Term Paper in the Master Seminar

E435 European Economic Integration

Economic Reasons for the Success of Populism in Europe

Elaboration on the Paper

Populist Leaders and the Economy

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1 Introduction

Recently, populist parties and their leaders have had an extraordinary surge in popularity. Besides increasing poll ratings for the German right-wing party "Alternative für Deutschland", examples include the election of Donald Trump in 2017, the election of Girgia Meloni in Italy or the recent re-election of Recep Tayyip Erdogan in Turkey. Since it is found that political leaders have indeed impact on economics, Funke et al. (2020) examine the impact of populist policies on the economic performance of developed countries.

Although their results indicate that the average citizen does worse under populist leaders, stylized facts based on their sample data show that populist leaders indeed survive longer in office compared to their non-populist opponents. Moreover, based on their findings that populist leaders lead to democratic decay, Funke et al. (2020) provide reasons for the cultural backlash argumentation. The authors make the assertion that populist leaders survive longer in office because they change institutional rules in their favor. However, by basing their explanation entirely on the cultural backlash argumentation, the authors neglect any potential *economic* reason for the reelection of populist leaders.

Against this background, this elaborative paper aims to answer the two research questions: (1) *What is the impact of (right-wing) populist policies on European economic integration* and (2) *what are potential economic reasons for "the people of Europe" to re-elect (right-wing) populist rather than non-populist leaders?* For this purpose, the first part of this paper will analyze the results of Funke et al. in the light of these very questions. We will see that some of the methods and results might not be optimal to answer these questions, and thus, based on an econometric analysis, the second part of this paper will suggest a research extension proposal.

2 Data on Populist Leaders in Power

Based on a broad but clear definition of populism, this section explains how the new global database of populism from Funke et al. (2020) was generated. Subsequently, relevant stylized facts on populism are presented which have motivated the research question of this elaborative paper.

2.1 Identifying Populist Leaders

Definition: Despite extensive literature, defining political concepts such as populism remains difficult. Depending on the approach (discursive, structural, economic or political-institutional), definitions of the term can differ significantly (Hawkins, 2009, pp. 8–10; Mudde, 2004, pp. 8–10). However, to define populists unambiguously and independently of time, region, institutional or economic features, the authors adopt the definition of Mudde (2004) which is widely used among economists.

Mudde (2004) defines populism as an ideology that considers society to be divided into two homogeneous and antagonistic groups, "the pure people" versus "the corrupt elite", arguing politics should be an expression of the general will of the people (Mudde, 2004, p. 662). Consequently, a populist leader claims to be the true representative of "the people".

Following further sociopolitical research, Funke et al. differentiate between right-wing and left-wing populism. According to Mudde and Rovira Kaltwasser (2013, p. 159) right-wing populists express their political dissent in cultural terms, targeting foreigners, religious and ethnic minorities who allegedly threaten the country's values and traditions while being protected by "the elites". Thus, right-wing

populists often nourish xenophobia while demanding conservative domestic and (often but not always) liberal economic policies (Betz, 1994 as cited in Funke et al., 2020, pp. 9–10).

In contrast, left-wing populists predominantly express their populist discourse in economic terms, attacking "the capitalist elite" which supposedly exploit "the people" by advocating globalization and ruling international financial institutions such as the IMF or the World Bank. Unlike their right-wing opponent, left-wing populists are inclined to promote multiculturalism and call for a higher level of state interventions and economic nationalism (Mudde & Rovira Kaltwasser, 2013, 159 ff.).

Sample Countries: Focusing on the effect of populist leaders on advanced and emerging economies since 1900 (or independence), the authors include all OECD and/or EU members (41 countries) as well as the largest economies from South America (9 countries), Asia and Africa (10 countries) in their sample. The resulting sample consists of 60 countries (see Appendix A) with 1,458 leaders (1,827 leader spells), accounting for 95% of world GDP.

Based on the above-mentioned definitions, a political leader, and thus his or her country is classified as right-wing, left-wing, or non-populist, respectively. For this purpose, 770 scientific papers containing "populism" or "populist" in their titles were automatically scanned for descriptions on these leaders. A leader was assigned the value of "1" (populist) if her or his political campaign and legislative period (i.e., his or her description) essentially relied on right- or left-wing populist rhetoric and the value of "0" (non-populist) otherwise.

2.2 Stylized Facts on Populist Leaders

A total of 50 populist leaders (3.4% of all leaders) with 72 leader spells, which are almost evenly split between right- (35) and left-wing populists (37), were identified. Fairly half of the sample economies (27 countries) had a populist leader at least once. While right-wing populism occurs mainly in Europe, left-wing populism can be observed predominantly in Latin America, which is in line with (Rodrik, 2018, p. 23).

Appendix B, summarizing all populist spells, shows that in 2018 populism is at its highest level since 1900, with 16 countries ruled by a populist at this point. Furthermore, the authors find that populist leaders survive longer in office compared to their non-populist opponents. While the average non-populist legislative period lasts about 3.3 years, an average populist leader stays 5.5 years in office. Along with this, the probability of being re-elected for a populist (34%) is twice as high as for a non-populist politician (16%), resulting in an average time in power of a (non-)populist of (4) 8 years.

As already introduced, the relatively longer populist spells give rise to the question whether there are economic reasons for their higher re-election rate. Hence, focusing on European economies, this elaboration puts special emphasis on the impact of *right-wing* populists on the economy.

3 Measuring Economic Outcomes under Populist Leaders

Having presented stylized facts, this section introduces the data as well as the author's empirical strategy and critically assesses the main underlying methodology chosen by Funke et al. to quantify the impact of populist policies on economic outcomes.

3.1 Data and Empirical Strategy

Considering the significant influence of WW2 on economic outcomes, the authors reduce their extended sample (1900-2018) to a core sample of 30 populist cases (1945-2018), serving as basis for their results. To measure (short-) long-term economic performance of populists, dummy variables, taking the value of "1" in the first (5) 15 years *after* the begin of the populist spell and "0" otherwise, are created. Hence, the authors assume a one-year time lag of populist policies to take effect.[1]

Data: To create panel data with adequate indicators for different socioeconomic dimensions, namely economic wellbeing, economic integration, democratic institutions, and income inequality, the authors consult several data sources which are summarized in Appendix C. As control variables Funke et al. include data on systematic currency, debt, and banking crises in their models.

Empirical Strategy: Unfortunately, there is no perfect approach to estimating causal effects of policy interventions on economic outcomes. Funke et al. solve this general problem of policy event studies by combining different methods such as panel regressions and the so-called synthetic counterfactual method (SCM) from Abadie et al.; Abadie and Gardeazabal (2010; 2003). The main idea of the SCM is to create a synthetic doppelganger of the treated economy which evolves as if no populist leader was elected.

3.2 Synthetic Counterfactual Method

This section will explain the SCM in detail by using the evolution of real GDP as an example. Subsequently, several tests are presented to establish causality and prove robustness of the results. Based on additional research, the last subsection will critically evaluate Funke et al.'s SCM application and further motivate the research question of this elaborative paper.

3.2.1 Method

Abadie and Gardeazabal (2003) firstly proposed this method in the context of a case study investigating economic effects of the 1960s conflicts in the Basque country. Conceptionally, a doppelganger economy is constructed by combining and weighting non-populist donor economies respectively to replicate the treatment economy of interest as accurately as possible *prior* to the populist election (pre-treatment episode). After the populist event (post-treatment episode), the synthetic doppelganger evolves according to the weighted dynamics of the non-populist donor countries as if the populist event did not occur. Comparing the dynamics of the non-populist doppelganger and the populist economy of interest yields the quantified effects of (right- or left-wing) populism.

More theoretically, for each populist episode *p*, an algorithm minimizes the following mean squared prediction error (*MSPE*) by choosing the optimal weighting vector W_p^*:

$$argmin(MSPE) = (Y_p - \boldsymbol{X}_p W_p)' \boldsymbol{V}_p (Y_p - \boldsymbol{X}_p W_p), \qquad p = 1, \ldots, P$$

$$\text{subject to} \qquad \sum_{c=1}^{C} w_{c,p} = 1 \text{ and } w_{c,p} \geq 0 \; \forall \; p,c.$$

Here, Y_p denotes an *n x 1* vector of *n* covariates (*including* the dependent variable of interest $y_{n,p}$) of the treatment country *C+1*. $\boldsymbol{X}_p$ denotes an *n x C* matrix of the very same *n* covariates for all preselected donor

[1] These dummy variables are primarily constructed to conduct panel regressions (see section 5.2) and are not used for the estimation of synthetic counterfactuals.

countries C with $c = 1, \ldots, C$. W_p denotes the vector of individual country weights $w_{c,p}$ weighting the non-populist donor countries' contribution to the synthetic doppelganger (inner optimization problem). And last, $\boldsymbol{V}_p$ denotes an $n \times n$ positive-semidefinite and symmetric matrix, which weights the n covariates of $\boldsymbol{X}_p$ and Y_p (*ideally according to their predictive power with all elements of matrix* $\boldsymbol{V}_p$ *summing up to 1*).[2] To ensure accuracy and trace long-term effects, the doppelgangers are constructed 15 years before (optimization period matching *pre-treatment* data) and after (prediction period with *post-treatment data of donors*) the populist event (Abadie et al., 2010, pp. 116 ff., 28; Abadie & Gardeazabal, 2003, pp. 116 ff., 28; Funke et al., 2020, pp. 116 ff., 28).

