# Why Populists Neglect Automation: The Political Economy of Economic Dislocation

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# Automation and Globalization

- Trade liberalization $\rightarrow$ manufacturing job losses $\rightarrow$ globalization backlash/populism

- Automation is responsible for at least as many manufacturing job losses
  - Yet dramatically less attention from politicians

- Moreover, both problems can be solved with the same policy: transfers.
  - But politicians fixate on policy solutions to undo globalization (e.g. tariffs)

1) *Why hasn't the rise of automation attracted the same ire from elected officials and voters as globalization?*

2) *Why have voters embraced protectionist policies rather than transfers as a response to economic dislocation?*

# Argument

- Theory:
    - Citizens balance equity and efficiency.
    - Economic nationalists value self-sufficiency.
    - Economic nationalism crowds out demand for transfers in response to foreign shocks.
        - Voters use transfers and other policy to balance equity and efficiency.
        - Dislike imports $\rightarrow$ more policy intervention
        - Reduce transfers to rebalance equity and efficiency

# Argument

- Theory:
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    - Economic nationalists value self-sufficiency.
    - Economic nationalism crowds out demand for transfers in response to foreign shocks.
        - Voters use transfers and other policy to balance equity and efficiency.
        - Dislike imports $\rightarrow$ more policy intervention
        - Reduce transfers to rebalance equity and efficiency

- Empirical Analysis:
    - Foreign labor shocks dampen demand for transfers, compared to automation shocks.
    - Making the automation shock "foreign" reverses this.

## Contributions

- A model of how voters choose between multiple potential remedies.

# Contributions

- A model of how voters choose between multiple potential remedies.

- A better understanding of our current populist "moment."
- What happens when Silicon Valley is no longer the only Tech Mecca?



FOREIGN AFFAIRS
**China's Sputnik Moment?**
How Washington Boosted Beijing's Quest for Tech Dominance
By Dan Wang   July 29, 2021

FINANCIAL TIMES
US needs Japan and Korea to counter China

Quantum computing stocks for retail investors to buy

- IBM (IBM)       • Honeywell (HON)     • Alibaba (BABA)
- Alphabet (GOOGL)   • Amazon (AMZN)      • Baidu (BIDU)

Economy & Business
**VOA**
**Analysts: China Expanding Influence in Africa Via Telecom Network Deals**

# Literature on Trade, Populism, and Automation

- The Globalization Backlash:
  - Baccini, Pinto, and Weymouth (2017)
  - Colantone and Stanig (2018, 2019)
  - Di Tella and Rodrik (2020)
  - Rickard (2021)
- Automation and Populism:
  - Mansfield, Milner, Rudra (2021, **CPS** special issue)
  - Baccini and Weymouth (2021), Owen (2021), Zhang (2019)
  - Anelli, Colantone, and Stanig (2019)
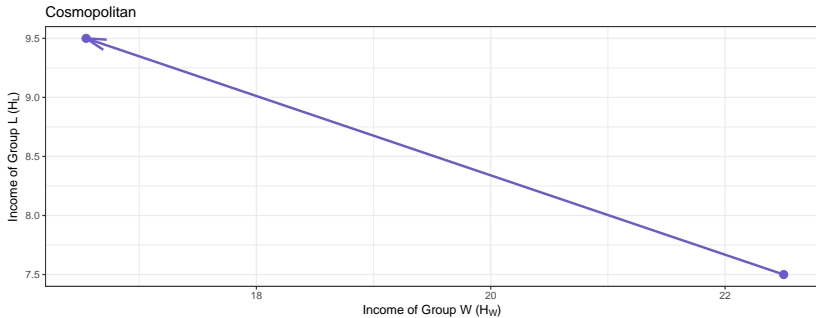  - Wu (forthcoming **PSRM**): Blame misattribution

