The Consequences of Automation for Voting Behaviour

Massimo Anelli Italo Colantone Piero Stanig

Bocconi University

Bocconi University - April 1, 2019

o Revival of nationalism in Western democracies.

Revival of nationalism in Western democracies.



Revival of nationalism in Western democracies.





o In Europe, nationalism and radical right on rise from 1990s.

- o In Europe, nationalism and radical right on rise from 1990s.
- o How to explain nationalist and populist vote?

- o In Europe, nationalism and radical right on rise from 1990s.
- o How to explain nationalist and populist vote?
- Correlation with economic distress and increasing inequality.

- o In Europe, nationalism and radical right on rise from 1990s.
- How to explain nationalist and populist vote?
- o Correlation with economic distress and increasing inequality.
- Need a deeper analysis, to identify the root economic causes of the malaise.

- o In Europe, nationalism and radical right on rise from 1990s.
- How to explain nationalist and populist vote?
- Correlation with economic distress and increasing inequality.
- Need a deeper analysis, to identify the root economic causes of the malaise.
- Important for two reasons:

- o In Europe, nationalism and radical right on rise from 1990s.
- o How to explain nationalist and populist vote?
- o Correlation with economic distress and increasing inequality.
- Need a deeper analysis, to identify the root economic causes of the malaise.
- Important for two reasons:
 - 1. understanding the structural drivers of what we are observing;

- o In Europe, nationalism and radical right on rise from 1990s.
- o How to explain nationalist and populist vote?
- Correlation with economic distress and increasing inequality.
- Need a deeper analysis, to identify the root economic causes of the malaise.
- Important for two reasons:
 - 1. understanding the structural drivers of what we are observing;
 - 2. designing well informed policy actions.

- o In Europe, nationalism and radical right on rise from 1990s.
- o How to explain nationalist and populist vote?
- Correlation with economic distress and increasing inequality.
- Need a deeper analysis, to identify the root economic causes of the malaise.
- Important for two reasons:
 - 1. understanding the structural drivers of what we are observing;
 - 2. designing well informed policy actions.
- Globalization and technical change are key structural factors.

o Technological unemployment is a recurrent fear in history.

Technological unemployment is a recurrent fear in history.



Time, February 24 -1961

«In the past, new industries hired far more people than those they put out of business. But this is not true of many of today's new industries.»

Technological unemployment is a recurrent fear in history.



Time, February 24 -1961

«In the past, new industries hired far more people than those they put out of business. But this is not true of many of today's new industries.»

"Why are there still so many jobs?" (David Autor, 2015)

Technological unemployment is a recurrent fear in history.



Time, February 24 -1961

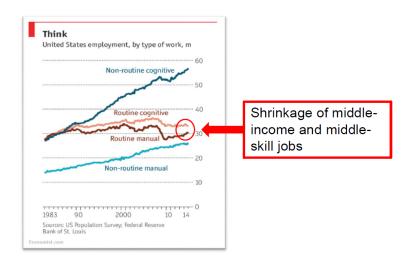
«In the past, new industries hired far more people than those they put out of business. But this is not true of many of today's new industries.»

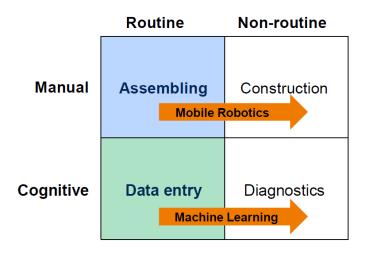
- "Why are there still so many jobs?" (David Autor, 2015)
- Is techno-anxiety justified?