Following Abadie et al. (2010), the authors choose a *purely data-driven approach* to estimate the elements of the outer optimization weighting matrix $\boldsymbol{V}_p$. Unfortunately, neither Funke et al. (2020) nor Abadie et al. (2010) provide any specifications on this approach, which raises some interesting questions discussed in section 3.2.3.

However, to obtain the average (right- or left-wing) populist effect on the economy, the average evolution of all (right- or left-wing) populist economies around the respective populist's assumption of office is compared to the estimated average dynamics of all the counterfactuals. That said, Figure 1 shows the divergence between the dynamics of real GDP of the average (right-/left-wing) populist economy (solid lines) and the average synthetic counterfactual (dashed lines). Subtracting the doppelganger average from the (right-/left-wing) populist average yields the so-called doppelganger gap, illustrated in Figure 2 (one standard deviation shaded in grey).

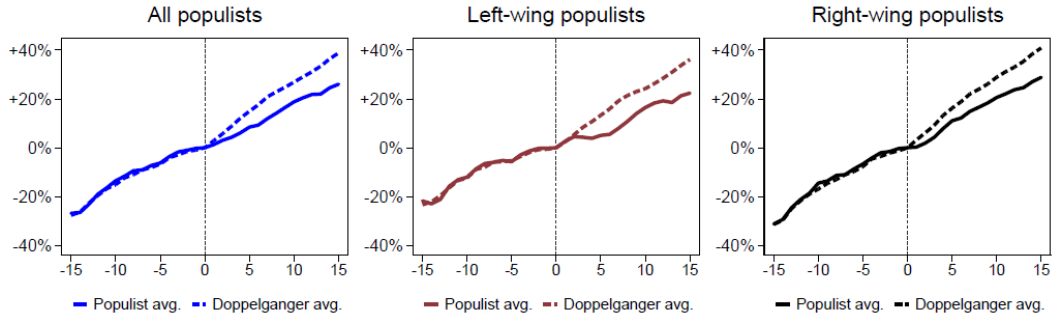

Figure 1: Dynamics of real GDP after populist event from (Funke et al., 2020, p. 24)

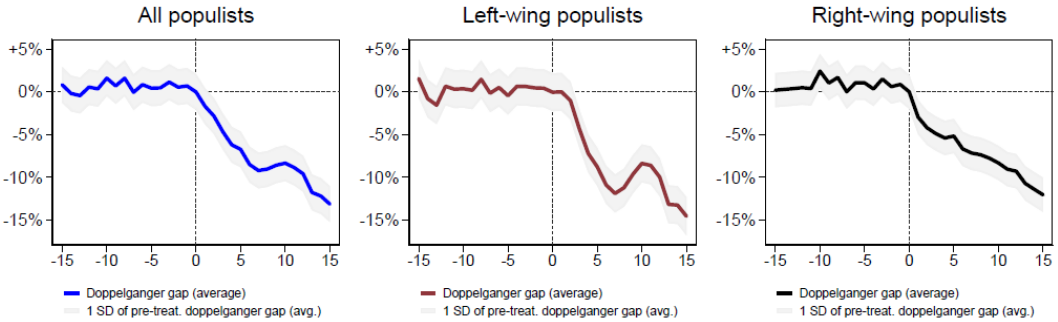

Figure 2: Differences in real GDP after populist event from Funke et al. (2020, p. 25)

[2] Here, predictive power refers to the quantitative explanatory power of a covariate for the dependent variable of interest (e.g., real GDP), estimated, for instance, by the coefficients of a regression analysis.

3.2.2 Causality and Robustness

Causality: A causal interpretation of the results depends on the assumption that the synthetic control group indeed evolves as if the average populist economy had evolved without any populist intervention. To prove causality, Funke et al. run time and country placebo studies. For the time placebo experiment, the populist event is shifted five years backwards artificially. If the populist policies have a causal effect, no doppelganger gap is expected during the first five years. Hence, the results plotted in Appendix D support a causal interpretation of the doppelganger gap.

For the country placebos, the SCM is applied to an economy that has never experienced populist leadership. Here, no divergence between the average populist path and the average synthetic path is expected at any time. Here, as shown in Figure 3, the average GDP dynamics of treatment and counterfactual economy are similar but not identical. For all populists as well as for left- and right-wing populists, the treatment and control group paths slightly drift apart.

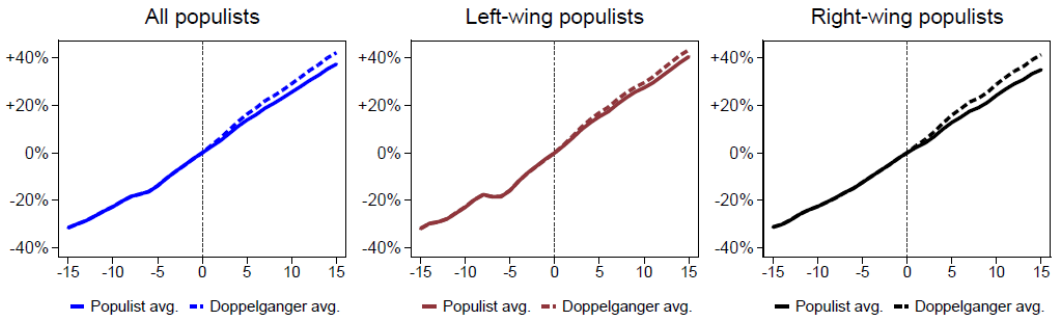

Figure 3: Country placebo experiment with real GDP from (Funke et al., 2020, p. 28)

Focusing on medium- and long-term effects, Funke et al. claim that this divergence is insignificant, arguing that the estimated results after 15 years (right-/left-wing) populist leadership (see Figure 3) show differences about 3-4 larger in magnitude (Funke et al., 2020, p. 27). However, this elaborative paper focuses on short-term effects of (right-wing) populist policies on European economic integration and economic outcomes that are perceptible by "the people" within an ordinary legislative period of 4-5 years. Later, we will see that the magnitude of the short-run effects is similarly small for some of these relevant economic indicators. This makes it difficult to identify a positive or negative effect of populist policies on the respective economic outcome, especially since the right-wing country placebos (right panel) show the largest "doppelganger gap".

Robustness: The authors verify their findings by testing whether they are robust to changes in the outcome variable (e.g., SCM application to aggregate consumption), country sample (reproducing results with extended sample), alternative populist definitions (resulting in altered populist spells), and outliers (by using the sample median). Throughout all modifications, the main findings remain robust. For aggregate consumption, the resulting doppelganger gap between the treatment and control group is even larger compared to the real GDP paths (see Figure 4).

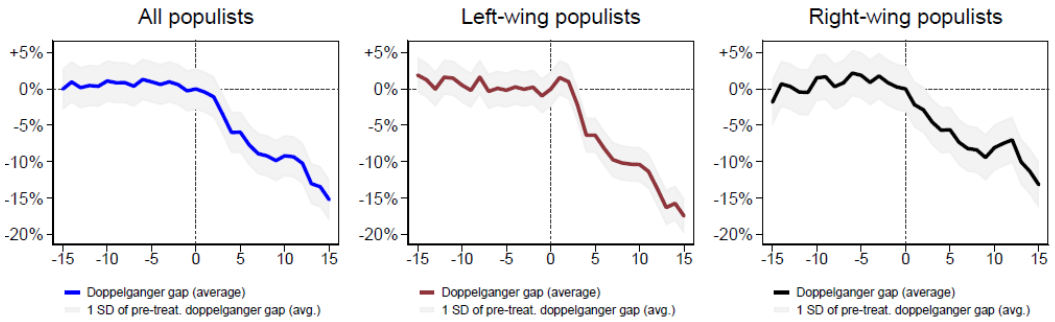

Figure 4: Differences in aggregate consumption after populist event from Funke et al. (2020, p. 29)

3.2.3 Critical Assessment

The above-mentioned remarks on the country placebos give reason to search for possible explanations for this small but eventually meaningful divergence. Unfortunately, Funke et al. neither provide any specifications on their data-driven optimization method nor do they quantify the magnitude of the problematic "doppelganger gap".

