The Political Costs of Austerity

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ASSA Annual Meeting

January 2023

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Motivation

- **Anti-establishment and populist parties gained significant support since Great Recession.**
  - Extreme parties vote share increased by over 10 p.p. in Europe since 2008 ▸ Figure
  - New parties emerged, both left and right extremes: AfD, 5 Star Movement, Golden Dawn.

- Partisan conflict and more fragmented parliaments associated with **higher policy uncertainty** and **lower economic growth** (Azzimonti, 2018; Funke et al., 2020).

- Rise in extreme parties coincided with significant **fiscal policy interventions**.

- Significant opposition resulted in **anti-austerity movement**.

> **Research Question:** Is there a causal link between austerity and extreme voting in Europe?

In a nutshell

Methodology

- **Yearly regional** data: novel dataset on election outcomes (regional, national, European).
- Bartik instrument combining **regional sensitivities** to national changes with **narrative (national) austerity shocks**.
- **Instrumental variable local projections** (Jordà, 2005).

Preview of Results

- Austerity has strong political (and economic) costs.
- Raises extreme parties vote share, lowers voter turnout, increases fragmentation.
- Austerity accounts for a significant amount in extreme voting ($\approx 10\%$).
- Amplifies the political costs of economic recessions.

- **Data on economic outcomes** from ARDECO

    - Regional data: **Nuts 2**, 38 regions in Germany (*Regierungsbezirke*, e.g., Dresden, Chemnitz, Leipzig), 22 in France (*Regions*, e.g., Île-de-France, Alsace, Rhône-Alpes).
    - Gross value added, employment, output, wages, investment.

- **Gross value added (GVA) the of non-market sector as proxy** for final consumption expenditure of general government (GG).

    - Composed of public sector wage bill ($> 60\%$); intermediate consumption and the consumption of fixed capital by the GG.
   - Shows very similar statistical properties to official government spending (Gabriel et al. 2022).

Election Data

① **Novel collection of election data at Nuts 2 level** for Regional, National, and European elections
  → Data for 133 regions from 8 countries (1980-2015)

  - Combine established sources with information from national and regional offices.
  - ≈ 20 elections per region.
  - AUS, FRA, ITA, ESP, SWE, DEU, FIN, PRT.

② **Classify far-left** and **far-right** parties following economic and political science literature (Massetti and Schakel, 2015; Funke et al., 2016; Algan et al., 2017).

  - Left: Marxist-Leninist and/or communist positions (e.g., Party of Italian Communists).
  - Right: Ethnocentric and nationalistic views (e.g., National Front).

National austerity episodes

- Narrative spending-based consolidation episodes (Guajardo et al., 2014; Alesina et al., 2020).

- Examining policymakers' intentions as described in contemporaneous documents.

- Discretionary changes in public spending (e.g., lower wage bill) to reduce budget deficit.

- Response to *past* conditions rather than *prospective* conditions.

- Not systematically correlated with other developments affecting output in the short term.

- 95 national consolidation episodes which, on average, amount to 0.86% of GDP.

- Public spending and extreme voting in national elections between 2011 and 2015.
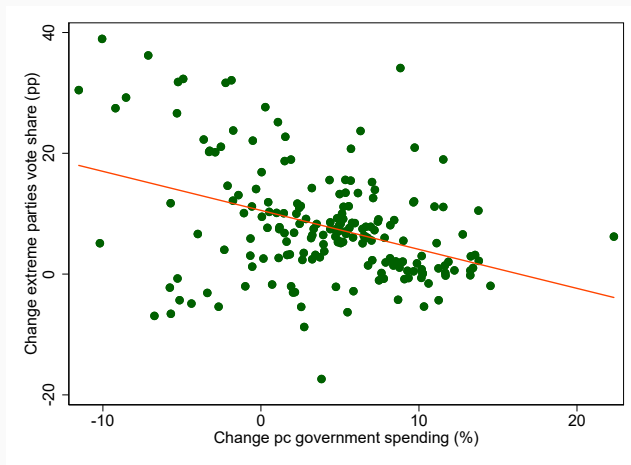
Local Projections

- Estimate dynamics responses using local projections at the regional level i:

$$z_{i,t+h} = \alpha_{i,h} + \beta_h \frac{G_{i,t} - G_{i,t-1}}{G_{i,t-1}} + \gamma_h(L)X_{i,t} + u_{i,t+h}$$

- $z_{i,t+h}$: pp. change in extreme parties vote share.
- $\alpha_{i,h}$: region fixed-effects.
- $(L)X_{i,t}$: lags of regional government spending and output.
- β_h: normalized such that government spending falls by 1% on impact.

