

Economic vote and globalization before and during the Great Recession

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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.

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Introduction

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

This theory 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 the literature. On the one hand, we may presume that if the economy has a substantial impact on electoral behaviour during normal times, it should have an even stronger one during periods of severe and persistent crisis. Put simply, the harsher the economic situation, the greater the punishment. Yet, on the other hand, citizens may have moderated the negative judgements 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 extraordinary circumstances (Lewis-Beck and Lobo 2017). Several authors demonstrated the electoral downsides of being in government during the Great Recession

(Bermeo and Bartels 2014; Giuliani and Massari 2018; 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. They range, to cite just a few of them, from the actual economic quantities triggering the punishment, through the differing impacts of the absolute levels versus short-term dynamics of those quantities, to the benchmarks used by citizens in evaluating their actual domestic economic situation.

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 at the ballot box. Globalization is normally supposed to moderate the economic vote (Hellwig 2008; Hellwig and Samuels 2007; Kayser 2007), although scholars often differ 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.

On the one hand, the global character of the crisis is the foremost reason why we should expect a moderation of the economic vote. Objectively, the causes of the Great Recession are beyond the reach of domestic policy-makers, which cannot be held responsible for that state of affairs. The more a country is economically open, the more it is exposed to forces beyond its control. And the more it is politically integrated, the less the protection against those forces depends exclusively on national governments.

On the other hand, élites are judged even for the risks that they have contributed to developing, and citizens are not necessarily rational and farsighted in recognizing the partition of the actual responsibilities (Achen and Bartels 2016). Since the more economically interconnected systems are

those that imported the crisis more swiftly, and the external constraints imposed on the most politically integrated countries may exacerbate voters' reactions rather than moderating them, globalization could actually increase, and not decrease, retrospective economic voting.

This puzzling relationship constitutes the main reason for exploring the effects of globalization on the economic vote before and during the Great Recession. To anticipate some results, although we found confirmation of the basic retrospective mechanism of the economic vote, 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, focusing more specifically on the expected conditional impact of globalization, considering how the Great Recession may have altered those mechanisms, and developing our working hypotheses. Next, we present our dataset, which comprised 168 legislative elections held in 38 democratic countries in the period 2000-2015, and we explain how 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.¹ The last section concludes by highlighting our contribution to the understanding of the

¹ Following the suggestion of one of the referees, we tested alternative changing points in the period surrounding that year. The underlying idea is that countries did not experience the height of the crisis at the same time.

These alternative models seem to confirm the years 2008 and 2009 as most plausible turning points, and

mechanisms that govern retrospective economic voting, and proposing some further avenues for research on 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.

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. The mechanisms on which it relies do not require the diverse political actors to possess any sophisticated competences, or particular coordination capacities. The straightforwardness of the

eventually we kept the original 2008 choice to grant maximum comparability with other works in the field (e.g. Dassonneville and Lewis-Beck 2014).

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 conditioning role of globalization is one of those more delicate mechanisms, and it is of primary importance because of the global nature 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 four main mechanisms contributing to that effect.

² Some authors have expressed scepticism regarding this mainstream position. Dassonneville and Lewis-Beck (2018) 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). More radically, Fisher (2016), using survey data from the Comparative Study of Electoral Systems project, advanced the opposite idea that “performance voting increases with globalization (and...) was also stronger after the 2008 financial crisis than it was beforehand” (151). His models acknowledge both an unconditional decrease in government support after the Great Recession, and a positive interaction of performance voting with measures of economic globalization such as the relative level of trade and foreign direct investments. Fisher’s work, based on micro-level subjective data, well complements our macro-level approach using objective indicators, although he only considers the conditional effect of economic, and not political, globalization.

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 most evident example in this regard. By reducing the room for 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 leanings will all lack resources to compensate for the risks of higher integration levels. According to 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 favour 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 also be due to 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 in terms of 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, the latter 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 may empirically coexist, in the sense that the elements on which they rely tend to co-vary, it is hard to believe that a disruptive 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 reinvigorated domestic political tensions more than absorbing them.

