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Week 1: Basics of Immigration

- I. Why Immigration?
 - A. Immigration is one of the most hotly-debated topics on Earth, especially in countries like the United States that are habitual net recipients of migrants.
 - B. As with most "hotly-debated topics," the intellectual quality of popular and political discourse is low. On all sides.
 - 1. "America First"
 - 2. "Abolish ICE"
 - C. Higher-quality analysis still struggles with the complexity of the issue.
 - 1. Results from basic economics
 - 2. Qualifications from advanced economics
 - 3. Cultural factors
 - 4. Political factors
 - 5. Crises and scandals
 - D. This class explores all of these complexities and more to help students achieve a sophisticated understanding of the issue.
 - E. Disclosure: My own views on immigration are radical and radically unpopular. Throughout the course I will strive to:
 - 1. Distinguish between the academic consensus and my own views
 - 2. Acknowledge key uncertainties and ambiguities
 - 3. Maintain both candor and civility
- II. The Demography of Immigration
 - A. By the numbers, migration remains rare. Roughly 3.5% of human beings currently reside outside their nation of birth up from 2.8% in 2000.
 - B. Where do migrants come from? Asia, then Europe, Latin America, and finally Africa.



Note: NA = Northern America; LAC = Latin America and the Caribbean

C. Where do migrants go to? Asia, then Europe, North America, and finally Africa.





D. The U.S. contains more migrants than any other country by a large margin.



Image: Gilles Pison, based on United Nations data

- E. As a percentage of population, however, the foreign-born share in the U.S. is moderate. Micro-states (<1M population) aside, the highest foreign-born shares are in UAE (88%), Qatar (79%), Kuwait (72%), Oman (46%), Macao (40%), Hong Kong (40%), Saudi Arabia (38%), and Singapore (37%). (All U.N. 2019 figures)</p>
- F. Out of Western democracies, the highest foreign-born shares are in Australia (30%), Switzerland (30%), New Zealand (22%), Canada (21%), and Sweden (20%).
- G. Global map of foreign-born share (see next page):
- H. According to U.N., the U.S. foreign-born share is now at 15%, slightly above the previous historic high in 1890. According to the U.S. Census, we're slightly below the historic high.

Immigrant share in U.S. is lower than in many other countries

% foreign born, 2017



Note: Share foreign born in U.S. is for the 50 states and District of Columbia. Countries and territories without shading have populations less than 1 million and are not included.

Source: Pew Research Center analysis of United Nations and U.S. Census Bureau data.

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Immigrant share of U.S. population approaches historic high

% of U.S. population that is foreign born



Note: Share foreign born is for the 50 states and District of Columbia.

Source: U.S. Census Bureau, "Historical Census Statistics on the Foreign-Born Population of the United States: 1850-2000" and Pew Research Center.

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- III. Understanding Migration Patterns
 - A. Income/wages are the most obvious predictor of migration. People strongly prefer to migrate to countries where incomes are higher.
 - 1. Immigration versus Social Desirability Bias
 - B. The so-called "gravity model" also clearly explains a lot.
 - 1. Gravity models say that trade is directly proportional to the size of the trading partners and inversely proportional to the distance between them.
 - 2. We can clearly see this with migration: size (population? total GDP?) and proximity both matter.
 - C. Cultural affinity is another big factor. People clearly favor countries where they already speak the language.

1. The case of Spain

- D. Religious similarity also seems to matter, especially in the Middle East.
- E. Migrants prefer to migrate to countries that already contain many migrants from their home country.
 - 1. This leads to clear agglomeration effects at both the national and local level.
- F. Still, all of these factors pale before the power of regulation.
 - 1. Strict regulation of migration leads to very low migration even if all other factors push toward high migration.
 - 2. Liberal migration policies in rich countries almost always lead to very high migration, even if other factors are unfavorable.
- IV. How Regulated Is U.S. Immigration?
 - A. Despite its open borders history, the U.S. foreign-born share is now fairly typical for a First World country.
 - B. The U.S. gives roughly 1 million per year lawful permanent resident status, and grants citizenship to roughly 750,000 per year. (Until coronavirus, anyway).
 - C. Breakdown for new lawful permanent residents in 2018: 44% immediate relatives of U.S. citizens, 20% family-sponsored, 19% refugees/asylees/crime victims, 13% employment-based, and 4% diversity lottery.
 - D. How many wish to come? Multiple sources of evidence confirm the rationing is draconian.
 - 1. Black market prices
 - 2. Surveys For 2018: over 750M want to migrate; 158M name U.S. as first choice, over 100x the typical annual number admitted.
 - 3. Diversity lottery about 0.8% make the first cut; about 80% of these apply; about half of these get accepted. Even if everyone who wants to come applies (!), this implies about 12.5M more immigrants per year.
 - 4. Issues with these measures?
 - 5. Bannerjee-Duflo's RCT objections
 - E. How can strict regulation and high illegal immigration co-exist? Simple: Immigrants migrate despite the high costs because the gains are vast.

Profile of the Unauthorized Population: United States

Demographics	Estimate	% of Total
Unauthorized Population	11,300,000	100%
Top Countries of Birth		
Mexico	5,944,000	53%
El Salvador	655,000	6%
Guatemala	525,000	5%
China	362,000	3%
Honduras	355,000	3%
Regions of Birth		
Mexico and Central America	7,593,000	67%
Caribbean	351,000	3%
South America	685,000	6%
Europe/Canada/Oceania	579,000	5%
Asia	1,774,000	16%
Africa	318,000	3%

- F. Why isn't illegal immigration higher?
 - 1. Geography
 - 2. High smuggling cost (+ credit market imperfections)
 - 3. Punishment (especially for "illegal *re*-entry")
 - 4. Danger
- G. The logic of tourist visas
- H. The case of "Wet Foot, Dry Foot"
- V. How Regulated Is Immigration Globally?
 - A. The Gulf monarchies have the easiest immigration policies, but even they have considerable regulation and make naturalization almost impossible.
 - B. The EU has near-open borders internally, but strict regulation for non-EU members especially from Third World nations.
 - 1. The outsourcing of draconian measures
 - C. Countries like Canada and Australia allow relatively high levels of skilledbased immigration, but strictly regulate other kinds of immigration.
 - 1. Remoteness and seas substitute for direct enforcement.
 - D. How many want to come?

Top Desired Destinations for Potential Migrants

To which country would you like to move?

	2010-2012	2015-2017	Estimated number of adults
	%	%	(in millions)
United States	22	21	158
Canada	6	6	47
Germany	4	6	42
France	5	5	36
Australia	4	5	36
United Kingdom	7	4	34
Saudi Arabia	5	3	24
Spain	4	3	21
Japan	2	2	17
Italy	3	2	15
Switzerland	2	2	14
United Arab Emirates	2	2	12
Singapore	1	1	11
Sweden	1	1	9
China	1	1	9
New Zealand	1	1	9
Russia	1	1	8
Netherlands	1	1	7
South Africa	1	1	7
Brazil	1	1	6
South Korea	1	1	6
Turkey	*	1	6

- E. The number who say they want to come vastly exceeds the number any rich country allows to come.
- F. Some Unpleasant Immigration Arithmetic: Openness Index = (# Immigrants/# Would-Be Immigrants).
- VI. A Brief History of Immigration Regulation
 - A. The U.S. case until the late 19th-century: Open borders with small exceptions for "undesirables," including prostitutes, anarchists, diseased, mentally ill.
 - B. Then, the Chinese Exclusion Act, followed by the Gentleman's Agreement with Japan.
 - C. 1917 Literacy/Asiatic Barred Zone Act (vetoed by Wilson, overridden by Congress).
 - D. Temporary ("emergency") 1921 national quotas based on 1910 Census.
 - E. Permanent 1924 national quotas based on 1890 Census.

- F. The accidental liberalization of the 1965 act; family reunification was intended to keep America white while avoiding explicit racism.
- G. Timmer and Williamson scores (-5 to +5, with 0 indicating "Open doors, no encouragement, no discouragement"):

Argentina Australia -2 -2 -4 -4 Canada Brazil -2 -2 -4 -4 United Kingdom United States -2 -2 -4 -4

FIGURE 1 POLICY: An immigration policy index

- H. Europe, the wars, decolonization, and immigration.
- I. *Emigration* restrictions in the Communist world.
- VII. The Standard Story of Immigration
 - A. The standard story of immigration:
 - 1. In earlier times, when America was underpopulated, free immigration was a good idea.
 - 2. Once the economy matured, however, the country adopted immigration restrictions to suit changing conditions
 - 3. These restrictions prevent economic and social collapse.
 - B. The first two parts of the story have little basis in fact.
 - C. Most of the United States remains virtually empty, so why aren't we still "underpopulated"?
 - 1. Wages are much higher now than they were in the 19th-century, so economically speaking we're more underpopulated than ever.
 - D. Immigration restrictions weren't imposed because the "economy matured." They were imposed because of racial and ethnic prejudice: first against the Chinese and Japanese, then against Southern and Eastern Europeans.
 - E. At the time, most Americans favored immigration restrictions because they were convinced that these unpopular racial and ethnic groups were "inferior" and would remain so. But most Americans were wrong.
 - 1. Chinese, Japanese, and Southern and Eastern Europeans have been at least as successful as the rest of the population.
 - F. Still, the failings of the first two parts of the story hardly show that the last part is incorrect.
 - G. Even if the last part is hyperbole, immigration restrictions could still be wise policy. Perhaps they merely have net benefits even though they don't literally "prevent economic or social collapse."
- VIII. Immigration Regulation: What's the Point?
 - A. The overriding goal of immigration regulation is to reduce immigration.
 - B. Most countries eagerly prevent low-skilled immigration, but very few countries admit even high-skilled immigrants with open arms.
 - 1. In the Australian point system, a young fluent-English speaker with a Ph.D. has 70 points, but needs 85 points for admission.
 - C. To many people, justifying immigration restriction is superfluous, because the desirability of the goal is obvious.
 - 1. "Are you on drugs?"
 - 2. From this point of view, the key policy question is, "What's are the most effective ways to restrict immigration?" not "Why bother?"
 - D. In this class, we will not take the desirability of restriction for granted. Instead, we will consider and assess arguments for restriction.
 - E. The top four:
 - 1. Immigration causes poverty.
 - 2. Immigration is a fiscal burden.
 - 3. Immigration causes cultural harm.
 - 4. Immigration causes political harm.

- F. Also-rans:
 - 1. Immigration harms the environment.
 - 2. Immigration spreads contagious disease.
- G. Note: Most people resolve even the most technical uncertainties about immigration via wishful/morbid thinking.
 - 1. If you like immigration, all problems are fake.
 - 2. If you dislike immigration, all problems are dire.
- H. Don't do this.

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Week 2: Immigration As Trade

- I. Population Economics with Identical Workers
 - A. Immigration is a special kind of population growth, so let's start with that.
 - B. Aggregate Labor Markets analyze large labor markets (cities, states, countries, the world) using Aggregate Labor Supply and Aggregate Labor Demand.
 - C. Aggregate Labor Supply depends on hours/worker and number of workers.
 - 1. The larger the region, the more fixed is the number of workers and the more vertical the ALS curve.
 - D. Aggregate Labor Demand overwhelmingly depends on worker's Marginal Value Product = Marginal Physical Product * Price.
 - 1. Since this isn't a macro class, it's helpful just to think of the central bank as targeting the price level, so ALD is just a function of workers Marginal Physical Productivity.
 - E. Question: What happens to the Aggregate Labor Market when the population of workers rises?
 - F. Let's start with the admittedly unrealistic assumption that all workers are identical. Then immigration:
 - 1. Increases Aggregate Labor Supply.
 - 2. Has no effect on Aggregate Labor Demand. (There's no clear reason why rising population would shift MPP, and the central bank continues to target P, so MVP=MPP*P stays the same).
 - G. Conclusion: Population growth reduces wages.
 - H. Does this mean that population growth is bad for humanity? Absolutely not. The new people are almost certainly glad to be alive.
 - I. Does this mean that population growth is bad for existing people?
 - 1. Probably not for the families of the new people.
 - 2. Not for *employers* of labor including everyone who owns stock or a retirement account, or who hires a nanny, housekeeper, or elder care professional.
 - 3. Not for home- or land-owners more people means higher housing prices.
- II. Population Growth and Comparative Advantage
 - A. In the real world, workers are *far* from identical. Skills vary widely.
 - B. This implies that population growth can actually raise wages. Why? Comparative advantage: People with different skills produce more *total* output if they specialize and trade.
 - C. Simple example: Young workers are relatively good at physically demanding jobs. Mature workers are relatively good at mentally demanding jobs.

1. Imagine that initially the young workers are kept in exile, cut off from the rest of the economy.

	Young	Mature
Boxes Moved	4	4
Furniture Restored	.5	5

D. Suppose that in a day, young and old people can produce:

E. Both sides can increase production via specialization and trade! Have ten young people switch from restoring furniture to moving boxes (-5 furniture, +40 boxes), and two mature workers switch from moving boxes to restoring furniture (+10 furniture, -8 boxes). The world is richer by 5 furniture's and 32 boxes.

F. How can we show this in an Aggregate Labor Market diagram? Thanks to comparative advantage, trade effectively raises MPP. Suppose that post-trade, furniture and boxes have equal prices. Then trade effectively changes the productivity table to:

	Young	Old
Boxes Moved	4	5 (by trading furniture for boxes)
Furniture Restored	4 (by trading boxes for furniture	5

- 1. Implication: population increases *both* ALS and ALD, so the effect on average wages is now ambiguous.
- G. Wait, what about externalities?
- III. What's the Optimal Number of People?
 - A. People often worry about "overpopulation" or "underpopulation." What does this mean in economic terms?
 - B. It's tempting to say "optimal population"="population with maximum GDP per capita." But:
 - 1. Anyone who has a baby rejects this at the household level. When my wife and I had twins, our family's per-capita income fell by 50% as a matter of pure arithmetic.
 - 2. By this standard, the existence of life-loving but below-average people is "suboptimal."
 - C. Even by the "maximize per capita GDP" standard, though, the world still might be underpopulated. Consider: Over the last two centuries, both population and per capita GDP have massively increased.
 - D. Furthermore, over the last 150 years, the real prices of food, fuel, and minerals have fallen by about 1%/year. The main commodity that keeps getting more expensive: labor. If we're "running out" of anything, it's people.

- E. In any case, economists' real standard for over- or underpopulation is whether *the marginal baby born has (on net) negative or positive externalities*.
- F. Slogan: "You don't have to raise the average to pull your weight."
- IV. Negative Externalities of Population
 - A. As Landsburg notes, many people think that each child born gets a 1/7 billion share of world resources implying negative externalities.
 - B. This isn't how the world really works. Instead, when a family has one more child, each child in that family gets a *lot* less, with little effect on anyone else.
 - C. This is especially clear from bequests. Picture a simple agricultural economy where kids always divide their parents' landholdings equally. If everyone but you has lots of kids, your kid inherits just as much land and his land will actually be worth more due to higher demand.
 - D. Lesson: With private property, parents who care about their kids automatically internalize any "poverty externality." Under old-school socialism, in contrast, the poverty externality is very real. You can have an many kids as you like without reducing your family's consumption at all.
 - E. Poverty aside, people also often worry about the negative *environmental* externalities of population.
 - F. Key economic point: Limiting population to reduce environmental externalities is using a sword to kill a mosquito. Why not just raise the price of environmental damage with e.g. pollution taxes?
 - G. The same applies to congestion externalities. If the roads are crowded at rush hour, rush hour tolls are a much cheaper and more humane solution than preventing people from existing.
- V. Positive Externalities of Population
 - A. Does population have any *positive* externalities? Yes!
 - B. Existence externality: Most people are happy to be alive, but parents can't charge you for the privilege of existing.
 - 1. In Singapore, though, you are financially responsible for your elderly parents.
 - C. Idea externality: Progress depends largely on ideas, and ideas come from people.
 - 1. Historically, almost all progress comes from populous, connected regions of the world especially Eurasia.
 - 2. Historically, isolated areas with low populations have low, zero, or negative progress. See Tasmania.
 - D. Notice: Technology has now connected the whole world. A great idea anywhere quickly becomes a great idea everywhere.
 - E. Population increases both the supply and demand for new ideas. This is most obvious for languages, but works in all areas of idea creation.
 - 1. Imagine deleting half the names in your music collection, or half the Nobel prize-winners.
 - F. Choice externality: More population means more choices. See NYC vs. Hays, Kansas. The fact that urban rents are higher than rural rents shows

that people prefer (people + the indirect effects of people) to splendid isolation.