Bartik instrument

- Instrument change in regional public spending by Bartik-type instrument:

$$\underbrace{\tilde{g}_{I,t}}_{\text{Shift}} \times \underbrace{\frac{\overline{G_i}}{\overline{\overline{G_I}}}}_{\text{Share}}$$

- *Shift* varies at country (and time) level, *share* at regional level.

  Idea: capture different sensitivities to common national austerity measures ▸ Nuts 2 Map

  - Similar cyclical sensitivities for regions with high and low shares.
  - Strong instrument with F-value > 70.

- Differential exposure leads to different *changes*.
- Valid when shares correlated with the *level* of the outcome (Goldsmith-Pinkham et al., 2020).

Austerity increases vote share of extreme parties

Figure 1: Response of extreme parties vote share to a reduction in public spending by 1%
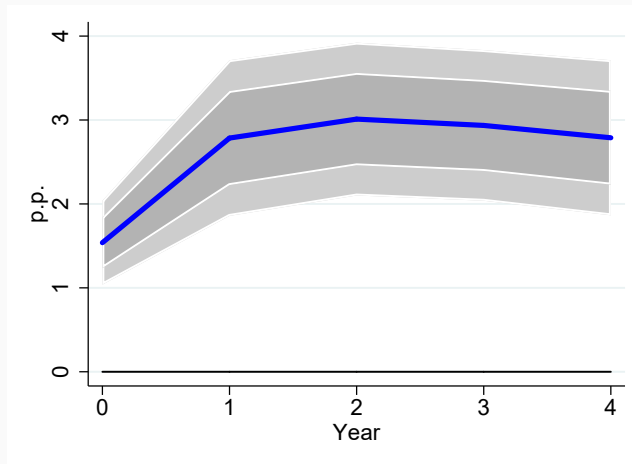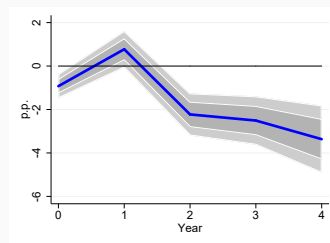
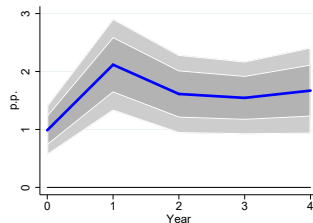# Austerity lowers voter turnout and raises fragmentation

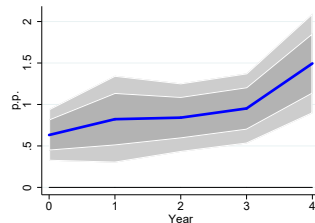- Fragmentation measured by the Herfindahl-Hirschmann concentration index: $ENP = \sum_{i=1}^{n} p_i^2$.

- Austerity increases fragmentation $(1 - ENP_{i,t})$.

(a) Turnout   (b) Total votes for extreme parties   (c) Fragmentation

Forecast Error Variance Decomposition

Table 1: Forecast Error Variance Decomposition

Horizon	Far	Far left	Far right
1	0.6%	3.8%	1.1%
2	4.1%	5.4%	0.5%
3	7.5%	8.6%	1.7%
4	9.7%	9.1%	2.7%

- Austerity **explains about 10% of the variation** in the vote share of extreme parties.

Robustness Checks `▶ Robustness Table`

- Instrument Construction - Shift:

    - Unexpected Austerity $g_{l,t}^u$ (excluding anticipated austerity plans).
    - Using differently constructed narrative shocks by Devries et al. (2011).

- Instrument Construction - Share:

    - Time-varying share (lagged share).
    - Aggregate share (% of government spending going to one specific region).
    - Excluding capitals and top 10% of s_i.

- Others:

    - Dropping the Great Recession period.
    - Adding Year FE.
    - Using Driscoll and Kraay std. errors.
    - State-dependencies (expansion/recession, rural/urban, poor/rich).