A good example is provided by the European Union, the most developed case of political and economic interconnectedness. Its stability and growth pact was 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 main 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 entire continent, spread fears even to countries whose economic solidity was not in question. Under such 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 judgement regarding the failure to defend the national interest against the external sources of instability.

More generally, also the literature on the “losers” of globalization contributes to 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 protection. According to the compensation theory, economic insecurity is typically tackled by welfare expansion (Cameron 1978; Katzenstein 1985; Rodrick 1998). Since social-democratic mainstream parties are traditionally recognized as those more ideologically prone to this type of intervention, they should be favoured in elections under such circumstances. But when this type

of international competition spread to more sectors, when the crisis hit the economy of the mostly developed countries to an extent that exponentially increased needs while at the same time reducing 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 above-described Rodrick's paradox was not resolved by "striking a balance between openness and domestic needs" (77), as its proponent suggested more than twenty years ago, but by 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 in the hope of more protection, became a rationale for casting more votes in favour of radical, non-incumbent parties advocating economic protectionism and rejecting any kind of supra-national coordination.

Consequently, countries more exposed to this trade competition, and more bound to international agreements, should experience those political consequences more than do more isolated and less interconnected countries. Also in this case, the underlying mechanism is both economic and political. Trade exposure is often complemented by international institutional agreements that prevent governments from unilaterally protecting and privileging domestic interests. In tough economic

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. In numerous countries, most 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 governments.

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, strengthen 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, or at least a weakening, of the traditional moderating effects of the different types of openness and interconnectedness that used to work before the Great Recession. To briefly reprise the four mechanisms previously described for normal times, after the onset of the crisis both the reduced margins for manoeuvre and the lack of clarity for policy-making responsibilities were no longer considered valid excuses for poor economic performance. 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 on the choices of domestic decision-makers. In regard to the latter, Armingeon and Guthmann (2014) provide evidence that externally imposed measures 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 opened the way for new political actors, who refused to converge on the mainstream equilibrium between openness and social support, but rather used 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 certainly 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 no longer observe that conditioning effect on performance voting, and possibly even the opposite, with globalized systems being more exposed to the political consequences of their state of the economy compared to more autarchic and isolated countries. As in the previous literature, we expect that both economic and political mechanisms drive that effect.

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 corresponded 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), which have been uninterruptedly democratic since the year 2000.⁴ In spite of those shared belongings, the economic conditions of those countries

⁴ 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,

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 that of Switzerland, but achieved 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.⁵ In those ballots, some government coalitions lost up to 48% of their votes, while others even improved their popular support against the previous election.

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 ran the same models also using the full dataset and interacting our variables with the crisis without finding any difference. The results obtained following this alternative strategy

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 online appendix.

⁵ 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. We also excluded the first 2000 Croatian election, which had no previous democratic incumbent.

are reported in the online appendix. Because of the time-series cross-section nature of our data, we used panel regression with random-effects. A Breusch-Pagan Lagrange multiplier test confirmed 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.

The equation of our model was as follows:

$$Y_{it} = \mu + \beta_1 Y_{it-1} + \beta_2 E_{it-1}[\beta_4 G_{it}] + \gamma W_{it} + u_i + \varepsilon_{it}$$

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, in certain models interacted with globalization G_{it} , plus a vector of control variables W_{it} , and country/observation specific error terms.

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, and also evade the awkward issue of the relative gains and losses of major and minor partners of the coalition (but see Giuliani and Massari 2017; Stiers 2018).

Another controversial issue regards measurement of the state of the economy. We chose to employ the unemployment rate, instead of other macroeconomic indices, 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. The rate of people looking for a job has thus been constantly considered able to shift retrospective evaluations.

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.

Furthermore, in the online appendix we provide empirical evidence demonstrating that growth and inflation do not systematically affect electoral prospects in both periods considered, and their respective models show a worse fit compared to unemployment. 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. Nonetheless, following common practice in the literature, we decide to include growth as control variable in all our models.