- 1. Pointed question: Why don't people who complain about overpopulation move to the middle of nowhere?
- G. Retirement externality: Government old-age programs are pyramid schemes. With lots of kids, low taxes can sustain high benefits. Low birth rates are a major reason why Social Security and Medicare are going to be in big trouble.
 - 1. What if government benefits for the elderly depended on your number of kids?
- H. Even without government programs, the elderly benefit if other people have kids. Imagine: What would happen in seventy years if everyone stopped having kids today?
- VI. Immigration and AS-AD
 - A. Everything we said about AS-AD and population applies to AS-AD and immigration.
 - 1. If natives and immigrants have identical skills, immigration definitely reduces wages.
 - 2. If natives and immigrants have different skills, the effect of immigration on wages is ambiguous.
 - B. In the real world, native workers and immigrant workers are *far* from identical.
 - 1. Most obvious difference: Current immigrants tend to be either lowskilled or high-skilled compared to Americans.
 - 2. Potential immigrants tend to be very low-skilled compared to Americans.
 - 3. Slightly less obvious difference: Holding overall skill constant, natives usually speak much better English.
 - C. These facts imply that immigration can actually raise American wages. Why? Again, comparative advantage: People with different skills produce more *total* output if they specialize and trade.
 - D. Simple example: Many highly educated American women stay home with their kids because it is so expensive to hire a nanny. Many women in Mexico know how to take care of children, but have little education.
 - E. Suppose that in a day, American and Mexican women can produce:

	American Woman	Mexican Woman
Computer Programs Written	4	.1
Children Cared For	2	2

F. Both sides can increase production by immigration and specialization! Have ten Mexican women switch from writing computer programs to childcare (-1 program, +20 childcares), and one American woman switch from childcare to computer programs (+4 programs, -2 childcares). The world is richer by 3 programs and 18 childcares.

G. How can we show this in an Aggregate Labor Market diagram? Thanks to comparative advantage, trade effectively raises MPP. Suppose that post-immigration, computer programs and childcare have equal prices. Then immigration effectively changes the productivity table to:

	American Woman	Mexican Woman
Computer Programs Written	4	2
		(by trading childcare
		for programs)
Children Cared For	4	2
	(by trading programs	
	for childcare)	

- H. As usual, comparative advantage implies mutually beneficial trade even when one side is worse at *everything*. So the early 20th century debate about "inferior peoples" was doubly misguided.
 - 1. Pearson on IQ and immigration: "What is definitely clear, however, is that our own Jewish boys do not form from the standpoint of intelligence a group markedly superior to our natives. But that is the sole condition under which we are prepared to admit that immigration should be allowed."
- I. Key difference between population growth and innovation: If population growth doesn't happen, the potential people who don't exist never know what they're missing.
 - 1. Population growth changes the numerator (GWP) *and* the denominator (world population) for "average world living standards," so we can't definitively say that population growth raises world living standards.
- J. Immigration, in contrast, only changes the numerator (GWP), leaving the denominator (world population) the same. So we can definitively say that immigration raises world living standards.
- K. What about externalities of immigration? As usual, there are both positive and negative externalities. Figuring out the net effect is a complicated empirical question (which we'll try to ballpark this semester).
- VII. Trade and Arbitrage
 - A. Price differentials naturally provoke arbitrage.
 - B. As a result, we should expect that transportation costs aside free international trade will equalize global prices.
 - C. The same goes for labor, of course. With free trade in labor, we would expect equally productive labor to earn the same wage all over the world.
 - D. Is this an oversimplification? Definitely. Regulation and taxes aside, the labor market could discriminate against some workers.

- E. How severe should we expect such discrimination to be?
- VIII. Basic Economics of Discrimination: Theory
 - A. Gary Becker famously argued that market forces mitigate and perhaps even preclude labor market discrimination.
 - B. Why would anyone think this? Let us begin by defining "discrimination" more precisely. In economic terms, we can think of pure dislike or hatred for others as a *taste for discrimination*, a willingness to pay to avoid people you don't like.
 - C. For example, suppose a Serbian employer hates Croatians. But how much is he willing to pay for this? Would he give up \$1,000,000 to avoid hiring a Croatian? Probably not. There is some amount of money sufficient to make the Serbian hire the Croatian in spite of his discriminatory taste.
 - D. Once we understand this notion of the "taste for discrimination," we can use it to analyze a variety of cases. Consider the canonical case of employer-on-worker discrimination.
 - E. Assumptions:
 - Most employers have a taste for discrimination against Asians. Their willingness to pay to satisfy this taste ranges from \$2/hour/worker to \$0/hour/worker, with an average of \$1/hour/worker.
 - 2. No one else has discriminatory tastes.
 - 3. Asian and non-Asian workers are equally productive.
 - 4. Labor markets are competitive and there are no anti-discrimination laws.
 - F. What happens? Labor demand for Asians is lower and they earn lower wages at first.
 - G. Who hires them? The **least-discriminatory** employers! If the wage gap is \$1.00, then employers who value discrimination by less than \$1.00 hire only Asians.
 - H. More racism thus means lower profits. Less racist employers hire cheaper Asian labor, while more racist employers higher more expensive non-Asian labor.
 - I. Thus, over time the most racially tolerant employers become a larger and larger part of the market, and racist employers are driven out of business.
 - J. This shifts employers' distribution of discriminatory tastes in the direction of tolerance raising the demand for Asian labor and reducing the demand for non-Asian labor. So the wage gap falls.
 - K. As long as there are enough employers who care solely about money, not race, the ultimate effect is that racist employers are driven from the market, and equally-productive labor earns the same wage.
 - L. Even if most people are racist, selection pressure favors non-racist employers. Businesspeople are competing to make money; any goals other than making money - good or bad - hold them back.
 - M. In other words, more greedy, less racist employers tend to drive less greedy, more racist employers out of business.

- N. Corollary 1: Government regulation is necessary to **sustain** discrimination by profit-seeking employers.
- O. Corollary 2: Discrimination is much more likely to appear in the *non-profit* sector.
- IX. Basic Economics of Discrimination: Empirics
 - A. A vast literature empirically tests Becker's story. Enormous wage *differences* are obvious in the data. But do these differences actually reveal discrimination?
 - B. Standard approach: Estimate wages as a function of standard labor market variables, plus race, gender, or any other basis for discrimination.
 - C. Standard result: Adding reasonable controls (education, experience, family status, test scores) almost always drastically shrinks measured discrimination, often reducing it to statistical insignificance or even flipping the sign.
 - D. Like most people, social scientists tend to be deeply disturbed by even tiny degrees of discrimination. A 10% unexplained wage gap will therefore often be written up as "evidence of serious discrimination."
 - 1. Query: If you can account for 80% of a large wage gap with a few readily-observed variables, what are the odds you could account for 100%+ with a richer list of variables?
- X. Discrimination Against Immigrants
 - A. People today are much more likely to publicly express anti-immigrant sentiments than racism.
 - B. Yet strangely, almost no one trusts business to discriminate against immigrants. The main point of internal immigration enforcement is to make discrimination against illegal immigrants *mandatory*.
 - 1. Remember the two corollaries!
 - 2. There is research on the effect of legalization on the wages of previously illegal immigrants. This usually leads to roughly +20% earnings.
 - C. Well-established fact: Immigrants to the First World earn vastly more than seemingly identical people who stayed in their home country.
 - D. Question: What happens if we analyze *these* earnings gaps using the same method we use to measure discrimination?
 - 1. Note: Since we're comparing immigrants to people from the same country who stayed home, we're measuring the effect of discriminatory government treatment (some people can migrate; the rest can't) rather than employer discrimination.
 - E. Clemens, Montenegro, and Pritchett pursue this question in their paper on "The Place Premium." They use a Becker-type setup to estimate the effect of *mandatory segregation* on wages.
 - 1. Usual estimates show percent of unexplained wage differences. CMP show unexplained wage *ratios*. A value of 4 indicates that wages in the U.S. are quadruple wages in the comparison country, implying a 75% unexplained wage gap. A value of 16.308 implies a 94% unexplained wage gap!

F. Key conclusions:

- 1. "It is difficult to find labor markets anywhere on earth that sustain real wage differentials *Rc* much above 1.5 across geographic areas in the absence of policy restrictions on migration."
- 2. "Focusing on male workers in their late thirties with nine to twelve years of education, we estimate that for workers from the median country this ratio (*Rc*) is 4.54, for the 80th percentile country it is 7.58, and the working-age population weighted average is 6.83."
- 3. More advanced models that try to correct for *un*observable differences between workers yield only slightly smaller estimates.
- 4. Results by country:

Nigeria	16.308	Peru	4.153
Yemen	15.114	Guyana	4.067
Haiti	14.245	Jamaica	3.790
Egypt	13.526	Brazil	3.769
Cambodia	9.139	Nicaragua	3.643
Vietnam	8.395	Рапата	3.635
Ghana	8.160	Chile	3.582
India	7.859	Guatemala	3.226
Sierra Leone	7.608	Uruguay	3.181
Cameroon	7.477	Colombia	3.068
Pakistan	7.433	South Africa	2.985
Indonesia	7.069	Paraguay	2.907
Nepal	6.692	Thailand	2.828
Sri Lanka	6.657	Turkey	2.735
Venezuela	6.532	Belize	2.633
Jordan	5.593	Mexico	2.589
Bangladesh	5.487	Argentina	2.486
Ecuador	5.368	Costa Rica	2.194
Uganda	5.286	Dominican	2.084
Bolivia	5.106	Republic	
Ethiopia	4.585	Morocco	2.026
Philippines	4.504		

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Weeks 3-4: Immigration and Wealth Creation

- I. Migration and Labor Productivity
 - A. If the place premium results are even close to correct, they imply that migration *massively* increases global wealth creation.
 - B. Key intuition: When a Nigerian who produces \$1000/year in Nigeria moves to the U.S., he starts producing 16x as much \$32,000/year, enriching *the world* by \$30,000/year.
 - 1. If 15M Nigerians move, global wealth rises by \$30,000*10M=\$450B per year.
 - C. Note: This is *not* the trivial point that increasing population increases the GDP of the receiving country. This is the deep point that moving population from low-productivity countries to high-productivity countries increases GWP Gross World Product.
 - D. What exactly is going on? For starters, we have comparative advantage. Migration allows specialization and trade.
 - E. Why not just have trade in goods? Simple: Because *80%* of a modern economy is services, most of which *must* be traded locally. Consider:
 - 1. Restaurant meals
 - 2. Childcare and eldercare
 - 3. Construction
 - F. Further issue: Comparative advantage aside, residing in a rich country almost certainly makes migrants more productive.
 - 1. You can think of this as the "multifactor productivity" from growth models.
 - 2. More plausibly, the productivity boost varies by job, but is positive for almost all jobs.
 - G. The rise in worker productivity is obvious for agriculture and manufacturing, where we can readily measure migrants' pre- and post-migration productivity.
 - H. What about services, where the change in output is less obvious? Since the main value of most services is saving customers' time, saving the time of richer customers is logically equivalent to an increase in service-sector productivity.
- II. Immigration and GWP
 - A. Standard trade models estimate the cost of trade barriers.
 - B. Key result: The deadweight cost created by tax wedges is *non-linear*.
 - 1. If all the relevant "curves" are straight lines, deadweight loss is quadratic in the tax wedge.
 - 2. Hence, doubling the tax wedge quadruples the deadweight cost. Multiplying the tax wedge 10x multiplies the deadweight cost 100x.

- C. What happens if we use standard trade models to estimate the deadweight cost of immigration restrictions?
 - 1. Alternately, to estimate the efficiency *gain* of eliminating restrictions.
- D. Michael Clemens famously does this in his "Economics and Emigration: Trillion-Dollar Bills on the Sidewalk?"
- E. The estimates are astronomical. From Clemens, with some relevant comparisons:

Table 1

Efficiency Gain from Elimination of International Barriers (percent of world GDP)

All policy barriers to merchandise trade

- 1.8 Goldin, Knudsen, and van der Mensbrugghe (1993)
- 4.1 Dessus, Fukasaku, and Safadi (1999)^a
- 0.9 Anderson, Francois, Hertel, Hoekman, and Martin (2000)
- 1.2 World Bank (2001)
- 2.8 World Bank (2001)^a
- 0.7 Anderson and Martin (2005)
- 0.3 Hertel and Keeney (2006, table 2.9)

All barriers to capital flows

- 1.7 Gourinchas and Jeanne (2006)^b
- 0.1 Caselli and Feyrer (2007)

All barriers to labor mobility

147.3	Hamilton and Whalley (1984, table 4, row 2)
96.5	Moses and Letnes (2004, table 5, row 4) ^c
67	Iregui (2005, table 10.3) ^{c,d}
122	Klein and Ventura (2007, table 3) "

- F. In 2019, estimated GWP was \$142T. So if open borders doubled global production, it would increase GWP by another \$142,000,000,000,000 per year.
 - 1. Present value with 4% discounting: \$3.6 quadrillion.
 - 2. Present value with 4% discounting and 2% continued global growth: \$6.8 quadrillion.
- G. Intuitively, the annual deadweight cost is huge because you are multiplying a huge loss to the world per worker times a very large number of workers.
 - 1. The NPV is mind-bogglingly huge because the world gets this annual gain forever.
- H. Disclosure: To capture the full gain, billions of people have to move.