Figure 3: Response of *per capita* GDP and employment to a reduction in public spending of 1%

(a) Output (%)   **(b)** Employment (%)
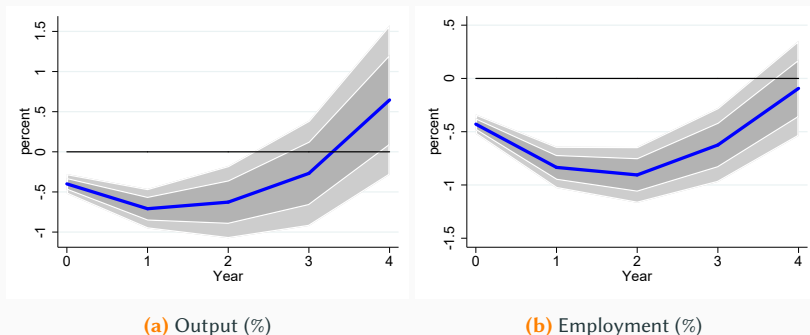
- Corresponding multipliers: 1.8 for output, 2 for employment (Nakamura and Steinsson 2014, Gabriel et al. 2022).
- Close relationship between detrimental economic developments and voters support for extreme parties.

- Are our results just a reflection of economic downturns leading to higher vote shares for extreme parties?

$$z_{i,t+h} = I_{i,t}^{ra} \left[\boldsymbol{\zeta_h^{ra}} + \boldsymbol{\beta_h^{ra}} \frac{G_{i,t} - G_{i,t-1}}{G_{i,t-1}} + \gamma_h^{ra}(L) X_{i,t} \right]$$

$$+ I_{i,t}^{r} \left[\boldsymbol{\zeta_h^{r}} + \boldsymbol{\beta_h^{r}} \frac{G_{i,t} - G_{i,t-1}}{G_{i,t-1}} + \gamma_h^{r}(L) X_{i,t} \right]$$

$$+ (1 - I_{i,t}^{ra} - I_{i,t}^{r}) \left[\zeta_h^{e} + \beta_h^{e} \frac{G_{i,t} - G_{i,t-1}}{GDP_{i,t-1}} + \gamma^{e}(L) X_{i,t} \right] + \alpha_{i,h} + u_{i,t+h}.$$

$I_{i,t}^{ra} = 1$ in **austerity recessions** (negative growth and consolidation).

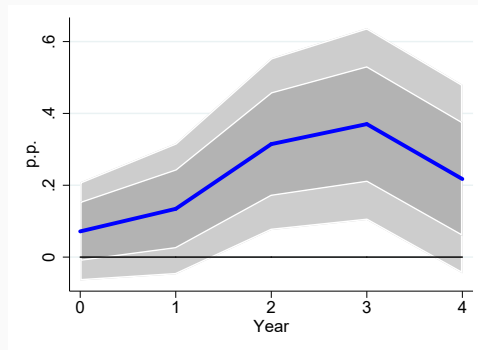$I_{i,t}^{r} = 1$ in **other recessions** (negative growth and no consolidation).

Political costs amplified in austerity driven recessions

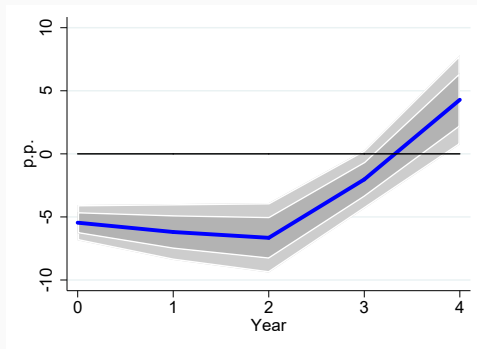**Figure 5:** Difference between austerity and non-austerity driven recessions
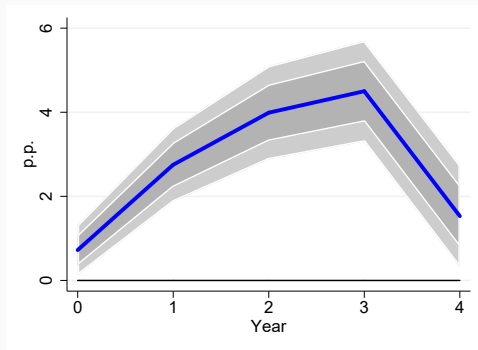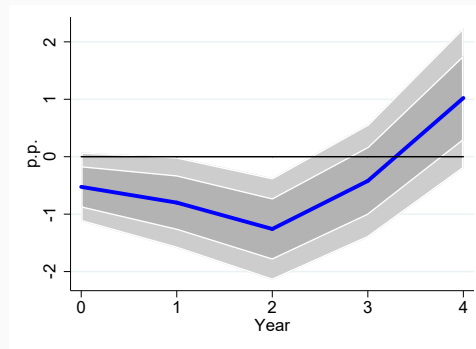
(a) Average effect (ζ_h^{ra}-ζ_h^r)