Having chosen the macroeconomic quantity was not the end of the issue, however, since we could include either the unemployment rate or its change against some previous period, typically the previous year. Scholars have successfully used both indices in their empirical analyses (Lewis-Beck and Stegmaier 2013). On the one hand, the trend variable accounts for the *deterioration* of the economy, thus mirroring the typical question used in the literature adopting subjective survey data, which asks if the economic situation has improved or deteriorated compared to the previous 12 months. On the other, the ratio of jobseekers is a more direct measure of the *state* of the economy, and more consistently reflects the actual distress of the population due to the economic situation.

We prefer to adopt the latter index for three main reasons. Firstly, whereas in normal times the trend variable probably correctly reflects the perceptions that drive the retrospective judgement, it would be excessive to assume that marginal decreases in the amount of jobseekers should reward the incumbent even in situations of double digit unemployment. Conversely, the actual level of unemployment says something about the state of the economy in both normal and exceptional times. It is a measure that is able to traverse different contexts. Secondly, short-term fluctuations do not reflect one important feature of the Great Recession, i.e. its persisting character, that made the hardship so deep and full of consequences. Thirdly, as we report in the online appendix, models including the level of unemployment systematically show a better fit compared to those with its short-term change, in terms of both explained variance and Akaike information criteria. Furthermore, probably because of the first two reasons, the coefficient for the latter variable is even non-significant during the crisis period.

Our main covariate of interest is thus the level of unemployment. 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. This is now common practice in order

better to reflect the timing of an election whenever more precise data are not available (Bélangier and Gelineau 2010; Dassonneville and Lewis-Beck 2018).

Globalization is the second central variable of this study. It has been often operationalized in the literature through measures of trade openness and capital flows (Vowles and Xezonakis 2016). Yet we prefer to use aggregate measures such as the different KOF indices provided by the Swiss Economic Institute of ETH Zürich, mostly because they are able to capture “the multifaceted aspects of globalisation” (Potrafke 2015: 530). Additionally, by adopting the KOF economic and political sub-indices of globalization we can mirror the diverse conditional mechanisms identified by different scholars, and which were summarized in the previous section. While the economic subcomponent is based on the classic distinction between trade and financial globalisation, thus echoing the mainstream operationalisation in this field of study, the political subcomponent reflects the web of institutional relationships in which a country is embedded. These range from the number of (multilateral and bilateral) treaties signed, through membership of international organizations, to the presence of foreign embassies and international NGOs.⁶

Our models control for a well-known set of confounding factors, starting from the growth of GDP per capita that we have already justified. Coalition governments blur the responsibilities (Silva and Whitten 2017), and their inclusion as a dummy variable helps in controlling for size effects

⁶ The KOF subcomponents are not significant for what they directly measure, but because they are good proxies for those multifaceted phenomena (Gygli, Haelg and Sturm 2018). The economic and globalization indices address different issues: across the years, the correlation between the two components is weak if not insignificant, especially during the crisis period. In the online appendix, we briefly report some further empirical data in this regard.

compared to single-party executives. The fragmentation of the party system affects the availability of feasible alternatives to incumbents (Rowe 2015), and we have operationalized it with Laakso and Taagepera's effective number of parties. The negative evaluation of the economy can induce either higher or lower electoral participation, depending whether dissatisfied citizens mobilize to punish the incumbents (Cebula 2017) or, more radically, desert the ballot box (Radcliff 1994). The political alienation fostered by the Great Recession could have further complicated the relationship between economy and turnout (Giuliani and Massari 2018), so that it is necessary to control for the change in electoral participation compared to the previous election.

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. Incidentally, the explained variance in the crisis period is higher than before the crunch, 54.5% against 49%, with the same model better representing citizens' electoral behaviours.

*** Table 1 approximately here

Comparing the magnitude of the coefficients for unemployment in the two periods, one might gain 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 may 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.