- A shock of size $A$ creates aggregate gains with distributive consequences and redistributive parameter $\alpha > 1$.
  - Winners' income: $H_W = \alpha A$
  - Losers' income: $H_L = (1 - \alpha)A$
  - A shock from globalization $G$ or technology $T$.
- Government has two instruments:
  - Policy $p$ to reverse the shock: $A'(p) < 0$
  - Transfers: $t$
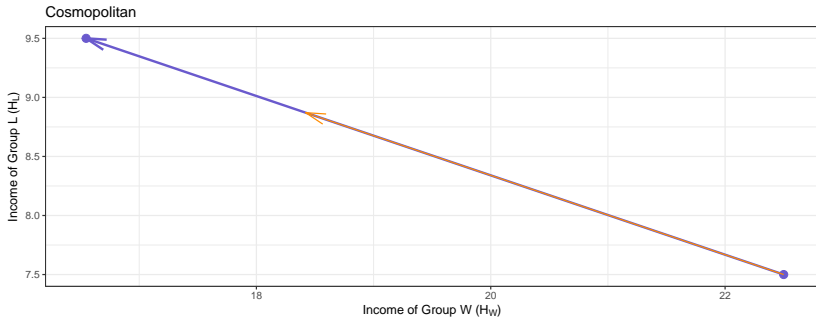    - Leaky according to $\ell(t) < t$, $\ell'(t) < 0$

- The voter likes:

    - *Efficiency*: her utility is increasing in $H_W$ and $H_L$.
    - *equity*: her utility is convex in $H_W$ and $H_L$.

- There is an efficiency and equity tradeoff.

- Economic nationalists value economic self-sufficiency.

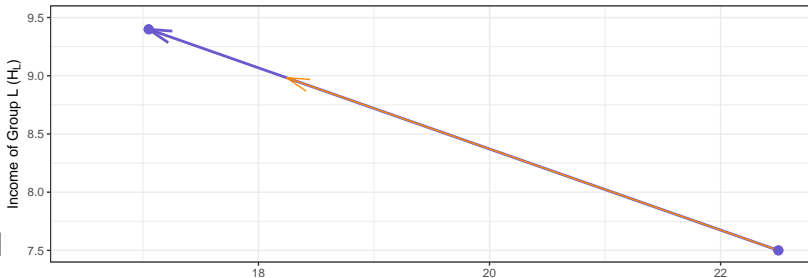    - Parameter $\lambda$ governs pro-export, anti-import attitude

# The Model in a Diagram



Cosmopolitan

# The Model in a Diagram



Cosmopolitan

# The Model in a Diagram



Nationalist –– Import Good –– Rely on Policy

Income of Group L ($H_L$) vs Income of Group W ($H_W$)

Nationalist –– Export Good –– Rely on Transfers

Income of Group L ($H_L$) vs Income of Group W ($H_W$)

# Empirical Implications

|          | Labor                            | Automation                       |
|----------|----------------------------------|----------------------------------|
| Foreign  | More Protection Fewer Transfers  | More Regulation Fewer Transfers  |
| Domestic | Less Protection More Transfers   | Less Regulation More Transfers   |

|  | Labor | Automation |
|---|---|---|
| Foreign | More Protection<br>Fewer Transfers | More Regulation<br>Fewer Transfers |
| Domestic | Less Protection<br>More Transfers | Less Regulation<br>More Transfers |

| | Labor | Automation |
|---|---|---|
| Foreign | More Protection<br>Fewer Transfers | More Regulation<br>Fewer Transfers |
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## General Motors closing plant, laying off 1,500 Michigan workers

By Staff · 12/20/19 03:04 PM EST

General Motors (GM) announced this week that it will close a plant in Michigan, laying off more than 1,500 workers as it tries to address financial losses.

The news comes just months after GM announced it would be laying off 200 workers at a plant in neighboring Ohio.

GM said they expect to end the plant's light truck manufacturing operations by September 1, 2020, with another part of the plant closing by the end of 2020. The estimated job loss is 1,545 workers.



*A worker at a US auto plant. CHARLIE RIEDEL / AP*

"We are conscious of the impact this decision will have on our employees, their families, and the local community, and we are announcing it now to provide them with as much time as possible to prepare for this transition," the CEO said in a press release. "These decisions are never easy, nor are they taken lightly."

