Economic vote and globalization before and during the Great Recession

Marco Giuliani

(Università degli studi di Milano)

The Great Recession undoubtedly reduced the electoral prospects of incumbent parties, coherently with the expectations of the economic vote theory. Yet, the exceptionality of the period may have displaced other elements of that theory, such as, for instance, the moderating impact that globalization is supposed to have on the retrospective mechanism. By using an original dataset comparing 168 elections in 38 democratic countries in the period 2000-2015, we detail how the crisis modified and even reversed that conditional effect. Furthermore, we differentiate our results by separating the impact of economic openness from that of political globalization. In so doing, we improve our understanding of the mechanisms that trigger the conditional effect on the economic vote in normal and exceptional times.

Keywords: Economic vote; Great Recession; globalization

NB. This is the submitted version, before receiving the comments of the journal's referees that contributed to its substantial revision and improvement.

The final version of the article can be retrieved here:

https://www.tandfonline.com/doi/full/10.1080/17457289.2019.1697881

Introduction

The theory of economic voting has been successfully put to a test in very diverse set of circumstances. Put briefly, the theory states that voters react to a poor state of the economy by sanctioning incumbents in the ballots. The punishment of government parties is the direct consequence of their supposed insufficient capacity to manage the economy, often the most important problem perceived by the population, together with the deterioration of the public well-being.

This well-known logic has been proved to apply to entirely different geographical and political contexts, as well as to diverse time-periods; and it has been supported by analyses using both micro-level individual data and macro-level objective indicators (Dassoneville and Lewis-Beck 2018; Lewis-Beck and Stegmaier 2013). The Great Recession has been recently an important challenge for this strand of literature. On the one hand, we could presume that if the economy has a substantial impact on electoral behaviour during normal times, *a fortiori* it should have had an even stronger influence during periods of tough and persistent crisis. To put it simply, the harsher the economic situation, the greater the punishment. Yet, on the other hand, citizens may have moderated the negative judgments on their national governments because of the global character of the crisis, whose consequences could not be simply attributed to the lack of managerial capacities. Benchmarking the domestic economic performance against the background of what was happening in other countries may have diluted the reward/punishment, especially if governments were sufficiently able to shift the blame to international actors such as the European Union or the International Monetary Fund (Hobolt and Tilley 2014a; Kayser and Peress 2012; Lobo and Lewis-Beck 2012).

In spite of the only apparent simplicity of the empirical test, the theory of economic voting proved to be robust even to these extra-ordinary circumstances (Lewis-

Beck and Lobo 2017). Several authors demonstrated the electoral downsides of being in government during the Great Recession (e.g. AA 2018; Bermeo and Bartels 2014; Hernandez and Kriesi 2016; LeDuc and Pammet 2013). However, the robustness of the basic mechanism at the core of the theory does not equate with its perfect transposition from normal to exceptional times. Several non-marginal elements may differ between the two periods, starting from the actual economic quantities triggering the punishment, to the different impact of absolute levels versus short term dynamics of those quantities, to the benchmarks used by citizens in evaluating their actual domestic economic situation, to cite just a few of them.

In this article, we will focus on the conditional effect of globalization on the impact of the state of the economy on the incumbents' failure/success in the ballot box. Globalization is normally supposed to moderate the economic vote (Hellwig 2008; Hellwig and Samuels 2007; Kayser 2007), although scholars often divide over the actual mechanism that produces that outcome. However, most of the empirical research dates to before the Great Recession and uses pre-crisis data. Therefore, it is still unclear if that conditional relationship still held during those troubled years, or if our knowledge and interpretation of the underlying mechanism needs to be updated.

As a matter of fact, the Great Recession and globalization enjoy a paradoxical relationship. The former is the manifest expression of the latter. In a non-globalized world, the economic crisis could not have propagated itself so swiftly, extensively and deeply. Yet the crisis backfired on the same factor that granted its incredible spread, revealing itself even as "a crisis of globalization" (Vowles and Xezonakis 2016). After decades of continuous progress, the crisis produced the first instance of slowdown, halt, if not retreat of the diverse indices of globalization used in the social sciences (Gygli, Haelg and Sturm 2018). This puzzling relationship thus constitutes a further reason for exploring with some detail, and comparing systematically, the effects of globalization on the economic vote before and during the Great Recession.

We did so by analysing a wide range of elections that took place in 38 very diverse democracies from the year 2000 to 2015. To anticipate the main results of this work, we found confirmation of the basic retrospective mechanism of the economic vote, but globalization did not exhibit the traditional moderating effect after the onset of the crisis. Quite the contrary. The tighter the economic and political interconnectedness of a country, the more the elector tensions propagated from system to system, with electorates over-reacting to the actual state of their economy.

The article is organized as follows. In the next two sections, we review the essential elements of the theory of economic voting, focussing more specifically on the expected conditional impact of globalization, considering how the Great Recession may have altered those mechanisms, and producing our working hypotheses. Next, we present our dataset, which comprises 168 legislative elections that took place in 38 democratic countries in the period 2000-2015, and explain the way in which we operationalize our variables. Finally, we check our hypotheses by comparing the impact of the state of the economy on the electoral performance of incumbents using a series of models for robustness, and the year 2008 as the watershed that distinguishes the pre-crisis period from the Great Recession and its aftermath. The last section concludes by highlighting our contribution to the understanding of the mechanisms governing retrospective economic voting, and advancing some further research avenues in the contrast between normal and exceptional times.

Economic voting in a globalized setting

The basic idea of the mechanism of retrospective economic voting is that the electorate judges the incumbent executive by evaluating the state of the economy. The way in which that evaluation proceeds may vary, and citizens gain understanding of the actual macro-economic dynamics by using very different sources of information. People may be sincerely interested in politics or dislike it, manifest a genuine concern for the public good or solely for their own personal financial situation. This does not affect the logic of the economic vote. The understanding of what is truly happening in the economy, as well as of the political responsibilities for that state of affairs, does not need to be sharp and thorough in order to activate the retrospective mechanism. Perceptions may be even misaligned with the dynamics of the economic reality, not least because of its inevitable and controversial complexity, since a blurred grasp of the actual health of the economy suffices for the reward/punishment mechanism to take place.[1]

The minimalism of the assumptions echoes the idea of "intelligence of democracy" suggested by Lindblom (1966) in a parallel field, and it is probably one of the reasons for the robustness of the theory itself. It is a democracy for realists (Aachen and Bartels 2016) that cannot and does not rely on the intelligence, competences and coordination capacities of the diverse political actors. The straightforwardness of the

[1] That is why many scholars prefer working with survey data that include standard questions on the sociotropic and egotropic perception of the economy, not even considering macroeconomic indices. In so doing, they address directly the issue of the perspective of the agent who is supposed to punish the incumbent parties, yet risking to draw conclusions on endogenous relationships. De Vries, Hobolt and Tilley (2018) recently reviewed the literature on the actual bases of economic perceptions, and demonstrated that people adjust their insights starting from real economic changes, whatever mix of mediated information they rely on.

heuristics, and the abundance of cognitive shortcuts determining the vote choice, do not imply that the Great Recession may have not disrupted some more subtle and delicate links connecting the economic and political arenas, without disconfirming the overall association between state of the economy and electoral success.

The conditional role of globalization is one of those more delicate mechanisms, and it is of primary importance due to the global character itself of the Great Recession. Most scholars agree that globalization refracts the impact of the state of the economy on domestic politics and on electoral behaviours (Hellwig 2001; Kayser 2007), and several empirical studies confirm that the degree of openness of the economy moderates the typical reward-punishment mechanism of the economic vote.[2] Yet the reasons for that supposed reduction are unclear and still debated. We can list at least four different mechanisms contributing to that effect.

First, the more a country is embedded in a web of economic and institutional relationships, the less the state of its economy can be attributed to the domestic government. On the one hand, the strength of global markets reduces the effectiveness of several policy instruments, and many policy choices are taken beyond the domestic borders in intergovernmental or supranational arenas – the European Union being the

[2] Recently, Dassonneville and Lewis-Beck (2018) have expressed skepticism in this regard, and proved the absence of any diminishing trend in the economic vote paralleling the increasing trend in globalization. "The data offer no indications of economic globalization significantly weakening the economic vote longitudinally, [although] this conclusion still permits the mechanisms to be operating cross-sectionally" (14). Already Fisher (2016), using survey data, advanced the idea that "performance voting increases with globalization (and…) was also stronger after the 2008 financial crisis than it was beforehand" (151).

most evident example in this regard. By reducing the room-to-manoeuvre of policy-makers, globalization severely undermines the process of electoral accountability, and thus the necessary attribution of responsibility which is the basis for retrospective voting (Hellwig 2007, 2008, 2015; Hellwig and Samuels 2007)

Second, besides shifting the liabilities to international markets and supranational decision-making arenas (Hobolt and Tilley 2014a; Lobo and Lewis-Beck 2012), globalization blurs them (LeDuc and Pammet 2013). Whereas the former process has to do with recognizing the actual limits of domestic politics, the latter is more an issue of clarity of responsibility (Powell and Whitten 1993; Dassonneville and Lewis-Beck 2017; Silva and Whitten 2017). On the economic side, a higher exposure to global trade increases the difficulty of extracting the "competency signal" from the shocks observed in the domestic economy, and thus attribute the observed variation to the managerial capacities of incumbents (Duch and Stevenson 2008, 2010). On the political side, being embedded in a multi-level setting conceals the actual responsibilities of the central governments and facilitates their blame shifting tactics (Hobolt and Tilley 2014b).

Third, if we agree that "economic integration exposes national economies to the turbulences in the world economy" (Kim 2007, 182), governments of different economic leaning will all come short of resources to compensate for the risks of higher integration levels. Following the so-called Rodrick (1997) paradox, "growing international economic integration increases the demand on governments for protection at the same time it undermines their ability to supply policies that require significant government spending" (Hays 2009, 12). Higher globalization levels thus favours a convergence in the policy recipes of parties on both sides of the political spectrum, offering similar protections against these global sources of insecurity. If parties' economic policy positions converge (Sen and Barry 2018), the opposition can no longer offer any alternative to dissatisfied voters, therefore reducing the viable options for the economic vote.