Kuosmanen et al. (2021, p. 1 ff.) provide one plausible explanation, stating that the algorithm of SCM-packages in R, Stata and MATLAB, namely *Synth*, *jointly* optimizes W_p and $\boldsymbol{V}_p$, and thus solves the minimization problem *implicitly* since W_p^* depends on the choice of $\boldsymbol{V}_p$ ($W_p^*(\boldsymbol{V}_p)$). Put differently in their technical paper on the *Synth*-package, Abadie et al. (2011, p. 9 ff.) concede that there is no assurance that the algorithm will yield a *global* rather than a *local* solution to the minimization problem. By reproducing the original case studies of Abadie and Gardeazabal (2003) and Abadie et al. (2010) on California's Tabacco Control Program and Basque terrorism, Kuosmanen et al. (2021) and Klößner et al. (2018) reveal two potential problems from this.

Firstly, since the *Synth*-algorithm solves the minimization problem locally, the estimated optimal weighting vectors W_p^* computed are found to be numerically instable. That is, randomly re-ordering donor countries (columns) or predictor covariates (rows) in the matrix $\boldsymbol{X}_p$ lead to different optimal weighting vectors $W_p^{*\prime}$.

Secondly and more importantly, even global solutions were found to be *corner* solutions, with matrix $\boldsymbol{V}_p$ assigning all weight to one predictor, namely the variable of interest (e.g., real GDP), and assigning no or insignificantly small weights to all other covariates over the pre-treatment period. Consequently, the synthetic counterfactual might not accurately capture observed and unobserved characteristics of the treatment country (Abadie, 2021, pp. 396 ff.; Klößner et al., 2018, pp. 9 ff.; Kuosmanen et al., 2021, pp. 1 ff., 19 ff.).

Addressing these problems, Kuosmanen et al. (2021, pp. 14 ff.) suggest to estimate the matrix of predictor weights $\boldsymbol{V}_p$ *separately beforehand* by conducting a panel regression, and then follow the bilevel optimization approach proposed by Malo et al. (2020) to compute the optimal vector of donor weights W_p explicitly. Conceptionally, the main idea is to divide the optimization problem into two stages. In the first-stage minimization, the vector of donor weights W_p is estimated only based on the independent variables given their predictor weights $\widetilde{\boldsymbol{V}}_p^*$ from the panel regression which separately determined the explanatory

power of the independent variables on the dependent variable *beforehand*.[3] Then, in the second-stage minimization, the optimal weighting vector W_p^* is estimated for the dependent variable subject to an additional constraint, namely the given result from the first-stage minimization ($MSPE_{1st\ stage}^*$). Since now only the dependent variable is estimated, the predictor weights $\widetilde{\boldsymbol{V}}_p^*$ are not directly included in the equation rather than incorporated as constraint. This way, the optimization problem is no longer solved jointly which rules out the possibility of a corner solution that assigns (almost) all the predictor weight to a single variable. Moreover, the explicit bilevel formulation guarantees to find a global rather than a local optimum which solves the problem of numerical instability. Section 5.2 formulates the two-step SCM-approach mathematically by applying and partially conducting it in the context of our research question.

As illustrated in Figure 5, the different SCM-approaches of the *Synth*-package (grey line), the iterative strategy with regression weights proposed by Kuosmanen et al. (2021) (orange line) and the global corner solution assigning all weight to a single predictor (blue line) lead to significantly different dynamics of the dependent variable (here, real per-capita GDP of the Basque country).

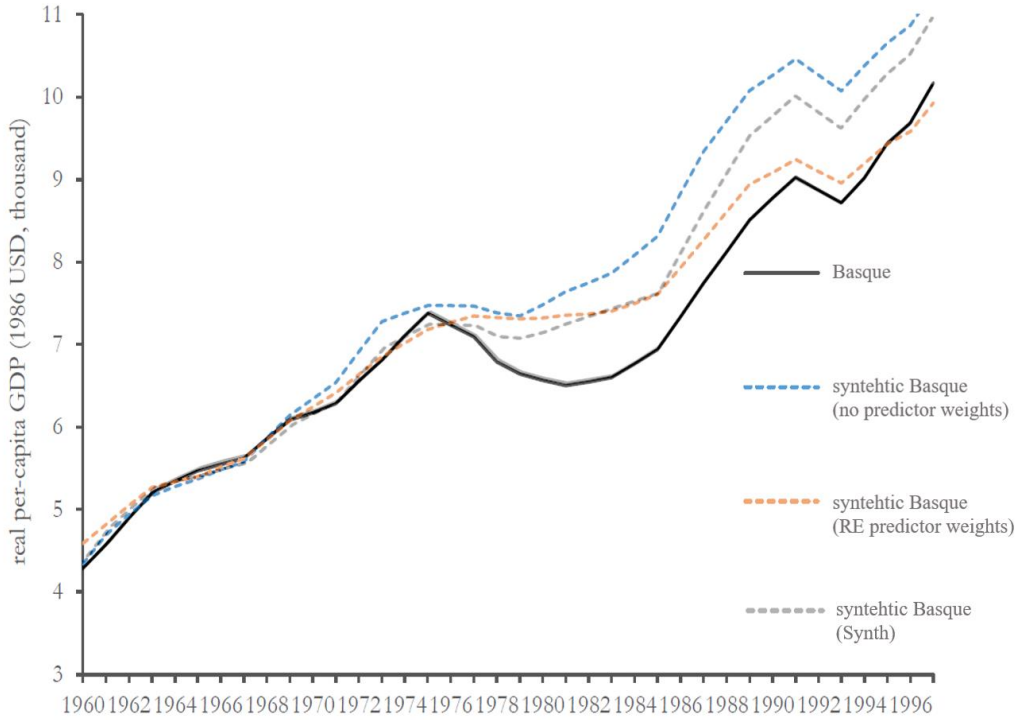

Figure 5: Comparison of different SCM-algorithms (self-composed graphic based on Kuosmanen et al. (2021, p. 26))

As mentioned above, even though the Synth-package seems to better match the dynamics of real per-capita GDP in the *pre-treatment* period, it might fail to capture observed and unobserved characteristics of the Basque economy by underestimating some predictors. Looking at the different donor weightings, this can indeed be assumed. The two-step procedure assigns 79.9% of the donor weights to Cantabria – *which interestingly is a neighbor region of the Basque country, and thus might replicate the economic development realistically* – and the remaining weight to Catalonia (12.4%) and Madrid (7.7%). The *Synth*-

[3] Here, $\widetilde{\boldsymbol{V}}_p$ denotes the *n–1 x n–1* positive-semidefinite and symmetric matrix of predictor weights, *excluding* the weight v_n of the dependent variable y

package, in contrast, assigns 85% of the donor weights to Catalonia, 15% to Madrid and no weight to Cantabria.

Besides the significant differences in magnitude of the doppelganger gaps, for the two-step approach the effect of Basque terrorism on real per-capita GDP disappears by the mid-1990s, whereas the *Synth*-doppelganger gap continues to exist. This shows that an adequate integration of predictors potentially influences qualitative findings (Kuosmanen et al., 2021, pp. 19, 24 ff.).

However, depending on the case, a careful application of the joint optimization approach does not necessarily lead to wrong results or qualitative conclusions (Kuosmanen et al., 2021, pp. 30 ff.). But as we will see in the next section, for some of our interpretations it might be reasonable to repeat the SCM following the two-step approach. This is why section 5.2 formulates the two-step SCM-approach mathematically by applying and partially conducting it in the context of our research question.

4 Economic Outcomes under Populist Leaders

This section presents Funke et al.'s results of the SCM application to several socio-economic indicators representing four dimensions, namely *economic wellbeing*, *economic integration*, *democratic institutions*, and *income inequality*. By consulting additional literature, these findings are interpreted in the context of our research questions: (1) What is the impact of (right-wing) populist policies on European economic integration and (2) what are potential economic reasons for "the people of Europe" to re-elect (right-wing) populist rather than non-populist leaders?

4.1 Economic Wellbeing

Since populist discourse often highlights the welfare of "the people", Funke et al. choose the standard measures of real GDP and aggregate consumption as economic indicators to examine the effect of populist policies on economic well-being.

Regarding the dynamics of real GDP, the 15 years aftermath of populist leadership, illustrated in Figure 2 (section 3.2.1), shows that (right-wing) populists underperform by about 12 percentage points compared to their non-populist counterfactual. In less than two years after the (right-wing) populist took office, the economic performance starts to decline. At this point, the average (right-wing) populist economy performs one standard deviation worse than in the pre-treatment period.

For aggregate consumption, the doppelganger gap is comparable in magnitude. Figure 3 (section 3.2.2) shows that 15 years after the (right-wing) populist event, aggregate consumption is about 13 percentage points lower than the synthetic control group. Similarly, the divergence between the average right-wing populist country and the synthetic control starts around two years after the populist event.

In terms of economic well-being, we can therefore conclude that in the long-term, right-wing populists and their policies perform significantly worse than non-populist governments. Moreover, both the doppelganger gap for real GDP as well as for aggregate consumption starts to shape *shortly* after the inauguration i.e., during the average legislative period of 4-5 years. Hence, also in the short-term, (right-wing) populists cannot deliver on their promises to improve the wellbeing of "the people", and thus do not provide any economic grounds for re-election so far.

