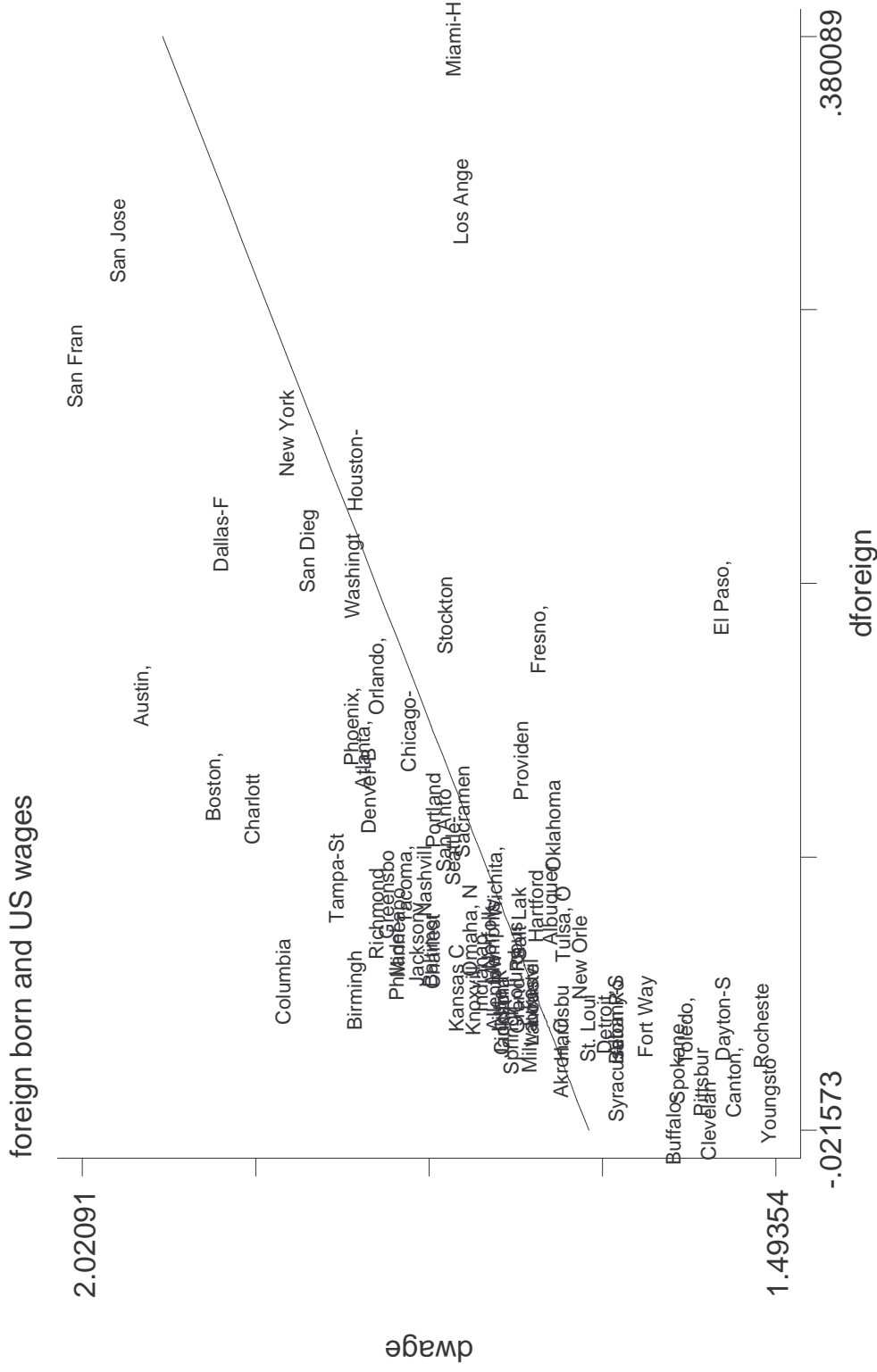
	1970	2000
Germans	4.6%	11.6%
Britons	5.7%	13%
Italian	2.3%	8.9%
French	8.9%	26%
Chinese	18%	25%
Russian	7%	20%
Mexican	1%	1%
Canadian	5.7%	15.3%

# American Cities

- Looking across US cities we can learn much about the economic effect of diversity, as captured by the share of foreign born. The degree of diversity varies a lot across cities, some, such as Cincinnati, Pittsburgh have only 2-3% of foreign born, others, such as New York, Los Angeles, Miami have up to 40%-50% of foreign born.
- As American are mobile, and react to the presence of foreign-born moving in or out of cities, they “arbitrage away” the excess of supply of labor and in the long-run the correlation between wages and rents of natives and diversity reflect, respectively, the effect of foreign born on productivity and on city amenities.