- 1. Hence, this is a long-run estimate, not a claim about what would happen the year after the world adopted open borders.
- 2. Though by the previous quadratic logic, halving the wedge cuts the loss by 75%.
- I. Borjas' criticism: Analysis ignores moving costs, objective and subjective. If you assume Haitians are willing to pay hundreds of thousands of dollars to stay in Haiti, this wipes out the gains. However, this is crazy:
 - 1. Attachment is a normal good.
 - 2. People are less attached to unpleasant places.
 - 3. A lot of attachment is to people, not places. Under free migration, you could bring your family, too.
- III. Understanding the Productivity Gap
 - A. Why is labor productivity so much higher in rich countries than poor countries?
 - B. Proximate causes:
 - 1. More capital
 - 2. Better technology
 - 3. Better management
 - C. What about human capital? The comparisons already try to account for pure differences in skill.
 - 1. But migration could enhance human capital by reducing exposure to contagious disease, malnutrition, crime, political instability, and so on.
 - D. But what causes *those* differences?
 - 1. Path-dependence?
 - 2. Culture?
 - 3. Politics?
 - 4. Genes?
 - 5. Other?
 - E. And will immigration endanger those differences? We'll return to this after the midterm.
- IV. Migration and Innovation
 - A. Recall the effect of population on innovation.
 - 1. Supply effect more creative people.
 - 2. Demand effect more customers to incentivize creative people.
 - B. Further recall the non-rivalrousness of innovation.
 - C. From an innovation standpoint, migration effectively increases population.
 - 1. Creative people can migrate to centers of innovation to realize their comparative advantage.
 - 2. Since migration enriches migrants, their demand for innovation rises as well.
 - D. Think about how much Chinese and Indian talent were wasted during the 20th century alone.
 - E. Clemens' estimates, however, are totally static. So perhaps the true GWP gain has been understated rather than overstated.
- V. Growth and Intra-Country Migration

A. In theory, migration increases wealth, and migration restrictions reduce wealth. But do we see this in practice?

B. Definitely. Consider the three most populous countries on Earth.

- C. China.
 - 1. Under Mao, China had a strict internal passport system to keep farmers from migrating to cities.
 - 2. Deng and his successors relaxed this system.
 - 3. This liberalization, combined with rising agricultural productivity and opening of international markets, ultimately raised urbanization by over 40 percentage-points more than half a billion people.
 - 4. Some of this would be "urbanization in place," but it's mostly migration.
 - 5. Without this migration, only a small fraction of Chinese would have enjoyed the vast gains of market reforms.
- D. India.
 - 1. Though much less socialist than Maoist China, India also had highly socialist policies for decades, followed by liberalization and a large increase in growth.
 - 2. As in China, however, a key part of the subsequent economic growth has been migration from backward villages to relatively advanced cities.
 - 3. Indian urbanization went up by 10 percentage-points from 1980 to 2016. Since population rose by 600 M during this time (to 1.3 B), and rural fertility is much higher than urban, this again amounts to hundreds of millions of migrants.
- E. *U.S.*
 - 1. Despite high initial urbanization, U.S. urbanization rose by another 8 percentage-points from 1980-2016.
 - 2. During this same time, however, housing and land-use regulation in the U.S. became very strict, leading to large increases in house prices in the most productive areas of the country.
 - 3. As a result, net migration in the U.S. now goes from highproductivity areas to low-productivity areas!
 - 4. Estimates of the economic *harm* of this reversal of normal migration patterns are massive.
 - 5. Moretti's estimates: "increasing housing supply in New York, San Jose, and San Francisco by relaxing land use restrictions to the level of the median US city would increase the growth rate of aggregate output by 36.3 percent. In this scenario, US GDP in 2009 would be 3.7 percent higher, which translates into an additional \$3,685 in average annual earnings."
 - 6. Glaeser and Gyourko's lower bound estimate of the damage: 2% of U.S. GDP per year.
- VI. Swamping and Diaspora Dynamics
 - A. Critics of immigration often fear "swamping" even if immigration is good in moderation, it can easily reach dangerous levels.

- 1. Short-run burden on the welfare state
- 2. Congestion
- 3. Unrest
- B. Borjas' dilemma:
 - 1. Either billions of immigrants *won't* come, so the Clemens model overstates the social benefits; or...
 - 2. Billions *will* come, leading to swamping, so again the Clemens model overstates the social benefits.
- C. Paul Collier's model of "diaspora dynamics" seems to formalize the fear of swamping.
- D. In this model, the *flow* of migrants depends positively on the *stock* of migrants, because people want to be around other people who share their cultural background.
- E. As a result, migration starts slowly, then gradually snowballs.
 - 1. Puerto Rico is a nice example. When the Supreme Court opened the border in 1902, immigration started low, then snowballed.

TABLE 1-1.Puerto Rico's NetEmigration, 1900–2000

Years	Net Number of Out-Migrants
1900-1910	2,000
1910-1920	11,000
1920-1930	42,000
1930-1940	18,000
1940-1950	151,000
1950-1960	470,000
1960-1970	214,000
1970-1980	65,817
1980-1990	116,571
1990-2000	130,185

2. You can see the same pattern at the city level.

3. Collier takes the undesirability of this snowballing for granted, though he hesitates to say that serious problems have happened yet.

	1950	1970	2000
United States: Total	301,375	1,391,463	3,406,178
New York, NY	245,880	817,712	789,172
Chicago, IL	2,555	79,582	113,055
Philadelphia, PA	1,910	26,948	91,527
Newark, NJ	545	27,663	39,650
Jersey City, NJ	655	16,325	29,777
Paterson, NJ	_	12,036	24,013
Los Angeles, CA	_	10,116	13,427
Bridgeport, CT	590	10,048	32,177
Hoboken, NJ	_	10,047	4,660
Hartford, CT	_	8,631	39,586
Cleveland, OH	_	8,104	25,385
Boston, MA	_	7,335	27,442
Miami, FL	_	6,835	10,257
Lorain, OH	_	6,031	10,536
San Francisco, CA	_	5,037	3,758
Dover, NJ	_	_	2,413
Springfield, MA	_	_	35,251
Camden, NJ	_	_	23,051
Rochester, NY	_	_	21,897
Tampa, FL	—	_	17,527

TABLE 1-4. Puerto Ricans' Residence, Selected Cities, 1950-2000

Note: Figures are for Puerto Rican birth and parentage. Cities are in order of 1970 population.

Sources: U.S. Commission on Civil Rights, Puerto Ricans in the Continental United States: An Uncertain Future (Washington, DC: GPO, October 1976), 23; and U.S. Bureau of the Census, 2000 Census of Population and Housing, Table DP-1, Profile of General Demographic Characteristics.

- F. On further reflection, however, diaspora dynamics plausibly solves Borjas' dilemma.
 - 1. Swamping won't happen because immigration builds gradually, leaving ample time for families, business, and government to prepare.
 - 2. Massive gains will be realized in the long-run because vast numbers will come in due time.
- VII. Ghost Towns and Zombie Economies
 - A. Most First World countries contain large regions in long-run decline.
 - 1. Agricultural areas
 - 2. Rustbelt
 - B. Given the depressed condition, you might expect wages to be *much* lower in these areas.

- C. In fact, however, the wage gap is modest. Why? Because when economic conditions falter, people relocate to higher-wage areas of the country.
- D. Labor-supply elasticity cushions the economic damage for affected populations leavers *and* stayers.
- E. The Case of the U.S., 1930-1990: The 902 slowest-growing counties area the size of Mexico lost 28% of their population even though the national population doubled in size.
- F. Details:

U.S. region	Population, 1930 (thousands)	Population change, 1930–90 (percent)	Current population/ counterfactual at rate of natural increase	Region area (square miles)	Countries of smaller area,with examples (number) ^b	Area per capita income as percentage of national average
Texaklahoma	835.8	-36.8	0.31	58,403	117 (Nicaragu	ia, 92.2
Heartland	1,482.6	-34.0	0.33	59,708	Bangladesh 117) 85.2
Deep South	1,558.2	-27.9	0.36	36,284	96 (Jordan, Austria, Sri Lanka)	62.6
Pennsylvania Coal	1,182.9	-27.9	0.36	2,972	43 (Trinidad and Tobage Mauritius)	84.5),
Great Plains North	1,068.0	-27.7	0.36	100,920	128 (United Kingdom, Ghana, Ecuador)	85.4
All U.S.	123,202.6	101.9		3,536,278	100.0	

Table 2-1. Population Change in Assembled Regions, 1930-90^a

G. Pritchett calls these declining regions "ghost towns." Although the region suffers greatly, the inhabitants only suffer mildly. If conditions get bad enough, they exit.

1. Who really suffers? Landowners!

H. Letting people leave ghost towns helps society as well as the residents, because they can reallocate their labor to higher-productivity work.

I. Due to immigration restrictions, the same mechanism barely functions on an international level. Instead, when conditions in a nation deteriorate, the inhabitants have to stay and suffer.

1. This too hurts stayers, would-be movers, and society.

- J. Pritchett calls these "zombie economies": the economic rationale is gone, but the population lingers. Ghost towns aren't pretty, but zombie economies are much worse.
- K. Leading zombie economies:

Table 2-2. How Large Is the Ghosthood?^a

		Rati	Ratios of the population to the current actual population if					
				th as the chan	ne shock was as l e realized popula eges in the follow three cases:	arge ation ving	the lab restore GD X assumin of output populat	or force fell to P per capita to g an elasticity per person to ion of–0.4
Country or region	Year of peak GDP per capita (GDP _{pc})	Ratio GDP _{pc-2000} / GDP _{pc-peak}	Current population	Ireland 48% fall from 1841 to 1926 (percent)	U.S. ghost regions 28% fall from 1930 to 1990 (percent)	OECD lagging regions ^b (percent)	Previous peak GDP per capita 0.4 (percent)	GDP per capita implying 2% annual growth since peak (no divergence) 0.4 (percent)
Zambia	1964	0.59	10,089	18	25	35	36	14
CAF zone	1970	0.44	3,603	27	37	51	24	11
Niger	1963	0.50	10,832	17	23	32	29	11
Chad	1979	0.50	7,694	30	41	57	29	17
Rwanda	1981	0.75	8,508	33	45	63	55	30
Bolivia	1978	0.87	8,329	33	44	62	72	34
Romania	1986	0.74	22,435	54	74	103	54	34

L. Related: The economics of evacuation. When one region *within* a country faces disaster, governments usually help people relocate to mitigate the damage. When a whole country faces disaster, however, other countries usually stop victims from relocating to mitigate the damage.

VIII. Brain Drain

- A. Does immigration deprive developing countries of their "best and brightest"?
- B. In a sense. Since legal migration is easier for highly credentialed workers, a disproportionate share migrate. For the poorest countries, this share is often very high.
- C. But is this actually a net negative for people who stay behind? Probably not, due to remittances, international business connections, retirement, and beyond.
 - 1. Collier mostly describes brain drain as something that could become a problem, but is rarely a problem yet.
 - 2. Clemens on Filipino nurses.
- D. The problem, if any, largely vanishes if low-skilled workers can migrate freely, too.
 - 1. The case of Puerto Rico.

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Weeks 5-6: Immigration and Wealth Distribution

- I. Production vs. Distribution
 - A. Harsh reality: In the real world, not even the greatest instances of progress literally benefit *everyone*.
 - 1. A plague is great for morticians.
 - B. Happy reality: In the real world, almost everyone is a net beneficiary of the *totality* of progress.
 - C. Slogan: "The secret of mass consumption is mass production."
 - D. Alternate slogan, from Robert Lucas: "Of the tendencies that are harmful to sound economics, the most seductive, and in my opinion the most poisonous, is to focus on questions of distribution."
 - E. Key point: Living standards are high in countries that produce a lot, and low in countries that produce little. The rest is details.
 - F. Furthermore: Almost all other good things correlate with living standards: health, safety, leisure, culture, etc.
 - G. So while critics often complain that economists don't pay enough attention to distribution, you could also argue that even economists pay too *much* attention to distribution.
 - 1. Complainers focus on specific downsides of progress. The problem is that progress is great overall, but easy to criticize each time it happens.
 - H. Bigger point: *Large* increases in production are almost always broadly beneficial. Who today is worse off because of...?
 - 1. The Industrial Revolution
 - 2. Vaccines
 - 3. The internet
 - I. The upshot: While immigration clearly has distributional effects, these are minor compared to its effects on global production.
 - J. Still, almost everyone who analyzes immigration wonders about distributional effects, so let's explore them.
- II. Global Inequality and the Arithmetic Fallacy
 - A. People often object to low-skilled immigration because it "increases inequality." Are they right to do so?
 - B. Almost all inequality data comes from national governments. When you measure inequality at the national level, low-skilled migration almost automatically raises measures of inequality.
 - C. When you measure inequality globally, however, low-skilled migration normally *reduces* inequality. Why? Because people with very low wages get a large raise.
 - D. Related: As national inequality rose in almost every country, global inequality fell. Sala-i-Martin's graphs:



The WDI and Individual Country Distributions in 1970



The WDI and Individual Country Distributions in 2000

E. Milanovic's "elephant" graph:

Figure 4. Change in real income between 1988 and 2008 at various percentiles of global income distribution (calculated in 2005 international dollars).



- F. Which measure of inequality is better?
 - 1. If you dislike *seeing* inequality, national data is better.
 - 2. If you dislike inequality itself, global data is better.
- G. Aside: CPI bias!
- III. The Arithmetic Fallacy
 - A. People often argue that immigration should only be allowed if it raises percapita GDP.
 - B. On reflection, however, this principle bars win-win immigration.
 - C. Here's how. Suppose that initially, natives' earn \$50,000 per year and foreigners earn \$5000 per year. Immigration raises natives' earnings to \$60,000 and foreigners to \$10,000.
 - D. What does immigration do to per-capita GDP? If half the post-immigration population is foreign-born, per-capita GDP in the receiving country *falls* to \$35,000 even though both natives and foreigners are richer.
 - E. How is this possible? Because averages are misleading measures when the numerator and the denominator both change.
 - 1. The basketball/height example.
 - F. Since most would-be immigrants are low-skilled by First World standards, scenarios where win-win immigration lowers per-capita GDP are the norm.
- IV. Distributional Effects on Receiving vs. Sending Countries
 - A. Migration is good for increasing the size of the pie but how does the extra pie get sliced?
 - B. If all labor is identical, immigration simply raises Aggregate Labor Supply in the receiving country. Results:
 - 1. Wages fall.

- 2. Capital rental prices rise.
- 3. Innovation goes up.
- C. The results in the sending country are the mirror image:
 - 1. Wages rise.
 - 2. Capital rental prices fall.
 - 3. Innovation falls.
- D. Note: All three kinds of changes affect almost everyone to some extent.
 - 1. Anyone with a retirement plan or home is, to some degree, a capitalist.
 - 2. Anyone who consumes new products benefits from innovation.
- E. Complications:
 - 1. Remittances: Migrants often send money home, so movers gain less and stayers gain more than you'd think.
 - 2. Innovation is usually international, so the *fruits* of innovation can rise in a sending country even though domestic innovation falls.
- F. If labor is heterogeneous, immigration raises Aggregate Labor Supply and Aggregate Labor Demand in the receiving country. Results:
 - 1. Wages may rise or fall.
 - 2. Capital rental prices rise.
 - 3. Innovation goes up.
- G. Once again, the results in the sending country are exactly the opposite:
 - 1. Wages may rise or fall.
 - 2. Capital rental prices fall.
 - 3. Innovation falls.
- H. Complications:
 - 1. Remittances: Even if wages fall in the sending country, remittances from the receiving country may more than offset the loss.
 - 2. Innovation: Innovators are especially likely to move to centers of innovation, increasing global innovation.
- V. Distributional Effects Within Countries
 - A. Since workers aren't identical, some natives can lose even if most gain, and some natives can gain even if most lose.
 - B. Natives tend to lose when they're *selling* the same skills that immigrants are selling. Natives tend to gain when they're *buying* the same skills that immigrants are selling.
 - 1. People often claim that economics professors favor immigration because we don't have to worry about foreign economists coming here to "take our jobs." True or false?
 - C. More generally: Elasticity of labor supply and labor demand both matter greatly.
 - 1. Influx of mathematicians matters much more if mathematicians can't easily switch to other STEM-type jobs, or if demand for mathematicians is inelastic.
 - D. Further complication: Traded vs. non-traded goods. Non-traded goods benefit people near immigrants. Traded goods might primarily benefit the global market rather than inhabitants of the receiving country.