Fourth, the actual reduction of the sanctioning could be the by-product of the fact that citizens do not react directly to the state of the economy in their own country, but to the pre-digested information provided by the media, which comparatively evaluate that state against some relevant external benchmarks. However, the more a country is globalized, the more its economy fluctuates together with that of its neighbours in a common business cycle, and the more this reduces the distance between the domestic macroeconomic indices and their external benchmarks. Eventually, since the media directly inform voters about that gap, they do not react less vigorously in globalized countries, but simply have less to react against as a consequence of the alignment of the domestic and international business cycles (Kayser and Peress 2016).

A globalized economic vote in turbulent times

It is evident that the mechanisms of the supposed moderating effect of globalization on the economic vote are rather diverse, and rely on different types of connectedness. Some of them work through the economic arena, whereas others do so through the political one. Some require a more sophisticated reasoning, and some less. Some assume that the moderating effect is the outcome of an actual reduction in the domestic economic capacities or political responsibilities, while others think it is more a matter of concealing those liabilities and distance the blame.

Whereas in normal times, those different explanations could empirically coexist, in the sense that the elements on which they rely tend to co-vary, it is hard to believe that a disrupting phenomenon like the Great Recession left them unaffected. After 2008, in spite of a common deterioration of the economy, the macroeconomic parameters diverged more than in the past, and the international institutional system more than absorbing the domestic political tensions reinvigorated them.

A good case is represented by the European Union, the most developed example of political and economic interconnectedness. Its stability and growth pact has been severely put to the test by the diverging macroeconomic trajectories during the crisis, as well as by the different fiscal responses implemented by the 28 member states (Armingeon 2012). The EU itself, from being a useful external constraint and source of solutions, rapidly became part of the problem and the major political target for the growing Eurosceptic parties. Some of the perceived dangers depended exactly on the closeness of the exchanges amongst member states. The risk of a domino effect, with the sovereign debt crisis propagating from Southern Europe across the whole continent, spread the fears even in countries whose economic solidity was not in question. Under those circumstances, citizens may over-react to the actual domestic state of the economy by interiorizing in their evaluations both a general sense of insecurity and a more specific judgment regarding the failure to defend the national interest against those external sources of instability.

More generally, also the literature on the “losers” of globalization contributes to our understanding of what happened to the economic vote during the Great Recession. There is solid evidence that those segments of population employed in sectors more exposed to competition by countries with low labour costs – initially mostly blue-collar workers from the manufacture industry – turned to their governments for welfare protection. According to the compensation theory, this was supposed to favour social-democratic mainstream parties. But when this type of competition spread to more sectors, when the crisis hit the economy of the mostly developed countries to an extent that exponentially increased the needs while at the same time reducing the public resources, when issues of fiscal responsibilities made that type of welfare support insufficient or non-feasible, citizens started to turn away from all types of mainstream actors (Colantone and Stanig 2018).[3]

During the Great Recession, the previously introduced Rodrick's paradox has not been solved by "striking a balance between openness and domestic needs" (77), as the same author proposed more than twenty years ago, but producing a deeper political crisis further affecting government capabilities and the electoral fates of incumbents. What used to be a reason for not turning to opposition parties hoping for more protection, became a rational for casting more votes in favour of radical, non-incumbent parties advocating economic protectionism and refuting any kind of supra-national coordination

As a consequence, countries more exposed to this trade competition, and more bound to international agreements, should experience those political consequences more than more isolated and less interconnected countries. Also in this case, the underlying mechanism is both economic and political. The trade exposure is often complemented by international institutional agreements that prevent governments from unilaterally

[3] Eurobarometer data show a sharp decline in the perceived economic benefits produced by globalization at the height of the Great Recession, with the lowest point reached towards the end of 2011, and countries the majority of whose citizens started to dispute that globalization produces any opportunity for growth. Data from the 2013 International Social Survey Programme show that the absolute majority of the respondents favoured trade restrictions, and thought that international organizations were taking too much power from the governments. That distribution was common in very diverse countries, from the US to Europe.

protecting and privileging domestic interests. In tough economic circumstances, this double set of constraints – external economic exposure and lack of political margins – is more a liability than an escape opportunity for incumbents. Furthermore, external interventions in domestic economic choices, such as the conditionality measures imposed by the IMF loans, reinforce rather than reduce dissatisfaction with one's government (Alonso and Ruiz-Rufino 2018). Eventually, the hostility against free-trade expands beyond the economic arena, involving issues of social and cultural identity (Margalit 2012) that can be easily exploited politically by actors advocating the restoration of national sovereignty against the intrusion of international or supranational institutions.

If this line of reasoning is correct, we should expect a reversal of the traditional moderating effects of the different types of openness and interconnectedness that used to work before the Great Recession. Reviewing in short the four mechanisms previously introduced for normal times, after the onset of the crisis both the reduced margins for manoeuvring and the lack of clarity for the policy-making responsibilities were no more considered valid excuses for the poor economic performance.[4] Regarding the former, Kosmidis (2018) demonstrated with an experiment run in Greece – probably the country most affected by the Great Recession and by the external constraints put in place by the international community – that the size of the economic vote is not reduced by the external constraints to the choices of domestic decision-makers. On the latter, Armingeon and Guthmann (2014) provide evidence that externally imposed measures

[4] Put it in a different way, the rhetoric efforts for justifying those performance on the basis of these two factors were increasingly discounted by citizens, who further reacted negatively to the same attempts at shirking those responsibilities.

did not blur the responsibilities, but rather “amplified the effect of worsening economic performances on national democratic support” (434). Both the reduced margins and the institutional embeddedness were political faults of incumbents that needed to be further sanctioned.

Regarding the third mechanism, the exceptionality of the period paved the way to new political actors, refuting to converge on the mainstream equilibrium between openness and social support, but rather using the weapons of welfare chauvinism and economic protectionism against incumbent parties. Finally, while benchmarking in integrated business cycles undermined economic voting in normal times, flattening the local contribution to the domestic economic performance, the Great Recession surely produced a global retreat but following much more disordered patterns. The increased awareness of what was happening elsewhere, coupled with the fear of contagion should amplify the political reactions above all in the most interconnected systems (Park 2019).

Consequently, our hypothesis is that, whereas before the Great Recession higher levels of globalization routinely moderated the impact of the state of the economy on the incumbents’ electoral prospects, during that period we should expect exactly the opposite, relying as before on both economic and political mechanisms.

Data, method and operationalizations

Having outlined our hypotheses, we now present the dataset used to test them, detail the operationalization of our variables, and specify the model.

We collected electoral, economic and globalization data regarding 38 countries covering the period between 2000 and 2015. The sample practically corresponds to the universe of the economically advanced countries, belonging either to the European Union (EU) or to the Organisation for Economic Co-operation and Development

(OECD), that have been uninterruptedly democratic since the year 2000.[5] In spite of those common belongings, their economic conditions before and during the Great Recession were far from homogeneous, so that both our independent and dependent variables show a great degree of variation. To give an example, Greece's average unemployment rate in the overall period was almost five times higher than the Swiss one, having one third of its average growth. The crisis increased unemployment in the Mediterranean country by eight points and reduced its growth from +4% to -3.5%, whereas it left the Swiss labour market intact with just a one point slowdown in the growth of its economy. Also the electoral performance of incumbents – our dependent variable – varied greatly. Between 2000 and 2015, the selected countries went to the polls for a general election 168 times, almost evenly split between the two time-periods.[6] In those ballots, some government coalitions lost up to 48% of their votes, while others even improved their popular support against the previous election.

---

[5] The complete list is the following: Australia, Austria, Belgium, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Latvia, Lithuania, Luxembourg, Malta, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom, United States. We provide the codebook and some descriptive statistics of the variables used in the supplementary online appendix.

[6] We excluded the two ballots that were retaken in Greece, in 2012 and 2015, just a few months after the general election, because their exceptional character cannot be framed within a common model, as well as the first 2000 Croatian election, which had no previous democratic incumbent.

We chose a split-sample research design. This makes the presentation of the results clearer, especially considering the conditional nature of our hypothesis, which would otherwise require the illustration of a triple interaction. We thus have a symmetric comparison between the eight pre-crisis years, from 2000 to 2007, and the eight years after the onset of the Great Recession, from 2008 to 2015. For robustness, we run the same models also using the full dataset and interacting our variables with the crisis without founding any difference. The results obtained following this alternative strategy are reported in the online appendix. Because of the time-series cross-section nature of our data, we use panel regression with random-effects. A Breusch-Pagan Lagrange multiplier test confirms that this modelling is to be preferred to a normal OLS for most of our equations, especially during the crisis, with a Hausman test confirming that a random effect specification is preferable to introducing fixed effects.[7]

The equation of our model is as follows:

$$Y_{it} = \mu + \beta_1 Y_{it-w} + (\beta_2 E_{it-} \ + \beta_3 \Delta E_{it-1}) \times \ [\beta_4 G_{it}] + \gamma W_{it} + u_i + \varepsilon_{it}$$

where Y_{it} is the percentage of votes for the incumbent parties in country *i* at the time of election *t*, which is a function of its same votes in the preceding ballot (w years before), E_{it-1}represents the state of the economy in the previous year, and ΔE_{it-1} its change compared to the year before, in certain models interacted with globalization G_{it}, plus a vector of control variables W_{it}, and country/observation specific error terms.

---

[7] In any case, a linear specification does not alter the substance of the results in any case. Furthermore, using panel corrected standard errors is not advisable when the number of the groups exceeds the number of the time observations.

We now examine each of these components. The dependent variable, and its lagged quantity on the right-hand side, includes all incumbent parties and not just the party of the head of government. In so doing, we avoid considering as a punishment effect the simple transfer of votes amongst different incumbent parties, while also addressing the thorny issue of the relative gains and losses of major and minor partners of the coalition (but see Giuliani and Massari 2017; Stiers 2017).