Economic analysts say that the auto manufacturing industry in the United States faces a range of challenges, including automation and imports from abroad.



*A construction site for a planned factory outside of the US.*

Based on industry analysis, globalization is the main cause of job losses. Many firms have chosen a strategy of "offshoring," where they move production facilities to a foreign country. This allows foreign workers to perform many of the same tasks that were previously done by US auto plant. Factories like this one get shut down as employees are replaced with workers abroad.



*Imports of products manufactured abroad arrive at a US port.*

Economic analysts say that the auto manufacturing industry in the United States faces a range of challenges, including automation and imports from abroad.



*Automation at work.*

Based on industry analysis, automation is the main cause of job losses. High-tech companies that are located in the United States, like Cisco, IBM, and Microsoft, have developed computer software and advanced robotics that allow machines to perform many of the same tasks that were previously done by auto plant workers. Factories like this one get shut down as employees are replaced with advanced robotics that US technology companies have developed for the auto industry.



*A US company that develops automation technology.*

# Survey Design: Outcomes

*Next, we want to ask how you think the US Federal government should respond to events like the one described in the article. Please tell us how much you agree or disagree with each possible response on the next pages.*

- *The Federal government should increase benefits that are paid to people who are unemployed.*
- *The Federal government should restrict imports of automobiles by increasing tariffs.*
- *The Federal government should increase regulations to limit a company's ability to replace workers with automation.*

|  | Outcomes | Labor | Automation |
|---|---|---|---|
| Foreign | Restrict Imports Share: | | |
| | Restrict Automation Share: | | |
| | Benefits to Unemployed Share: | | |
| Domestic | Restrict Imports Share: | | |
| | Restrict Automation Share: | | |
| | Benefits to Unemployed Share: | | |

| | Outcomes | Labor | Automation |
|---|---|---|---|
| Foreign | Restrict Imports Share: | 34.3% | |
| | Restrict Automation Share: | 29.6% | |
| | Benefits to Unemployed Share: | 36.1% | |
| Domestic | Restrict Imports Share: | | 32.8% |
| | Restrict Automation Share: | | 28.1% |
| | Benefits to Unemployed Share: | | 39.2% |

# Results: Shares

| | Outcomes | Labor | Automation |
|---|---|---|---|
| Foreign | Restrict Imports Share: | | 32.5% |
| | Restrict Automation Share: | | 30.4% |
| | Benefits to Unemployed Share: | | 37.1% |
| Domestic | Restrict Imports Share: | | 32.8% |
| | Restrict Automation Share: | | 28.1% |
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# Results: Shares

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| | Restrict Automation Share: | 29.3% | 28.1% |
| | Benefits to Unemployed Share: | 37.4% | 39.2% |

# Conclusion

- Why do voters demand restrictions on trade but not automation?
  - Nationalists' bias against imports have two reasons to support protectionism: higher imports and job losses
  - Nationalists' bias for exports have conflicting incentives: restrictions on automation protect jobs but also reduce exports
- Why don't voters support transfers as a solution to both automation and offshoring?
  - Demand for protection crowds out demand for transfers because they are substitute policies for balancing equity and efficiency.
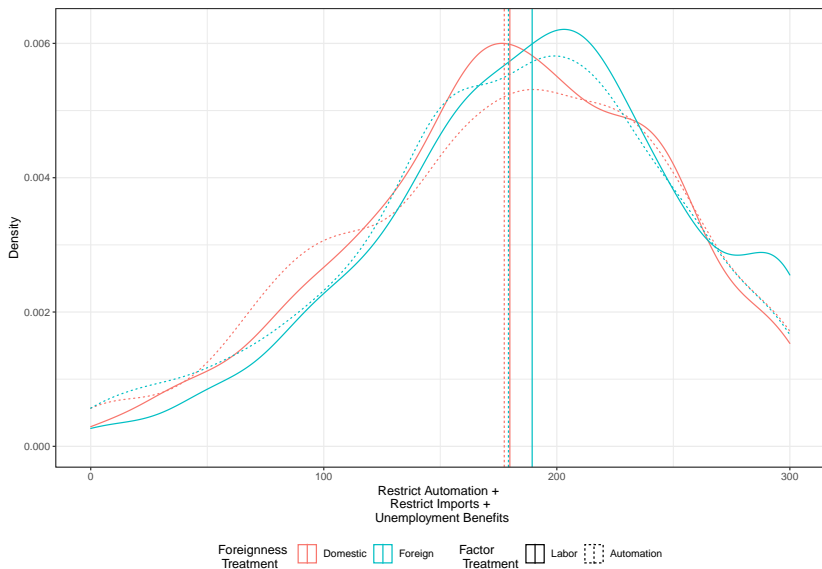
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# Appendix