4.2 Economic Integration

Even though economic integration and trade openness is widely associated with economic prosperity, in their speeches many populist leaders, especially from the political left, advocate protectionism (Frankel and Romer, 1999; Ventura, 2005 as cited in Funke et al., 2020, p. 34; Eichengreen, 2018, p. 679; Mudde & Rovira Kaltwasser, 2013, p. 159). But right-wing populists also refer to the threat of foreign economic supremacy in their rhetoric to justify economic nationalism. The proclamation of Donald Trump's trade wars and his "America First" policies are prime examples based on this very principle (Eichengreen, 2018, p. 682).

To examine and quantify the (right-wing) populist effect on economic integration, Funke et al. (2020, pp. 34 ff.) use data on tariff rates and the KOF Financial Globalisation Index as proxies for trade openness and financial integration, respectively. The KOF Financial Globalisation Index, ranging from 0 (integration) to 100 (disintegration), is composed of measures such as foreign direct investment, capital controls, foreign assets and liabilities, openness of capital accounts, and international investment agreements.

Figure 7 shows that 15 years after the (right-wing) populist event, import tariff rates are 7.5 percentage points higher compared to the synthetic control group. However, especially among the right-wing populists, there is a high heterogeneity, indicated by the high standard deviation (shaded in grey). While some introduce moderate protectionist policies, others (e.g., Recep Tayyip Erdogan or Donald Trump) pursue extreme protectionist strategies with tariff rates up to 12 percentage points higher than the average non-populist.

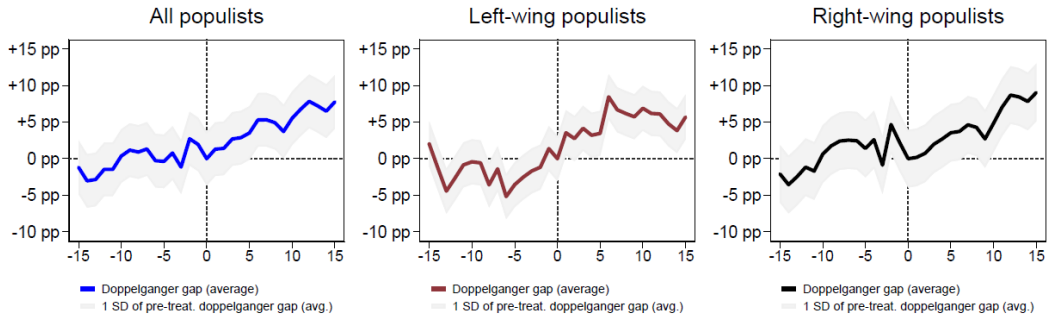

Figure 6: Differences in tariff rates after populist event from (Funke et al., 2020, p. 35)

The dynamics of the KOF Financial Globalisation index draws a more differentiated picture. Although the index declines by about 5 percentage points under the average populist leader compared to the synthetic doppelganger, this evolution is mainly driven by left-wing populist economies (doppelganger gap of 15 percentage points). In contrast, the average right-wing populist leader almost maintains the level of financial openness as before (see Appendix E).

Summing up, left-wing populists live up to their description of particularly blaming and attacking international financial institutions for "the suffering of the people" and implement more protective economic policies compared to their right-wing opponents. Nonetheless, the long-term increase in tariff rates under right-wing populist leaders shows that populists in Europe tend to compromise on European economic integration. Especially the PiS government in Poland or Viktor Orbán in Hungary, despite being EU member states, follow a strategy of economic nationalism to protect their markets (Funke et al., 2020,

p. 36). Events like the recent re-election of Turkeys President Recep Tayyip Erdogan confirm these tendencies of economic nationalism. Thus, regarding our first research question, we can state that the average European populist policies indeed have a negative impact on the region's economic integration.

However, given the mutual trade dependencies and existing trade agreements between the EU and other developed and emerging economies, one could argue that the actual threat of European economic isolation is rather unlikely. Moreover, the heterogeneous right-wing policies on trade and financial openness do not present a unified picture. Despite the empirical evidence, the inferred effect of their policies on European economic integration remains somewhat unclear and depends on more factors than the political orientation of some countries' leaders. These include, for example, the decision of supranational institutions such as the EU, strategies of important trade partners such as the "Buy American" program of the Biden administration or the existence of strong economic dependencies which showed their relevance during the Covid pandemic.

4.3 Democratic Institutions

According to Acemoglu et al. (2013), democratic institutions and judicial constraints on the executive represent important prerequisites for long-term economic growth (as cited in Funke et al., 2020, p. 40). More specifically, economies that transition towards more democratic structures have been found to be associated with a long-term increase in per-capita GDP of about 20%. In contrast, democratic decay, signaling uncertainty for business ventures, might lead to economic recession via the "brain drain" effect (Funke et al., 2020, p. 41). To examine the populist impact on democratic institutions, the authors apply the SCM to three indices measuring judicial independence, free and fair elections, and press freedom.

The doppelganger gaps in Appendix F illustrate that shortly after the (right-wing) populist event, democratic institutions start to erode. Depending on the index, after 15 years, the doppelganger gaps between the right-wing populist country and the synthetic counterfactuals account for 5 (judicial independence and media freedom) to 15 (electoral freedom) percentage points.

Based on these findings, the authors explain why populist leaders are twice as often re-elected as non-populist leaders, and thus survive relatively longer in office. By weakening democratic structures and changing "institutional rules", populist leaders supposedly secure their power.

Even though this explanation seems evident, it neglects any potential economic reasons for their higher re-election rate. This is in line with Colantone and Stanig (2019, pp. 16 ff.), who argue that ignoring economic determinants of populist success would not paint the full picture of voting behavior. Moreover, almost all European countries that experienced a right-wing populist leader, namely Italy, Hungary, Bulgaria, Poland and the Slovak Republic, are EU member states, and thus, have to fulfill certain democratic requirements (at least nowadays). Thus, the author's argumentation, entirely based on democratic decay, might be somewhat premature. From this perspective, the existence of economic explanations can still be assumed. Therefore, the next section examines the impact of right-wing populism on economic outcomes that are directly perceptible by "the people", i.e., the voters.

4.4 Income Inequality

As seen in section 4.1, so far, the *average* citizen does worse under (right-wing) populist leadership. However, theoretically it is possible that aggregate GDP and consumption decline, but income is better

distributed among the population i.e., the *median* citizen does better under populist leadership. If that is the case, it would be a valid reason for "the people" to re-elect this populist leader. Moreover, since populists in general claim to advocate social justice for "the people", the authors use the Gini index and the share of labor compensation in GDP to examine the populist effect on income inequality.

Regarding the Gini index, the results show that after 5 years of right-wing populist leadership, income inequality slightly rises by about 1 percentage point on average compared to the synthetic control (see Figure 7). However, in the very short run, there is no significant change in income distribution under right-wing populist policies. Interestingly, their left-wing opponents reduce income inequality, fitting into the respective definitions of right- and left-wing populism.

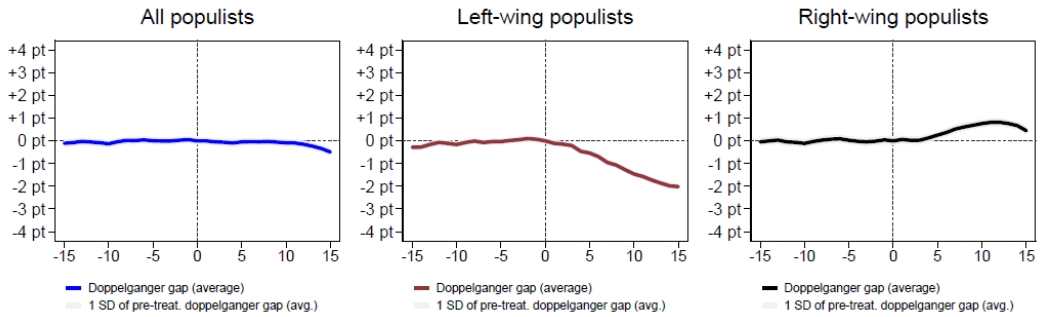

Figure 7: Differences in Gini Index after populist event from Funke et al. (2020, p. 32)

Similarly, in the mid- to long-term, the labor share increases under left-wing and slightly decreases by around 1 percentage point under right-wing populists compared to their doppelganger. But again, there is no short-term effect of right-wing populism on income inequality within the first 4-5 years, and if there was, the perceptible effect on "the people" remains unclear and could only be guessed upon.