- 1. Restaurants vs. cars
- E. Main lesson: Distributional effects are exceedingly complicated. Ex: What happens if you admit more nannies?
 - 1. High-skilled moms benefit from cheaper childcare.
 - 2. Existing childcare workers suffer from increased supply of childcare.
 - 3. Workers who compete with high-skilled moms suffer from increased labor supply.
 - 4. Consumers of their products benefit from increased product supply.
- VI. Immigration and Native Wages
 - A. Non-economists usually focus on employment: Do immigrants "take our jobs"?
 - B. Economists usually think that in the medium-run, wages will adjust, so the interesting question is really: Do immigrants "cut out wages"?
 - C. So what happens to wages when the supply of immigrants rises? In a simple model, everything depends on labor demand elasticity.
 - 1. High labor demand elasticity \rightarrow small wage effects.
 - D. What do researchers find? As always, there's a range. But a typical estimate of wage-elasticity is that when immigrants raise labor supply by 1%, wages fall by .1%.
 - 1. Upshot: Cumulative immigration would have to be massive to noticeably depress wages. Adding 10% to the whole workforce cuts wages by just 1%.
 - E. Summary of research from 2011: see Table 6, next page.
 - F. What about the effect of immigration on unemployment?
 - G. Estimates are also low. Summary of research from 2011: see Table 7, next page.
 - H. The "infinite contradiction": minimum law literature finds low labor demand elasticity; immigration literature finds high labor demand elasticity.
 - 1. So who do you believe?

Study	Country	Year	Percentage of Wage Elasticity
	A. European Stud	lies	
DeNew & Zimmermann (1994a)	Germany	1984-89	-0.16
DeNew & Zimmermann (1994b)	Germany	1984-89	-0.35 (-0.54 to +0.12)
Bauer (1997)	Germany	1994	+0.082
Bauer (1998)	Germany	1994	-0.021 to +0.035
Pischke & Velling (1994)	Germany	1985-89	±0 (+0.033)
Hatzius (1994)	Germany	1984-91	-0.058 to ±0
Brucker & Jahn (2010)	Germany	1975-2004	-0.1
Winter-Ebmer & Zweimüller (1996)	Austria	1988-91	regional +0.037 industry +0.01
Winter-Ebmer & Zimmermann (1998)	Germany Austria		±0 to +0.01 -0.16 to ±0
Gang & Rivera-Batiz (1994)	Netherlands Great Britain France Germany	1986-89	-0.09 to + 0.02 -0.08 to +0.02 -0.11 to -0.01 -0.05 to +0.11
Zorlu & Hartog (2005)	Netherlands Great Britain Norway	1998 1997-98 1996	-0.04 to +0.02 -0.036 to +0.056 -0.063 to +0.180
Hunt (1992)	France	1968	-0.08 to -0.14
Dolado et al. (1996)	Spain		+0.02 to +0.04
B. North	h American and Ol	ther Studies	
Grossman (1982)	USA	1970	-0.1
Card (2001)	USA	1989	-0.04 to -0.01
Goldin (1994)	USA	1890-1921	-1.6 to -1.0
LaLonde & Topel (1991)	USA	1970, -80	-0.6 to -0.1
Borjas, Freeman, & Katz (1992)	USA	1967-1987	-1.2
Altonji & Card (1991)	USA	1970, -80	-0.86, -1.2
Borjas (2003)	USA	1960-2001	-0.4 to -0.3
Pope & Withers (1993)	Australia	1881-1981	± 0
Friedberg (2001)	Israel	1994	+0.03

Table 6: Survey of Immigration's Wage Effect for Natives

Sources: Bauer and Zimmermann (1999), Friedberg and Hunt (1995), reported studies. Table shows elasticity of wages with respect to a one percent increase in the share of immigrants in labor force (or population).

Study	Country	Year	Employment Effect			
A. European Studies						
Winkelmann & Zimmermann (1993)	Germany	1974-84	Small negative employment effect			
Mühleisen & Zimmermann (1994)	Germany	1982-89	None			
Pischke & Velling (1997)	Germany	1986-89	Employment +2%			
			Unemployment ±0%			
Hatzius (1994)	Germany		None			
Brucker & Jahn (2010)	Germany	1975-2004	Unemployment +0.1%			
Velling (1995)	Germany	1988-93	Employment rate +0.24%			
Gang & Rivera-Batiz (1994)	Germany	1988	None			
Winter-Ebmer & Zweimüller (1997)	Austria	1988-91	None			
Winter-Ebmer & Zimmermann (1998)	Austria		Employment -0.1%			
	Germany		Small negative employment effect			
Dolado et al. (1996)	Spain		Negative employment effect			
Hunt (1992)	France	1968	Unemployment +0.2%			
Gross (2002)	France	1975-95	Unemployment rate -0.16%			
Angrist & Kugler (2003)	EEA	1983-99	Employment -0.07% to -0.02%			
B. North American and Other Studies						
Card (2001)	USA	1989	Employment -0.12%			
Altonji & Card (1991)	USA	1980	Employment rate -0.23%			
Friedberg (2001)	Israel	1994	Employment -0.16%			

Table 7: Survey of Immigration's Employment Effect for Natives

Sources: Bauer and Zimmermann (1999), Friedberg and Hunt (1995), reported studies. Table shows change in native employment or unemployment due to a one percent increase in immigrants' share of population or labor force unless otherwise stated.

VII. Labor Heterogeneity and Distributional Effects

- A. In recent decades, the United States has had two main kinds of immigration:
 - 1. Legal high-skilled immigration.
 - 2. Illegal low-skilled immigration.
- B. Economists have estimated the effects of this immigration on native wages. Let's look at two sets of estimates:
 - 1. Borjas and Katz, for Mexican immigration from 1980-2000.
 - 2. Ottaviano and Peri, for 1990-2006.
- C. Borjas and Katz break workers into four educational/skill categories. Key assumption: Natives and immigrants with the same education level are identical. Estimates of the *total* effect of immigration on native wages:

Worker Type	Short-Run	Long-Run
High school dropouts	-8.4%	-4.8%
High school graduates	-2.2%	+1.2%
Some college	-2.7%	+0.7%
College graduates	-3.9%	-0.5%
All native workers	-3.4%	0.0%

- D. Borjas is probably the most respected critic of immigration in the world. But his estimates are shockingly positive compared to what normal people think. Even dropouts only lose 4.8% total (not per year).
- E. Ottaviano and Peri assume that native and foreign labor are different, even if they have the same level of education. Natives have a comparative advantage in language skills, foreigners have a comparative advantage in non-language skills. Estimates of the *total* effect of immigration on native wages:

Worker Type	Short-Run	Long-Run
High school dropouts	-0.7%	+0.3%
High school graduates	-0.6%	+0.4%
Some college	0.0%	+0.9%
College graduates	-0.5%	+0.5%
All native workers	-0.4%	+0.6%

- F. Notice: On Ottaviano and Peri's more reasonable assumptions, native workers enjoy long-run gains from immigration. Even native drop-outs slightly gain.
 - 1. The only workers who lose from immigration are earlier immigrants. They suffer quite a bit materially, but don't forget that immigrants are often eager to reunite their families.
- VIII. Immigration Restrictions and Their Effects: The Story So Far
 - A. Wages are very low in many populous Third World nations. Tens of millions of people would be overjoyed to come to the U.S. and take what Americans see as "bad jobs."
 - B. Why don't they come? Because it is:
 - 1. Virtually impossible for low-skilled workers to come here legally (unless they already have close family members in the U.S.).
 - 2. Very expensive for low-skilled workers to come here illegally. Smugglers ("coyotes") charge rural Mexicans two *years* income

(about \$3000) to take them across the border. Fees for more distant countries are vastly higher.

- C. Immigration restrictions probably have more effect on labor markets than all other government policies combined. They clearly "work" in the sense that they drastically reduce immigration.
- D. What are the other effects of immigration restrictions?
- E. Effect #1: Drastically reducing world output. Immigration laws prevent workers from moving to the most productive locations in the world to do whatever they do best. Rough estimates say that world output would DOUBLE under open borders.
- F. Effect #2: Drastically increasing world poverty. Merely moving from a Third World country massively increases workers' income. People from the poorest countries typically gain 1000% or more. One immigrant can keep a large extended family alive back home.
- G. Effect #3: Reducing average American income. Low-skilled Americans who don't own a home or other assets may gain from immigration restrictions, but only a small minority of Americans are in this category.
- H. Effect #4: Shielding American eyes from the sight of severe poverty. Conditions in many populous Third World countries are awful, so we should expect immigrants to keep coming here even if their living standards seem very low to us. Open borders would drastically reduce global poverty, but make remaining poverty much more visible.
- I. All these results come from simple models. What if we enrich these models to include...
 - 1. Fiscal burden?
 - 2. Culture?
 - 3. Politics?
 - 4. More?
- J. Answer: Stay tuned until after the midterm.

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Week 8: Fiscal Effects of Immigration

- I. Basics of Public Finance and Migration
 - A. Immigrants use public services, which burdens natives.
 - B. Immigrants also pay taxes, which unburdens natives.
 - C. In countries like the U.S., the use of public services varies only moderately by income.
 - 1. Poor use more services targeted at the poor.
 - 2. But rich use more old-age programs (Social Security, Medicare) because they live much longer.
 - 3. Rich also use more publicly-funded higher education, because they have higher rates of college attendance.
 - D. However, the payment of taxes varies tremendously by income.
 - 1. Overall, the U.S. tax system is highly progressive.
 - E. Upshot: From a fiscal point of view, low-skilled immigrants are plausibly a net burden on native taxpayers, while high-skilled immigrants are plausibly a net benefit for native taxpayers.
- II. Rivalry, Age, Family, Federalism, and Immigration
 - A. Major complication: Many government services are non-rival; i.e., their cost does not depend on population.
 - 1. National defense
 - 2. Debt service
 - B. More sophisticated version: Goods are on a continuum from congested to rival to semi-rival to rival.
 - Quick math: Divide spending by N^a to determine services' percapita value. a=0 for non-rival, 0<a<1 for semi-rival, a=1 for rival, a>1 for congested.
 - C. When you're estimating the services an immigrant consumes, you therefore have to take a stand on the share of non-rival goods. With non-rival goods, immigrants can be net taxpayers even though they earn less than average, or even less than the median.
 - 1. It's the same as the logic of a matinee. Theaters profit by charging some customers much less than AC.
 - D. Another major complication: Fiscal burden varies heavily by age. Schoolage children are extremely burdensome for taxpayers, as are the elderly. Working-age people, in contrast, use few services.
 - E. Remember: Welfare states focus much more on helping kids and the elderly than helping the poor per se.
 - F. Third major complication: Immigrants come in families and immigrant parents often have native children.
 - G. Good analyses, therefore, factor in:
 - 1. The cost of the services used by immigrants' children.
- 2. The future taxes the immigrants' children will pay.
- 3. Future generations!
- H. Note: Sending countries, not receiving countries, pay for almost all the education of adult immigrants. Picture a family of 3:
 - 1. Three natives domestic taxpayers pay for 3 educations.
 - 2. Two immigrants with native child: domestic taxpayers pay for 1 education.
- I. Last complication: Federal, state, and local results widely vary, so it's important to measure "consolidated" effects.
- III. Overall, Long-Run Net Fiscal Effects
 - A. In the face of all this complexity, how can we measure the *net* fiscal effect of an immigrant?
 - 1. Key point: Most people have an opinion on the fiscal effect of immigration but have zero patience for actually looking at numbers.
 - B. Easy answer: Measure the Net Present Value (NPV) of all the taxes an immigrant will ever pay minus the NPV of all the services an immigrant will ever consume.
 - C. Better answer: Count the NPV of the immigrants' descendants as well. This is called the "overall, long-run net fiscal effect."
 - D. Do these estimates require assumptions? Absolutely, but all assumptions are not created equal.
 - E. National Academy of Sciences estimates (in \$1000s) of overall, long-run net fiscal effects, using a 75-year horizon:

FIGURE 8-23 Net Fiscal Impacts of Immigration, by Budget Scenario, Treatment of Public Goods, and Average Characteristics of New Immigrants



TABLE 8-14 75-year Present Value Flows for Consolidated Federal, State, and Local Governments for Three Future Budget Scenarios, by Grouped Ages of Immigrant Arrival in the United States, with Public Goods Excluded from Incremental Benefit Costs to Immigrants and Descendants (flows in thousands of 2012 dollars)

	CBO Long-term Budget Outlook							CBO Long-term Budget Outlook with Deficit Reduction								No Budget Adjustments																				
	Т	otal Ir	npac	t		Immi	grant		De	escend	ants	s	Т	otal II	mpac	t		Immi	grant		D	escend	ant	ts	Т	otal I	mpac	t		Immi	grant		De	scend	lants	ŝ
	0-24	25-64	65+	Avg.	0-24	25-64	<u>65+</u>	Avg.	0-24	25-646	<u>5+ /</u>	Avg.	0-24	25-64	65+	Avg.	0-24	25-64	<u>65+</u>	Avg.	0-24	25-646	5+	Avg.	0-24	25-64	65+	Avg.	0-24	25-64	<u>65+</u>	<u>Avg.</u>	0-24 2	25-646	<u>5+ /</u>	Avg.
TOTAL NET	r i																																			
<hs< td=""><td>35</td><td>-225</td><td>-257</td><td>-117</td><td>23</td><td>-198</td><td>-257</td><td>-109</td><td>11</td><td>-26</td><td>0</td><td>-8</td><td>56</td><td>-212</td><td>-254</td><td>-101</td><td>34</td><td>-189</td><td>-254</td><td>-99</td><td>22</td><td>-23</td><td>0</td><td>-2</td><td>-118</td><td>-231</td><td>-254</td><td>-185</td><td>-18</td><td>-176</td><td>-254</td><td>-115</td><td>-100</td><td>-55</td><td>0</td><td>-70</td></hs<>	35	-225	-257	-117	23	-198	-257	-109	11	-26	0	-8	56	-212	-254	-101	34	-189	-254	-99	22	-23	0	-2	-118	-231	-254	-185	-18	-176	-254	-115	-100	-55	0	-70
HS	239	-42	-164	49	140	-50	-164	11	98	8	0	39	263	-28	-162	67	153	-40	-162	22	110	13	0	45	13	-105	-170	-67	61	-70	-170	-29	-48	-36	0	-39
SomCol	401	157	-155	261	236	99	-155	155	165	58	0	106	427	174	-151	283	250	110	-151	168	178	64	0	115	117	35	-163	67	127	47	-163	78	-11	-12	0	-11
BA	495	504	-160	481	301	366	-160	330	194	138	0	150	522	525	-157	503	316	381	-157	345	206	145	0	159	172	283	-177	235	160	251	-177	210	12	32	0	25
>BA	446	994	-100	812	287	805	-100	635	159	190	0	177	472	1023	-97	840	302	826	-97	654	170	197	0	186	140	627	-120	469	143	565	-120	427	-2	63	0	42
Avg.	291	269	-201	259	177	196	-201	173	114	73	0	85	316	288	-199	279	190	209	-199	186	126	79	0	93	45	116	-206	77	82	118	-206	92	-37	-2	0	-15
TAXES																																				
<hs< td=""><td>778</td><td>340</td><td>38</td><td>503</td><td>382</td><td>216</td><td>38</td><td>272</td><td>396</td><td>125</td><td>0</td><td>230</td><td>791</td><td>345</td><td>38</td><td>510</td><td>388</td><td>218</td><td>38</td><td>276</td><td>404</td><td>127</td><td>0</td><td>235</td><td>514</td><td>258</td><td>37</td><td>349</td><td>283</td><td>181</td><td>37</td><td>213</td><td>231</td><td>76</td><td>0</td><td>136</td></hs<>	778	340	38	503	382	216	38	272	396	125	0	230	791	345	38	510	388	218	38	276	404	127	0	235	514	258	37	349	283	181	37	213	231	76	0	136
HS	942	475	33	620	482	318	33	365	461	157	0	255	959	481	33	630	490	321	33	370	470	160	0	260	616	352	30	432	350	258	30	282	265	94	0	149
SomCol	1096	659	40	844	576	438	40	491	521	220	0	354	1116	668	40	858	585	443	40	498	531	225	0	361	716	479	35	576	417	348	35	372	299	130	0	205
BA	1159	978	53	1005	638	682	53	649	521	296	0	355	1181	992	53	1021	650	690	53	659	531	302	0	362	746	704	47	697	451	532	47	493	295	172	0	204
>BA	1088	1445	78	1314	618	1101	78	939	469	344	0	375	1108	1467	79	1336	629	1117	79	954	478	351	0	383	693	1025	64	909	428	827	64	695	264	198	0	214
Avg.	989	771	43	822	521	543	43	515	468	228	0	307	1007	782	43	835	530	550	43	522	477	232	0	313	643	558	39	569	375	424	39	391	268	134	0	178
BENEFITS																																				
<hs< td=""><td>743</td><td>565</td><td>295</td><td>619</td><td>358</td><td>414</td><td>295</td><td>381</td><td>385</td><td>151</td><td>0</td><td>238</td><td>735</td><td>556</td><td>292</td><td>611</td><td>353</td><td>407</td><td>292</td><td>375</td><td>382</td><td>149</td><td>0</td><td>236</td><td>631</td><td>489</td><td>291</td><td>534</td><td>300</td><td>358</td><td>291</td><td>328</td><td>331</td><td>131</td><td>0</td><td>206</td></hs<>	743	565	295	619	358	414	295	381	385	151	0	238	735	556	292	611	353	407	292	375	382	149	0	236	631	489	291	534	300	358	291	328	331	131	0	206
HS	704	517	197	570	342	368	197	354	362	149	0	216	697	509	195	563	337	361	195	348	360	147	0	215	603	458	200	499	290	328	200	311	313	130	0	188
SomCol	696	501	194	583	340	340	194	336	356	162	0	247	689	494	192	576	336	333	192	330	353	161	0	246	599	444	198	509	290	301	198	293	309	142	0	216
BA	665	474	213	524	337	316	213	319	327	158	0	205	658	467	211	517	333	310	211	314	325	157	0	204	574	421	224	462	291	281	224	283	283	140	0	179
>BA	641	450	179	503	331	296	179	304	310	154	0	198	636	444	176	496	327	290	176	299	309	154	0	197	552	397	185	440	286	262	185	268	267	135	0	172
Avg.	698	502	244	563	344	347	244	342	354	154	0	221	691	494	242	556	339	341	242	336	352	153	0	220	598	442	246	491	292	307	246	299	306	135	0	192