	Routine	Non-routine
Manual	Assembling	Construction
Cognitive	Data entry	Diagnostics

	Routine	Non-routine
Manual	Assembling	Construction
Cognitive	Data entry	Diagnostics

	Routine	Non-routine
Manual	Assembling	Construction
Cognitive	Data entry	Diagnostics





• However, there are three channels for complementary job creation:

- However, there are three channels for complementary job creation:
 - 1. Higher productivity ⇒ firm growth and hiring

- However, there are three channels for complementary job creation:
 - 1. Higher productivity ⇒ firm growth and hiring
 - 2. Higher income ⇒ higher demand boosts employment

- However, there are three channels for complementary job creation:
 - 1. Higher productivity ⇒ firm growth and hiring
 - 2. Higher income ⇒ higher demand boosts employment
 - 3. Demand externalities \Rightarrow new jobs in other sectors (e.g., leisure)

 Key message: machines and computers both substitute and complement human labor.

- Key message: machines and computers both substitute and complement human labor.
- Automation creates new opportunities for skills that are complementary to technology.

- Key message: machines and computers both substitute and complement human labor.
- Automation creates new opportunities for skills that are complementary to technology.
- 65% of children in primary education will have a job that does not exist yet (WEF, 2016).

o Technological change, just like globalization, raises aggregate welfare.

- o Technological change, just like globalization, raises aggregate welfare.
- Yet, it also creates winners and losers, who bear the adjustment costs.

- o Technological change, just like globalization, raises aggregate welfare.
- Yet, it also creates winners and losers, who bear the adjustment costs.
- Losers tend to be concentrated in specific social segments, industries, and regions (Acemoglu and Restrepo, 2017; Di Chiacchio et al., 2018).

- o Technological change, just like globalization, raises aggregate welfare.
- Yet, it also creates winners and losers, who bear the adjustment costs.
- Losers tend to be concentrated in specific social segments, industries, and regions (Acemoglu and Restrepo, 2017; Di Chiacchio et al., 2018).
- Challenge for business and policy:

- o Technological change, just like globalization, raises aggregate welfare.
- Yet, it also creates winners and losers, who bear the adjustment costs.
- Losers tend to be concentrated in specific social segments, industries, and regions (Acemoglu and Restrepo, 2017; Di Chiacchio et al., 2018).
- Challenge for business and policy:
 - → leveraging and accompanying structural change

- o Technological change, just like globalization, raises aggregate welfare.
- Yet, it also creates winners and losers, who bear the adjustment costs.
- Losers tend to be concentrated in specific social segments, industries, and regions (Acemoglu and Restrepo, 2017; Di Chiacchio et al., 2018).
- Challenge for business and policy:
 - ightarrow leveraging and accompanying structural change
 - → ensuring social and political sustainability

Structural change and politics

o Political implications?

- o Political implications?
- Two possible answers:

- Political implications?
- Two possible answers:
 - $1. \ \, {\sf Demand for compensation \ and \ redistribution}.$

- Political implications?
- Two possible answers:
 - 1. Demand for compensation and redistribution.
 - 2. Call for protection.

• Free trade and technology with compensation is the first best (Cameron, 1978).

- Free trade and technology with compensation is the first best (Cameron, 1978).
- Support for pro-redistribution parties.

- Free trade and technology with compensation is the first best (Cameron, 1978).
- Support for pro-redistribution parties.
- o 'Embedded Liberalism Bargain' (Ruggie, 1982).

- Free trade and technology with compensation is the first best (Cameron, 1978).
- Support for pro-redistribution parties.
- 'Embedded Liberalism Bargain' (Ruggie, 1982).
- o From the 90s: tension due to less public resources (Rodrik, 1997).

- Free trade and technology with compensation is the first best (Cameron, 1978).
- Support for pro-redistribution parties.
- 'Embedded Liberalism Bargain' (Ruggie, 1982).
- From the 90s: tension due to less public resources (Rodrik, 1997).
- Recent crisis and austerity as catalysts.

o Loss of credibility for embedded liberalism (Hays 2009; Frieden 2017).

- Loss of credibility for embedded liberalism (Hays 2009; Frieden 2017).
- o Demand for protection.