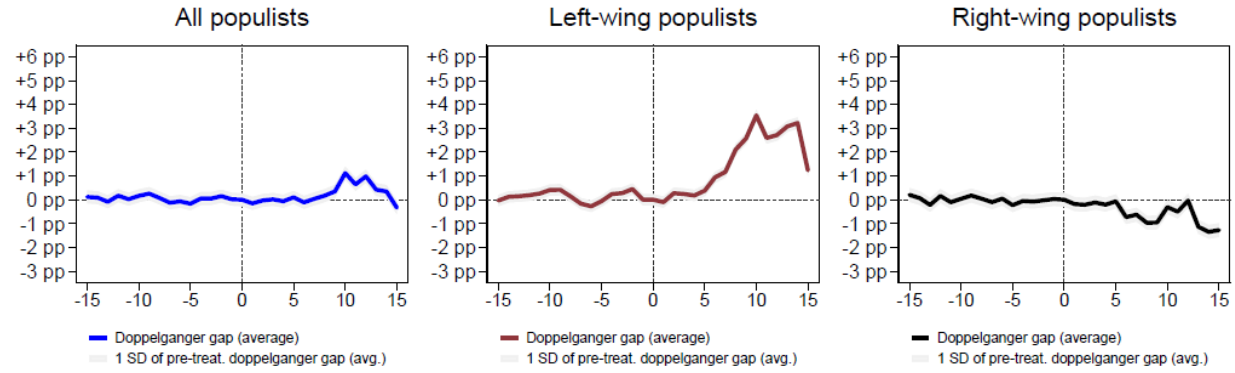

Figure 8: Differences in labor share after populist event from Funke et al. (2020, p. 33)

Regarding long-term effects, Funke et al.'s findings are in line with Rodrik (2018), who found that financial globalization has a negative impact on income inequality. The underlying intuition is that a higher level of capital mobility gives more bargaining power to the employees i.e., if wages are too high, business is relocated to countries with lower wage levels (Rodrik, 2018, pp. 9 ff.). Given their higher levels of protectionism, this might explain why left-wing populist policies lead to more income equality.

However, having in mind the critique on the authors' SCM-approach and given the very small magnitudes of the doppelganger gaps within the first 5 years, any interpretation of short-term effects might be

misleading. The striking results of the country placebo experiment (section 3.2.2) now become relevant. Thus, the question whether right-wing populists provide potential economic reasons for their re-election hinges on Funke et al.'s construction of the synthetic counterfactual and, more evenly important, the voters' actual perception of the short-term outcomes. If voters react very sensitive to changes in certain economic outcomes and correspondingly adjust their voting behavior, populist leaders could exploit this relentlessly to remain in power.

The next section will examine this possibility by identifying such a "concern of the people" and outline as well as partially conduct its application to the two-step SCM-approach.

5 Research Extension Proposal: Unemployment under Populist Leaders

As presented above, the average short-term effect of European populists on income inequality remains ambiguous. To provide further empirical evidence, the impact of right-wing populism on an additional economic concern of the people that might give reason to re-elect right-wing populists, namely unemployment, is examined and discussed.

5.1 Identifying Economic Concerns of Europeans

Surprisingly, Funke et al. did not investigate the impact of populist policies on unemployment, an economic outcome which is found to influence voting behavior. Using regional data across Europe Algan et al. (2017) investigate the impact of economic recession on voting behavior. In essence, their findings show that economic uncertainty has a significant effect on the voter's values, beliefs and trust in the government. More specifically, their regression results indicate that a 1 percentage point increase in unemployment is associated with a 1 percentage point increase in populist votes. These findings confirm that European voters react very sensitive to changes or threats to their employment situation.

Consequently, supporting our research endeavors, Algan et al. (2017) suggest that the recent success of European populism cannot solely be explained by cultural backlash, but that economic insecurity might also play an important role (Algan et al., 2017, pp. 329 ff.). Against this background, we can assume that unemployment represents an important and perceptible concern of the people.

5.2 Iterative Synthetic Counterfactual Method

Again, measuring implications of policy treatments represents an empirical challenge. Thus, two methods are suggested, applied and partially conducted. First, a panel regression was conducted, and second, we suggest a refinement of Funke et al.'s SCM-approach by applying Kousmanen et al.'s (2018) iterative SCM-approach to our case and present first results.

Data: Upon request, Funke et al. provided their panel data (Appendix D), which was complemented with country specific panel data from the World Bank (2023) on unemployment, population growth rates and foreign direct investments from 1960-2018.

Panel Regression: For our panel regression, we follow Funke et al.'s approach of exploiting a populist dummy that takes the value of "1" in the first 5 (15) years *after* the begin of the right-wing populist episode, and 0 otherwise. More specifically, for each period t, the following equation is estimated:

$$y_{c,t} = \alpha_c + \beta * \textit{Right-wing Populist}_{c,t} + \gamma_t * X'_{c,t} + \mu_t + \varepsilon_{c,t}$$

where $y_{c,t}$ denotes the unemployment rate for country *c = 1,..., C+1* in period t. $X'_{c,t}$ denotes the vector of control variables which in our case are population growth rate[4] and dummy variables for currency, government debt and banking crisis, with coefficients captured by γ_t. $Right\text{-}wing\,Populist_{c,t}$ denotes the right-wing populist dummy, and thus β captures the average percentage effect of right-wing populist policies on the unemployment rate in a purely descriptive difference-in-differences setup. Country and time fixed effects are denoted by α_c and μ_t, respectively, and $\varepsilon_{c,t}$ denotes the error term.

Iterative SCM: For the refinement proposal of Funke et al.'s SCM-approach, we apply the iterative SCM-approach exemplarily to examine the effect of Victor Orbán's right-wing populist policies on Hungary's unemployment rate. For this purpose, we proceed as follows:

Step 1: Panel regression to estimate the vector of predictor weights V_p *separately beforehand*

$$y^{pre}_{n,\tilde{c},t} = \alpha_{\tilde{c}} + \beta * Z'_{\tilde{c},t} + \mu_t + \varepsilon_{\tilde{c},t}\,, \quad \tilde{c} = 1,...,C+1;\ t = 1,...,\ T^{pre}$$

Here, $y^{pre}_{n,\tilde{c},t}$ denotes the unemployment rate observed for country $\tilde{c}$ in the *pre-treatment* period *t*, indicated by T^{pre} denoting the last time period before the populist event. $Z'_{\tilde{c},t}$ denotes the vector of *1 x n – 1* explanatory covariates, which in our case are eight, namely population growth rate, KOF Financial Globalisation Index investments, inflation rate, GDP and a democracy index[5]. The choice of control variables is based on MAQBOOL et al. (2013, p. 204), who found these parameters to be key determinants for unemployment. The very same covariates are contained in the vector of treatment country Y_p and matrix of non-populist donor countries $\boldsymbol{X}_p$.[6] Accordingly, β is the vector of coefficients, where each element β_i captures the average impact of the covariate $z_{i,\tilde{c},t}$ of vector $Z'_{\tilde{c},t}$ with *i = 1, ..., n – 1*. Country and time fixed effects are denoted by $\alpha_{\tilde{c}}$ and μ_t, and $\varepsilon_{\tilde{c},t}$ denotes the error term.

After estimating the coefficient vector $\hat{\beta}$, Kuosmanen et al. (2021) suggest to allocate weights v_i according to the relative estimated prediction power $\hat{\beta}_i$, that means

$v_i = |\hat{\beta}_i| \,/\, \sum_{i=1}^{n-1} |\hat{\beta}_i|$ with v_i being the *i*-th element of vector $\tilde{\boldsymbol{V}}^*_p$.[7]

Step 2: Based on the estimated weighting vector $\tilde{\boldsymbol{V}}^*_p$, *explicitly* compute the optimal vector of donor weights W^*_p by following the bilevel formulation from Malo et al. (2020)

Step 2.1: Given $\tilde{\boldsymbol{V}}^*_p$, solve the minimization problem for *i = 1, ..., n – 1* predictor variables

$$argmin(MSPE_{1st\ stage}) = \left(\tilde{Y}_p - \tilde{\boldsymbol{X}}_p W_p\right)' \tilde{\boldsymbol{V}}^*_p \left(\tilde{Y}_p - \tilde{\boldsymbol{X}}_p W_p\right), \qquad p = 1, ..., P$$

$$\text{subject to} \quad \sum_{c=1}^{C} w_{c,p} = 1 \text{ and } w_{c,p} \geq 0 \ \forall\ i, c, p.$$

Here, $\tilde{Y}_p$ denotes the *n – 1 x 1* vector of predictor variables (*excluding* the variable of interest $y_{n,p}$, i.e., unemployment rate) of the treatment country *C+1* (here, Hungary). $\tilde{\boldsymbol{X}}_p$ denotes the

[4] Included as control based on MAQBOOL et al. (2013, p. 204) who found population growth to be a key determinant for unemployment.
[5] The democracy index is calculated based on the indices for judicial, electoral and media freedom (see section 4.3).
[6] Here, we refer to the ordinary SCM-approach from Funke et al. (section 3.2.1)
[7] Here, $\tilde{\boldsymbol{V}}_p$ denotes the *n–1 x n–1* positive-semidefinite and symmetric matrix of predictor weights, *excluding* the weight v_n of the dependent variable *y*

n – 1 x C matrix containing the very same *n – 1* predictor variables for all preselected donor countries C with *c = 1, …, C*.[8] And W_p denotes the vector of individual country weights $w_{c,p}$.

