A BIGGER MELTING POT:
MIGRATION, COMPETITIVENESS AND GROWTH IN NORTH-AMERICA (AND BEYOND)

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A BIGGER MELTING POT

1. The politics of migration in the US
2. Economic effects of anti-migration policies
3. Our general equilibrium model
4. GEM simulation results
5. And the real question is...
INTERNATIONAL MIGRATION IS A HOT TOPIC FOR SOME POLITICIANS IN THE UNITED STATES

End birthright citizenship
Immigration moderation
Make Mexico Pay For The Wall
Increase prevailing wage for H-1Bs
Enhanced penalties for overstaying a visa
Triple the number of ICE officers
Mandatory return of all criminal aliens
Nationwide e-verify
Requirement to hire American workers first
Detention—not catch-and-release

Refugee program for American children
Put American Workers First
Cooperate with local gang task forces
Defund sanctuary cities
End welfare abuse

www.donaldjtrump.com,
THE PUBLIC IS LESS INTERESTED...
GOOGLE SEARCHES FOR ‘IMMIGRATION’ IN THE US (100 = APR 2006)

https://www.google.com/trends/explore#q=Immigration&geo=US&cmpt=q&tz=Etc%2FGMT%2B6
## Endorsements

Are better predictors of presidential elections in the US than popularity.

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<th>Candidate</th>
<th>Representatives 1 point each</th>
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ECONOMIC EFFECTS OF ANTI-MIGRATION POLICIES
MIGRATION IS A COMPLEX PHENOMENON
REGRESSION ANALYSIS

Variable in the country of origin...

Explain net migration

- Population Density
- Gross net income (Atlas)
- Gross net income per capita
- Purchasing Power Parity
- Gross net income (USD)

Does not explain net migration*

- Country surface
- GDP growth
- GDP per capita growth
- Adjusted National Savings

IMCO analysis with World Bank Data (2010-2014).
* P-Values significantly different to zero

IMCO.org.mx

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A country is competitive if it consistently attracts and retains investment and talent.
Migration is costly and it is likely that the poorest are not able to cover the costs associated with migration.*

IMCO Analysis with World Bank Data
* OECD (2009), The Future of international migration to OECD countries, OECD, page 156
IN FACT, EXPULSOR COUNTRIES RELINQUISH THEIR DEMOGRAPHIC DIVIDEND IN FAVOR OF RECEIVER COUNTRIES

The US population pyramid would look more like Japan’s if not for international migration

Mexico

US

Japan

WolframAlpha Data
MORE CONSUMERS AND WORKERS MAKE ECONOMIES BIGGER
POPULATION SHOCKS WILL REDUCE GDP
EVEN IF MORE OF THE DEPORTED ARE CONSUMERS
WORKERS FOLLOW PRODUCTIVITY
INTEGRATED SOCIETIES CREATE SYNERGIES

E4 > E2 + E3
OUR GENERAL EQUILIBRIUM MODEL
Determine price and quantity of goods for which the economy is at equilibrium.
GTAP IN GAMS
BASE MODEL

– GTAP7 Database
  • 113 regions
  • 57 sectors
  • 5 primary factors

– Simplified Economy
  • 3 Macro Regions: USA, Mexico, Rest of the World
  • 5 Sectors: Services, Finance, Manufacturing, Agriculture, Infrastructure & Natural Resources
  • 4 Primary Factors: Skilled and Unskilled Labor, Land, Capital

– Trade allowed across regions
NO MIGRATION

In the original model labor is not mobile.
1. **Factors of Production**
   The labor force can be native-born or foreign-born.

2. **Income**
   Foreign-born labor sends remittances home.

3. **Database**
   World Bank, PEW Research Center and Migration Policy Institute data.
GEM SIMULATION RESULTS
1. **Policy 1:** Reduction in the supply of unskilled foreign-born labor in the U.S.

2. **Policy 2:** Deportation of 1M illegal immigrants per year in a 10 year period from the U.S.

3. **Policy 3:** Training of 0.1% of the unskilled foreign-born population in the U.S. every year (16K people the first year).
SHOCK PROPAGATION IN THE ECONOMY

POLICY 1: REDUCTION IN THE SUPPLY OF UNSKILLED FOREIGN BORN WORKERS

Reduction in the supply of unskilled foreign born workers

Source: IMCO, with GTAPinGAMS model
SHOCK EFFECTS ON OUTPUT AND NATIVE LABOR

POLICY 1: REDUCTION IN THE SUPPLY OF UNSKILLED FOREIGN BORN WORKERS

Unskilled foreign born workers

OUTPUT LOSS

Finance -1.6%
Services -0.7%
Agriculture -2.3%
Construction -2.6%
Industrial Production -4.9%

NATIVE LABOR

Skilled Wages -0.8%
Unskilled Wages -0.1%
Private Income -0.3%
Skilled 0.3%
Unskilled 0.03%
Total 0.9%

Native Employment

Source: IMCO, with GTAPinGAMS model
SHOCK EFFECTS ON GDP AND WELFARE

POLICY 1: REDUCTION IN THE SUPPLY OF UNSKILLED FOREIGN BORN WORKERS

-20%

Unskilled foreign born workers

Source: IMCO, with GTAPinGAMS model
TAKE HOME

POLICY 1: REDUCTION IN THE SUPPLY OF UNSKILLED FOREIGN BORN WORKERS

A reduction in the supply of unskilled foreign-born workers produces small positive effects on U.S. native employment that are not compensated by large negative effects on U.S. prices, GDP, and welfare.