Regarding the control variables, growth has the correct positive sign in both periods, although it reaches a weak statistical significance only in the second one. Party fragmentation has the expected negative coefficient, while the coalition dummy is never significant, confirming the doubts recently expressed by Dassonneville and Lewis-Beck (2017) regarding the clarity issue. Interestingly, the coefficient for turnout trend changes sign between the two periods, somehow confirming its uncertain status in the literature, and its varying role between normal and exceptional, with a poor economy mobilizing against the incumbents in normal times, and fuelling abstentions during 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 models are presented in table A.4 in the online appendix. However, 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 in 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, together with their 95% confidence intervals and histograms representing the distribution of the observations, separately for the period before and during the crisis, respectively in the left and right panels. Moreover, the first row

represents the conditional effect of economic globalization, whereas the second one that of political globalization.

*** Fig 1 approximately here

From the left graphs of 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 seem to imply a sharper impact of that type of openness. More in detail, 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 1 to 4 percentage points in the ballots (considering the 95% confidence intervals). At increasing levels of globalization, the punishment diminished, until it was no longer significantly different from the null effect.

There are three minor differences between economic and political intermediation. Firstly, the slope of the first marginal effect is steeper, and, in fact, the corresponding coefficient of the interaction term for economic openness is more than two times bigger than that for political globalization. Secondly, a comparatively larger portion of observations fall within 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 confidence intervals are smaller in the first graph compared to the second one, implying a better capacity to represent the actual relationship among economy, globalization and voting behaviour: a finding that also the higher explained variance of the first model confirms for the pre-crisis period.

What happens when we move from the pre-crisis to the Great Recession period? In the right panels of figure 1 the marginal conditional effects of unemployment are entirely different from those of 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.

Even more interestingly, the political globalization index shows a much clearer conditional impact, but in the opposite direction. The tighter the political interconnectedness, the more intense the punishment effect of the state of the economy: the line of the marginal effects of unemployment in the lower right-hand graph has 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 gained during the election. To this evident multiplicative effect corresponds even an improved fit of the whole model, which now reaches the same explained variance as the one based on the economic 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 did not alter 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 preclude changing 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 negatively on the electoral prospects of incumbents.

The more politically and economically integrated countries of the EU, with the shared critics to the common austerity policies, are the best examples of these reversed effects, driving some of the overall effects presented in the article. The recent literature exploring the changes in party competition experienced during the crisis years shows how the success of nationalist and Eurosceptic 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 boon for incumbents (Jensen, Quinn and Weymouth 2016).

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

Our second contribution consists in separately testing different types of globalization. This procedure 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 complements recent 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 depressed state of the economy, and are more effective in open systems. A similar argument has been advanced in regard to the multiplicative effects on 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.

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Table 1. The baseline model of the economic vote before and during the Great Recession

	Before (2000-2007)	After (2008-2015)
Lag votes	0.52*** (0.11)	0.76*** (0.09)
Unemployment	-1.38*** (0.31)	-0.65*** (0.21)
Growth Gdp pc	0.36 (0.38)	0.63* (0.35)
Trend turnout	-0.27* (0.14)	0.27* (0.16)
Enep	-1.54* (0.82)	-1.10 (0.68)
Coalition	4.64 (2.85)	-0.23 (2.70)
Constant	29.20*** (6.57)	13.26** (5.42)
N	83	85
R-squared	0.490	0.545
Countries	38	38

Panel regressions with random effects (coefficients with s.e. in parentheses)