Step 2.2: Given $MSPE^*_{1st\ stage}$, solve the minimization problem for the dependent variable $y^{pre}_{n,p}$ to obtain vector W^*_p, optimally weighting the donor countries to estimate Hungary's unemployment rate

$$argmin(MSPE_{2nd\ stage}) = \left(y^{pre}_{n,p} - x'^{pre}_{n,p} W_p\right)' \left(y^{pre}_{n,p} - x'^{pre}_{n,p} W_p\right), \qquad p = 1, \ldots, P$$

$$\text{subject to} \qquad MSPE^*_{1st\ stage} = \left(\tilde{Y}_p - \tilde{\boldsymbol{X}}_p W_p\right)' \tilde{\boldsymbol{V}}^*_p \left(\tilde{Y}_p - \tilde{\boldsymbol{X}}_p W_p\right),$$

$$\sum_{c=1}^{C} w_{i,c,p} = 1 \text{ and } w_{i,c,p} \geq 0 \ \forall\ i, c, p.$$

Here, $y^{pre}_{n,p}$ denotes a scalar of the dependent variable (*n*-th covariate of vector Y_p) in the pre-treatment period. Analogously, $x'^{pre}_{n,p}$ denotes a *1 x C* vector containing the dependent variable of each donor country in the pre-treatment period. Since now only one variable, namely the dependent variable, is estimated, the weights of the control variables $\tilde{\boldsymbol{V}}^*_p$ are not included. But recall that these weights are captured by the first constraint.

Step 3: Given W^*_p from Step 2, estimate the synthetic counterfactual of the treatment country *C+1*, i.e. Hungary, for the post-treatment periods.

$$\hat{y}^{post}_{n,p} = x'^{post}_{n,p} W^*_p, \qquad p = 1, \ldots, P$$

In our case, $\hat{y}^{post}_{n,p}$ denotes the estimated unemployment rate for the synthetic counterfactual of Hungary after Victor Orbán went into office. The dynamics of the doppelganger is estimated for 15 post-treatment periods based on actual unemployment rates of the preselected donor countries $x'^{post}_{n,p}$ weighted according to the optimal weighting vector W^*_p.

5.3 Results: Unemployment under Populist Leaders

Overall, the results give reason to believe that right-wing populist leaders instrumentalize economic "concerns of the people" to remain in power.

Panel Regression Results: The results in Table 1, analyzing the average effect of right-wing populism on unemployment in a purely descriptive difference-in-differences approach, show indeed that right-wing populism is negatively correlated with unemployment. After 5 years, the average right-wing populist has implemented policies that reduced his or her country's unemployment rate by 0.5 percentage points. Adding controls to the panel regression (column b) even pushes the effect. Here, the average right-wing populist reduces unemployment for about 0.6 percentage points.

[8] In contrast to $\tilde{c}$, *c* does not include the treatment country.

	(a) No controls	(b) Controls
	5-year aftermath	
Right-wing Populist	-0.528* (0.0286)	-0.683** (0.314)
Population growth rate	-	-1.028 (0.193)
Currency crisis	-	-0.089 (0.246)
Government debt crisis	-	1.690*** (0.617)
Banking crisis	-	-0.358 (0.333)
R^2	0.002	0.040
Observations	1,829	1,829

Table 1: Panel regression results - Effect of Right-wing populist Leaders on unemployment. ***Note:*** *Robust standard errors are shown in parentheses. *** Significant at 0.01, **significant at 0.05 and * significant at 0.*

Iterative SCM Results

Step-1-Results: As illustrated in Table 2, population growth rate and the democracy index have the highest explanatory power, followed by GDP, the KOF Financial Globalisation Index and inflation.

	Unemployment rate
Population growth rate	-1.677*** (0.153)
GDP	-0.042*** (0.003)
KOF Financial Globalisation Index	0.031*** (0.008)
Inflation	-0.002*** (0.001)
Democracy Index	0.620* (0.394)
R^2	0.171
Observations	1,829

Table 2: Step-1-Results: Panel Regression for predictor weights. ***Note:*** *Robust standard errors are shown in parentheses. *** Significant at 0.01, **significant at 0.05 and * significant at 0.*

Following Kousmanen et al. (2018), we calculate the optimal vector of predictor weights $\widetilde{\boldsymbol{V}}_p^*$ and obtain:

$$\widetilde{\boldsymbol{V}}_p^* = \begin{matrix} 0.706 \\ 0{,}017 \\ 0{,}013 \\ 0{,}000 \\ 0{,}072 \end{matrix}$$

It is noteworthy that the population growth rate obtains such a high predictor weight, resulting in very small weights for the remaining covariates. These results are therefore considered a numeric example of applying the iterative SCM-approach to our case rather than an actual suggestion for predictor weights. This is also because these weights could not be tested.

Step-2-Results: Due to computational restrictions and the fact that the Synth-package was recently removed from the R library, the following results were computed by the *MSCMT*-Package for R proposed by Klößner et al. (2018). The algorithm functions similarly as the Synth-algorithm, which is why the following results are to be interpreted carefully. Figure 9 shows the estimated synthetic doppelganger for the exemplary case of Hungary.

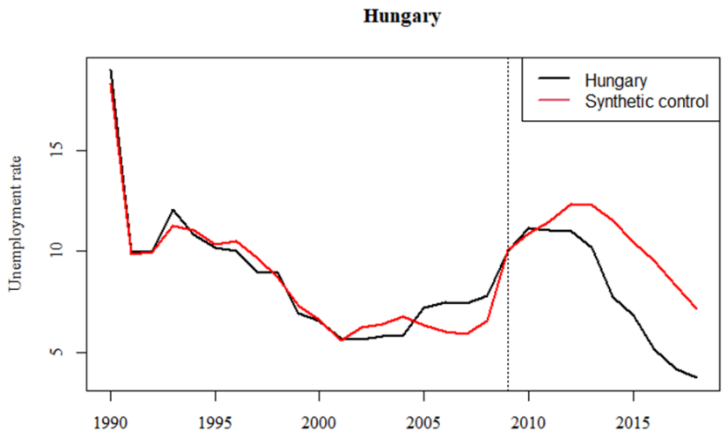

Figure 9: Differences in unemployment rate of Hungary after election of Victor Orbán in 2010.

We can see that for the pre-treatment period from 1990-2010 the synthetic counterfactual replicates the actual dynamics of the unemployment rate of Hungary only approximately, which indicates that the mentioned predictor covariates are not an optimal choice for the selection of adequate donor countries.

However, assuming the synthetic counterfactual roughly replicates the tendencies of the Hungarian unemployment rate under a non-populist government, we can observe that shortly after the populist election in 2010, Victor Orbán implemented policies that lead to a decrease in the unemployment rate.

The next section will shortly conclude and summarize the undertakings of this elaborative paper.

6 Conclusion

This elaboration examines (1) whether European populist leaders compromise on European economic integration and (2) if there are potential economic reasons for the longer survival of populists in office compared to non-populists. For this purpose, the results and methods from Funke et al. (2020) were critically analyzed.

We found that indeed, trade openness as well as financial openness decrease under right-wing populist policies in Europe. Thus, we can state that right-wing populists follow policies that lead to European economic disintegration. Even though these effects are even stronger for left-wing populists and European supranational institutions such as the EU might mitigate these effects, the tendencies are clear: The average right-wing populist indeed delivers on his or her promises to protect the country from foreign economic domination by implementing protectionist policies.

Regarding our second research effort, we conducted an econometric analysis, finding that the SCM-approach of the authors may not be optimal for answering the second research question. Hence, this paper derives suggestions to improve the precision of the SCM but unfortunately failed to apply the method entirely. However, basic panel regression results show that there might be potential economic reasons for "the people" to re-elect right-wing populists. Thus, these results give reason to support the findings of Algan et al. (2017), stating that the recent success of European populism cannot solely be explained by cultural backlash, but that economic insecurity might also play an important role (Algan et al. , 2017, p. 317).