- Fielded Sept 23-24, 2020 and Oct 28-29, 2020

- Recruited approximately $N = 3,150$ Lucid.

- Good balance across treatments.
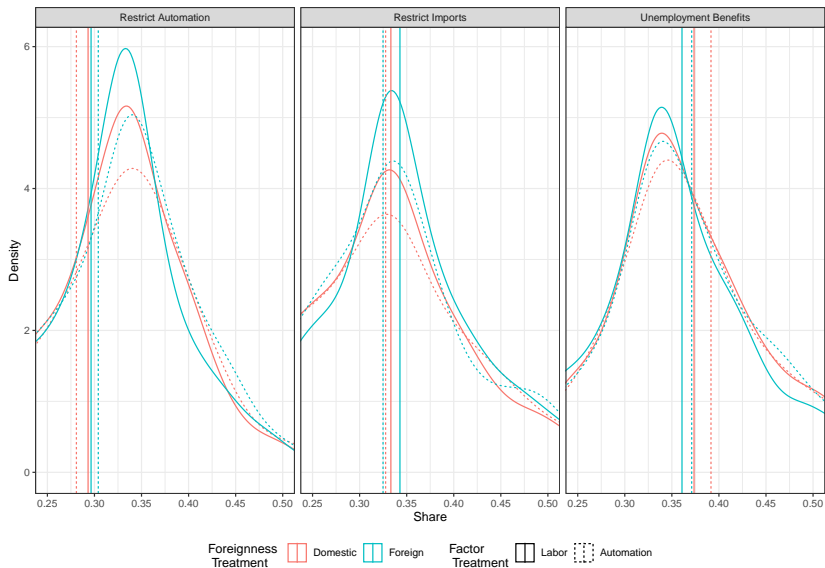
- Decent manipulation check scores.

# Attention Check Correlates

| | Dependent variable: | |
| --- | --- | --- |
| | attentioncheck_pass | I(time_reading >= 30) |
| | (1) | (2) |
| education_strBachelor's degree | −0.030 (0.034) | −0.010 (0.027) |
| education_strCompleted some college, but no degree | −0.027 (0.036) | 0.016 (0.028) |
| education_strDoctorate degree | −0.174*** (0.055) | −0.172*** (0.046) |
| education_strHigh school graduate | −0.038 (0.035) | −0.072*** (0.028) |
| education_strMaster's or professional degree | −0.309*** (0.038) | −0.131*** (0.031) |
| education_strOther post high school vocational training | −0.039 (0.062) | −0.018 (0.047) |
| education_strSome high school or less | −0.247*** (0.077) | −0.192*** (0.050) |
| gender_strMale | −0.145*** (0.019) | −0.102*** (0.014) |