(b) Marginal effect (β_h^{ra}-β_h^r)

Trust in country's parliament

(a) Average effect (ζ_h^{ra}-ζ_h^r)

(b) Marginal effect (β_h^{ra}-β_h^r)

- Austerity deteriorates trust in the political system which might favor extreme parties.

Conclusion

- Austerity has **large political consequences.**

- Consolidations lead to **higher vote share of extreme parties, more fragmentation, and lower turnout.**

- Austerity explains about 10% of the variation in extreme parties vote share.

- Can be rationalized by the **strong negative economic impact of austerity.**

- Austerity **amplifies** the political costs of economic recessions.

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Thank you!

References

Alesina, A., G. Azzalini, C. Favero, F. Giavazzi, and A. Miano (2018). Is it the "how" or the "when" that matters in fiscal adjustments? *IMF Economic Review 66*(1), 144–188.

Alesina, A., C. Favero, and F. Giavazzi (2020). *Austerity: When it Works and when it Doesn't.* Princeton University Press.

Alesina, A., D. Furceri, G. Ciminelli, G. Saponaro, et al. (2021). Austerity and elections. Technical report, International Monetary Fund.

Algan, Y., S. Guriev, E. Papaioannou, and E. Passari (2017). The european trust crisis and the rise of populism. *Brookings Papers on Economic Activity 2017*(2), 309–400.

Azzimonti, M. (2018). Partisan conflict and private investment. *Journal of Monetary Economics 93*, 114–131.

Devries, P., J. Guajardo, D. Leigh, and A. Pescatori (2011). A new action-based dataset of fiscal consolidation.

Fetzer, T. (2019). Did austerity cause brexit? *American Economic Review 109*(11), 3849–86.

Literature

1 **Sources of political change:** economic and socio-cultural factors, unemployment, immigration (Funke et al., 2016; Algan et al., 2017; Guiso et al., 2020).

2 **Political costs of austerity:**

- Fetzer (2019): austerity induced reforms in the UK led to a rise in support for the UKIP.
- Ponticelli and Voth (2020): positive relationship between budget cuts (taxes) and social unrest.
- Alesina et al. (2021): while tax-austerity carries large electoral costs, the effects of expenditure-consolidations depend on the political-leaning.

3 **Economic costs of austerity:** output, consumption, investment contraction (Guajardo et al., 2014; Jordà and Taylor, 2016; Alesina et al., 2018, 2020).

Consolidations in Sweden

- **Fiscal consolidation in 1984** was motivated primarily by deficit reduction.
  - The Swedish Budget 1984-85: "*As the Government pointed out in the bill on certain economic policy measures last October, one of the principal tasks for economic policy is to restore a more balanced situation in Government finance. Unless we succeed in this, other goals will not be feasible.*"

- **Consolidations in the early 90s**, aiming for a long-run surplus.
  - Motivated by the need to reduce the large budget deficit, which was "*one of the main factors behind increasing international skepticism about the stability of the Swedish economy*" (OECD Economic Surveys 1993/94).