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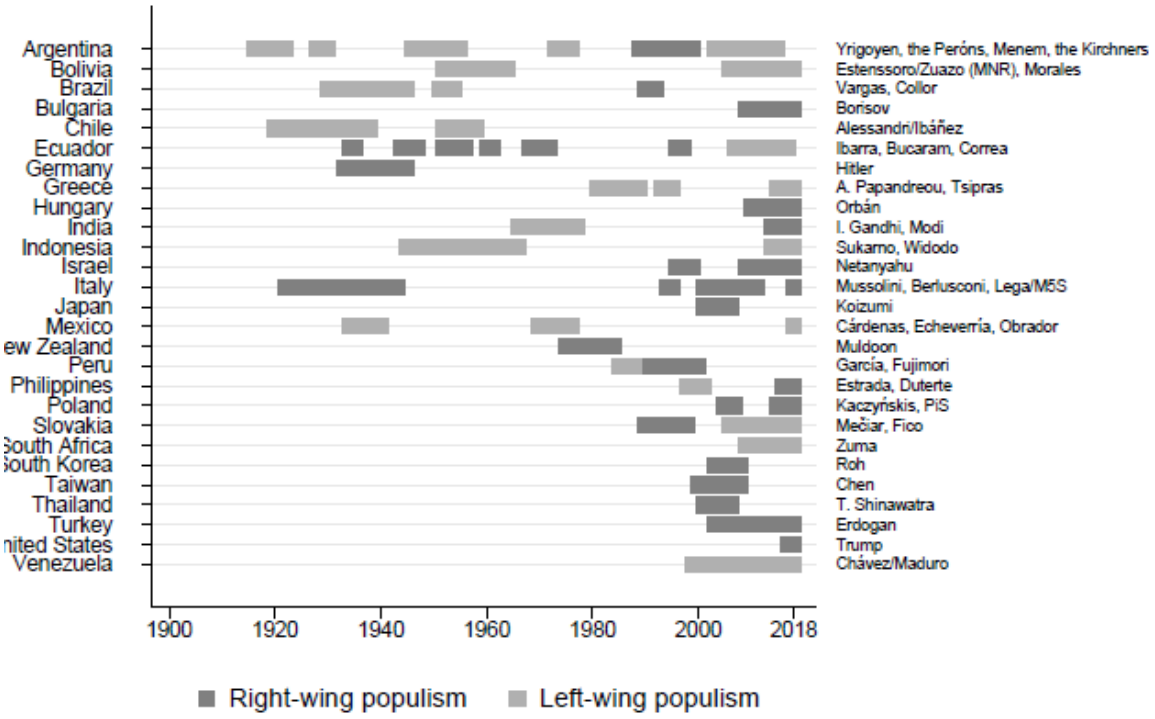
Appendix A: Populist government episodes 1900-2018

A. Populist leader spell (coded dataset)					B. Populist episodes (for econometric analysis)			
No.	Country	Years	Leader	Left/right	No.	Leader	Episode	Sample
1.	Argentina	1916-1922	Yrigoyen	Left-wing	-	Yrigoyen	1916-1922	-
2.	Argentina	1928-1930	Yrigoyen	Left-wing	1.	Yrigoyen	1928-1930	Extended
3.	Argentina	1946-1955	Perón	Left-wing	2.	Perón	1946-1955	Core
4.	Argentina	1973-1974	Perón	Left-wing	3.	Perón-Martínez	1973-1976	Core
5.	Argentina	1974-1976	Martínez	Left-wing				
6.	Argentina	1989-1999	Menem	Right-wing	4.	Menem	1989-1999	Core
7.	Argentina	2003-2007	Kirchner	Left-wing	5.	Kirchner-Fernández	2003-2015	Core
8.	Argentina	2007-2015	Fernández	Left-wing				
9.	Bolivia	1952-1956	Estenssoro*	Left-wing	6.	Estenssoro-Zuazo	1952-1964	Core
10.	Bolivia	1956-1960	Zuazo*	Left-wing				
11.	Bolivia	1960-1964	Estenssoro	Left-wing				
12.	Bolivia	2006-	Morales	Left-wing	7.	Morales	2006-	Extended
13.	Brazil	1930-1945	Vargas	Left-wing	8.	Vargas	1930-1945	Extended
14.	Brazil	1951-1954	Vargas	Left-wing	9.	Vargas	1951-1954	Core
15.	Brazil	1990-1992	Collor	Right-wing	10.	Collor	1990-1992	Core
16.	Bulgaria	2009-2013	Borisov	Right-wing	11.	Borisov	2009-	Extended
17.	Bulgaria	2014-2017	Borisov	Right-wing				
18.	Bulgaria	2017-	Borisov	Right-wing				
19.	Chile	1920-1924	Alessandri	Left-wing	12.	Alessandri-Ibáñez	1920-1938	Extended
20.	Chile	within 1925	Ibáñez	Left-wing				
21.	Chile	within 1925	Alessandri	Left-wing				
22.	Chile	1927-1931	Ibáñez	Left-wing				
23.	Chile	1932-1938	Alessandri	Left-wing				
24.	Chile	1952-1958	Ibáñez	Left-wing	13.	Ibáñez	1952-1958	Core
25.	Ecuador	1934-1935	Velasco	Right-wing	14.	Velasco	1934-1935	Extended
26.	Ecuador	1944-1947	Velasco	Right-wing	-	Velasco	1944-1947	-
27.	Ecuador	1952-1956	Velasco	Right-wing	15.	Velasco	1952-1956	Core
28.	Ecuador	1960-1961	Velasco	Right-wing	16.	Velasco	1960-1961	Core
29.	Ecuador	1968-1972	Velasco	Right-wing	17.	Velasco	1968-1972	Core
30.	Ecuador	1996-1997	Bucaram	Right-wing	18.	Bucaram	1996-1997	Core
31.	Ecuador	2007-2017	Correa	Left-wing	19.	Correa	2007-2017	Extended
32.	Germany	1933-1945	Hitler	Right-wing	20.	Hitler	1933-1945	Extended
33.	Greece	1981-1989	Papandreou	Left-wing	21.	Papandreou	1981-1989	Core
34.	Greece	1993-1995	Papandreou	Left-wing	22.	Papandreou	1993-1995	Core
35.	Greece	2015-	Tsipras	Left-wing	23.	Tsipras	2015-	Extended
36.	Hungary	2010-	Orbán*	Right-wing	24.	Orbán	2010-	Extended
37.	India	1966-1977	Gandhi*	Left-wing	26.	Gandhi	1966-1977	Core
38.	India	2014-	Modi	Right-wing	25.	Modi	2014-	Extended
39.	Indonesia	1945-1948	Sukarno	Left-wing	-	Sukarno	1945-1966	-
40.	Indonesia	1949-1966	Sukarno	Left-wing				
41.	Indonesia	2014-	Widodo	Left-wing	27.	Widodo	2014-	Extended
42.	Israel	1996-1999	Netanyahu	Right-wing	28.	Netanyahu	1996-1999	Core
43.	Israel	2009-	Netanyahu	Right-wing	29.	Netanyahu	2009-	Extended
44.	Italy	1922-1943	Mussolini	Right-wing	30.	Mussolini	1922-1943	Extended
45.	Italy	1994-1995	Berlusconi	Right-wing	31.	Berlusconi	1994-1995	Core
46.	Italy	2001-2006	Berlusconi	Right-wing	32.	Berlusconi	2001-2011	Core
47.	Italy	2008-2011	Berlusconi	Right-wing				
48.	Italy	2018-	Lega/M5S[(a)]	Right-wing	33.	Lega/M5S	2018-	Extended
49.	Japan	2001-2006	Koizumi	Right-wing	34.	Koizumi	2001-2006	Core
50.	Mexico	1934-1940	Cárdenas	Left-wing	35.	Cárdenas	1934-1940	Extended
51.	Mexico	1970-1976	Echeverría	Left-wing	36.	Echeverría	1970-1976	Core
52.	Mexico	2018-	López Obrador	Left-wing	37.	López Obrador	2018-	Extended
53.	New Zealand	1975-1984	Muldoon	Right-wing	38.	Muldoon	1975-1984	Core
54.	Peru	1985-1990	García*	Left-wing	39.	García	1985-1990	Core
55.	Peru	1990-2000	Fujimori	Right-wing	40.	Fujimori	1990-2000	Core
56.	Philippines	1998-2001	Estrada	Left-wing	41.	Estrada	1998-2001	Core
57.	Philippines	2016-	Duterte	Right-wing	42.	Duterte	2016-	Extended
58.	Poland	2005-2007[(b)]	Kaczyńskis/PiS[(a)]	Right-wing	43.	Kaczyńskis/PiS	2005-2007	Extended
59.	Poland	2015-[(b)]	PiS (J. Kaczyński)[(a)]	Right-wing	44.	PiS (J. Kaczyński)	2015-	Extended
60.	Slovakia	1990-1991[(b)]	Mečiar	Right-wing	45.	Mečiar	1990-1998	Core
61.	Slovakia	1992-1994[(b)]	Mečiar	Right-wing				
62.	Slovakia	1994-1998	Mečiar	Right-wing				
63.	Slovakia	2006-2010	Fico	Left-wing	46.	Fico	2006-2018	Extended
64.	Slovakia	2012-2018	Fico	Left-wing				
65.	South Africa	2009-2018	Zuma	Left-wing	47.	Zuma	2009-2018	Extended
66.	South Korea	2003-2008	Roh	Right-wing	48.	Roh	2003-2008	Core
67.	Taiwan	2000-2008	Chen	Right-wing	49.	Chen	2000-2008	Core
68.	Thailand	2001-2006	Shinawatra	Right-wing	50.	Shinawatra	2001-2006	Core
69.	Turkey	2003-	Erdoğan	Right-wing	51.	Erdoğan	2003-	Core
70.	United States	2017-	Trump	Right-wing	52.	Trump	2017-	Extended
71.	Venezuela	1999-2013[(b)]	Chávez	Left-wing	53.	Chávez-Maduro	1999-	Core
72.	Venezuela	2013-[(b)]	Maduro	Left-wing				