SOURCE: The values are panel-generated using CPS data pools from 2011-2013.

NOTE: The "total' figures equal the fiscal impact of the individual immigrant plus the fiscal impacts of that individual's descendants. See accompanying text for a discussion of the difference between scenarios without and with public goods included. The discount rate used for the NPV calculations is 3 percent.

TABLE 8-13 75-year Net Present Value Flows Comparing an Immigrant Arriving at Age 25 with a Native-born Person Followed from Age 25, for Consolidated Government Finances under Two Future Budget Scenarios, by Educational Attainment, Varying the Treatment of Public Goods (in thousands of 2012 dollars)

		CBO Long	-term Budget Out	tlook	No Budget	Adjustments	
		Total	Individual	Descendants	Total	Individual	Descendants
No Public Good	s Included in Benefits						
<hs< td=""><td>Immigrant</td><td>-186</td><td>-109</td><td>-77</td><td>-246</td><td>-87</td><td>-159</td></hs<>	Immigrant	-186	-109	-77	-246	-87	-159
	Native	<u>-388</u>	<u>-251</u>	<u>-137</u>	-427	-234	<u>-193</u>
	Imm–Nat	202	142	60	181	147	34
LIC	T	70	40	22	70	21	100
HS	Native	<u>14</u>	<u>61</u>	<u>-47</u>	<u>-139</u>	<u>-7</u>	-100 -132
	Imm–Nat	58	-12	70	60	28	32
SomCol	Immigrant	347	205	142	109	136	-2.7
0011001	Native	262	<u>208</u>	<u>54</u>	26	<u>97</u>	<u>-71</u>
	Imm–Nat	85	-3	88	83	39	44
BA	Immigrant	821	514	307	433	361	72
	Native	895	<u>684</u>	211	<u>473</u>	<u>446</u>	27
	Imm–Nat	-74	-170	96	-40	-85	45
>BA	Immigrant	1,362	972	390	795	670	125
	Native	1,344	<u>1,020</u>	<u>324</u>	766	<u>674</u>	<u>92</u>
	Imm-–Nat	18	-48	66	29	-4	33

- F. Note: "On average, recently arrived first generation independent person units (since 2006) have small net fiscal burdens relative to first generation units that have been in the United States longer because the new first generation immigrants heading the unit tend to be younger, have more education, and have fewer dependent children."
- G. Why makes the "No Budget Adjustments" numbers so bad? Because they assume that the U.S. keeps spending vastly more than it taxes... forever.
- IV. NPV By Skill and Age
 - A. The NAS also breaks numbers down by educational and age category.
 - B. Primarily due to tax progressivity, more-educated immigrants have a better NPV.
 - C. Similarly, due to pension programs, younger immigrants have a better NPV.
 - D. *Open Borders* reports results from Table 8-14:
 - 1. Results by education: NPV>0 for all except HS Dropouts.
 - 2. Results by age: NPV>0 for all education levels for <25 years old; NPV<0 for all education levels for 65+ years old.
 - E. **Error in Open Borders**: Jason Richwine pointed out, and the NAS authors confirmed, that I misinterpreted the reported NPVs for <25 year old immigrants. Since most people in this category have yet to complete the education, what the NAS calls the "fiscal effect of a young high school dropout" is in fact the "fiscal effect of a *child* of high school dropout." Many of whom will not in fact turn out to be high school dropouts!
 - F. **Corrected estimates:** NPV for *actual* 25-year-old high school dropout immigrants is actually -\$186,000. NPV for *actual* 25-year-old high school graduates is +\$72,000. (Table 8-13)
 - G. Other complications?
 - H. Biggest doubts?
 - I. While projecting the fiscal effects of liberalization using current averages is naïve, interacting sub-group estimates with estimates of post-liberalization demographics isn't.
- V. Friedman and Open Borders: An Assessment
 - A. Friedman's quip: "You cannot simultaneously have free migration and a welfare state."
 - B. As we'll see later, this assumes that immigrants have to be fully eligible for welfare benefits. In high-immigration states (Gulf monarchies, Singapore), they rarely are.
 - C. Suppose, though that immigrants *must* be treated equally. Is Friedman right then? It all depends on the numbers.
 - D. At least in the U.S., it's unclear. Despite the existence of the welfare state, the average new immigrant more than pays for himself.
 - E. Young immigrant high school dropouts are a net negative, but young immigrant high school graduates are a net positive.
 - F. Note further: NAS estimates also show that immigrants are fiscally better than natives in all age and education categories.
 - 1. NPV for 25-year-old high school drop-out natives is -\$388,000!

- G. Should we conclude that: "You cannot simultaneously have free reproduction and a welfare state"?
- VI. Immigration and the Environment
 - A. All else equal, higher population leads to more environmental harm.
 - 1. At first glance, however, immigration only redistributes environmental harm rather than increasing it.
 - B. Problem: Precisely because immigration increases global per-capita production and consumption, maybe it increases total environmental harm after all.
 - C. Note: If environmental harm is a good argument against immigration, it is an equally good argument against Third World development in general.
 - D. Big complication: The Environmental Kuznets Curve. Empirically, moving countries from low income to middle income *raises* measured environmental harm. Yet moving countries from middle income to high income *reduces* measured environmental harm.
 - 1. Failure to properly measure low-income environmental quality e.g. animal waste?
 - E. Why would there be an Environmental Kuznets Curve?
 - 1. Consumer demand
 - 2. Norms
 - 3. Regulation
 - F. Key implication: If countries are going to develop anyway, the best scenario for the environment is speeding through middle income zone ASAP.
 - 1. And that's precisely what immigration does!
- VII. Immigration and Contagious Disease
 - A. "If there were no immigration, all new contagious diseases would exist in a single country."
 - B. Not true; you'd also have to get rid of all tourism and trade as well.
 - 1. Remember: tourist contagion works two ways. It's not enough to keep foreigners out; you have to keep domestics from travelling and then returning.
 - C. Couldn't you allow tourism with quarantines and/or testing?
 - D. Sure, but strict, long-lasting quarantines would deter almost all tourism. Who wants to endure two three-week quarantines just to go on vacation?
 - E. In contrast, most would-be immigrants would happily endure a three-week quarantine. In you can multiply your income by a factor of 5 or 10 by migrating, a quarantine is no big deal.
 - F. Even seasonal guest workers would probably find quarantine an OK deal.
 - G. Long-run perspective: Immigration helps eradicate "diseases of poverty" e.g. those spread by eating wild animals.

Weeks 9-10: Culture, Crime, and Immigration

- I. The Value of Assimilation: Coordination and Beyond
 - A. The American "melting pot" has long been a popular ideal.
 - B. Though some have put forward the competing "salad bowl" ideal, almost everyone favors immigrant assimilation along *some* important dimensions.
 - 1. Language
 - 2. Support for democracy
 - 3. Support for human rights
 - 4. Educational success
 - 5. Self-support
 - 6. Rejection of extremism
 - C. What's good about assimilation?
 - D. Palatable answer: coordination. No culture is "better" than any other, but it is better for people who share a country to share a culture to avoid a "Tower of Babel" situation.
 - E. Bitter but potentially better answer:
 - 1. Good culture makes countries successful.
 - 2. Successful countries spur immigration from unsuccessful countries.
 - 3. If immigrants assimilate, larger group gets to enjoy the benefits of the "superior" culture.
 - 4. Otherwise, receiving countries will eventually be as bad as sending countries.
 - F. Example: Is Islamic fundamentalism a good system in culturally supportive countries? Or is it bad everywhere?
 - G. Of course, some assimilation concerns could be about coordination, while others are about cultural superiority.
 - H. Related point: Comparing different *kinds* of immigrants.
 - 1. Krikorian's position
 - 2. Typical nativist's position
 - "Magic dirt" or magic culture?
- II. Linguistic Assimilation

Ι.

- A. Best-case for coordination: Life is easier if all the people in a country share a common language, but it doesn't much matter *which* language they share.
 - 1. Though speaking a globally more *popular* language does have clear benefits.
 - 2. The case of early Israel.
- B. There is a widespread perception in the U.S. that the latest wave of immigrants is failing to learn English. Is this true?

- C. On the surface, yes. Between 1980 and 2010, the share of the U.S. population that doesn't speak English in the home rose from 11% to 21%. 44% in California!
- D. On closer look, immigrants themselves haven't changed much.
 - 1. First-generation adult immigrants from non-English countries rarely became fluent in the past, and rarely become fluent today.
 - 2. Subsequent generations of immigrants, however, continue to attain near-universal fluency.
- E. "Speaks English well" results for kids (ages 6-15) by generation.
 - 1. Note: These measures understate *adult* fluency.





- F. U.S. schools spend years trying to teach foreign languages to natives, with negligible results; 88% who say they speak the foreign language "very well" learned it at home.
- G. How long does this home learning last? Sociologists actually measure "linguistic life expectancies" in generations. Results for sample in southern California:



FIGURE 3 Linguistic life expectancies for selected immigrant groups by generation

- H. Some people see the higher survival of Spanish fluency in Hispanics as a sign of poor assimilation. Given Hispanic kids' high English fluency, is the ability to speak a second language really a sign of a *problem*?
- III. Educational Assimilation
 - A. There is normally a high correlation between parental education and child education.
 - B. Question: If we admit lots of low-education immigrants, should we expect this to sharply depress the education of the next generation?
 - C. Answer: No, because the children of immigrants have *much* higher upward mobility than children of natives.
 - D. The pattern for children of natives:

TABLE 8-9 Predicted Educational Distribution of U.S.-born Children of a U.S.-born Parer Percentages of Parental Offspring Expected to be in an Educational Category (rows add 100)

				Child's education	n		
	94	Less than high school	High school graduate	Some college	Bachelor's degree	More than bachelor's	Color Scale:
	Less than high school	29.4	50.9	18.4	1.3	0.0	10-20
Ication	High school graduate	7.6	42.2	42.2	7.8	0.2	20-30
's edu	Some college	1.0	16.9	50.1	28.8	3.2	30-40
Parent	Bachelor's degree	0.0	2.3	26.0	51.8	19.9	40-50
	More than bachelor's	0.0	0.3	7.0	40.3	52.4	>50

E. The pattern for children of immigrants:

TABLE 8-8 Predicted Educational Distribution of U.S.-born Children of a Foreign-born Parent, Percentages of Parental Offspring Expected to be in an Educational Category (rows add to 100)

				Child's education	on		
		Less than high school	High school graduate	Some college	Bachelor's degree	More than bachelor's	Color Scale:
	Less than high school	17.1	44.1	32.4	6.2	0.3	10-20
Ication	High school graduate	4.3	27.2	46.2	20.3	2.0	20-30
's educ	Some college	0.7	11.9	40.2	38.0	9.2	30-40
Paren	Bachelor's degree	0.1	2.2	21.7	46.5	29.5	40-50
	More than bachelor's	0.0	0.6	8.8	37.7	52.9	>50

F. Suppose we code the five educational categories from 1-5, then look at the conditional expectation for childrens' education as a function of parental education. Results:

Parental	Native	Immigrant
Education	Parent	Parent
1	1.9	2.3
2	2.5	2.9
3	3.2	3.4
4	3.9	4.0
5	4.4	4.4

G. We can use this information to construct another table mapping immigrants' observed education into their *potential* education – i.e., the education they would have acquired if they'd been born in the United States.

Immigr Educati	ant on	Environment Deprivation
Actual	Potential	
1	1.67	67
2	2.57	57
3	3.29	29
4	4.20	20
5	5.00	00

- H. This gives us a plausible measure of the environmental deprivation effect of growing up outside of the U.S.
 - The poorer the country, the greater the likely deprivation.

IV. Basics of Trust

1.

- A. Intuitively, social trust seems like a good thing.
 - 1. "Society works better if we trust each other."
 - 2. Less conflict.
 - 3. Less need for formal enforcement.
- B. Social scientists almost always measure trust with simple survey questions. E.g. the General Social Survey asks, "Generally speaking, would you say that most people can be trusted or that you can't be too careful in life?"

1. Response options: "Can trust," "Depends," and "Can't be too careful."

- 2. Generic label for such questions: "generalized trust."
- C. Since the World Values Survey also measures generalized trust, a vast literature uses trust to predict local, state, nation, and international outcomes.

- D. Standard results: Trust is good for almost all desirable social outcomes. Trusting societies are richer, safer, happier, etc.
- E. Caveat: This is the consensus view. However, a few seemingly careful review articles argue that the trust literature suffers from both confirmation bias and carelessness.
- V. Immigration and Trust
 - A. Many scholars are worried that immigration will hurt trust.
 - B. Why? Main argument is that immigration raises diversity, and diversity is bad for trust.
 - C. Even many left-wing social scientists regretfully make this argument, most notably Robert Putnam.
 - D. If you actually look at the numbers in Putnam's own work, however, the magnitude of this diversity effect is microscopic.