Another controversial issue regards measurement of the state of the economy. We chose to employ the unemployment rate, and its change against the previous year, for a set of reasons. First of all, unemployment has been considered by various authors and in different time-periods as one of the "big two", i.e. the two best indices for the analysis of retrospective voting. Nannestad and Paldam (1994, 216), in their review, suggested using unemployment and inflation. Lewis-Beck and Stegmaier (2013, 376), twenty years later, preferred unemployment and growth.

Inflation cannot be used in periods in which its opposite, deflation, is part of the problem, as during the Great Recession. Yet even growth, usually a valid alternative, presents some drawbacks during that same period. Whereas normally that macroeconomic indicator slowly fluctuates at different positive levels, during the Great Recession in many countries the index registered marked ups-and-downs, passing back and forth from positive to negative values. Estonia, for example, recorded a 7.8% growth in 2007, a -17.4% recession in 2009, before jumping back to a 7.6% growth in 2011; Finland had a -8.3% recession in 2009, a positive 3% growth the year after, before falling back again to negative values; the same happened to Japan, with a -5.4% recession in 2009, +4.2% growth in 2010, and again a reduction in GDP in 2011. With these roller-coaster patterns, the usual assumptions regarding the voters' temporal horizon become much more sensitive and problematic. Unemployment rates do not suffer from these downsides, since their temporal dynamics are not as brusque, and tend to reflect correctly the actual permanence of a crisis, or its slow recovery.[8]

Some authors suspect that unemployment, as a quantity triggering the economic vote, is ideologically biased, given that social-democratic parties advocate higher levels of social protection. Yet fiscal austerity promoted substantial welfare retrenchment under opposite ideological predispositions, especially in situations of blurred institutional responsibilities (Jensen and Mortensen 2014; Pierson 2001). In fact, Clements, Nanou and Real-Dato (2018) report a decrease in responsiveness by parties on both sides, consistently with the finding of Hernandez and Kriesi (2016) that only radical, non-mainstream parties benefitted from the Great Recession. Also according to Bartels (2014), the economic crisis did not systematically favour left-wing governments; indeed, quite the opposite (Le Duc and Pammet 2013).

[8] The rebounds are partially an effect of the nature of the index. Growth is a measure of change (in GDP) against the previous year, whereas unemployment is a level variable. After a fall of the GDP in a certain year, the permanence of that deprived situation is measured simply as zero growth, while even a small recovery, insufficient to re-establish the wealth of the previous year, is measured as a positive quantity that should (implausibly) benefit incumbents. We consider in our equation also short-term changes (ΔE_{it-1}), but with growth it becomes a sort of second derivative of GDP – the change in the level of change (of GDP) – whereas for unemployment it is simply the improvement or the further deterioration (first derivative) of the amount of people looking for a job. For robustness, in the supplementary material we replicated many analyses using the GDP per capita and its yearly change (i.e. growth) as proxies for the state of the economy, mostly finding further confirmation for our hypothesis.

Thus, also considering that being out of the labour market was perceived in the whole period, and even more so during the Great Recession, as the most pressing problem all around the world, we adopted unemployment as our independent variable. More specifically, assuming the standard one-year time horizon of voters, we computed a quarterly weighted average of the annual unemployment rates of the election year and the year before, as it is now common practice in order to better reflect the timing of an election whenever more precise monthly or quarterly data are not available or sufficiently homogeneous (Bélanger and Gelineau 2010; Dassonneville and Lewis-Beck 2018). We further include the corresponding measure of change against the previous four quarters to capture the short-term dynamics. For robustness, in the online appendix we replicate the basic models measuring the state if the economy directly in the year previous to the election and its change against two years before.

Globalization is the second central variable of this work. It has been often operationalized in the literature through measures of trade openness and capital flows (Vowles and Xezonakis 2016), or using aggregate indices such as the KOF globalization index (Potrafke 2015). Because of the way in which the arguments are framed, those indices are considered good proxies for the concept of interest. We mostly agree with those studies, although we have already noted that the mechanism on which they rely has sometimes an economic nature, and sometimes a political one. We thus propose employing two of the three subcomponents of the KOF index, differentiating between economic and political globalization. In so doing we incorporate the consolidated measures of trade and foreign investments into our economic index, while still being able to check for a different type of conditional mechanism using the political proxy for globalization.[9]

Our models control for a well-known set of confounding factors. Coalition governments blur the responsibilities (Silva and Whitten 2017), and their inclusion as a dummy variable helps in controlling for size effects compared to single-party executives. The fragmentation of the party system affects the availability of feasible alternatives to incumbents (Rowe 2015), whilst checking for the differential level of turnout prevents being misled by the impact of the state of the economy on the mobilization or discouragement of the electorate (Burden and Wichowsy 2014; Cebula 2017).

Empirical results: from taming to strengthening the effects of the economic vote

We start from the simplest comparison between the 83 elections before the Great Recession, and the 85 ballots during the crisis. Regressing the percentage of votes received by incumbents on the state of the economy confirms the theory of economic voting and the initial assumption of this article both in normal times and during the exceptional period of the Great Recession.

[9] The KOF subcomponents are not relevant for what they directly measure, but for being good proxies of those phenomena (Gygli, Haelg and Sturm 2018). The economic and globalization indices address different phenomena, resulting often in weak if not insignificant correlations between the two indices, especially during the crisis period. In the online appendix, we shortly report some further empirical data at this regard.

*** Table 1 approximately here

The results of Table 1 tell us something more. The economy was a fundamental driver of voting behaviours in both periods, and yet only the absolute level of unemployment always presents a significant coefficient, whereas the trend variable loses its systematic character, though keeping the correct negative sign, during the years of the crisis. Clearly, a recent recovery from a long-protracted depressed labour market with two-digit unemployment rates, as the ones persistently experienced during the Great Recession, is insufficient for improving the electoral chances of the incumbents.

Comparing the magnitude of the coefficients for unemployment in the two periods, one could get the false impression that after 2008 this variable had a smaller impact on electoral behaviour than in the preceding years, as if the theory of economic voting was less informative of what happened during the crisis. However, this could depend on the different range of all the variables during the two periods. It would be empirically implausible that, on top of the harsher conditions of the Great Recession, the state of the economy had an even bigger multiplicative effect on the incumbents' electoral failures: there would simply not exist sufficient vote percentages to lose. As an indirect proof, once we fix all the covariates at their mean values, the average predicted loss of incumbents before the crisis was less than 5%, whereas it was almost 8% during the Great Recession: thus, an average unemployment rate had a bigger effect during the latter period than before the onset of the crisis.

We now include globalization in our analysis. Simply adding our indices to the baseline model of economic voting would not reflect the essence of conditional hypotheses like the one that we discussed in the previous section. A better way to model them is to introduce an interaction term showing the impact of the economy at different levels of economic and political globalization.

The complete results of these analyses are presented in the online appendix. Yet, following the standard good methodological practices, we should not be "interested in the significance or insignificance of the model parameters per se" (Brambor et al. 2006, 8), but rather investigate the marginal effects of unemployment by plotting them at different intensities of the interacting term (Berry et al. 2012; Kam and Franzese 2007). These are reported in Figure 1 and 2, together with their 95% confidence intervals and histograms representing the distribution of the observations, separately for the period before and during the crisis. In the left hand panels of each figure, we plot the marginal effects of the unemployment rate on the incumbents' electoral performance, whereas in the right hand panels we plot those of its trend variable against the previous year. Finally, the first row represents the conditional effect of economic globalization, whereas the second one that of political globalization.

*** Fig 1 and 2 approximately here

From Figure 1, representing the pre-crisis period, we observe that both types of globalization have some tempering effect on the retrospective vote, although the smaller confidence intervals for the economic conditioning seems to imply a neater impact of that type of openness. More in detail, and starting from the level variable in the left panels, we see that for low degrees of economic and political globalization, unemployment rates have a systematic negative impact on the incumbents' electoral performance. In those years, in the least interconnected systems of our sample, having 1% more unemployment meant for incumbents losing from 2 to 4 percentage points in the ballots. At increasing levels of globalization, the punishment was increasingly less, until it was no longer significantly different from the null effect.

There are only three minor differences between the economic and the political intermediation. To start with, the slope of the first marginal effect is steeper, and, in fact, the corresponding coefficient of the interaction term for economic openness is twice as big at that for political globalization. Secondly, a comparatively larger portion of observations falls in the area for which we cannot reject the null hypothesis, so that economic globalization deactivates the retrospective vote more effectively than political interconnectedness. Finally, the explained variance of the first regression is higher than the second one (see the online appendix for the details), suggesting a better capacity to represent the actual dynamics of the pre-crisis period.

It is further interesting to note that once we introduce these conditional effects, the impact of the second variable capturing the state of the economy, i.e. the short-term trend of the unemployment rate, its increase or decrease against the recent past, loses significance. At practically no level and for no type of globalization does that trend variable still have an impact on the electoral process, as clearly shown by the confidence intervals overlapping the line of the zero-effect in the right-hand panels of figure 1.

What happens when we move from the pre-crisis to the Great Recession period? Overlooking the trend variable, whose impact is also here mostly non-distinguishable from zero, in Figure 2 the marginal conditional effect of the level of unemployment is entirely different from the previous period. Whereas earlier economic globalization had the clearest moderating influence, during the Great Recession it lost it entirely. The confidence intervals almost continuously overlap the central zero line, and nothing could be argued on the basis of the tiny central portion in which they do not.

More interestingly, the political globalization index show a much clearer conditional impact, but this time in the opposite direction. The tighter the political interconnectedness, the more intense the punishment effect of the state of the economy. Both lines of the marginal effects of level and trend in unemployment in the lower panels of Figure 2 have a clear descending slope, moving from outcomes that cannot be distinguished from zero to visibly negative values. At the highest levels of political globalization, where most of the observations are concentrated, and all other things being equal, to each 1% of unemployment corresponds a decrease of approximately 1 percentage point in the votes earned during the election. On top of this level effect, for each 1% increase of the unemployed compared to the previous year, incumbents lose another 3 percentage points in the ballots. To this evident multiplicative effect corresponds even a better fit of the model including the political moderation compared to the one based on the economical interface.