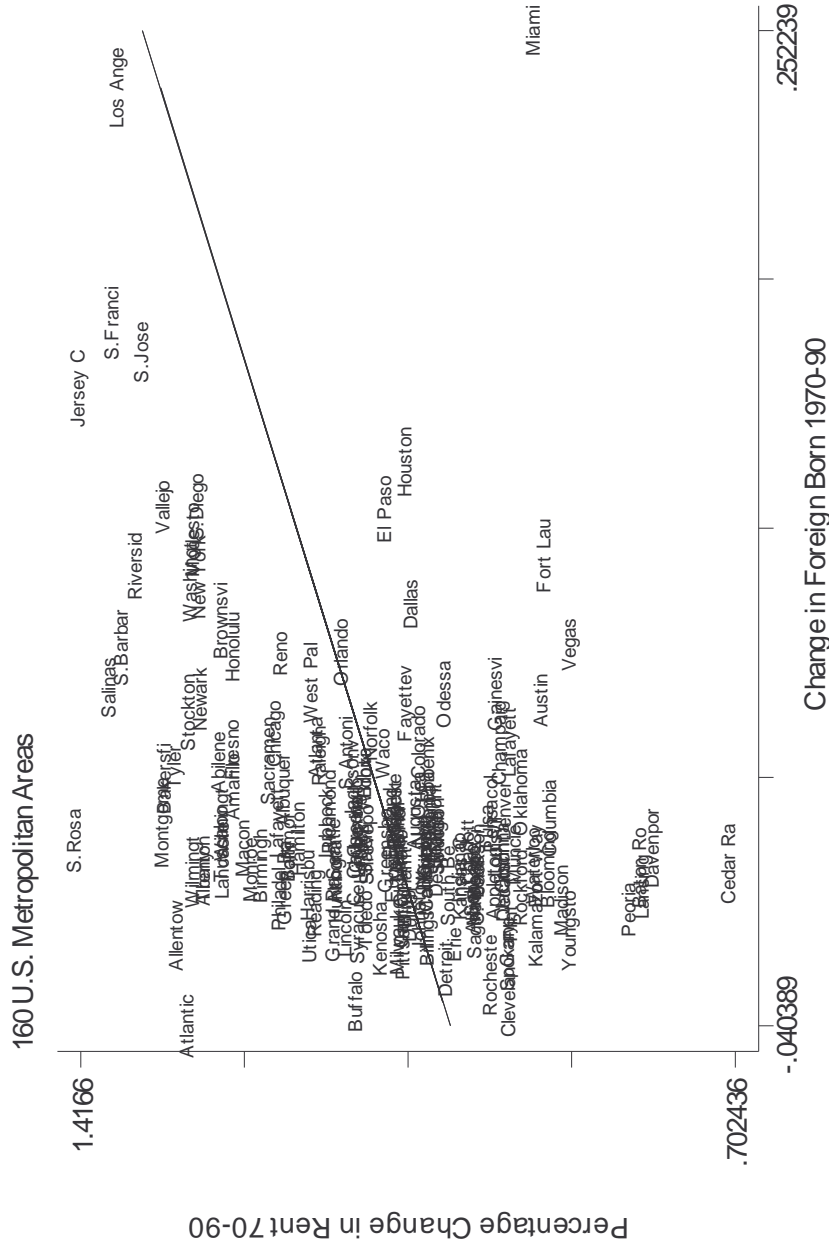
# Wages (productivity) of US-Born increased more where foreign born share grew more 1970-2000

## Wages and Diversity



Fact 4: Rents (willingness to pay for amenities) of US-Born increased more where foreign born share grew more

Figure 2 - Rents and Diversity



Slope: 1.14 std. error (0.37)

# What is going on?

- Our theory:
  - Foreign-born provide skills that are “complementary” to and needed by the US economy both at the low and high end of the range. This enhances productivity of US born. Higher wages.
  - Foreign-born provide a variety of consumption goods and services (from gardening to food to entertainment) that are valued by Americans. These are different from those provided by Americans and people have a taste for variety and they are willing to pay for it. Higher rents.

Hard Part on which we are working further  
(where all the technicalities are needed)

- To prove (beyond reasonable doubt) that the established correlations between presence of foreign-born and wages-rents are consequence of a causation mechanism going from foreign-born to productivity-rents. We used many controls plus Instrumental variable techniques and so far the result of causation from foreign-born to productivity stands.