Consolidation episodes

- **Austria: Fiscal consolidation in 1996** was motivated by deficit reduction and achieving the Maastricht deficit criteria for participation in EMU.
    - 1997 IMF Staff Report: "*With first-round participation in EMU the top economic priority since EU membership in 1995, the federal government agreed with the social partners and the lower levels of government on a phased two-year consolidation package to reduce the structural deficit.*"

- **Italy: Fiscal consolidation in 2004** was motivated by reducing fiscal deficit to below the 3 percent of GDP limit of the Stability and Growth Pact.
    - The government "*aimed at improving public finance balances in order to maintain the deficit below the limit of 3 percent*" (Italy Stability Program Update November 2004).
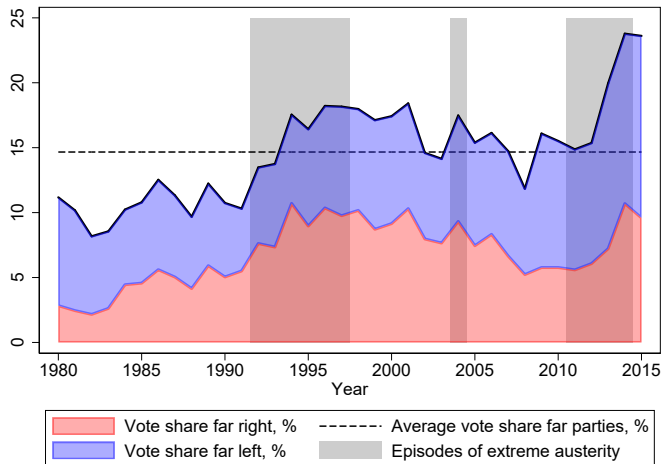
Data at the country level
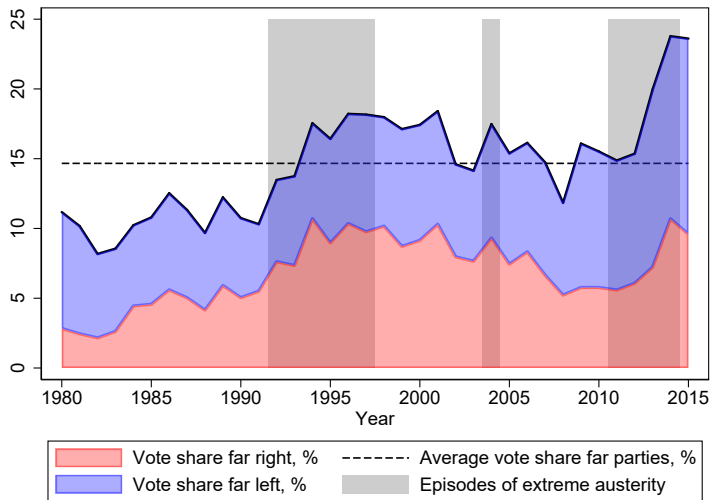
Figure 8: Regional government spending response to austerity
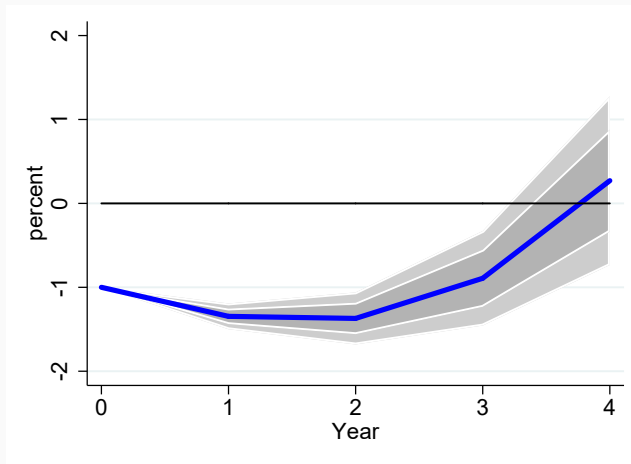
Notes: Vote shares are computed relative to total valid votes. Average vote share of far parties includes both far left and far right parties. Extreme austerity episodes are identified as above the 70th percentile of the shocks sum across countries.