Discussion and conclusions

The Great Recession did not gainsay the economic vote theory. We can thus confirm what some scholars have already noted: that the exceptionality of the period has not altered the essence of the punishment mechanism triggered by the economic conditions (Dassonneville and Lewis-Beck 2018; Lewis-Beck and Lobo 2017). However, not altering the essence does not mean not altering the details. We believe that the moderation of the economic vote produced by globalization was one of those details that needed to be checked and updated. In fact, the crisis cancelled the standard conditional effects of economic openness, whilst it completely reversed that of political interconnectedness. In the 2008-2015 period, the more a country was globalized, the more the state of its economy impacted on the electoral prospects of incumbents.

From the qualitative and quantitative literature exploring the changes in party competition experienced during the crisis years, we can learn how the success of nationalist and Eurosceptic (non-incumbent) parties has been fuelled by the perceived loss of sovereignty typical of more globalized countries. For some of them it has been more an issue of protection of national industries, for others the loss of policy-making capacities in a growing number of sectors, and for yet others the intrusion of supra- and international institutions in their domestic choices demanding structural reforms in exchange for financial support. Furthermore, scholars investigating the behaviour of those segments of the population that are often called the "losers of globalization" have demonstrated that, in recent times, openness is more a curse than a resource for incumbents (Jensen, Quinn and Weymouth 2016).

Our study thus fits into, and contributes to, a wider revision of the dynamics of political competition and public opinion representation that touches important contemporary issues such as Trump's success and Brexit, populism and Euroscepticism, as well as the growing dissatisfaction with the working of democracy in many countries. In this framework, the Great Recession, by drawing attention to the costs, more than to the opportunities offered by a high degree of interconnectedness, reversed the traditional role of globalization. This work, based on aggregated objective indices, complements the few other post-crisis analyses quoted in the article that found similar results, yet using individual survey data.

Our second contribution consists in separately testing different types of globalization that are not necessarily congruent and associated. This step has been overlooked by previous empirical tests, which is unfortunate because of the different mechanisms, explanations and arenas assumed in those analyses. Whereas in normal times, data do not heavily discriminate among different types of globalization, and yet grant a better fit to the economic explanation, during the Great Recession political explanations and dynamics come to the forefront.

Also in this regard, by trying to unravel the so-called “openness package” (Margalit 2012), our work is congruent with recent and contiguous studies. On the one side, appeals for the defence of national identities – against migrants or multinational firms – have been shown to be often anchored in a deprived state of the economy, and are more effective in open systems. A similar argument has been advanced in regard to the multiplicative effects on the public dissatisfaction produced during the crisis by governments trying to be fiscally responsible (Alonso and Ruiz-Rufino 2018). That attitude has often been perceived as surrendering to the external dictates of unelected bureaucrats, typically in political systems embedded in tight institutional networks (Armingeon and Guthmann 2014). Thus, political and institutional interconnectedness has been proved to be more important than trade openness or foreign investments in shaping the electoral responses to a crisis situation, sharpening rather than blurring the responsibilities. As further proof, countries that adopted the Euro – institutionally binding their economic policies – used to be better able to absorb the political tensions of a poor state of the economy before the Great Recession, but were more exposed to those tensions than those which did not have a common currency after 2008 (see the online appendix for the empirical evidence).

The economic vote has proved to be robust to even exceptional economic conditions. The Great Recession is now over. However, not all countries have been able to recover the pre-crisis situation in terms of number of employed persons or per capita wealth, let alone public debt. This may contribute to the persistence of its political effects well beyond the technical economic end of that period. Meanwhile, globalization has been increasingly perceived as part of the problem instead of part of the solution.

References

AA 2018

Aachen, Cristopher, and Larry Bartels. 2016. *Democracy for realists. Why Elections Do Not Produce Responsive Government*. Princeton: Princeton U.P.

Alonso, Sonia, and Rubén Ruiz-Rufino. 2018. "The costs of responsibility for the political establishment of the Eurozone (1999–2015)." *Party Politics.* doi: 10.1177/1354068818766182.

Armingeon, Klaus. 2012. "The Politics of Fiscal Responses to the Crisis of 2008–2009." *Governance: An International Journal of Policy, Administration, and Institutions* 25 (2): 543–565.

Armingeon, Klaus, and Kai Guthmann. 2014. "Democracy in crisis? The declining support for national democracy in European countries, 2007–2011." *European Journal of Political Research* 53 (3): 423–442.

Bartels, Larry. 2014. "Ideology and retrospection in electoral responses to the great recession." In *Mass Politics in Tough Times: Opinions, Votes, and Protest in the Great Recession*, edited by Nancy Bermeo and Larry M. Bartels, 185-223. Oxford: Oxford U.P.

Bélanger, Éric, and François Gélineau. 2010. "Does Perceived Competence Matter? Political Parties and Economic Voting in Canadian Federal Elections". *Journal of Elections, Public Opinion and Parties* 20 (1): 83-101.

Bermeo, Nancy, and Larry Bartels. eds. 2014. *Mass Politics in Tough Times: Opinions, Votes, and Protest in the Great Recession*. Oxford: Oxford U.P.

Berry, William, Matt Golder and Daniel Milton. 2012. "Improving tests of theories positing interaction". *Journal of Politics* 74 (3): 653–671.

Brambor, Thomas, William Clark and Matt Golder. 2006. "Understanding interaction models: improving empirical analyses." *Political Analysis* 14 (1): 63–82.

Burden, Barry, and Amber Wichowsy. 2014. "Economic discontent as a mobilizer: unemployment and voter turnout." *Journal of Politics* 76 (4): 887-898.

Cebula, Richard J. 2017. "Unemployment and voter turnout revisited: A brief note." *Electoral Studies* 48: 149-152.

Clements, Ben, Kyriaki Nanou and José Real-Dato. 2018. "Economic crisis and party responsiveness on the left–right dimension in the European Union." *Party Politics* 24 (1): 52-64.

Colantone, Ivan and Piero Stanig. 2018. "The Trade Origins of Economic Nationalism: Import Competition and Voting Behavior in Western Europe." *American Journal of Political Science*. doi: 10.1111/ajps.12358.

Dassonneville, Ruth and Michael Lewis-Beck. 2017. "Rules, institutions and the economic vote: clarifying clarity of responsibility." *West European Politics* 40 (3): 534-559.

Dassonneville, Ruth and Michael Lewis-Beck. 2018. "A changing economic vote in Western Europe? Long-term vs. short-term forces." *European Political Science Review.* doi:10.1017/S1755773918000231.

De Vries, Catherine, Sara Hobolt and James Tilley. 2018. "Facing up to the facts: What causes economic perceptions?." *Electoral studies* 51: 115-122.

Duch, Raymond and Randy Stevenson. 2008. *The Economic Vote. How Political and Economic Institutions Condition Election Results*. Cambridge: Cambridge U.P.

Duch, Raymond and Randy Stevenson. 2010. "The Global Economy, Competency, and the Economic Vote." *The Journal of Politics* 72 (1): 105-123.

Fisher, Stephen. 2016. "Does Globalization Weaken Accountability and Representation?." In *Globalization and Domestic Politics. Parties, Elections, and Public Opinion*, edited by Jack Vowles and Georgios Xezonakis, 69-88. Oxford: Oxford U.P.

Giuliani, Marco and Sergio Massari. 2017. "The economic vote at the party level: electoral behaviour during the Great Recession." *Party politics.* doi: 10.1177/1354068817728214.

Gygli, Savina, Florian Haelg and Jan-Egbert Sturm. 2018. "The KOF Globalisation Index – Revisited." *KOF Working Papers*, n. 439.

Hayes, Jude. 2009. *Globalization and the New Politics of Embedded Liberalism*. Oxford: Oxford U.P.

Hellwig, Timothy. 2001. "Interdependence. Government Constraints and Economic Voting." *Journal of Politics* 63 (4): 1141-1162.

Hellwig, Timothy. 2007. "Economic openness, policy uncertainty, and the dynamics of government support." *Electoral Studies* 26: 772-786.

Hellwig, Timothy. 2008. "Globalization, policy constraints and vote choice." *Journal of Politics* 70 (4): 1128-1141.

Hellwig, Timothy. 2015. *Globalization and Mass Politics. Retaining the Room to Maneuver*. Cambridge: Cambridge U.P.

Hellwig, Timothy and David Samuels. 2007. "Voting in open economies: the electoral consequences of globalization." *Comparative Political Studies* 40 (3): 283-306.

Hernández, Enrique, and Hanspeter Kriesi. 2016. "The electoral consequences of the financial and economic crisis in Europe." *European Journal of Political Research* 55 (2): 203–224.

Hobolt, Sara, and James Tilley. 2014a. "Who's in charge? How voters attribute responsibility in the European union." *Comparative Political Studies* 47 (6): 795–819.

Hobolt, Sara, and James Tilley. 2014b. *Blaming Europe? Responsibility without accountability in the European Union*, Oxford: Oxford U.P.

Jensen, Carsten, and Peter Mortensen. 2014. "Government Responses to Fiscal Austerity: The Effect of Institutional Fragmentation and Partisanship." *Comparative Political Studies* 47 (2): 143-170.

Jensen, Bradford, Dennis Quinn, and StephenWeymouth. 2016. "Winners and Losers in International Trade: The Effects on U.S. Presidential Voting." NBER Working Paper 21899. http://www.nber.org/papers/w21899.

Kam, Cindy, and Robert Franzese. 2007. *Modeling and Interpreting Interactive Hypotheses in Regression Analysis*. Ann Arbor: The University of Michigan Press.

Kayser, Mark. 2007. "How domestic is domestic politics? Globalization and Elections." *Annual Review of Political Science* 10: 341-362.

Kayser, Mark, and Michael Peress. 2012. "Benchmarking across Borders: Electoral Accountability and the Necessity of Comparison." *American Political Science Review* 106 (3): 661-684.

Kayser, Mark, and Michael Peress. 2016. "The Buck Stops There? Benchmarking Elections in Open Economy." In *Globalization and Domestic Politics: Parties, Elections, and Public Opinion*, edited by Jack Vowles and Georgios Xezonakis, 89-112. Oxford: Oxford U.P.