## How large is the effect?

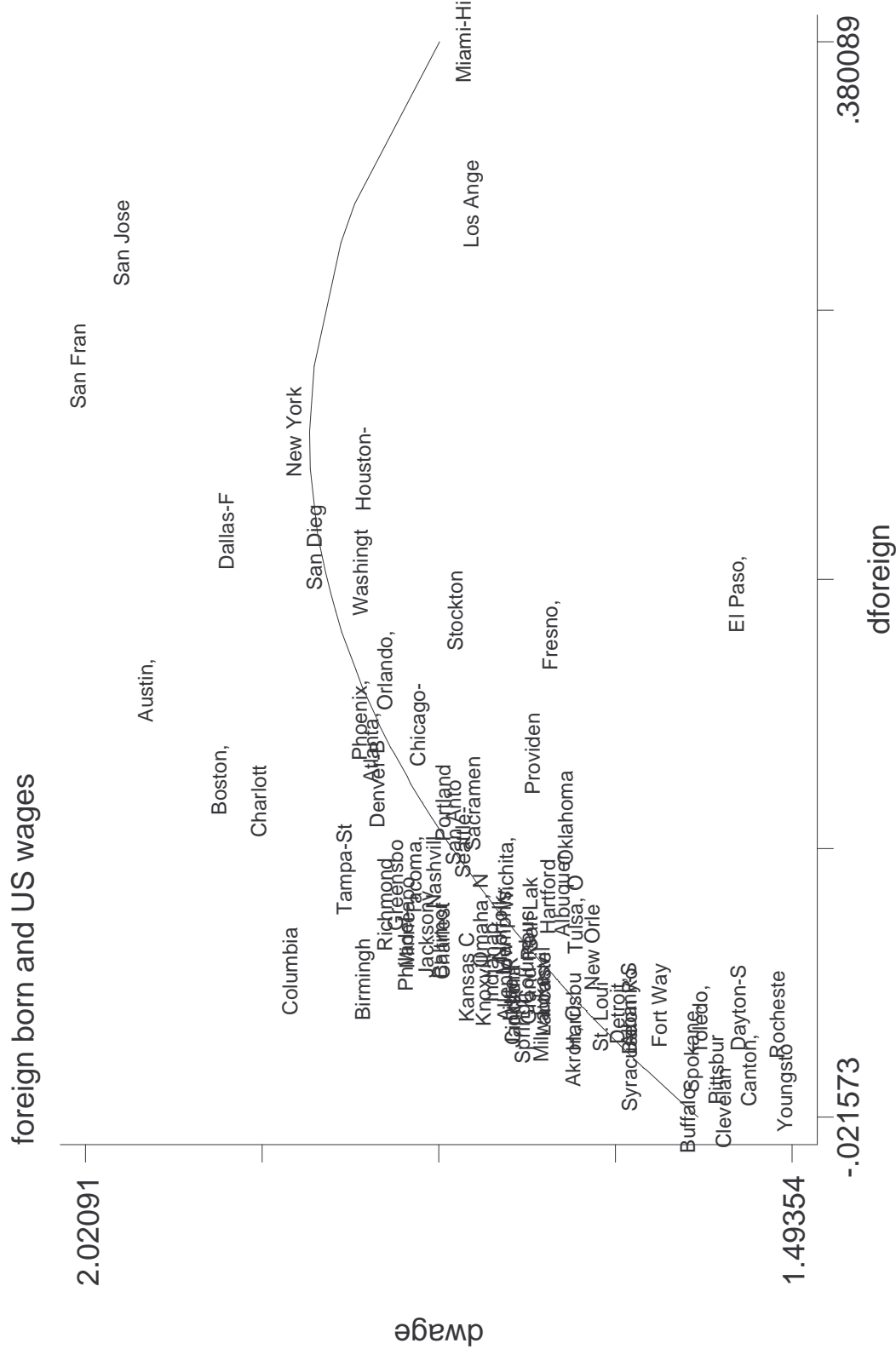
- For 1% larger share of foreigners wage of US-born are 0.9% larger. Therefore a difference in the share of foreigners as between Oklahoma City (10%) and San Francisco (38%) would imply a difference in average wages for natives as large as 25%. It would also imply 28% higher rents, and this is how the equilibrium is achieved.

# Qualifications

- How Much diversity is good? Is there an “optimal amount of diversity”? It is hard to believe that the effect will be positive even at 90% of foreign born. A country still needs natives!
- Who benefit most? (across skills)
- Talents or diversity?