Notes: Panel A: Dates/names from Archigos (Goemans et al. 2009) until December 2015 and own coding based on Wikipedia (using the same leader definition) from January 2016 to December 2018. (a) Coding ruling parties, we depart from Archigos procedure. (b) We extended/changed the existing Archigos dating. * Leaders had earlier/later spells coded as non-populist (Estenssoro 1985-1989, Zuazo 1982-1985, Orbán 1998-2002, Gandhi 1980-1984, García 2006-2011). Panel B: For statistical analysis, spells two years or closer together by the same populist (or by two populists with similar ideology) are connected. The resulting episodes are split into a core sample (starting years 1946-2003) and an extended sample (starting years 1919-1938 and 2004-2018). - = Episode excluded because it starts during a World War (starting years 1914-1918 or 1939-1945). If Years/Episode is left blank this means that the spell/episode was still ongoing in December 2018.

from Funke et al. 2020, p. 14

Appendix B: Populist leader spells by country – recurring patterns

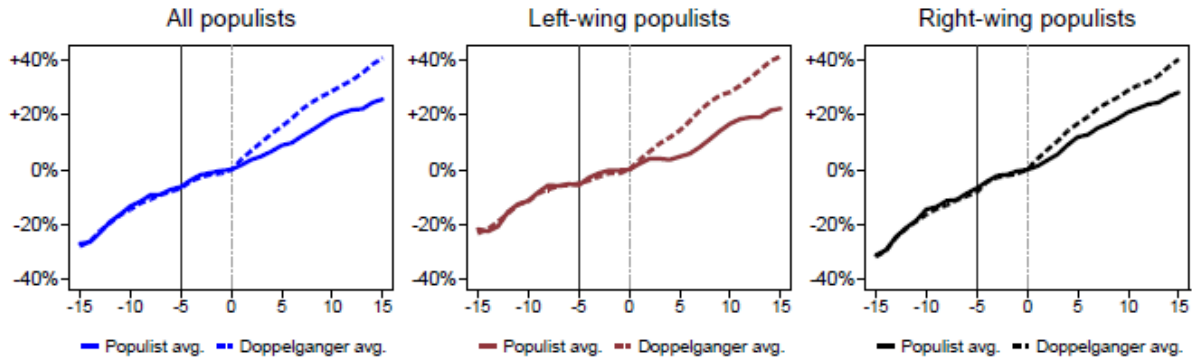


from Funke et al. 2020, p. 16

Appendix C: Data Sources from Funke et al. (2020)

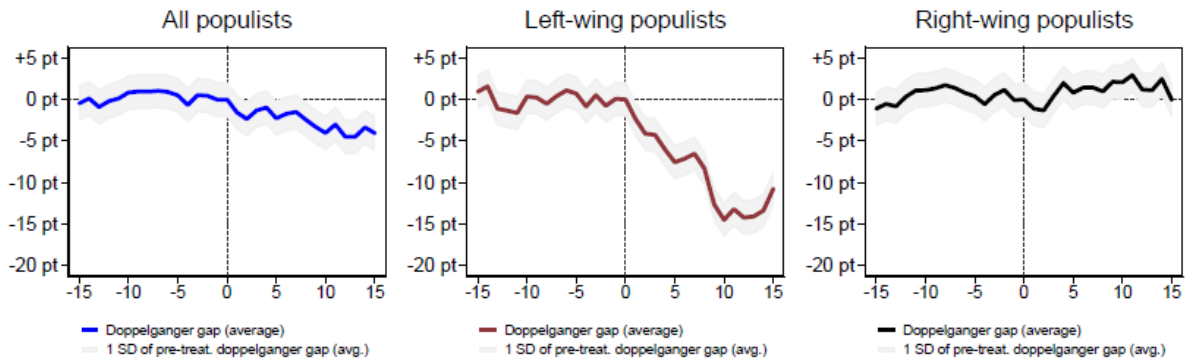
Variable	Source
GDP and Consumption (1900 -2018)	Jordà et al. (2017), Barro & Ursùa (2001), Bolt et al. (2018), World Bank (2018)
Inflation and CPI (1900-2018)	*Jordà et al. (2017), Reinhart and Roghoff (2009), IMF-IFS (2017) and IMF-WEO (2018)*
Public debt (1900-2017)	*Reinhart & Roghoff (2009), Mauro et al. (2013), Mbaye et al. 2018*
Crises (1900-2018)	*Jord`a et al. (2017), Reinhart and Rogoff (2010), Laeven and Valencia (2008, 2010, 2012)*
Gini (1960-2018)	*Standardized World Income Inequality Database, Version 8.3 (SWIID) by Solt (2020)*
Labor share (1950-2017)	*Penn World Table version 9.1 by Feenstra et al. (2015)*
Public debt (1900-2017)	*Reinhart and Rogoff (2009 and updates), IMF data by Mauro et al.(2013), IMF Global*
Balance (1900-2018)	*Mauro et al. (2013), IMF-WEO (2019)*
Tariffs (1960-2018)	*Furceri et al. (2020), World Bank WDI Tariff barriers (2018)*
Financial globalization (1970-2017)	*KOF (Konjunkturforschungsstelle) Swiss Economic Institute (Dreher 2006, Gygli et al. 2019)*
Judicial constraints on executive (1900-2018)	*Varieties of Democracy database, Version 9 (Coppedge et al.2019)*
Free and fair elections (1900-2018)	*Varieties of Democracy database, Version 9 (Coppedge et al.2019)*
Press and media freedom (1900-2018)	*Varieties of Democracy database, Version 9 (Coppedge et al. 2019)*

Appendix D: Time placebo test with real GDP from Funke et al. (2020)



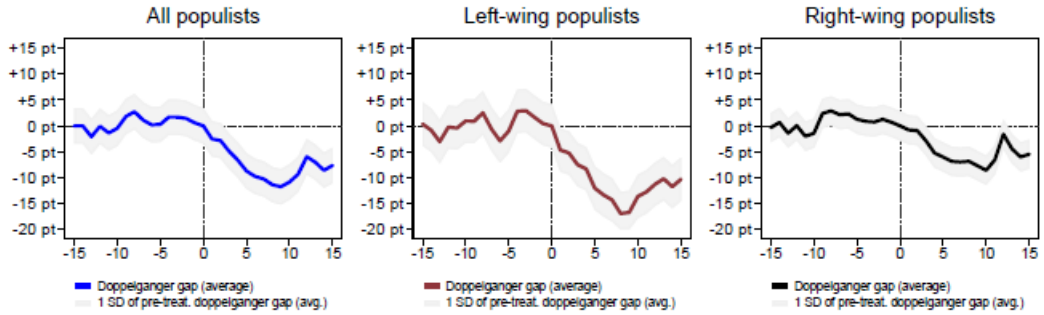
Notes: The figure shows results from a placebo experiment in time. Building on our baseline (Figure 5) for each case we artificially shift the starting year of the populist government five years backwards and then re-estimate the average treatment and doppelganger GDP trend paths. The black solid vertical lines mark the (new) fictitious starting year (at year "-5" on the x-axis), while the gray dashed lines indicate the (old) actual one (year "0" on the x-axis).

Appendix E: Differences in the KOF Financial Globalisation Index after populist Event from Funke et al. (2020)

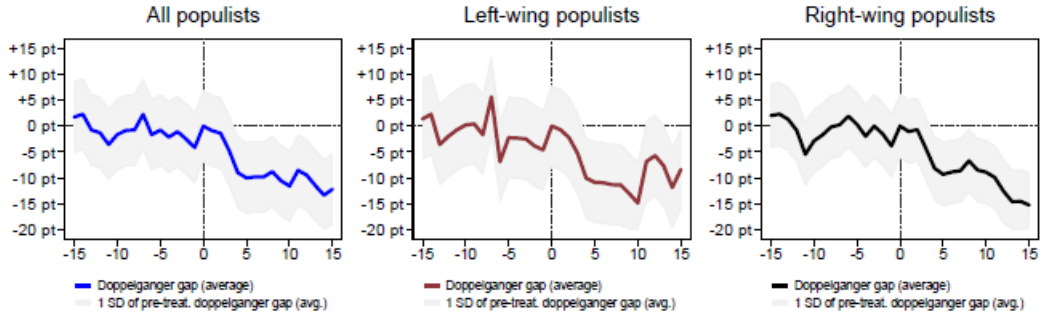


Appendix F: Differences in democratic institutions after populist Event from Funke et al. (2020)

A. Judicial constraints on the executive



B. Free and fair elections



C. Press and media freedom