| Country	Party	Party name (Code)
Italy	R	Brothers of Italy (FDICN); Casa Pound (CAPI); Italian Social Movement (MSIDN); National Alliance (ANA); New Force (FNU); No Euro (NEUR); Northern League (LN); Lombarda League (LLO); Veneta League (LVE);Piemont Autonomia Regionale (PIEAR); Social Alternative(ASM); The Freedomites (DF); The Right(LDES); Tricolour Flame (FT); Fronte Nazionale; Alternativa Sociale; Movimento Idea Sociale; Io Amo l'Italia; Io Sud; Wahlverband des Heimatbundes; Südtiroler Heimatbund; Freiheitliche Partei Südtirols; Union für Südtirol; Süd-Tiroler Freiheit; Valli Unite; L'Alto Adige nel Cuore; SOS Italia; Lega Padana Lombardia; Autonomie per l'Europa; Lega Padana; Destre Unite; Lega d'Azione Meridionale; Noi con Salvini; Lega Sardegna; Lega Sarda; Nello Musumeci Presidente; Sovranita
	L	Civil Revolution (RC); Communist Refoundation Party (PRC); Critical Left (SINC); Communist Worker's Party (PCDL); Party of Italian Communists (PDCI); Party of Proletarian Unity for Communism (PDUP); Five Star Movement (M5S); Anticapitalist Left (SA); Un'Altra Regione; La Sinistra della Libertà; L'Altra Europa con Tsipras; Nuova Sinistra; Democrazia Proletaria; Lega Socialista Rivoluzionaria; Lega Comunista Rivoluzionaria; Sardegna Natzione; Alleanza Lombarda Autonomia; L'Altra Europa con Tsipras; La Sinistra-L'Arcobaleno; Independentia Repubrica de Sardigna; Sinistra Ecologia Libertà; Partito di Alternativa Comunista

Notes: Party classification into far right and far left in Italy. Assuming a constant classification between 1980 and 2015.

(1.03,1.57]
(.92,1.03]
(.86,.92]
[.72,.86]
No data
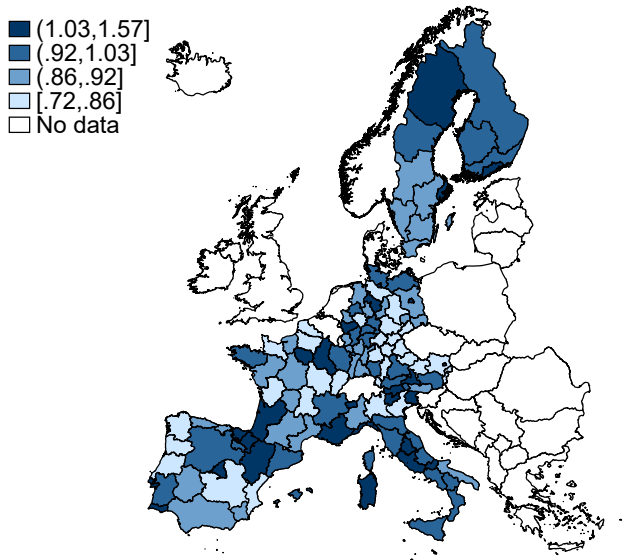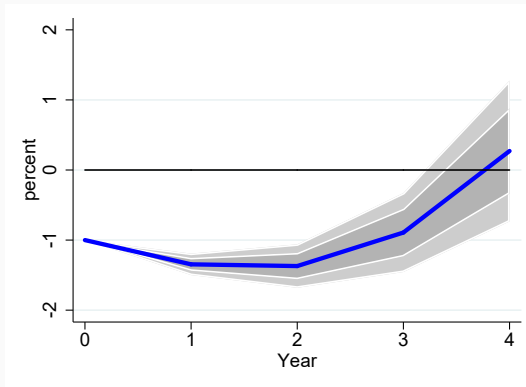
Notes: The Figure depicts the response of regional government spending to an austerity shock. The response is normalized so that spending falls by 1% of regional GDP in year 0. The dark and light shadings are 68% and 95% confidence bands based on robust standard errors clustered by region. The **first stage** Olea and Pflueger (2013) **F-statistic is 47**.