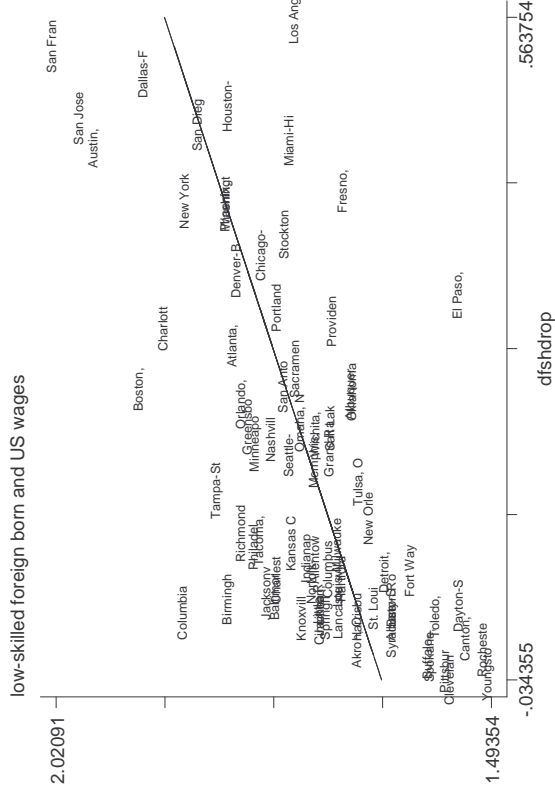
**Best fit is a quadratic function, meaning that there are “decreasing benefits”  
 To increase in foreign born. The optimal increase was 25% of population.**



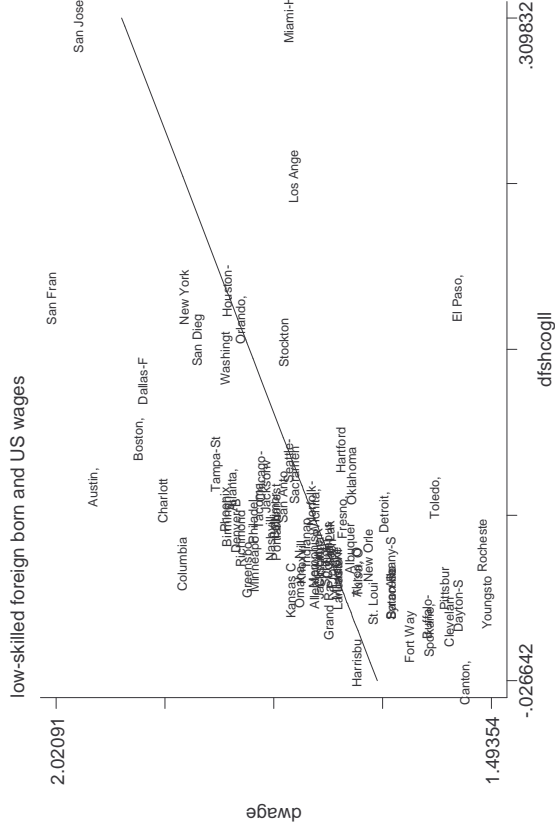
# Benefits for different skills (levels of education)

- Low skills are harmed by the increase in foreign low skilled. As the share of high school dropouts increase among foreign born, keeping constant the share of foreigners, native-born without high school degree experience wage decline. -0.19% per each percentage of unskilled foreign-born. Substitution effect analyzed by Borjas in a series of papers.
- High skills, however, are helped by the increase in foreign high skill even controlling for overall foreign-born. As the share of college graduates increases domestic college graduates experience a further 0.33% increase per each 1% (on top of the average 0.80% from foreign-born) overall.

# Benefit from different skills: Effect of low-skilled and high-skilled foreign born on US born average wages



Increase in 1% of foreign born without degree is associated with higher wage for US born by 0.44%



Increase in 1% of foreign born with college degree is associated with 0.92% higher wages for the average US-born

## Conclusions: What did we learn on the economic effect of diversity from the US?

- In a country in which diversity is much larger than in Europe diversity is associated with positive effects on productivity for natives.
- The US however, differently from Europe has been able to attract “talents”, which may have enhanced the “quality” of foreign-born
- There is evidence that, while unskilled immigrants do not have a generalized negative effect on wages they have a negative effect on wages of unskilled locals.

# Conclusions, continued

- The overall positive effect of immigrants is much larger when they are skilled. Diversity, however, seems good in general.
- There may be an optimal level of diversity, however as a whole, the US is still very far from it and Europe even farther.
- Advise for the EU: try to attract foreign born, especially talented ones.