# Distributions: Totals

# Distributions: Shares

# Regressions: Totals

|  | *Dependent variable:* | | | |
|---|---|---|---|---|
|  | Total Agreement | | Total Agreement (Standardized) | |
|  | (1) | (2) | (3) | (4) |
| Foreign Ind | 5.673** | 9.546*** | 0.084** | 0.141*** |
|  | (2.425) | (3.325) | (0.036) | (0.049) |
| Automation Ind | —6.295*** | —2.451 | —0.093*** | —0.036 |
|  | (2.426) | (3.450) | (0.036) | (0.051) |
| Sept Sample | —4.008 | —3.989 | —0.059 | —0.059 |
|  | (2.463) | (2.462) | (0.036) | (0.036) |
| Foreign * Automation |  | —7.739 |  | —0.114 |
|  |  | (4.848) |  | (0.072) |
| Constant | 184.229*** | 182.296*** | 0.041 | 0.012 |
|  | (2.557) | (2.811) | (0.038) | (0.041) |
| Observations | 3,115 | 3,115 | 3,115 | 3,115 |

# Regressions: Shares

|  | | | Dependent variable: | | | |
| --- | --- | --- | --- | --- | --- | --- |
|  | restrict automation share | restrict imports share | benefits to unemployed share | restrict automation share | restrict imports share | benefits to unemployed share |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
| Foreign Ind | 0.013*** | 0.003 | −0.017*** | 0.003 | 0.010 | −0.013 |
|  | (0.005) | (0.006) | (0.006) | (0.006) | (0.008) | (0.008) |
| Automation Ind | −0.002 | −0.012** | 0.014** | −0.012* | −0.005 | 0.018** |
|  | (0.005) | (0.006) | (0.006) | (0.007) | (0.008) | (0.008) |
| Sept Sample | −0.002 | 0.008 | −0.006 | −0.002 | 0.008 | −0.006 |
|  | (0.005) | (0.006) | (0.006) | (0.005) | (0.006) | (0.006) |
| Foreign * Automation |  |  |  | 0.020** | −0.012 | −0.008 |
|  |  |  |  | (0.009) | (0.012) | (0.012) |
| Constant | 0.290*** | 0.331*** | 0.379*** | 0.294*** | 0.328*** | 0.377*** |
|  | (0.005) | (0.006) | (0.006) | (0.006) | (0.007) | (0.007) |
| Observations | 3,090 | 3,090 | 3,090 | 3,090 | 3,090 | 3,090 |

*Note:* 

*$p<0.1$; **$p<0.05$; ***$p<0.01$

Appendix

# Regressions: Total (Controls)

| | Dependent variable: | |
|---|---|---|
| | Total Agreement | Total Agreement (Standardized) |
| | (1) | (2) |
| treatment_foreign_domesticForeign | 9.540*** (3.437) | 0.141*** (0.051) |
| treatment_automation_laborAutomation | −3.748 (3.509) | −0.055 (0.052) |
| treatment_foreign_domesticForeign:treatment_automation_laborAutomation | −5.135 (4.952) | −0.076 (0.073) |
| Observations | 2,904 | 2,904 |

*Note:* *p<0.1; **p<0.05; ***p<0.01

# Regressions: Shares (Controls)

|  | *Dependent variable:* | | |
|---|---|---|---|
|  | restrict automation share | restrict imports share | benefits to unemployed share |
|  | (1) | (2) | (3) |
| treatment_foreign_domesticForeign | −0.00002 (0.007) | 0.012 (0.008) | −0.012 (0.008) |
| treatment_automation_laborAutomation | −0.017** (0.007) | −0.005 (0.008) | 0.021** (0.008) |
| treatment_foreign_domesticForeign:treatment_automation_laborAutomation | 0.024** (0.010) | −0.016 (0.011) | −0.007 (0.012) |
| Observations | 2,881 | 2,881 | 2,881 |