Table 3. Predicting Trust in Neighbours from Individual and Contextual Variables

	В	S. E.	Beta	t	Sig.
(Constant)	0.79	0.11		7.0	0.0000
R's age	0.01	0.00	0.15	21.4	0.0000
R owns home (v. rent)	0.25	0.01	0.13	19.7	0.0000
R's education (years)	0.04	0.00	0.13	19.1	0.0000
R's ethnicity: black	-0.31	0.02	-0.12	-18.6	0.0000
Census tract poverty rate	-0.66	0.09	-0.08	-7.1	0.0000
R's satisfaction with current finances	0.10	0.01	0.08	12.4	0.0000
R's ethnicity: Latino	-0.24	0.02	-0.07	-9.8	0.0000
R's household income (\$100,000)	0.14	0.02	0.05	7.5	0.0000
County: Non-violent Crimes per Capita	-2.57	0.41	-0.05	-6.2	0.0000
Census tract Herfindahl Index of Ethnic	0.18	0.04	0.04	5.1	0.0000
Homogeneity					
Census Tract Population Density	-0.39	0.08	-0.04	-4.8	0.0000
(100,000 per sq. mi) Consus Treat Percent Living Some Town of	0.24	0.04	0.04	5.4	0.0000
Five Years Earlier	-0.24	0.04	-0.04	-5.4	0.0000
R's decades in this community	.020	.004	0.04	5.3	0.0000
Census Tract Percent Renters	-0.14	0.04	-0.04	-3.5	0.0006
Census Tract Percent Bachelor's Degree	0.29	0.07	0.03	4.3	0.0000
R is Spanish-speaker	-0.13	0.03	-0.03	-4.1	0.0001
R is female	0.05	0.01	0.03	4.7	0.0000
Census Tract Gini Coefficient for Household	0.39	0.15	0.02	2.7	0.0069
Consus Treat Average Commute Time (hours)	0.21	0.06	0.02	2.4	0.0006
D'a athricity Asian	-0.21	-0.00	-0.02	-3.4	0.0000
Consus Treat Persont United States Citizens	-0.09	0.05	-0.02	-3.3	0.0011
County: Violent Crimes per Capita	6.50	3 35	0.02	2.2	0.0204
Consus Tract Percent Over 65	0.21	0.10	0.02	2.0	0.0364
D is a citizen	0.21	0.10	0.01	2.1	0.0356
R is a citizen	0.00	0.05	0.01	1.0	0.0550
D is resident of South	0.02	0.001	0.01	1.0	0.0752
R is resident of Midwart	-0.02	0.02	-0.01	-1.2	0.2162
R is resident of West	-0.02	0.02	0.01	-1.0	0.5290
R's commuting time (hours)	_0.01	0.02	0.01	_0.2	0.4230
is a commuting time (nours)	-0.00	0.01	0.00	-0.2	0.0009

Notes: Question was 'How much can you trust people in your neighbourhood?' N = 23,260. Adj. $R^2 = 0.26$.

- E. Putnam uses a 4-point scale. Moving from current U.S. diversity level to *maximum* diversity reduces predicted trust by .04.
- F. Much bigger effects:
 - 1. Black and Hispanic shares
 - 2. Homeownership
 - 3. Citizenship
- G. There is however a *much* stronger argument that immigrants depress national trust. Namely: Most would-be immigrants come from poor countries, and poor countries have low trust.

Interpersonal trust attitudes, 2014

Our World in Data

Share of people agreeing with the statement "most people can be trusted" (World Value Survey). Since some observations for 2014 are not available the map displays the closest available data (1998 to 2014).



Data source: Trust – World Value Survey Note: See source for further details regarding specific survey question.

OurWorldInData.org/trust • CC BY-SA

VI. Trust Assimilation

- A. If migrants bring their low trust with them, and pass their low trust on to their kids, admitting low-trust migrants eventually yields a low-trust country.
- B. Is trust really so persistent? Researchers are divided.
- C. How do you measure assimilation? Standard method:
 - 1. Measure trust in ancestral country.
 - 2. See how well this predicts trust in country of residence.
- D. One common view:
 - 1. High assimilation for Europe
 - 2. Low assimilation for U.S.
- E. When I looked at U.S. studies, the work seemed poor. In particular, the sample of countries of origin was very narrow. So I greatly expanded the sample.

- 1. Trust measure is binary; 0="most people can't be trusted," 1="most people can be trusted."
- 2. Perfect trust persistence means C=0, Born*Ancestral=(1-Born)*Ancestral=1.
- F. Results: if you treat African-Americans like immigrants, trust assimilation is moderate, especially for later generations.

Dependent Variable: TRUST Method: Least Squares Date: 05/24/17 Time: 13:30 Sample (adjusted): 9121 62446 Included observations: 25210 after adjustments

Variable	Coefficient	Std. Error	t-Statistic
С	0.100325	0.020419	4.913316
BORN	0.121811	0.022546	5.402829
BORN*ANCESTRAL	0.560910	0.029475	19.02983
(1-BORN)*ANCESTRAL	0.700551	0.072665	9.640823

G. If you distinguish between slaves and free migrants, trust assimilation is high, especially for later generations.

Dependent Variable: TRUST Method: Least Squares Date: 05/24/17 Time: 13:46 Sample (adjusted): 9121 62446 Included observations: 25210 after adjustments

Variable	Coefficient	Std. Error	t-Statistic
С	0.100325	0.020288	4.944959
BORN	0.230960	0.023201	9.954724
BORN*ANCESTRAL	0.276592	0.033244	8.320146
(1-BORN)*ANCESTRAL	0.700551	0.072200	9.702911
SLAVE	-0.214622	0.011874	-18.07506

- Η. Bottom line: Trust is much more like than language than hair color. Ι.
 - Why trust is overrated:
 - 1. Moderate trust is helpful, but almost no one in the U.S. would bother to migrate to enjoy the benefits of higher trust.
 - 2. Moderate trust may be better for growth.
 - 3. Ultra-trusting earn less and get cheated more.
 - 4. What's really good is not trust but trustworthiness.
 - Quip: We need enough trust to make credit cards work. 5.
- Immigration and Crime in the U.S. VII.
 - Critics of immigration routinely point to immigrant crime and immigrants Α. undeniably commit some crimes.
 - From a social science point of view, however, the key question is: Β. Compared to what? Are immigrants more criminally inclined than natives, the same. or less?
 - C. The answer for the U.S. is clear. By virtually every known measure, immigrants have *lower* average crime rates than natives. Census data:



- D. But this doesn't quite decide matters. In principle, immigrants could *indirectly* raise crime rates by raising *natives*' crime rates.
 - 1. Immigrants raise unemployment, so natives turn to crime.
 - 2. Immigrants undermine social cohesion, so natives turn to crime.
- E. In the U.S., at least, the opposite seems true. A large literature finds that immigration lowers overall crime rates.
- F. There is less research for Europe, but there immigrants seem to have above-average crime rates. (Table 7.1 from *Routledge Handbook on Crime and International Migration*)
- G. Simplest story: U.S. natives have high crime, so immigrants are better than us. European natives have low crime, so immigrants are worse than them.
- VIII. Immigration, Terrorism, and Availability Cascades
 - A. Especially in the U.S., foreigners are greatly overrepresented in deadly terrorism.
 - 1. From 1975-2015, foreign-born terrorists were responsible for 88% of all terrorist deaths on U.S. soil.
 - B. The reaction to terrorism has been very costly. The U.S. alone has spent trillions.
 - C. The measured size of the problem, however, is tiny. For the U.S., murder is less than 1% of all deaths, and terrorism is less than 1% of all murders.
 - D. Why the disproportionate reaction? The availability cascades model (Kuran and Sunstein) provides the best answer.

Table 7.1 Foreign	nationals in Euro	opean prisons,	28 EU countr	ries	Portugal	137	14324	18.5	2650
	Prison population rate (per	Prison population total	Foreign prisoners, percentage	Foreign prisoners, estimated approximate					
	100,000 of national population)	10141	of prison population	absolute numbers	Romania	158	33510	0.6	201
Austria	98	8273	48.6	4021	Slovakia	184	9981	2	120
Belgium	108	12126	44.2	5360	Slovania	66	1257	10.7	145
Bulgaria	151	10996	2	220	Shovenia	145	66005	21.7	21227
Croatia	108	4741	5.7	270	Spain	67	6364	20.5	1041
Cyprus	106	905	53.8	487	Sweden United Kingdom	149	84202	12.8	10902
Czech Republic	157	16568	8.8	1458	(Tracker d and	148	84392	12.8	10802
Denmark	73	4091	26.8	1096	(England and Wales)				
Estonia	227	3036	39.9	1211	United Kingdom	101	1866	6.3	118
Finland	58	3134	14.5	454	(Northern Ireland)				
France	100	67050	17.5	11734	United Kingdom	146	7808	3.4	265
Germany	77	63317	27.1	17159	(Scotland)				
Greece	111	12479	63.2	7887	Totals		631272		117391
Hungary	186	18388	3.5	644	Source: The World	Prison Brid	ef(nd)		
Ireland	89	4120	14.3	589	Source. The world	I HSOH DIN	er (n.u.).		
Italy	105	64047	35	22416					
Latvia	304	6117	1.3	80					
Lithuania	329	9729	1.2	117					
Luxembourg	131	717	72.2	518					
Malta	145	610	40.3	246					
Netherlands	82	13749	24.6	3382					
Poland	209	80482	0.7	563					

- E. Cognitive psychologists have found that people frequently estimate probabilities based upon *how easy it is to think of examples*. They call this the "availability heuristic."
- F. This often leads to systematically biased estimates, or "availability bias."
- G. Psychologists normally demonstrate this bias in simple experiments. How does it play out in the real world?
- H. Kuran and Sunstein's story: The interaction between availability bias and the media leads to a never-ending series of mass hysterias, or "availability cascades."
- I. The cycle of hysteria:
 - 1. The media gives massive coverage to shocking but rare events in order to get good ratings.
 - 2. The public watches. Watching makes it easier for the public to think of examples of the events the media covers.
 - 3. One effect: The public begins to think the problems are quantitatively serious, so it gets easier to sell the public similar stories.
 - 4. Other effect: Politicians begin trying to solve the "problem" to win votes.
- J. Examples:
 - 1. Nuclear power
 - 2. Mass shootings
 - 3. Frankenfoods
 - 4. Terrorism
- IX. Pre-Assimilation
 - A. Common observation about immigration today versus 100 years ago: Modern transportation and communication have reduced the benefit of assimilation, so immigrants assimilate less than they used to.
 - 1. Krikorian's doughnut analogy
 - B. Yet this is only half the story: Modern transportation and communication also reduce the *cost* of assimilation.
 - C. Most notably: In the modern world, many hundreds of millions of foreigners "pre-assimilate" to Western cultures they have never experienced first-hand.
 - D. If and when they arrive, they are ready to "hit the ground running."
- X. Cosmopolitanism and Diversity
 - A. Does cosmopolitanism undermine diversity?
 - B. In one sense, yes: If everyone has full access to all of the world's cultures, no place remains culturally distinct.
 - C. In another sense, no: If everyone has full access to all of the world's cultures, each person has a maximum menu of cultural choices.
 - D. By analogy: If every store has all goods, do consumers have one choice or vast choice?
 - 1. Trivially, one choice.
 - E. Practically, vast choice.

Weeks 11-12: Political Effects of Immigration

- I. Background: The Myth of the Rational Voter
 - A. Do human beings vote their "enlightened self-interest" at least on average?
 - B. Doubly no. A large body of evidence shows that objective self-interest has little effect on people's political views. Instead, the chief roots of political orientation are:
 - 1. Ideology
 - 2. Group identity
 - C. The weakness of self-interested voting often comes as a relief to the friends of democracy. Unfortunately, even when people vote for "whatever is best for society," their beliefs about "what the best *is*" are systematically biased.
 - D. Some crucial biases:
 - 1. Social Desirability Bias
 - 2. Myside Bias
 - 3. Availability Bias
 - 4. Action Bias
 - 5. Anti-market Bias
 - 6. Anti-foreign Bias
 - 7. Make-work Bias
 - 8. Pessimistic Bias
 - E. Political rhetoric is "sociotropic," but this usually entails mutual demonization, not technocratic consensus.
 - F. So what? If everyone voted their enlightened self-interest, we could dismiss the fear that immigrants will vote to ruin their new country.
 - 1. They might want marginally different policy, but why "kill the goose that lays the golden eggs"?
 - G. If people don't vote their enlightened self-interest, however, then perhaps immigrants will take the destructive political philosophies of their homelands to their new destinations and ruin them.
 - H. Why travel to a country whose policies you oppose? Because, unlike political orientation, migration *is* largely determined by enlightened self-interest.
 - I. Why the contrast? Migration is action; voting is words; and actions speak louder than words.
 - J. Slightly different perspective: Voting has "political externalities" but contrary to naïve "Get Out the Vote" slogans, political externalities can be positive or negative.
- II. Nativity and Party Identification in the U.S.

A. If you're worried about negative political externalities of immigrant voting (or political participation more broadly), you can't merely show that immigrants vote badly. You have to show that they are *worse* than natives.

1. This works in the Median Voter Theorem, but much the same holds in almost any model of politics.

- B. "Worse" by what standard? For partisans, the obvious answer is:
 "Immigrants who vote for my party are good; immigrants who vote against my party are bad."
- C. Back in the 1980s, immigrants were almost as likely as natives to be Republicans. Since then, however, a large gap has opened up.
- D. Foreign-born voters are now 10 percentage-points more Democratic than natives.
 - 1. The gap is even bigger for immigrants who don't or can't vote.
 - 2. Worldwide, Democrats are much more popular than Republicans. 2016 international poll:



Who would you rather was president of the USA? %

YouGov yougov.com

October 2016 (US results from Oct.6-10)

E. This is not just about race. In 2012, white immigrants voted 9 percentage points more Democratic than white natives.

- F. Why the gap? One popular Republican story points to immigrant selfinterest. Yet Republicans also do poorly with wealthy, socially conservative Asians.
 - 1. Consider Indian-Americans, with a 4:1 D/R ratio.
 - 2. Alternate story: the Respect Motive.
- III. Nativity, Education, and Policy Opinions in the U.S.
 - A. Unless you're a professional politician, winning *policies* matter much more than winning *parties*.
 - 1. Ponder: Democrats in Republican states vs. Republicans in Democratic states.
 - B. Big question then is: Relative to natives, what do immigrants think about policy?
 - C. Answer: On average, the differences are very mild.
 - 1. Immigrants are microscopically more liberal (.18 gap on a 1-7 scale).
 - 2. Immigrants are moderately more in favor of government activism (.44 gap on a 1-5 scale).
 - 3. Almost exactly as hostile to taxes on the poor and middle-class, and slightly more hostile to taxes on the rich.
 - D. Disaggregated results:
 - 1. Immigrants are more supportive of welfare spending.
 - 2. Immigrants are less supportive of social security, health, education, and environmental spending.
 - 3. Immigrants are notably less supportive of defense spending.
 - 4. N.B. It's all relative, because government spending is absolutely popular with natives and immigrants.
 - 5. Immigrants are more socially conservative the natives on most issues, including abortion, gay marriage, marijuana legalization, and free speech for radical Muslims.
 - 6. Finally, immigrants are more pro-immigration (/less antiimmigration) than natives.
 - E. These are results for immigrants who currently reside in the U.S. But open borders would drastically change immigrant demographics. Mostly notably, it would allow far more low-skilled immigrants.
 - F. Key question: What are the political opinions of low-skilled foreigners like?
 - 1. Answer: Quite "populist" economically liberal, socially conservative.
 - 2. Free speech index: U.S. mean is at 50th percentile; immigrants without high school degrees 28th percentile; other immigrants 47th percentile.
 - 3. Statist economic policy index: U.S. mean is at 50th percentile; immigrants without high school degrees 79th percentile; other immigrants 60th percentile.
- IV. Participation, Influence, and Assimilation
 - A. Suppose you consider "populist" voters dangerous. How worried should you be about low-skilled immigrant voters? Only moderately, because...