Kim, So Young. 2007. "Openness, External Risk, and Volatility: Implications for the Compensation Hypothesis." *International Organization* 61 (1): 181-216.

Kosmidis, Spyros. 2018. "International Constraints and Electoral Decisions: Does the Room to Maneuver Attenuate Economic Voting?." *American Journal of Political Science.* doi: 10.1111/ajps.12362.

LeDuc, Lawrence, and John Pammett. 2013. "The fate of governing parties in times of economic crisis." *Electoral studies* 32: 494-499.

Lewis-Beck, Michael, and Mary Stegmaier. 2013. "The VP-function revisited: a survey of the literature on vote and popularity functions after over 40 years." *Public Choice* 157 (3-4): 367-385.

Lewis-Beck, Michael, and Marina Lobo. 2017. "The Economic Vote: Ordinary vs. Extraordinary Times." In *The SAGE Handbook of Electoral Behaviour*, edited by Kai Arzheimer, Jocelyn Evans ad Michael Lewis-Beck, 606-629. London: Sage,

Lindblom, Charles. 1966. *The Intelligence of Democracy*. New York: The Free Press.

Lobo, Marina, and Michael Lewis-Beck. 2012. "The Integration Hypothesis: How the European Union Shapes Economic Voting." *Electoral Studies* 31: 522-528.

Margalit, Yotam. 2012. "Lost in Globalization: International Economic Integration and the Sources of Popular Discontent." *International Studies Quarterly* 56 (3): 484–500.

Nannestad, Peter, and Martin Paldam. 1994. "The VP-function: a survey of the literature on vote and popularity functions after 25 years." *Public Choice* 79 (3-4): 213-245.

Park, Brandon. 2019. "Does Globalization Weaken the Economic Voting? It depends!." Working Paper (presented at the 2019 Annual Meeting of Southern Political Science Association, Austin. TX).

Pierson, Paul, ed. 2001. *The new politics of the welfare state*. Oxford: Oxford U.P.

Potrafke, Niklas. 2015. “The Evidence on Globalisation.” *The World Economy* 38 (3): 509–552.

Powell, Bingham, and Guy Whitten. 1993. “A Cross-National Analysis of Economic Voting: Taking Account of the Political Context.” *American Journal of Political Science* 37 (2): 391-414.

Rodrik, Dani. 1997. *Has Globalization Gone Too Far?*. Washington, DC: Institute for International Economics.

Rowe, Kelly. 2015. “Making voice count: Economic voting and the number of parties.” *Party politics* 21 (5): 803–812.

Sen, Sedef, and Colin Barry. 2018. “Economic globalization and the economic policy positions of parties.” *Party politics*. doi: 10.1177/1354068818761179.

Silva, Thiago, and Guy Whitten. 2017. “Clarity of Responsibility and Vote Choice.” In *The SAGE Handbook of Electoral Behaviour*, edited by Kai Arzheimer, Jocelyn Evans ad Michael Lewis-Beck, 80-91. London: Sage,

Stiers, Dieter. 2017. “Beyond the distinction incumbent–opposition: Retrospective voting on the level of political parties.” *Party politics*. doi: 10.1177/1354068817744201.

Vowles, Jack, and Georgios Xezonakis. 2016. “Introduction. Globalization and Domestic Politics.” In *Globalization and Domestic Politics. Parties, Elections, and Public Opinion*, edited by Jack Vowles and Georgios Xezonakis, 1-28. Oxford: Oxford U.P.

Table 1. The baseline model of the economic vote before and during the Great Recession (coefficient and s.e. in parentheses)

VARIABLES	(1) Before (2000-2007)	(2) After (2008-2015)
Lag votes	0.55***	0.73***
	(0.11)	(0.09)
Unemployment	-1.23***	-0.62***
	(0.31)	(0.22)
Trend unemployment	-2.06**	-1.30
	(0.84)	(0.80)
Trend turnout	-0.23*	0.26
	(0.14)	(0.16)
Enep	-1.65**	-1.11
	(0.80)	(0.69)
Coalition	3.96	-0.02
	(2.78)	(2.71)
Constant	29.02***	16.15***
	(5.78)	(5.04)
Observations	83	85
R-squared	0.534	0.542
Number of id	38	38

*** p<0.01, ** p<0.05, * p<0.1

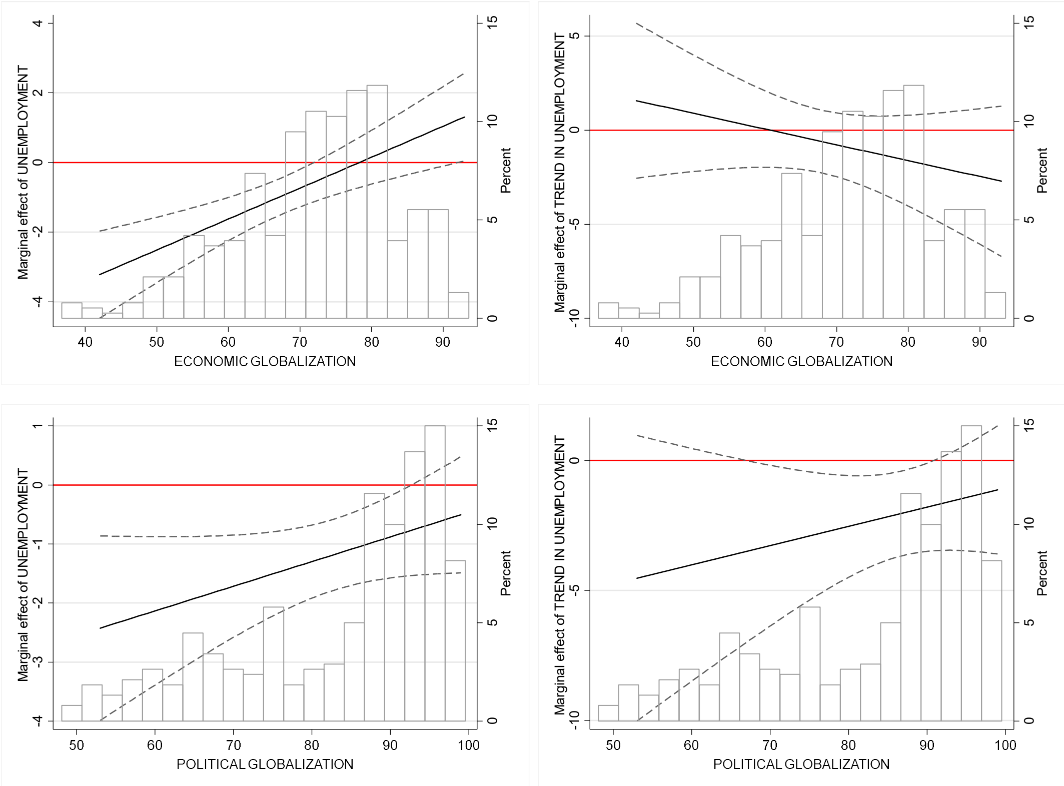

Figure 1. Marginal effects of the unemployment rate and trend at different levels of globalization in the period 2000-2007.

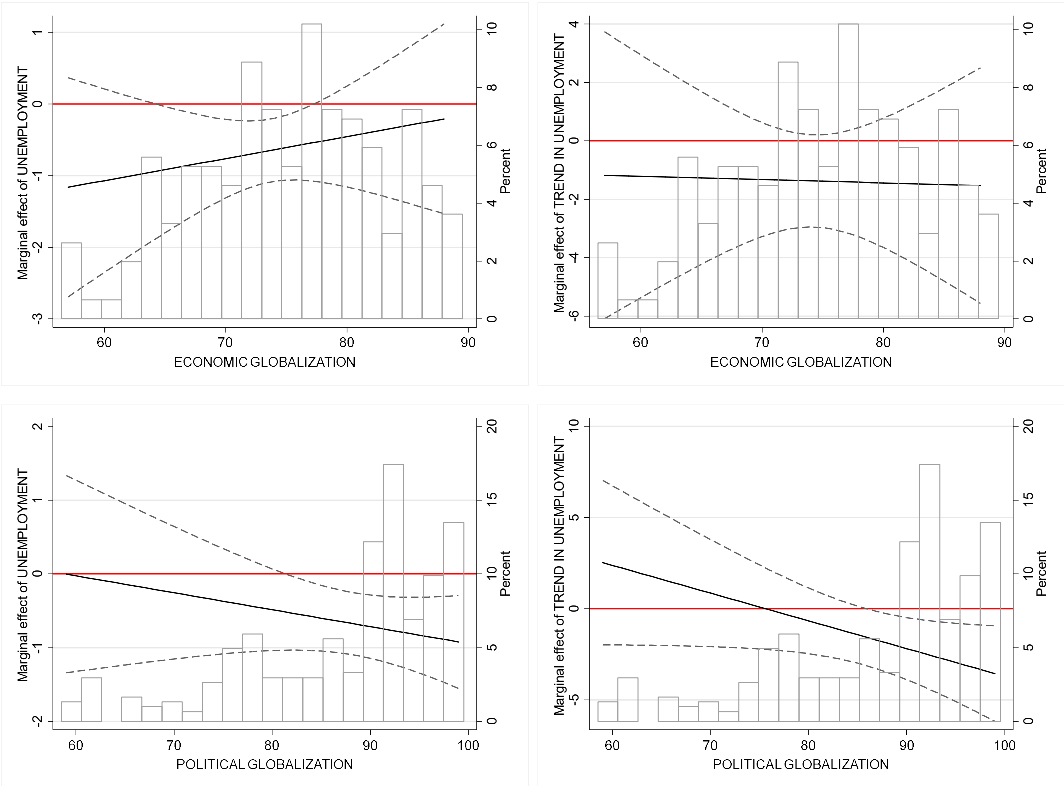

Figure 2. Marginal effects of the unemployment rate and trend at different levels of globalization in the period 2008-2015.