	Impact	1 Year	2 Years	3 Years	4 Years
Baseline	1.56***	2.80***	3.23***	3.26***	2.65***
	(0.31)	(0.57)	(0.61)	(0.61)	(0.49)
Unexpected austerity $g_{i,t}^u$	1.05***	2.13***	2.70***	2.86***	2.55***
	(0.17)	(0.35)	(0.39)	(0.43)	(0.34)
Drop Great Recession	1.44***	2.29***	2.38***	2.43***	2.02***
	(0.21)	(0.34)	(0.44)	(0.48)	(0.45)
Baseline with DK std. errors	1.56**	2.80***	3.23***	3.26***	2.65***
	(0.71)	(1.06)	(0.97)	(0.97)	(0.85)
Time fixed effects	1.42**	2.34**	2.39***	2.55**	2.42**
	(0.62)	(0.99)	(0.88)	(1.00)	(1.04)
Lagged $s_{i,t}$	1.45***	2.64***	3.06***	3.10***	2.57***
	(0.28)	(0.52)	(0.56)	(0.56)	(0.46)
s_i with aggregates instead of pc	0.64**	1.27**	1.63**	1.51**	1.04*
	(0.33)	(0.57)	(0.65)	(0.64)	(0.57)
IMF austerity shock	0.50***	2.07***	2.25***	2.61***	2.16***
	(0.12)	(0.35)	(0.35)	(0.39)	(0.32)

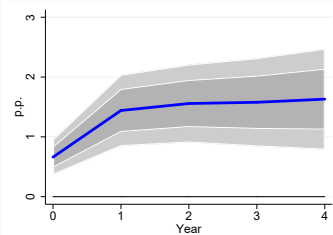# Austerity increases vote share of both left and right extreme parties

Figure 12: Response of vote shares (in p.p.) to a reduction in public spending by 1%
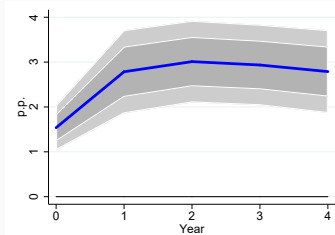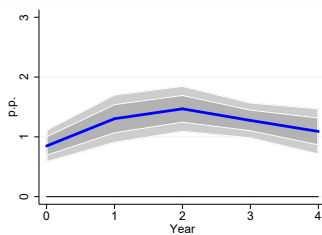
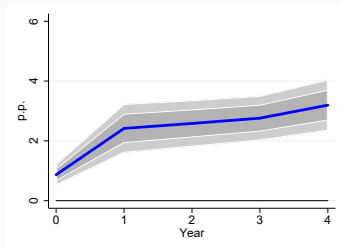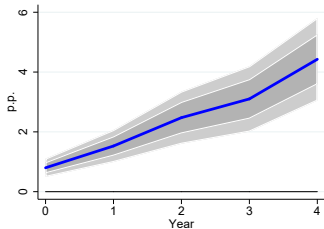**(a)** Far vote share = (b) + (c)   **(b)** Far-left vote share   **(c)** Far-right vote share

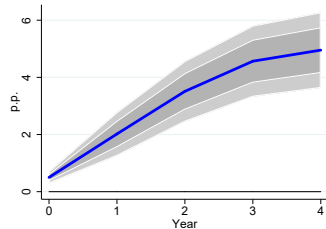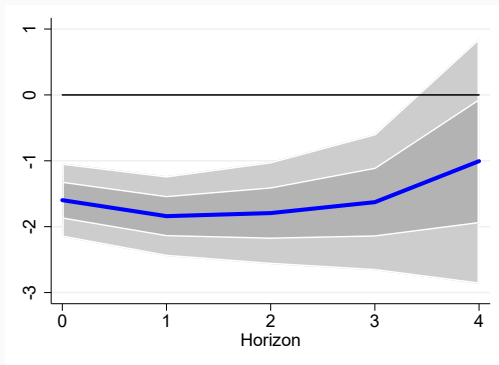# Increase in vote share across election types
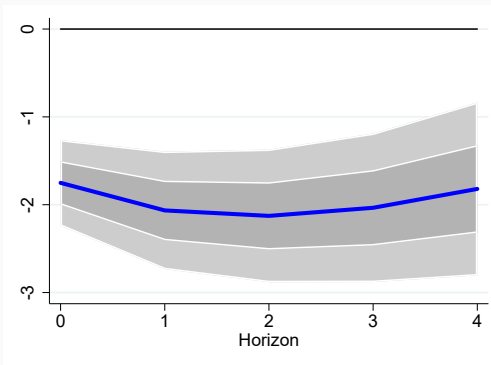
(a) National   (b) Regional   (c) European

Figure 16: Output and Employment Multipliers

(a) Output (b) Employment