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

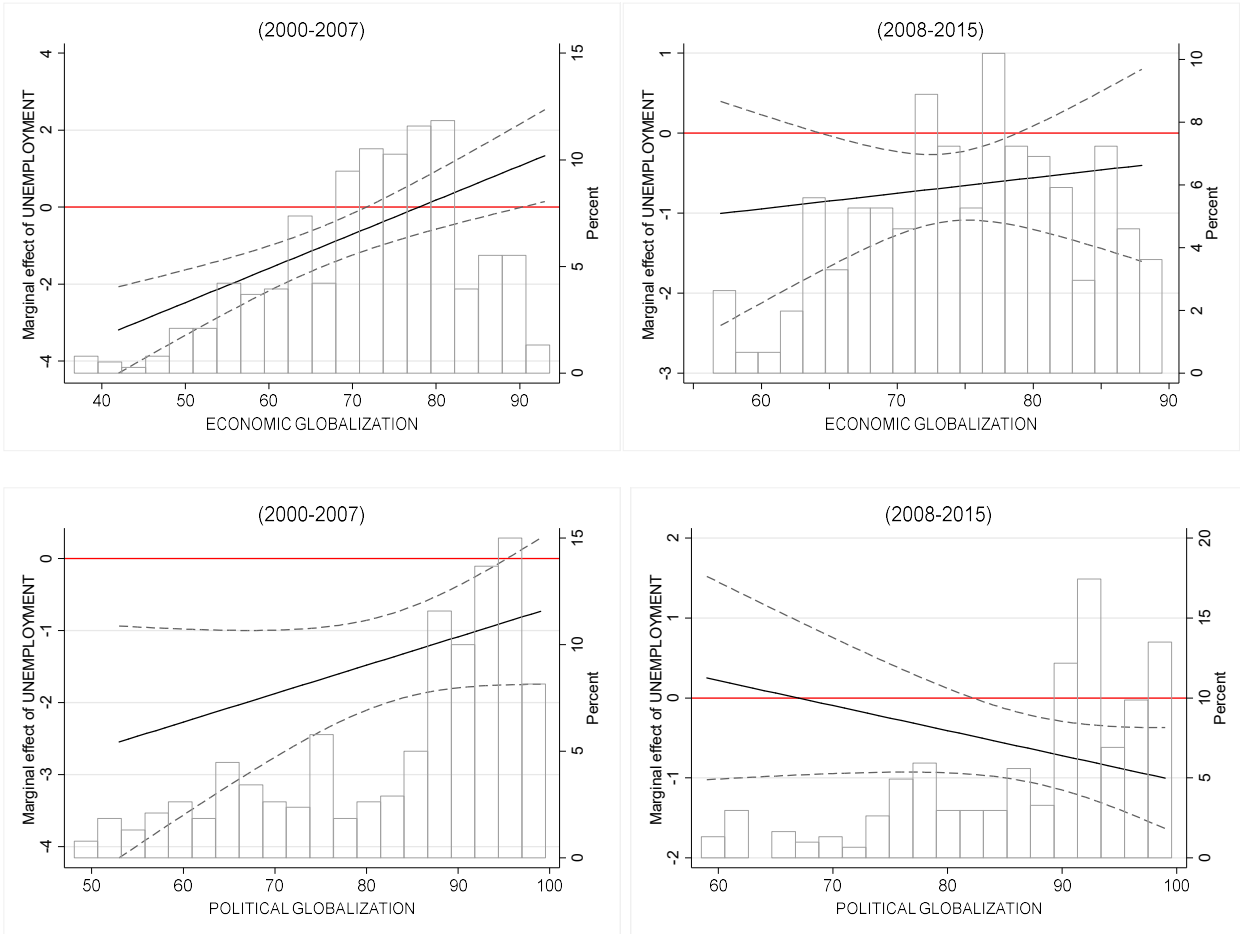


Figure 1. Marginal effects of unemployment rate at different levels of economic and political globalization in the period 2000-2007 (left) and 2008-2015 (right).