- B. Immigrants have low turnout.
 - 1. In 2012, 72% of eligible natives voted, versus 48% of eligible immigrants.
- C. Low-skilled immigrant voters have *very* low turnout.
 - 1. In 2012, only 27% of eligible immigrants who dropped out of high school voted.
- D. Political scientists have found that government pays little attention to lowincome voters in general.
 - 1. The Gilens method: Find policies where there is a noticeable income divide in public opinion, then see what actually happens to related concrete policy proposals.
 - 2. Gilens' results for middle- versus high-income voters have been challenged, but not results for low- versus middle-income voters.
- E. Standard measures indicate fairly high political assimilation. Firstgeneration immigrants have many odd political views, but rarely pass them on to their kids.
- V. Immigration, Cohesion, and the Welfare State
 - A. Bottom line: Public opinion measures provide little reason to think that higher immigration would appreciably *increase* the size of the welfare state.
 - B. Some researchers, however, fear immigration will *shrink* the welfare state.
 - C. Key idea: Most people support the welfare state out of a sense of national solidarity, not personal self-interest.
 - 1. Hypothesis: Anything that undermines this sense of national solidarity will undermine the welfare state as well.
 - 2. "People don't like supporting outgroups."
 - 3. Digression on Gilens' *Why Americans Hate Welfare*.
 - D. Ex: One experiment in Norway found that support for a minimum income program falls from $66\% \rightarrow 45\%$ if you mention that non-citizens would be eligible.
 - E. Multiple studies on aggregate data, with mixed results.
 - 1. Soroka et al.: "Although no welfare state has actually shrunk in the face of the accelerating international movement of people, its rate of growth is smaller the more open a society is to immigration."
 - F. The left-wing cosmopolitan conundrum.
 - 1. The case of Krugman
- VI. Ancestry and the Wealth of Nations
 - A. The correlation between national success today and national success 600 years ago is modest. Some call this a "reversal of fortune."
 - B. On closer look, however, countries that have dramatically changed their relative success rankings have also often had large-to-massive population replacement some violent, some peaceful.
 - 1. The Americas
 - 2. Oceania
 - C. This insight has inspired a body of research on the effects of national ancestry. Three main steps:

- 1. Create some measure of success in the distant past.
- 2. Measure modern nations' ancestral composition.
- 3. Predict modern nations' success using the success of the current inhabitants' ancestors.
- D. Main measures of ancestral success:
 - 1. Adoption of agriculture
 - 2. State history
 - 3. Adoption of key technologies
- E. Putterman-Weil is perhaps the best example of this approach. They measure ancestral success using both the adoption of agriculture and state history, then measure ancestry today, then use these measures to predict nations' current GDP.
- F. Illustration of the difference between geographical and ancestral "time since adoption of agriculture."



FIGURE IV Adjusted vs. Unadjusted agyears

G. What happens when you regress per-capita GDP today on these measures?

	ln(GDP per capita 2000)											
Dependent var.	(1)	(2)	(3)	(4)	(5)	(6)						
statehist	0.892***		-1.43***									
	(0.330)		(0.32)									
Ancestry-adjusted		2.01^{***}	3.37^{***}									
statehist		(0.38)	(0.41)									
agyears				0.134^{***}		-0.198^{***}						
				(0.035)		(0.044)						
Ancestry-adjusted					0.269***	0.461^{***}						
agyears					(0.040)	(0.054)						
Constant	8.17***	7.61***	7.51***	7.87***	7.05***	6.96***						
	(0.14)	(0.17)	(0.16)	(0.21)	(0.23)	(0.22)						
No. obs.	136	136	136	147	147	147						
R^2	.060	.219	.271	.080	.240	.293						

TABLE II HISTORICAL DETERMINANTS OF CURRENT INCOME

H. What about the vast array of confounding factors? The ancestry results seem fairly robust to multiple geographical controls. (Table IV)

Dependent			ln(GDP per	capita 200	0)	
var.	(1)	(2)	(3)	(4)	(5)	(6)
			Panel A			
Ancestry-	2.38^{***}	1.32***	2.21***	1.75***	1.31***	1.24***
adjusted statehist	(0.40)	(0.43)	(0.41)	(0.55)	(0.42)	(0.42)
Absolute		0.0386***				0.0337***
latitude		(0.0062)				(0.0084)
Landlocked			-0.628^{**}			-0.558^{***}
			(0.272)			(0.172)
Eurasia				0.594^{**}		-0.327
				(0.286)		(0.247)
Climate					0.609***	0.235^{*}
					(0.096)	(0.121)
Constant	7.44***	6.94***	7.65***	7.44***	6.92^{***}	6.99***
	(0.17)	(0.15)	(0.21)	(0.16)	(0.17)	(0.20)
No. obs.	111	111	111	111	111	111
R^2	.294	.527	.339	.334	.494	.593
			Panel B			
Ancestry-	0.313^{***}	0.172^{***}	0.289***	0.219^{***}	0.178^{***}	0.153^{***}
adjusted agyears	(0.048)	(0.053)	(0.051)	(0.062)	(0.060)	(0.054)
Absolute		0.0393***				0.0404***
latitude		(0.0058)				(0.0087)
Landlocked			-0.500**			-0.577^{***}
			(0.236)			(0.160)
Eurasia				0.631^{**}		-0.172
				(0.250)		(0.237)
Climate					0.516^{***}	0.053
					(0.101)	(0.133)
Constant	6.85***	6.61***	7.07***	7.04***	6.74***	6.80***
	(0.25)	(0.21)	(0.28)	(0.26)	(0.25)	(0.25)
No. obs.	116	116	116	116	116	116
R^2	.293	.523	.320	.334	.426	.563

TABLE IV HISTORICAL AND GEOGRAPHICAL DETERMINANTS OF CURRENT INCOME

Note. Robust standard errors in parentheses. ***p < .01, ** p < .05, * p < .1.

Troubling problem with Putterman-Weil: The world's three most-populous Ι. countries – China, India, and the U.S. – are all extreme outliers.

China and India have great ancestry measures. 1.

U.S. has mediocre ancestry measures. 2.

- 3. Bechhofer-Caplan, verified by Putterman: If you re-estimate with population-weighting, geographical predictors are robust but ancestry predictors are not.
- VII. Ancestry and Immigration
 - A. What does ancestry research have to do with immigration? Simple: immigration *changes countries' ancestry scores*. If you interpret the results causally, immigrants from relatively poor countries cause percapita GDP to fall (and presumably inflict many other sorts of damage).
 - B. The effect could be entirely cultural. If so, cultures seems to last for centuries or longer.
 - C. Ancestry scores by where ancestors were c.500 years ago:
 - 1. High: East Asia, South Asia, the Middle East
 - 2. Mediocre: Europe
 - 3. Low: Africa, Americas, Oceania (especially Australia)
 - D. Ancestry seems to provide a NIMBY argument against migration from people who drag down your country's score.
 - E. But does it really? Remember the Arithmetic Fallacy: When the population is changing, per-capita GDP is a bad measure of social effects.
 - F. Furthermore, remember all the geographic results. You can't change geography, but you can change where people live!
 - G. Thought experiment: What happens if everyone on Earth moves to the U.S.?
 - 1. Even though the U.S. outscores the average *country*, it still underperforms the world average!
 - 2. State history rises from .57 to .62.
 - 3. Agriculture rises from .59 to .68.
 - 4. Gross World Product skyrockets multiplying by over 4x. Clemens is a pessimist by comparison.
 - H. Aside: Although a few fans of ancestry research have used it to rationalize the exclusion of Middle Easterners, people from this region have humanity's *highest* agriculture and state history scores, because civilization began in the Fertile Crescent.
- VIII. IQ and the Wealth of Nations
 - A. Tests of cognitive ability often called "IQ tests" are highly predictive of individual life outcomes.
 - 1. Educational success
 - 2. Income
 - 3. Occupational prestige
 - 4. Family status
 - B. Nations, like individuals, differ in their average IQs. Despite the expected data problems, the basic pattern is robust. Global map:



- C. Can you use national IQ scores to predict societal success?
- D. Only a few researchers have tried, but the results seem very strong. Garett Jones' *Hive Mind: How Your Nation's IQ Matters So Much More Than the Own* is the most technically sophisticated and up-to-date.
- E. Big Jonesian result: National IQ doesn't merely matter for national success; national IQ matters much *more* for national success than individual success.
- F. Jones: +1 IQ point raises individual income by about 1%, but national income by about 6%, controlling for many other variables.
- G. Hanushek provides similar results for math and science scores. Why, though, would these specific skills be so important when most jobs use little math and almost no science?
 - 1. Every job, in contrast, taps human intelligence.
- H. Are the results causal, though? Jones documents three main causal mechanisms:
 - 1. Savings
 - 2. Cooperation
 - 3. Politics
- I. *Hive Mind* would inspire strong politically-motivated objections even if the evidence were bulletproof. Are any objections actually good?
 - 1. The recurring outliers of China, India, and the U.S.
 - 2. Population-weighting?
 - 3. At the individual level, IQ is much more predictive of job performance than income. So perhaps the apparent IQ externality merely reflects intra-national pay compression?
- IX. IQ and Immigration

- A. What does any of this have to do with immigration?
 - 1. Look at the map: Large groups of would-be immigrants have low IQs.
- B. If Jones' model is correct, welcoming large numbers would depress national IQ, causing large declines in GDP per capita and other measures of social success.
- C. This once again provides a NIMBY argument against many kinds of immigration (though a YIMBY argument *for* East Asian immigration to European-ancestry countries).
- D. How solid is the argument, though? The Arithmetic Fallacy aside, IQ remains one factor among many that predict national success.
- E. Thought experiment: According to *Hive Mind's* main estimate, what happens if everyone on Earth moves to the U.S.?
 - 1. Average IQ in the U.S. falls from 98 to the global average of 89.
 - 2. GWP rises by +81%, right in the Clemens ballpark.
- F. Jones rebuttal: More than 100% of the gains go to immigrants!
 - 1. Since per-capita GDP of the U.S. falls, and individual IQ has only a weak effect on individual income, U.S. natives' incomes still fall by about 40%.
 - 2. In other words, the problem is that under open borders, incomes would be too equal.
- G. My rebuttal to his rebuttal:
 - 1. A massive increase in overall GDP that greatly hurts any sizable group is historically unprecedented. Large increases in total production have been broadly beneficial, without fail.
 - 2. Jones' estimates of the private payoff for IQ are too low.
 - 3. Other countries with bigger IQ inequality also have much bigger income inequality.
 - 4. Finally: If IQ inequality sharply rises, so would the payoff for IQ.
- X. Adoption, Immigration, and Child Development
 - A. Does Jones' argument assume that causation only goes from $IQ \rightarrow GDP$ per capita? What about reverse causation?
 - B. *Hive Mind* actually has a whole chapter on environmental effects on IQ, but with no quantitative estimates of how much life in the Third World causes its inhabitants to have low IQ.
 - C. However, there is a credible way to estimate this effect. International adoptees are almost always born in the Third World but raised in the First World. What happens to their IQs?
 - D. Ideally, you would compare international adoptees to siblings who remained in their home country. As far as I know, no such studies exist.
 - E. Alternate and do-able approach: Compare international adoptees to the *average* person in their birth country.
 - 1. Since adoptees typically come from relatively poor families in their birth countries (or even orphanages), this is probably a lower-bound estimate of the causal effect.

F. What happens if you apply this method? Swedish results for "other non-Western" adoptees' adult IQs by age of adoption:

Age at Adoption	IQ		
0-6 months	90		
7-12 months	88		
13-18 months	89		
19-24 months	89		
2-3 years	87		
4-5 years	85		
7-9 years	76		

Other Non-Western IQ by Age of Adoption

- Average IQ in home country is only 84; for native-born Swedes, it's 99. Adoption at 0-6 months wipes out 40% of the IQ gap.
- 2. By the standards of IQ research, this is an amazing long-run gain, because environmental-driven increases in childhood IQ typically exhibit full fade-out.
- G. Can we legitimately use the effect of international adoption on IQ to estimate the effect of international *migration* on the IQ of second-generation immigrants?
- H. Yes, because the broader IQ literature finds little or no lasting effect of adoption on IQ. The effect is driven by the country you reside in, not the family you're raised in.
- I. Most researchers in this area are dismayed that IQs of international adoptees don't fully converge to the host country's, even for those adopted at the earliest ages. Possible explanations:
 - 1. Pre-natal environment
 - 2. Very early child environment
 - 3. Negative intra-country genetic selection (i.e. adoptees tend to come from their countries' relatively low IQ families)
 - 4. Cross-country genetic differences
- J. In any case, the glass is half-full. If migration could eliminate 40% of the Third World IQ gap, global IQ would rise by *a lot* in a single generation.
- K. If you really believe that IQ is important for social outcomes, this is an amazing opportunity.
- L. If global average IQ rises just 6 points as a result, Jones' model implies that open borders will raise GWP by 160%.
- XI. Population and National Power
 - A. Country's global influence heavily depends on GDP, not GDP per capita.
 - B. Upshot: All else equal, higher population \rightarrow greater global influence.
 - C. This is especially clear for military strength. Low-population countries occasionally beat high-population countries, but the odds are stacked against them.
 - 1. Tim Kane's *The Immigrant Superpower*
 - D. Thought experiment: Imagine WWII if all the German immigrants had stayed in Germany.

Week 13: Immigration Policy

- I. The Status Quo
 - A. What is current immigration policy in the U.S.?
 - B. To recap:
 - 1. The U.S. gives roughly 1 million per year lawful permanent resident status, and grants citizenship to roughly 750k per year. (Until coronavirus, anyway).
 - 2. Breakdown for new lawful permanent residents in 2018: 44% immediate relatives of U.S. citizens, 20% family-sponsored, 19% refugees/asylees/crime victims, 13% employment-based, and 4% diversity lottery.
 - 3. Roughly 46M foreign-born in the U.S, including about 11M illegal immigrants.
 - B. Who truly favors this package of policies and results? Hardly anyone champions the status quo.
 - C. How would you begin to defend existing U.S. immigration policies?
 - 1. Compromise between many competing values.
 - 2. Priority on emotional bonds with existing U.S. citizens over economic benefits.
 - 3. Modest philanthropy.
 - D. The connection with any of the social science we've discussed is tenuous at best. The background assumption seems to be that immigrants even high-skilled immigrants are generally bad for natives.
 - 1. Total neglect of effect of immigration on GWP.
 - 2. Strong pessimism about wage, employment, fiscal, cultural, and possibly political effects (though few non-Republicans mention the latter).
 - 3. Pronounced residual sense of obligation to natives with foreign relatives.
 - 4. Slight desire to attract Einsteins and Brins.
 - E. What do Americans like and dislike about immigration? Latest Gallup results suggest that the fiscal and crime arguments objections carry the most weight.

Americans' Views of Immigration's Impact Mixed

For each of the following areas, please say whether immigrants to the United States are making the situation in the country better or worse, or not having much effect. How about -- [RANDOM ORDER]?

