Immigration and Welfare in the US

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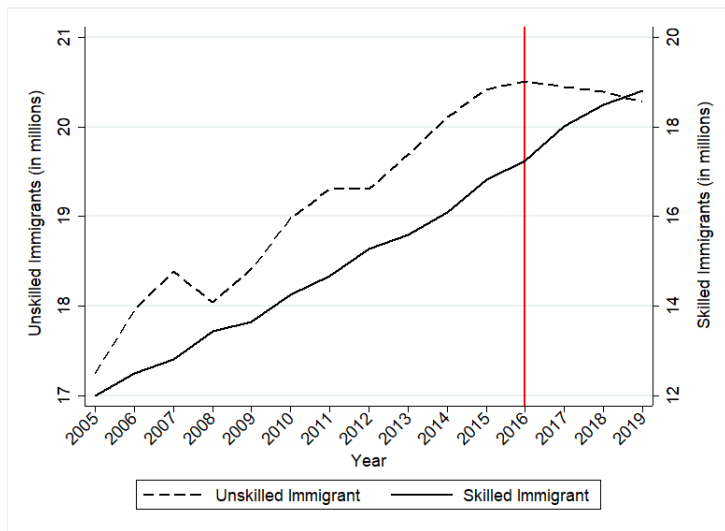
Immigration in the US

- Unskilled immigrants take up jobs replacing American workers

- American workers lose from immigration

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- **Immigrants↑ ⇒ Consumers↑ ⇒ Demand↑ ⇒ Jobs↑ ⇒ Welfare↑**

Unskilled immigration decreases post-2016

Research Question

How has native welfare changed post-2016?

What this paper does

- Builds a general equilibrium model that considers:
  - ▶ Love for variety
  - ▶ Both skilled and unskilled immigrants
  - ▶ Imperfect substitutability within and across skills

- Calibrates the model to the US economy for 2010-19

- Studies the counterfactual changes in native welfare:
  - ▶ If unskilled immigrant growth continued post-2016
  - ▶ Quantify the differences in welfare gains

Related Literature

- Wage impacts:
  - Negative impact on unskilled natives (Borjas 2003, Borjas and Katz 2007)
  - Wage impacts vary across skill (Ottaviano and Peri 2012)
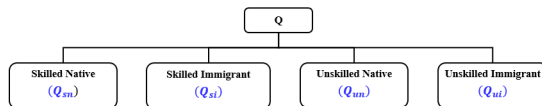
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- Firm side impacts:
  - ▶ Immigration increases firm entry (Dustmann and Glitz 2015)
  - ▶ Immigration increases firm productivity (Mitaritonna et. al. 2017)
  - ▶ Immigrants generate welfare gains (Bound et. al. 2017)
  - ▶ Welfare gains arise through more varieties and lower prices (Giovanni et. al. 2015)

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  - ▶ Welfare gains arise through more varieties and lower prices (Giovanni et. al. 2015)
    - ■ Changes in immigrant population of both skill types
    - ■ Quantify the welfare changes post-2016

Model based on closed economy Melitz (2003)

- Assumptions:
  - ▶ 2 types of producer:
    - Final Goods (Q)
    - Intermediate Goods (q)
  - ▶ 4 types of labor/consumer:
    - Skilled native (S_n)
    - Skilled immigrant (S_i)
    - Unskilled native (U_n)
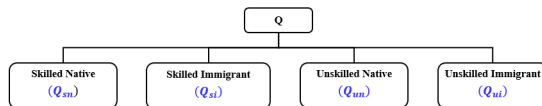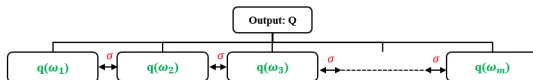   - Unskilled immigrant (U_i)

- Consumers demand final goods:

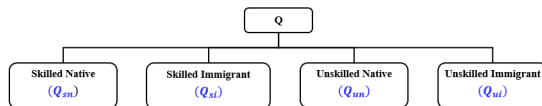# How the model economy works

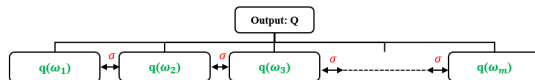- Consumers demand final goods:

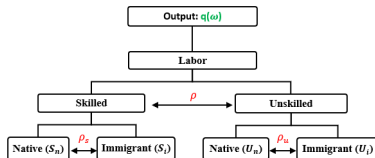- Final Goods producers:

How the model economy works

- Consumers demand final goods:

- Final Goods producers:

- Intermediate Goods producers:

Welfare analysis

- Skilled native welfare:

$$W_{sn} = Q_{sn} = \left(\frac{w_{sn}}{P}\right) S_n$$

- Unskilled native welfare:
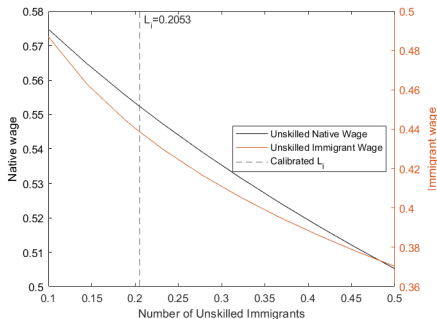
$$W_{un} = Q_{un} = \left(\frac{w_{un}}{P}\right) U_n$$