Online Appendix to

Economic vote and globalization before and during the Great Recession

Index

The Dataset

We here present the codebook and some descriptive statistics of the variables included in the dataset. For replication, the dataset is available in the author's personal webpage and uploaded in Harvard dataverse

Table A.1 Codebook

Variable	Description	Source
Votes and Lag votes	Aggregated pct votes of incumbent parties	Parlgov, Wikipedia
Unemployment	Unemployment rate computed as quarterly weighted average of the annual unemployment rates in the year before the election. E.g. if an election took place in May 2010 (i.e. in the second quarter of 2010) we produced a weighted index composed for ¼ of the annual 2010 rate and for ¾ of the annual 2009 rate	Oecd, Eurostat
Trend unemployment	Change of the preceding unemployment index against the previous year. E.g. for an election in May 2010 it is the value of the previously computed index minus a weighted index composed for ¼ of the annual 2009 unemployment rate and for ¾ of the annual 2008 unemployment rate	Oecd, Eurostat
Economic globalization	Kof economic globalization index	KOF – Eth Zürich
Political globalization	Kof political globalization index	KOF – Eth Zürich
Trend turnout	Difference in turnout against the previous election	Parlgov, Wikipedia
Enep	Effective number of electoral parties	Parlgov, Wikipedia
Disproportionality	Gallagher index of disproportionality	Parlgov, Wikipedia
Coalition	Dummy variable for coalition	Parlgov, Wikipedia
Crisis	Dummy variable for the period 2008-2015	
Euro	Dummy variable for Euro-zone countries	

Table A.2 Descriptive statistics of the main variables in the two periods, registered in election periods

	Before (2000-2007)			During (2008-2015)		
Variable	Obs	Mean	Std. Dev.	Obs	Mean	Std. Dev.
Votes (pct)	83	40.82	12.71	85	38.83	12.83
Unemployment	83	7.64	3.95	85	8.52	4.67
Δ unemployment	83	-0.24	1.11	85	0.23	1.27
Economic globalization	83	72.23	10.81	85	74.49	7.73
Social globalization	83	78.15	7.27	85	81.00	5.35
Political globalization	83	85.67	11.82	85	87.62	9.73
Δ turnout	83	-1.40	6.96	85	-1.12	6.14
Enep	83	4.55	1.64	85	4.99	1.79
Disproportionality	83	5.75	4.52	85	7.11	6.04

Regarding the different types of globalization

To substantiate the idea that the Great Recession altered the conditional effects of different types of interconnectedness, we checked the correlation between different globalization indices before and after the Great Recession.

Whereas economic and political globalization were positively and systematically associated before 2008, though the value of the correlation coefficient was extremely low, there is no relationship at all between the two indices after the onset of the crisis, with the coefficient having even a negative sign.

Table A.3 Pairwise correlation between KOF globalization indices before (light yellow) and during (light green) the Great Recession (p. values in parentheses)

	Economic globalization	Political globalization
Economic globalization	1.000	-0.046 (0.425)
Political globalization	0.096 (0.06)	1.000

This trend is confirmed even by computing separate pairwise correlations for each year in the sample.

The complete models of the marginal effects plotted in the article

Table A.4 Conditional regression interacting the state of the economy (level and trend of unemployment) with economic and political globalization. The marginal impacts are plotted in the article in figure 1 and 2.

VARIABLES	(1) Before (2000-2007)	(2) Before (2000-2007)	(3) After (2008-2015)	(4) After (2008-2015)
Lag votes	0.73***	0.60***	0.72***	0.78***
	(0.10)	(0.11)	(0.09)	(0.09)
Unemployment	-6.95***	-4.64**	-2.92	1.35
	(1.56)	(2.06)	(3.31)	(1.97)
Trend unemployment	5.09	-8.44	-0.54	11.50*
	(5.09)	(6.90)	(10.25)	(6.97)
Economic globalization	-0.31*		-0.05	
	(0.19)		(0.33)	
Political globalization		-0.22		0.19
		(0.21)		(0.22)
Unemployment*Eco globalization	0.09***		0.03	
	(0.02)		(0.04)	
Trend unemployment*Eco globalization	-0.08		-0.01	
	(0.07)		(0.14)	
Unemployment*Pol globalization		0.04*		-0.02
		(0.02)		(0.02)
Trend unemployment*Pol globalization		0.07		-0.15*
		(0.08)		(0.08)
Trend turnout	-0.26**	-0.19	0.23	0.22
	(0.13)	(0.14)	(0.16)	(0.16)
Enep	-1.70**	-1.54*	-1.13	-0.60
	(0.70)	(0.85)	(0.71)	(0.71)
Coalition	1.99	3.97	-0.69	-2.46
	(2.34)	(2.82)	(2.82)	(2.84)
Constant	40.54***	44.08**	20.69	-3.28
	(13.06)	(17.91)	(23.42)	(19.81)
Observations	83	83	85	85
R-squared	0.671	0.558	0.554	0.577
Number of id	38	38	38	38

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Robustness

We check the robustness of our results replicating our models using a:

a) different research strategy
b) different measure of the state of the economy
c) different temporal horizon

Different research strategy

In Table A.5 we reproduce the baseline model of the economic vote, paralleling the ones presented in the article in Table 1, and then we plot the marginal effects of unemployment level and trend before and during the crisis in Figure A.1

Table A.5 The baseline model of the economic vote

VARIABLES	(1)
Lag votes	0.65***
	(0.07)
Unemployment	-1.13***
	(0.27)
Trend unemployment	-2.44***
	(0.89)
Crisis	-4.29
	(2.96)
Unemployment*crisis	0.47
	(0.33)
Trend unemployment*crisis	1.23
	(1.17)
Trend turnout	0.01
	(0.11)
Enep	-1.27**
	(0.52)
Coalition	1.62
	(1.90)
Constant	23.78***
	(4.02)
Observations	168
Number of id	38
R-squared	0.529

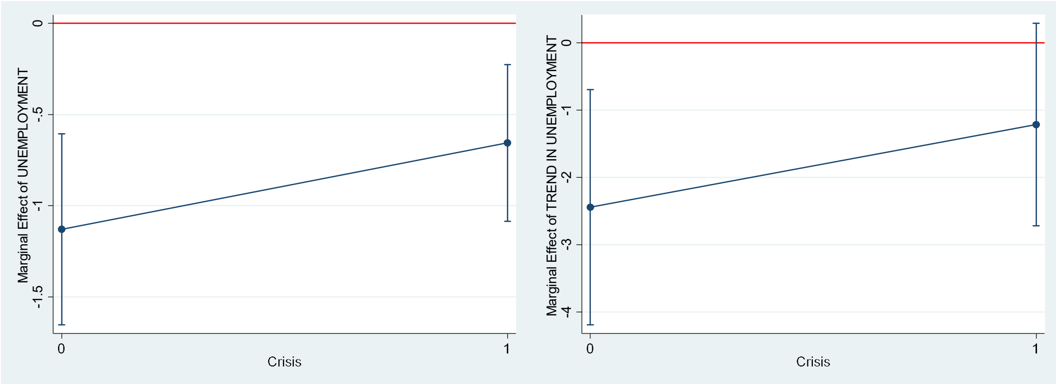

Figure A.1. Marginal effects of the unemployment rate and trend before (0) and during (1) the crisis.

This approach confirms the results of the split sample strategy used in the article. Whereas the unemployment rate impacts on the electoral fates of incumbents both before and during the Great Recession, since the respective confidence intervals are entirely in the negative portion of the graph without overlapping the zero line, the trend variable loses significance in the crisis period.

We then produced a model interacting three elements: the period, unemployment (rate in the left panel and trend in the right one), and level of globalization (economic in figure A.2, and political in figure A.3).

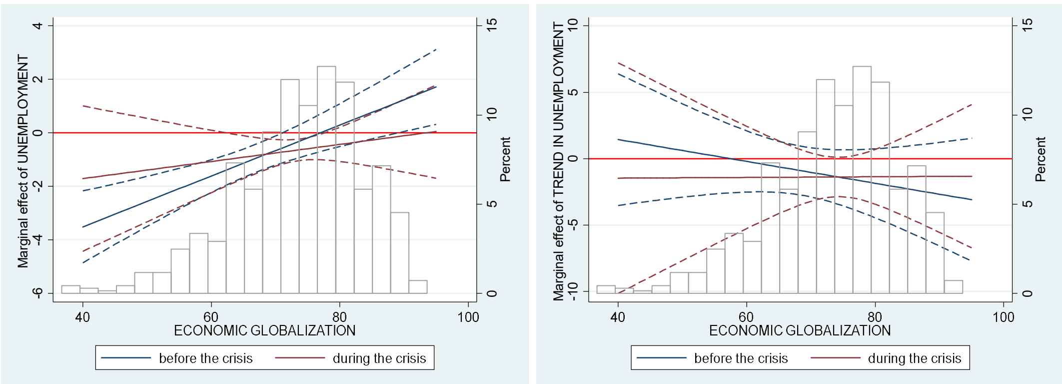

Figure A.2. Interacting crisis, state of economy and economic globalization

The blue line, with its dotted confidence intervals, represents the situation before the crisis, whereas the brown one the Great Recession period.

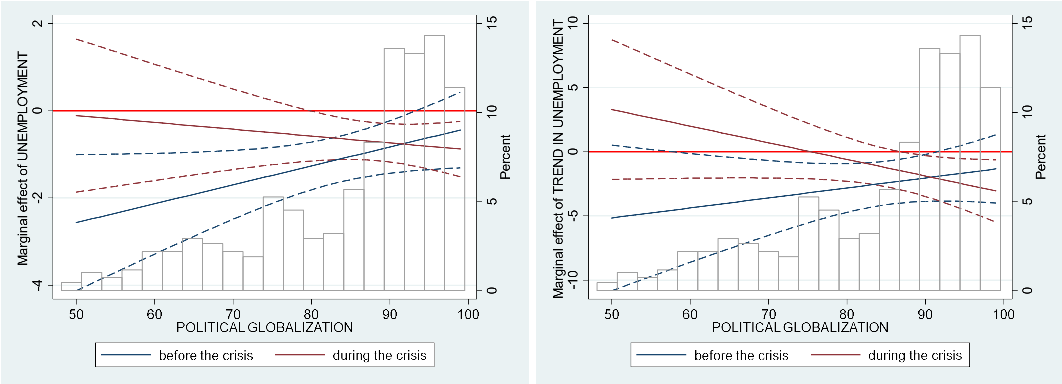

Figure A.2. Interacting crisis, state of economy and political globalization

The results confirm what we have seen in the article following a split-sample strategy. The blue lines of the conditional effect of economic and political globalization follow the same pattern, confirming their soothing capacities of the economic vote before the crisis. Following the brown lines, we appreciate the difference between economic and political globalization during the Great Recession, with the former variable losing its conditional status and the latter reversing its effect. The marginal impact of the trend variable is mostly insignificant, as in the article, save for the more politically globalized countries during the crisis. Even this pattern mirrors what we found using split samples.