- Loss of credibility for embedded liberalism (Hays 2009; Frieden 2017).
- Demand for protection.
- Economic Nationalism:

- Loss of credibility for embedded liberalism (Hays 2009; Frieden 2017).
- Demand for protection.
- Economic Nationalism:
 - 1. promise of protection;

- Loss of credibility for embedded liberalism (Hays 2009; Frieden 2017).
- Demand for protection.
- Economic Nationalism:
 - 1. promise of protection;
 - 2. lower taxes and less welfare state;

- Loss of credibility for embedded liberalism (Hays 2009; Frieden 2017).
- o Demand for protection.
- Economic Nationalism:
 - 1. promise of protection;
 - 2. lower taxes and less welfare state;
 - 3. narrative of nationalism and 'taking back control'.

- Loss of credibility for embedded liberalism (Hays 2009; Frieden 2017).
- Demand for protection.
- Economic Nationalism:
 - 1. promise of protection;
 - 2. lower taxes and less welfare state;
 - 3. narrative of nationalism and 'taking back control'.
- Typical of radical right parties, but not only.

• Impact of robot adoption on electoral outcomes in 15 Western European countries, over 1993-2016.

- Impact of robot adoption on electoral outcomes in 15 Western European countries, over 1993-2016.
- Region-specific measure of exposure to automation, based on the historical industry specialization of each region.

- Impact of robot adoption on electoral outcomes in 15 Western European countries, over 1993-2016.
- Region-specific measure of exposure to automation, based on the historical industry specialization of each region.
- Individual-specific exposure based on education, gender, and regional characteristics.

- Impact of robot adoption on electoral outcomes in 15 Western European countries, over 1993-2016.
- Region-specific measure of exposure to automation, based on the historical industry specialization of each region.
- Individual-specific exposure based on education, gender, and regional characteristics.
- A stronger exposure to automation leads to:
 - 1. higher support for nationalist and isolationist parties;
 - 2. higher support for radical right parties.

Three non-mutually exclusive mechanisms:

1. Vote against the incumbent: political elites and business establishment, even as "blind retrospection";

- 1. Vote against the incumbent: political elites and business establishment, even as "blind retrospection";
- 2. Vote against international integration, to take-back-control;

- 1. Vote against the incumbent: political elites and business establishment, even as "blind retrospection";
- 2. Vote against international integration, to take-back-control;
- 3. Vote against immigration, linked to economic distress through:

- 1. Vote against the incumbent: political elites and business establishment, even as "blind retrospection";
- 2. Vote against international integration, to take-back-control;
- 3. Vote against immigration, linked to economic distress through:
 - scarcity of job opportunities;
 - congestion on welfare services;
 - scapegoating.



Promise of redistribution not credible.

- Promise of redistribution not credible.
- Move to the center of mainstream left, also driven by fiscal constraints.

- Promise of redistribution not credible.
- Move to the center of mainstream left, also driven by fiscal constraints.
- High taxes not appealing to the middle-class constituency.

- Promise of redistribution not credible.
- Move to the center of mainstream left, also driven by fiscal constraints.
- High taxes not appealing to the middle-class constituency.
- Structural changes weaken labor unions.

- Promise of redistribution not credible.
- Move to the center of mainstream left, also driven by fiscal constraints.
- High taxes not appealing to the middle-class constituency.
- Structural changes weaken labor unions.
- Economic distress drives authoritarian, anti-immigration attitudes, not leftist.

- Promise of redistribution not credible.
- Move to the center of mainstream left, also driven by fiscal constraints.
- High taxes not appealing to the middle-class constituency.
- Structural changes weaken labor unions.
- Economic distress drives authoritarian, anti-immigration attitudes, not leftist.
- Reputation of humanist internationalism: moving away not credible, and would alienate historical constituencies.

Policy responses

o Discontent behind voting is well motivated and needs to be addressed.

Policy responses

- Discontent behind voting is well motivated and needs to be addressed.
- o Economic nationalism not the right answer.

Policy responses

- Discontent behind voting is well motivated and needs to be addressed.
- Economic nationalism not the right answer.
- Make structural change politically sustainable by making it more inclusive.