Source: IMCO, with GTAPinGAMS model
1. **Policy 1:** Variation in the supply of foreign-born labor in the U.S.

2. **Policy 2:** Deportation of 1M illegal immigrants per year in a 10 year period from the U.S.

3. **Policy 3:** Training of 0.1% of the unskilled foreign-born population in the U.S. every year (16K people the first year).
Deporting illegal immigrants produces:

- Minimal **native job creation** (0.1%).
- Total **job loss** (-6.78%).

- An **increase** in real wages of **unskilled** labor (+1.6%).
- A **decrease** in real wages of **skilled** labor (-1.8%).
- An increase in **private household income** (+2.9%).
Deporting illegal immigrants has:

- A **negative impact** on U.S. GDP (-4%).
- A **positive impact** on Mexican GDP (+6%).
Deporting illegal immigrants produces:

- A **negative impact** on **U.S. welfare** (-1%).
- A **positive impact** on **Mexican welfare** (+6%).
TAKE HOME

POLICY 2: DEPORTATION OF 1M ILLEGAL IMMIGRANTS PER YEAR

Deporting 1M illegal immigrants per year in a ten-year period produces

a small positive effect on U.S. native labor

and negative effects on U.S. GDP and welfare.

Source: IMCO, with GTAPinGAMS model
1. **Policy 1:** Variation in the supply of foreign-born labor in the U.S.

2. **Policy 2:** Deportation of 1M illegal immigrants per year in a 10 year period from the U.S.

3. **Policy 3:** Training of 0.1% of the unskilled foreign-born population in the U.S. every year (16K people the first year).
Investing in human-capital formation of unskilled migrants produces:

- **Minimal job reduction** (-0.10%).
- An **increase** in real wages of **unskilled** labor (+0.10%).
- A **decrease** in real wages of **skilled** labor (-0.11%).
- A decrease in **private household income** (-0.01%).
The policy has a **positive** impact on both economies:

- **U.S.** GDP increases by **0.1%** in the 10-year period.
- **Mexican** GDP increases by **4.4%** in the 10-year period.
The policy has a **positive** impact on both economies:

- **U.S.** welfare increases by **0.1%** in the 10-year period.
- **Mexican** welfare increases by **6.3%** in the 10-year period.
TAKE HOME

POLICY 3: FORMATION OF 0.1% OF UNSKILLED FOREIGN-BORN LABOR FORCE PER YEAR

Investing in unskilled foreign-born human-capital formation produces small negative effects on U.S. native employment that are compensated by positive effects on U.S. GDP and welfare.

Source: IMCO, with GTAPinGAMS model
AND THE REAL QUESTION IS...
THE QUESTIONS AND THE ANSWERS
TO THE MIGRATION POLICY CONUNDRUMS

Is migration good?
YES.

Policies to stop migration will hurt the economy?
DEFINITELY.
Assimilation

Human capital formation
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DEPUTY DIRECTOR
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EFFECT ON NATIVE WAGES AND EMPLOYMENT

POLICY 1: VARIATION IN THE SUPPLY OF UNSKILLED FOREIGN BORN WORKERS

A 20% reduction in the supply of unskilled foreign born workers produces:

- 3% increase in the wages of unskilled native workers
- 1.5% increase in the wages of skilled native workers
- 0.1% reduction in unskilled native workers employed
- 0.3% increase in skilled native workers employed

Source: IMCO, with GTAPinGAMS model
A reduction in the supply of unskilled foreign born workers leads to an increase in CPI higher than 2%. 
A 20% reduction in the supply of unskilled foreign born workers produces:

- **1% Increase** in the purchasing power of unskilled native workers.
- **-1% reduction** in the purchasing power of skilled native workers.
- **Negligible effect** in the purchasing power of private households.
THE US CURRENTLY HAS 11 M ILLEGAL IMMIGRANTS
WHAT IF THEY GET DEPORTED OVER THE NEXT 10 YEARS?

CHARACTERISTICS OF US ILLEGAL IMMIGRANTS

- 26 M immigrants in the labor force.
- 11 M Illegal immigrants;
- 56% of Mexican origin;
- 19% with more than a high school degree;
- 50% of current unskilled migrant in the labor force are illegal;
- 13% of current skilled migrant in the labor force are illegal.

Sources: US Bureau of Labor Statistics, Migration Policy Institute
EFFECT ON SECTORAL OUTPUT

POLICY 2: DEPORTATION OF 1M ILLEGAL IMMIGRANTS PER YEAR

- Industrial production is the most negatively affected.
- Services are the least negatively affected.

Source: IMCO, with GTAPinGAMS model
• **Agriculture benefits** the most from the policy.

• **Production** is the most negatively affected.
SHOCK EFFECTS ON GDP

POLICY 1: VARIATION IN THE SUPPLY OF UNSKILLED FOREIGN BORN WORKERS

- A 20% reduction in the supply of unskilled foreign born workers in the U.S. leads to a **1.3% reduction in U.S. GDP**.

- A 20% reduction in the supply of unskilled foreign born workers in the U.S. produces a **1.9% increase in Mexican GDP**.
SHOCK EFFECTS ON WELFARE

POLICY 1: VARIATION IN THE SUPPLY OF UNSKILLED FOREIGN BORN WORKERS

- A 20% reduction in the supply of unskilled foreign born workers in the U.S. leads to a **0.05% reduction in U.S. welfare**.
- A 20% reduction in the supply of unskilled foreign born workers in the U.S. leads to a **0.1% increase in Mexican welfare**.

Source: IMCO, with GTAPinGAMS model