- Aggregate native welfare:

$$W_n = Q_{sn} + Q_{un} = \frac{(w_{sn}S_n + w_{un}U_n)}{P}$$
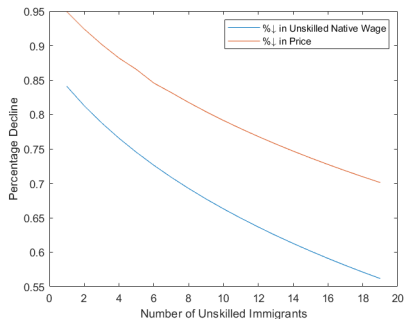
Calibration & counterfactual

- Data Sources:

  - ▶ Bureau of Economic Analysis
  - ▶ American Community Survey from IPUMS-USA

- Calibrate parameters to match:

  - ▶ Real GDP per capita for 2010-2019
  - ▶ Wage ratios between natives and immigrants for 2010-2019
  - ▶ Native to immigrant ratio for 2010-2019

- Counterfactual:

  - ▶ Unskilled immigrants grow at 1.3% year-on-year post-2016

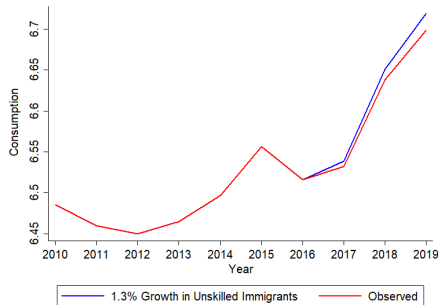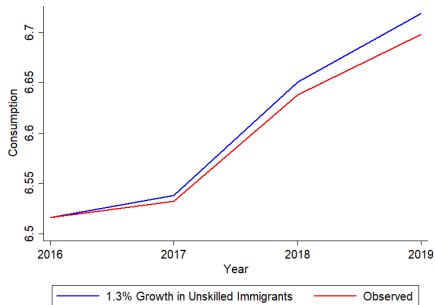# How welfare changes from unskilled immigration?

(a) Native Wages

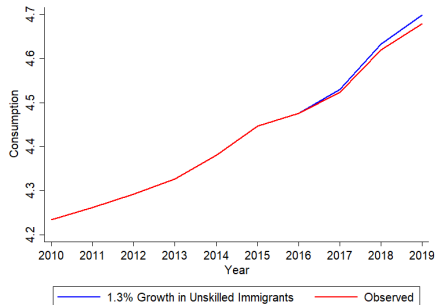(b) %Δ in P and w_{un}

Aggregate native welfare
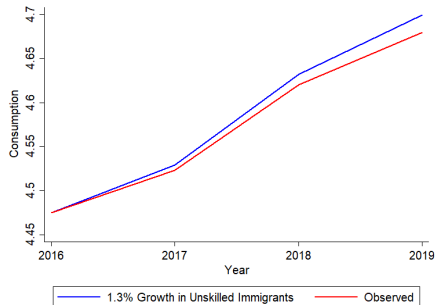

(a) Entire Period

(b) Post-2016
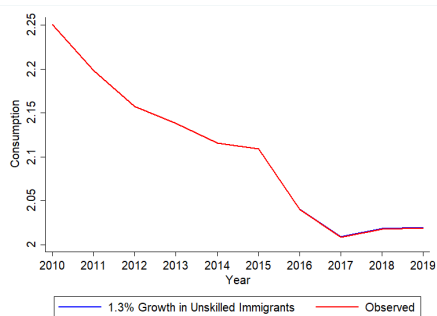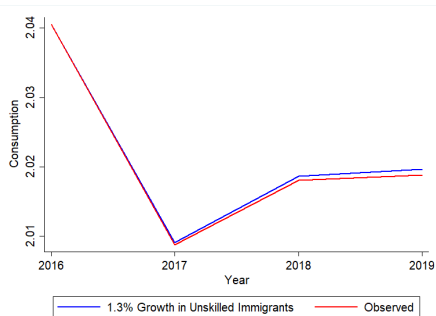
Skilled native welfare

(a) Entire Period

(b) Post-2016

Unskilled native welfare

(a) Entire Period

(b) Post-2016

Quantifying the welfare loss

Percentage change in consumption between 2016 and 2019

	Observed	U_i increase by 1.3%	% loss
Aggregate Native	2.8%	3.1%	10%
Skilled Native	4.56%	5.01%	9%
Unskilled Native	-1.06%	-1.02%	-4%

Conclusion

- Aggregate native welfare did not decrease post-2016, driven by skilled immigrant growth

Conclusion

- Aggregate native welfare did not decrease post-2016, driven by skilled immigrant growth

- But decline in unskilled immigrants reduced welfare gains from immigration

- Immigration is probably not the primary cause of low unskilled native welfare; outsourcing? taxes?

Future work

- How much welfare loss is mitigated through skilled immigrant influx?

- Decompose welfare loss into changes in labor cost and variety channels

Thank You!

Question? Comments?