Different measure of the state of the economy

We here substitute GDP pc and growth respectively to Unemployment level and its short-term trend.

As shown in Table A.6 the economic vote baseline theory is confirmed even by using these alternative indices, that present the expected significant positive values of their coefficients. The same if we approach the issue through an interaction (Fig. A.3).

Table A.6 Baseline regression using GDP pc and growth

VARIABLES	(1) Before (2000-2007)	(2) After (2008-2015)
Lag votes	0.55***	0.72***
	(0.12)	(0.09)
Gdp per capita	0.37***	0.23***
	(0.11)	(0.08)
Growth Gdp pc	0.49	0.93***
	(0.41)	(0.35)
Trend turnout	-0.25*	0.24
	(0.15)	(0.16)
Enep	-2.18***	-0.98
	(0.83)	(0.69)
Coalition	4.33	-0.43
	(2.97)	(2.71)
Constant	9.29	0.17
	(7.55)	(5.46)
Observations	83	85
R-squared	0.465	0.545
Number of id	38	38

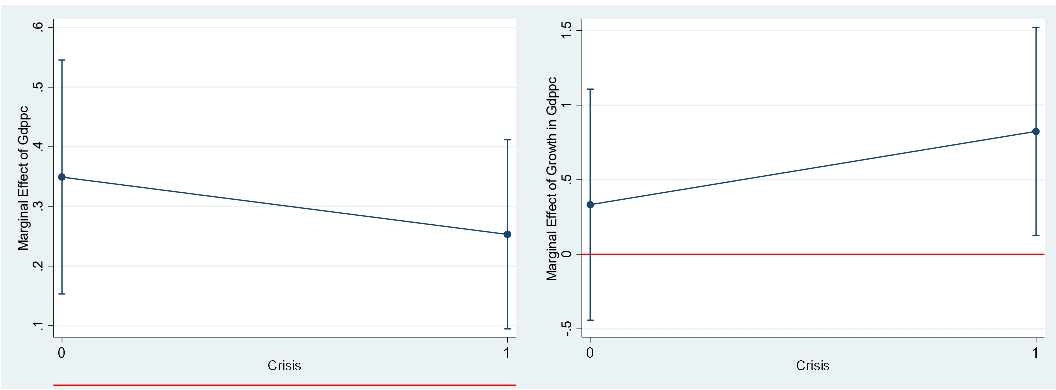

Figure A.3. Interacting crisis and the state of economy measured with Gdp pc and growth

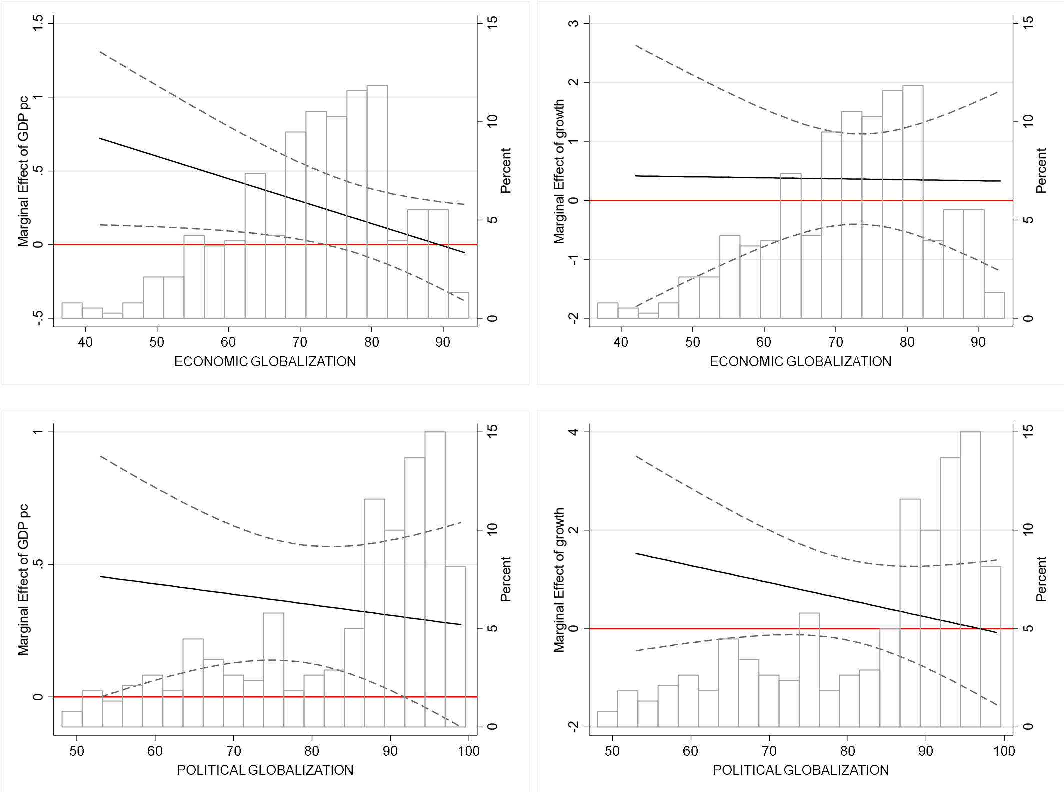

Figure A.4. Marginal effects of Gdp pc and growth at different levels of globalization in the period 2000-2007.

When we interact the Gdp pc levels and growth with globalization (Fig. A.4) we observe the same moderating effect that we ascertained for unemployment rate and trend for the pre-crisis period. At high levels of globalization the effect of the state of the economy on the electoral success of incumbent is cancelled, whereas it is present (and positive as expected) at low levels of globalization.

The moderating effect of economic globalization is clearer than that of political globalization, and, as in the article, the trend variable is mostly insignificant for all levels of the interacting factors.

In Figure A.5 the same models are replicated for the crisis period confirming that political – and not economic - globalization has now a much clearer conditional effect. However, this time, it increases and not reduces the economic vote, exactly as we commented with unemployment in the article.

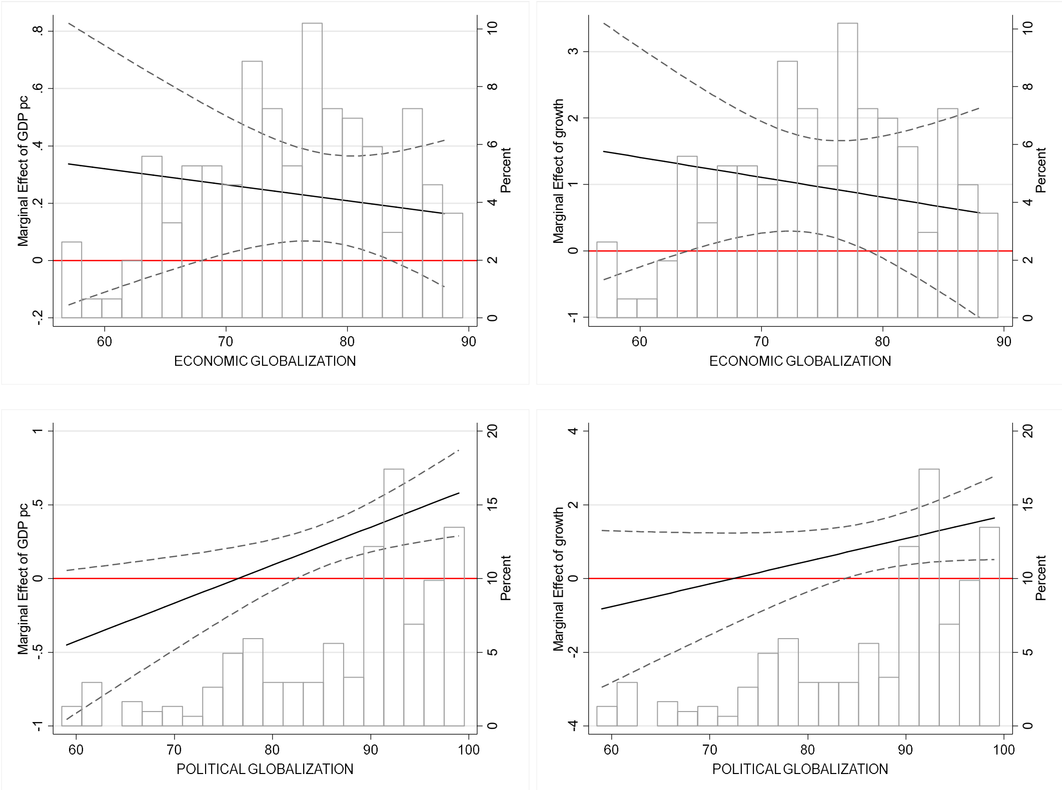

Figure A.5. Marginal effects of Gdp pc and growth at different levels of globalization in the period 2000-2007.

Different temporal horizon

In the article, we used a common strategy for accounting for the different timing of the elections throughout the year, i.e. we used a quarterly weighted average partially relying on what citizens experience of the state of the economy during the election year (if the election takes place after March) and during the previous year.

The simplest alternative is to consider directly the annual unemployment rate of the year prior to the election, and its change against two years before the election for the trend variable. The results of this alternative approach, that implicitly extends the time horizon of the voters by simply lagging all the variables, are presented in table A.7 and figure A.5 using respectively the split-sample and the interaction approach. They perfectly replicate what we have seen in the article with our more fine-grained measure, confirming their robustness.