	Better	Worse	No effect	Net (% Better - % Worse)
	%	%	%	pct. pts.
Food, music and the arts	57	10	32	+47
The economy in general	43	31	25	+12
Social and moral values	31	28	39	+3
Job opportunities for you and your family	19	25	56	-6
Taxes	20	42	37	-22
The crime situation	7	42	50	-35
GALLUP, JUNE 3-16, 2019				

- F. How popular is the status quo? Until about 10 years ago, the median American wanted less immigration. Since then, the median favors the "present level" of immigration.
- G. Over the last two decades, even Republican support for immigration has a slight upward trend. Support is way up for Democrats and independents.



H. However, the share of Americans who consider immigration the "most important problem" keeps rising, too.

Mentions of Immigration as the Most Important Problem, 1993-2019



- II. Liberalization
 - A. While support for more immigration remains a minority position, most economists and immigration researchers generally favor liberalization.
 - B. Key question: How *much* liberalization?
 - C. Puzzle: If complaints about immigration have little merit, why stop with 10%, 50%, or 100% more immigration?
 - D. Perhaps researchers think that the standard complaints will eventually *become* true if immigration gets high enough? (The out-of-sample problem).
 - E. Or do they simply fear the transition costs of any radical change?
 - F. Observation: Most advocates of moderate liberalization use arguments that justify radical liberalization. Since they picture themselves arguing with advocates of the status quo, they make little effort to rationalize their moderation.
 - G. Most sophisticated response: "backlash." If you push for too much immigration, you'll get less than if you asked for less.
 - 1. Backlash vs. resistance.
 - 2. True? The case of Brexit voting.
 - 3. Who believes the backlash argument for any other policy?
- III. Open Borders
 - A. If the benefits of free migration are immense and the costs are questionable, why not just have open borders?
 - B. Policy numeracy: The economic benefits come to many trillions per year, so even many multi-billion-dollar drawbacks would be minor by comparison.
 - 1. \$1T \$1B ≈ ???
 - C. Diaspora dynamics allow for a smooth glide after even radical liberalization.
 - D. The fiscal out-of-sample problem: New immigrants would be less-skilled than current immigrants, but low-skilled immigrants remain a net fiscal positive unless they're old.

- E. The cultural out-of-sample problem: About a billion potential immigrants are already pre-assimilated. With diverse global immigration, English remains the focal language.
- F. The political out-of-sample problem: New immigrants would be more socially conservative and fiscally liberal than current immigrants (and current natives), but the difference is modest and their participation is low.
 1. Would political assimilation of next generation really plummet?
- G. Utopian? Open borders was the norm in the 19th century.
- IV. Skill-Based and Culture-Based Immigration
 - A. Some policy analysts want to *add* more skilled migration on top of the status quo; others want to *reallocate* existing slots toward skilled migrants.
 - 1. Credentials
 - 2. Specific majors (e.g. STEM)
 - 3. Specific occupations (e.g. doctors)
 - B. Either way, the arguments are straightforward:
 - 1. Skilled immigrants created more economic value.
 - 2. Skilled immigrants are clear-cut fiscal gain.
 - C. Advocates also often believe that skilled immigrants are more culturally and political assimilated, or at least easier to assimilate.
 - D. Similarly, some policy analysts want to *add* more culturally-compatible migrants on top of the status quo, while others want to *reallocate* existing slots toward the culturally-compatible.
 - E. What does "culturally-compatible" mean?
 - 1. Common language
 - 2. Common religion
 - 3. Common ancestry (e.g. favorable UK treatment for descendants of UK colonial settlers).
 - F. Again, the arguments are straightforward:
 - 1. Culturally-compatible immigrants are more culturally assimilated.
 - 2. Culturally-compatible immigrants are more politically assimilated.
 - G. Advocates also often believe that culturally-compatible migrants are more economically productive and fiscally sound.
 - H. Australia is famous for its "point system," which blends skill- and culturebased migration, but many countries have similar policies.
 - I. Main question: If you have a fixed quota, it is easy to see why you would favor high-skilled, culturally-compatible migrants. But why have a quota in the first place?
 - 1. Quota only makes sense if lower-skilled, less-compatible migrants are not merely *worse*, but a net *negative*.
- V. Nativism and Malthusianism
 - A. Even today, a large minority of the public and a handful of prestigious researchers thinks the status quo allows *too much* immigration.
 - B. Two main strands:
 - 1. Nativism
 - 2. Malthusianism

- C. Nativism emphasizes that existing citizens are better than immigrants along important dimensions. Most immigrants are bad citizens and a burden on society, so we should keep them out.
 - 1. In the rare cases where nativists recognize gains to GWP, they focus on the immigrant-biased distribution of the gains.
- D. Malthusianism emphasizes that the total population of the U.S. is already dangerous high. Immigrants may not be worse people than natives, but resources are already stretched so thin that new arrivals are almost inevitably a net burden.
- E. Main difference: Nativists have no reason to favor slower domestic population growth; Malthusians clearly do.
- F. Earlier social science speaks to the main nativist claims. What about the Malthusian position?
- G. Remember the early discussion of the net externalities of higher population.
 - 1. The neglected positive externalities of population
 - 2. The long-run decline in food, fuel, and mineral prices
 - 3. The Environmental Kuznets curve
- VI. Keyhole Solutions
 - A. A major innovation in medicine: "keyhole surgery." The idea: Surgeons try to minimize side effects by carefully crafting the least invasive approach required to fix the patient's problem.
 - 1. "Minimally invasive surgery."
 - B. Keyhole surgery has inspired some policy analysts to develop "keyhole solutions" for social ills. The idea, again, is to minimize side effects by carefully crafting the least invasive approach required to fix society's problems.
 - 1. Pollution regulations versus pollution taxes
 - 2. Government provision versus vouchers
 - C. When people criticize immigration, however, the proposed remedies have little to do with the specific complaints.
 - D. Instead, the focus is on (a) exclusion, and (b) removal/deportation, despite severe side effects.
 - E. What would keyhole solutions for immigration problems look like? Let's take the soundness of the main complaints about immigration for granted, then consider how you could craft a cheap, humane remedy.
 - F. Immigration and American poverty: If immigrants are reducing the living standards of low-skilled Americans, there's no need to reduce immigration. We could simply charge immigrants an admission fee or extra taxes, then use the revenue to compensate low-skilled Americans.
 - G. Immigration and American taxpayers: If immigrants aren't paying their way, we could restrict immigrants' eligibility for various government benefits.
 - H. Immigration and American culture: If immigrants aren't learning our language and/or culture, we could make passing grades on language or "cultural literacy" tests a condition of entry.

- I. Immigration and American liberty: If immigrants are bad voters, we could restrict their right to vote.
- J. If any of these alternatives to immigration restrictions seem unfair, they're clearly *less* unfair than preventing people from coming at all.
- K. The Gulf monarchies, the countries with the world's most open immigration, all make heavy use of keyhole solutions.
- L. Are keyhole solutions impossible in Western democracies? Hardly. Many are already in use, even in the U.S.
 - 1. Foreign tourists and students can't vote or collect government benefits.
 - 2. Welfare reform imposed a 5-year wait on most federal benefits.
 - 3. You have to wait at least five years to apply for citizenship.
 - 4. The bracero program (WWII 1964)
 - 5. H1-B, H2-A, H2-B visa holders pay taxes but are ineligible for almost all federal benefits (usually including SS and Medicare).
- M. What exists, is possible and expandable.

Week 14: Philosophy of Immigration

- I. From Politics to Philosophy to Policy
 - A. While most people think in left-right terms, sophisticated thinkers usually base their policy views on some deeper philosophy.
 - B. What are the leading philosophies on which thinkers rely?
 - 1. Utilitarianism
 - 2. Egalitarianism
 - 3. Libertarianism
 - 4. Cost-benefit analysis ("wealth-maximization")
 - 5. Meritocracy
 - 6. Christianity
 - 7. Kantianism
 - 8. Citizenism
 - C. Given the social science we've explored, what do each of these philosophies imply about optimal immigration policy?
- II. Utilitarianism and Immigration
 - A. Core idea: "Maximize the sum total of human happiness."
 - B. Given the enormous expected effects of open borders on GWP combined with especially large gains for the global poor, the utilitarian case is very strong indeed.
 - C. What is the utilitarian perspective on immigration's other effects?
 - 1. Fiscal
 - 2. Cultural
 - 3. Political
 - 4. Transition costs?
 - D. Best utilitarian case for any alternative immigration policy?
- III. Egalitarianism and Immigration
 - A. Core idea: "Maximize the welfare of the worst-off group." (Rawls' maximin principle).
 - B. Given the enormous expected effects of open borders on GWP combined with especially large gains for the global poor, the egalitarian case is again very strong.
 - C. What is the egalitarian perspective on immigration's other effects?
 - 1. Fiscal
 - 2. Cultural
 - 3. Political
 - 4. Transition costs?
 - D. Best egalitarian case for any alternative immigration policy?
- IV. Libertarianism and Immigration
 - A. Core idea: "Respect rights to life and private property."
 - 1. Unless the consequences are really bad?

- B. Since open borders merely allows people to hire, rent, and sell to others regardless of their nationality, the libertarian position seems clear-cut.
 - 1. Nations as collective property of their citizens? If so, you have a "libertarian" case for whatever government does.
- C. What is the libertarian perspective on immigration's other effects?
 - 1. Economic
 - 2. Fiscal
 - 3. Cultural
 - 4. Political
 - 5. Transition costs?
- D. Best libertarian case for any alternative immigration policy?
- V. Cost-Benefit Analysis and Immigration
 - A. Core idea: "Maximize the dollar value of social resources."
 - 1. How is this different from utilitarianism? The relevant metric is willingness to pay, not human well-being.
 - 2. As always, willingness to pay depends on ability to pay.
 - B. Given the enormous expected effects of open borders on GWP, the costbenefit case for open borders is very strong.
 - 1. But not as strong as the utilitarian case, because cost-benefit analysis assigns no extra value to pro-poor distributional effects.
 - C. What is the cost-benefit perspective on immigration's other effects?
 - 1. Fiscal
 - 2. Cultural
 - 3. Political
 - 4. Transition costs?
 - D. Best cost-benefit case for any alternative immigration policy?
- VI. Meritocracy and Immigration
 - A. Core idea: "Rewards based solely on personal merit."
 - B. Since immigration restrictions mandate discrimination based on citizenship, they seem to directly violate meritocratic principles.
 - 1. The slogan is, "The best *person* for the job," not "The best *American* for the job."
 - C. What is the meritocratic perspective on immigration's other effects?
 - 1. Economic
 - 2. Fiscal
 - 3. Cultural
 - 4. Political
 - 5. Transition costs?
 - D. Best meritocratic case for any alternative immigration policy?
- VII. Christianity and Immigration
 - A. Core idea: "Love your neighbor as yourself."
 - B. Who is "your neighbor"? The parable of the Good Samaritan strongly affirms, "All humanity."
 - C. Given the enormous expected effects of open borders on GWP combined with especially large gains for the global poor, the Christian case is again very strong.

- D. What is the Christian perspective on immigration's other effects?
 - 1. Fiscal
 - 2. Cultural
 - 3. Political
 - 4 Transition costs?
- Ε. Best Christian case for any alternative immigration policy?
- VIII. Kantianism and Immigration
 - Α. Core idea: "Always treat others as an end in themselves, never as a mere means."
 - Β. The misguided lynch mob example: Punishing the innocent is wrong, consequences aside.
 - C. Don't immigration restrictions punish people for the "crime" of "choosing the wrong parents"?
 - 1. Collective property and its implications
 - Fundamental human rights versus democracy 2.
 - What is the Kantian perspective on immigration's other effects? D.
 - Economic 1.
 - Fiscal 2.
 - 3. Cultural
 - 4. Political
 - Transition costs? 5.
 - E. Best Kantian case for any alternative immigration policy?
- IX. Citizenism and Immigration
 - Core idea: "Maximize the well-being of current citizens and their Α. descendants."
 - Given the enormous expected effects of open borders on GWP, why Β. would citizenists oppose it?
 - Best answer: We want even more than we get under open borders. C.
 - D. How to get even more? Keyhole solutions: Admit foreigners, but with higher taxes, lower benefits, and no political say. E.
 - What is the citizenist perspective on immigration's other effects?
 - 1. Fiscal
 - 2. Cultural
 - 3. Political
 - Transition costs? 4.
 - Best citizenist case for any alternative immigration policy? F.
- Х. Liberalism, Conservatism, and Immigration
 - Opposition to immigration used to be bipartisan. Even in the early 2000s, Α. both parties overwhelmingly opposed liberalization, with just a 10 percentage-point gap.


Preference for Increase in Immigration Rises Most Sharply Among Democrats

- B. Since then, however, an enormous partisan gap has opened up. Both parties are more supportive of liberalization, but Democratic support has skyrocketed.
- C. What explains the change? Appeals to "fundamental philosophy" don't make much sense, because until recently Democrats, too, overwhelmingly opposed liberalization.
- D. Only a Trump effect? Maybe, but the trend looks like a straight line since 2010.
- E. Do Democrats just want more Democratic voters? This seems like an implausible master plan for politicians who seek to win the next election.
 - 1. Furthermore, why wouldn't Republicans strive to win over the growing foreign-born demographic?
- F. What about simply appealing to rising polarization? (Somewhat plausible, but this fails to explain why Republicans are slowly moving in the same direction).
 - 1. Alternative story: Generational replacement, combined with more cosmopolitan youth.
- G. The case for immigration is easy to make on both liberal and conservative grounds.
 - 1. Liberal: equality, poverty alleviation, anti-discrimination
 - 2. Conservative: free markets, meritocracy, opportunity
- H. The same goes for the case against:
 - 1. Liberal: protecting American workers, preventing worker exploitation, anti-business
 - 2. Conservative: protecting American culture, preventing the dilution of American values, America First
- I. What is the long-run political future of immigration? Public opinion suggests that liberalization is the future, though Trump's policies, coronavirus, plus status quo bias cut the other way.
- XI. The Precautionary Principle

- A. The Precautionary Principle: Disallow important changes unless you have *near-certainty* that the overall consequences will be good.
- B. This Principle has broad appeal. Liberals have used it to oppose fracking; conservatives have used it to oppose Syrian refugees.
- C. However, almost no one applies the Principle consistently. Most big social changes do *not* provoke appeals to the Precautionary Principle.
 - 1. Television
 - 2. Working moms
 - 3. Internet dating
- D. Deep point: In a changing world, stasis is potentially deadly, too.
- E. Still, the Precautionary Principle is plausibly the best argument against radical liberalization of immigration.
- F. Key idea:
 - 1. High-quality people are the main ingredient of a successful society.
 - 2. If your society is already successful, immigration endangers it by tampering with its main ingredient.
 - 3. Why take even a slight risk?
 - 4. 1950's West German slogan: "No experiments!"
- G. Rebuttal:
 - 1. Expected benefits of liberalization are high enough to provide an enormous margin of error.
 - 2. People routinely accept low-probability chances of dire harm, because the benefits of doing so are immense.
 - 3. Refusing immigration is risky too. E.g. What if an immigrant would have cured cancer?
 - 4. You have a right to extreme caution with your own life, but what if the price of your extreme caution is many trillions of dollars for others?
- H. Most radical policy changes have ended disastrously communism mostly infamously. If the lesson that:
 - 1. Radical change is bad? Or...
 - 2. Scrupulously review the evidence before you proceed?
- I. Let us not overlook radical policy changes that seem to have worked well:
 - 1. Abolition of slavery
 - 2. Religious toleration
 - 3. Freedom of speech
 - 4. End of communism
 - 5. End of Jim Crow