*Note:* *p<0.1; **p<0.05; ***p<0.01
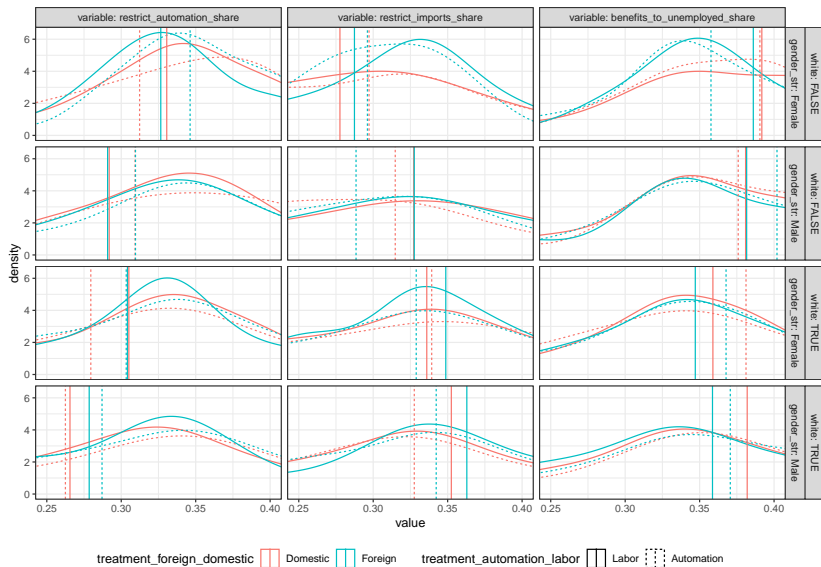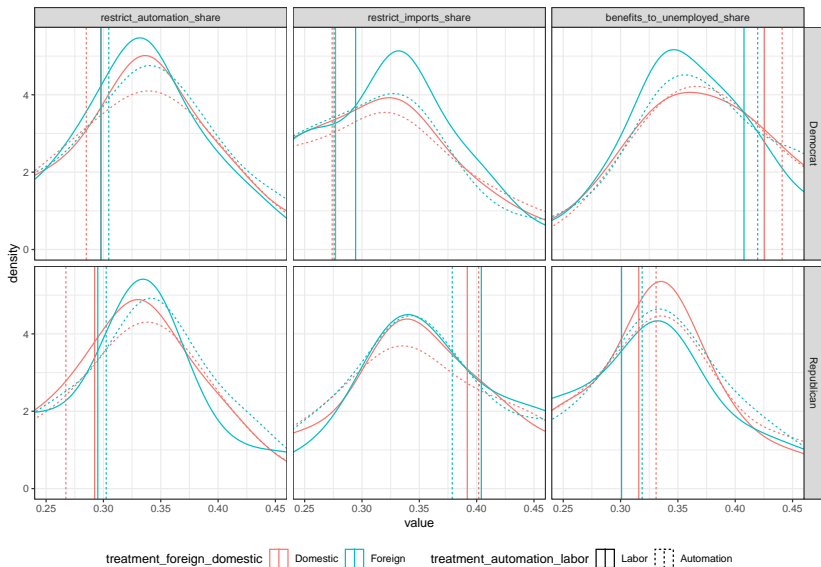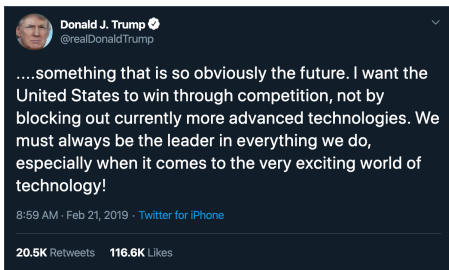
# Heterogeneity by Gender and Ethnicity



**Figure 1:** The distribution of agreement shares across treatments.

Appendix

# Heterogeneity by Party

# Does anyone care about the nationality of technology?



Donald J. Trump ✔
@realDonaldTrump

I want 5G, and even 6G, technology in the United States as soon as possible. It is far more powerful, faster, and smarter than the current standard. American companies must step up their efforts, or get left behind. There is no reason that we should be lagging behind on.........

8:55 AM · Feb 21, 2019 · Twitter for iPhone

25.3K Retweets    133.3K Likes



Donald J. Trump ✔
@realDonaldTrump

....something that is so obviously the future. I want the United States to win through competition, not by blocking out currently more advanced technologies. We must always be the leader in everything we do, especially when it comes to the very exciting world of technology!

8:59 AM · Feb 21, 2019 · Twitter for iPhone

20.5K Retweets    116.6K Likes

# References