Table A.6 Baseline regression using a different temporal horizon

VARIABLES	(1) Before (2000-2007)	(2) After (2008-2015)
Lag votes	0.58***	0.71***
	(0.10)	(0.09)
Lag unemployment	-1.19***	-0.56**
	(0.29)	(0.23)
Lag trend unemployment	-2.54***	-0.67
	(0.82)	(0.60)
Trend turnout	-0.23*	0.23
	(0.14)	(0.16)
Enep	-1.48*	-1.28*
	(0.78)	(0.71)
Coalition	3.93	0.55
	(2.70)	(2.78)
Constant	26.79***	16.83***
	(5.70)	(5.13)
Observations	83	85
R-squared	0.552	0.524
Number of id	38	38

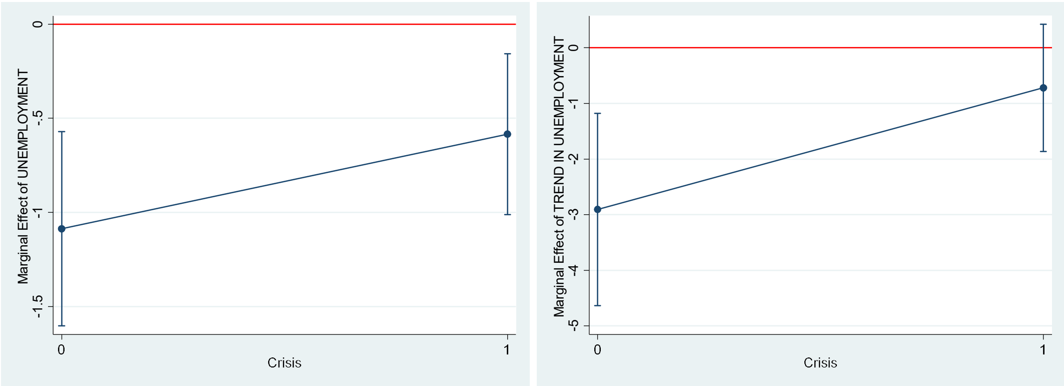

Figure A.6. Marginal effects of the unemployment rate and trend before (0) and during (1) the crisis.

Further examples

In the article, we argued that the multiplicative effect of the economic vote experienced during the Great Recession period worked mostly through political dynamics, since it was the degree of political interconnectedness, more than the level of economic openness, that influenced the punishment effect of incumbents because of the poor state of the economy.

The clearest example of interconnectedness, and of the external constraints to domestic policies that actually magnified instead of moderating the electoral reactions, is the Eurozone of the European Union. By adopting the same currency, the member states that chose the Euro agreed to submitting themselves to a complex system of external constraints (best represented by the Stability and Growth pact), and, at the same time, losing their monetary policy as instrument for respecting those aims. Through a mix of preventive and corrective measures, semi-automatic rules apply to member states in economic difficulty, so that financial support is conditioned by the acceptance of externally imposed reforms.

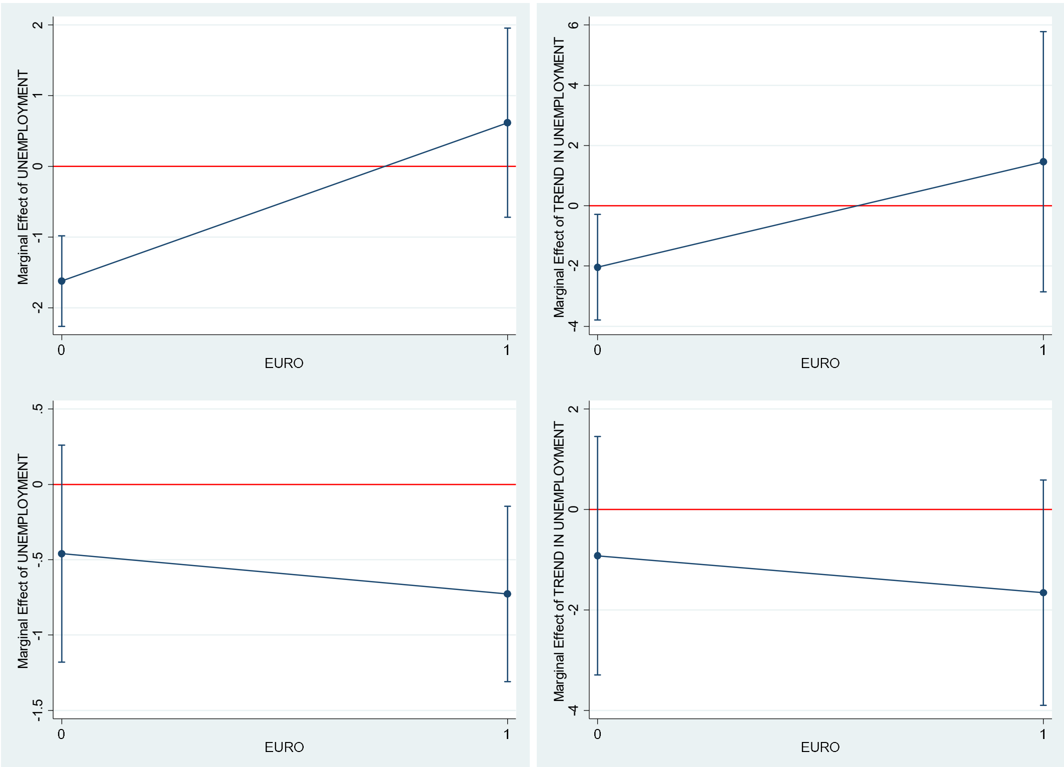

Figure A.7. Marginal effects of the unemployment rate (left) and trend (right), before (top) and during (bottom) the crisis, for countries adopting (1) or not (0) the Euro as common currency.

We thus decided to check this example of potentially problematic interconnectedness by testing directly if that multiplicative effect of the economic vote applied specifically to those EU member states that joined the Eurozone. We simply interacted a dummy variable for that belonging to the usual measures of the state of the economy producing the marginal effects reported in figure A.7.

Interestingly, all other things being equal, the common belonging to the single-currency area blurred the effect of unemployment (and of its trend) on the incumbents' performance in the ballot before the crisis. It is the most evident example of how that institutional embeddedness moderated the economic vote in normal times.

Yet, coherently with the multiplicative effects of political globalization illustrated in the article, the situation completely reversed during the Great Recession, when incumbents whose actions where externally constrained by supra-national rules like the ones governing the Eurozone, suffered more than the others from the effects of the poor state of the economy.

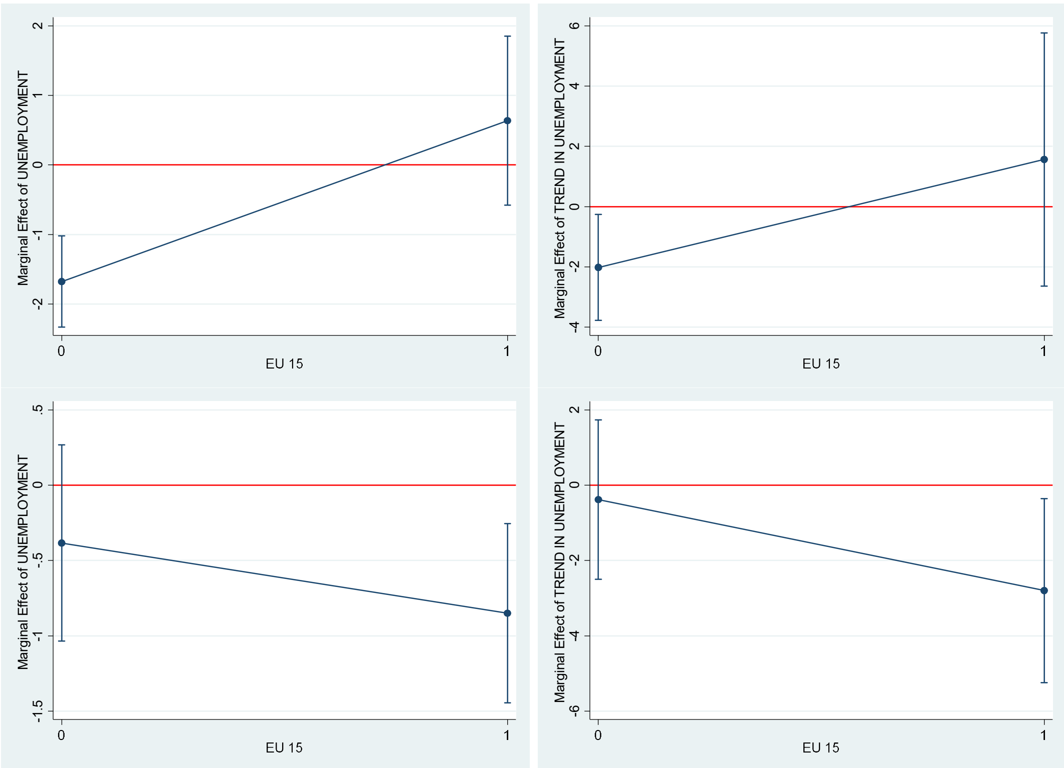

Figure A.8. Marginal effects of the unemployment rate (left) and trend (right), before (top) and during (bottom) the crisis, for EU 15 countries (1) or not (0).

A system of external conditionalities thus makes the electoral answer to the state of the economy more rigid. Yet even a close system of institutional relationships may have similar results, as it is demonstrating by checking the same models interacted with a dummy variable representing the fifteen "historical" members of the European Union. To be true, this group of countries largely overlaps with the Eurozone area. However, 3 of the historical member states have their own currency, and 7 of the countries adopting the Euro are not EU 15 member states. Thus, the overlap is partial, and there are ten countries belonging only to one of the two aggregations.

Yet, as it is shown in Table A.8, the results are similar to those of table A.7 and generalized in the article. They confirm once again that political and institutional embeddedness used to moderate the economic vote before the recession, but did exactly the opposite in the crisis years.