Online Appendix to
Economic vote and globalization before and during the Great Recession

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The Dataset

We here present the codebook and some descriptive statistics of the variables included in the dataset. For replication, the dataset is available on the author's personal webpage and uploaded in Harvard dataverse at <https://doi.org/10.7910/DVN/2JQKLY>

Table A.1 Codebook of the main variables used in the article and/or in this appendix

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 rate 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 $\frac{1}{4}$ of the annual 2010 rate and for $\frac{3}{4}$ of the annual 2009 rate	Oecd, Eurostat
GDP per capita Inflation	As with the unemployment index, we computed quarterly weighted averages of these two macroeconomic quantities, which have been used as control variables and/or for robustness checks	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	
EU 15	Dummy variable for the “older” EU member states (until the 1995 enlargement included)	

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

Variable	Before (2000-2007)			During (2008-2015)		
	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
Growth pc	83	5.62	2.83	85	2.42	2.93
Inflation	83	3.52	5.17	85	2.14	2.16
Economic globalization	83	72.23	10.81	85	74.49	7.73
Political globalization	83	85.67	11.82	85	87.62	9.73
Δ turnout	83	-1.40	6.96	85	-1.12	6.14
Ene _p	83	4.55	1.64	85	4.99	1.79

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, although 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 level of unemployment with economic and political globalization. The marginal impacts are plotted in the article in figure 1

	(1) Before (2000-2007)	(2) After (2008-2015)	(3) Before (2000-2007)	(4) After (2008-2015)
Lag votes	0.70*** (0.09)	0.76*** (0.09)	0.54*** (0.11)	0.78*** (0.09)
Unemployment	-6.91*** (1.40)	-2.11 (3.00)	-4.64** (2.14)	2.09 (1.88)
Economic globalization	-0.31* (0.18)	0.05 (0.32)		
Political globalization			-0.19 (0.22)	0.28 (0.22)
Growth Gdp pc	0.17 (0.33)	0.68* (0.35)	0.38 (0.39)	0.69* (0.36)
Trend turnout	-0.27** (0.13)	0.26 (0.16)	-0.24* (0.14)	0.27* (0.16)
Enep	-1.62** (0.69)	-1.14* (0.69)	-1.23 (0.84)	-0.99 (0.69)
Coalition	1.84 (2.35)	-0.94 (2.75)	4.75* (2.88)	-1.36 (2.81)
Unemployment # Eco globalization	0.09*** (0.02)	0.02 (0.04)		
Unemployment # Pol globalization			0.04 (0.03)	-0.03 (0.02)
Constant	40.39*** (12.85)	10.39 (22.62)	41.74** (19.39)	-12.68 (20.22)
N	83	85	83	85
R-squared	0.661	0.558	0.512	0.558
Countries	38	38	38	38

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

Robustness

We checked the robustness of our results replicating our models using:

- a) different research strategy
- b) different macroeconomic indices measuring the state of the economy
- c) different measures for unemployment (level vs trend)

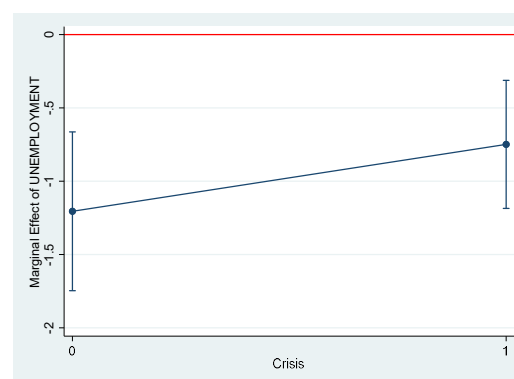
Different research strategy

Instead of a split sample research design, we here use an interactive strategy. In Table A.5 we reproduce the baseline model of the economic vote conditioned by the crisis, paralleling the models presented in Table 1 in the article. Next, we plot the marginal effects of unemployment before and during the crisis.

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)
N	168
R-squared	0.529
Countries	38

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



This approach confirms the results of the split sample strategy used in the article. 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.

Table A.6 Interacting unemployment, globalization and crisis

	(1)	(2)
Lag votes	0.70*** (0.07)	0.610*** (0.0713)
Unemployment	-7.09*** (1.46)	-4.405** (1.928)
Crisis	-29.77 (24.16)	-36.83 (24.05)
Unemployment # Crisis	4.90 (3.09)	5.347** (2.565)
Economic globalization	-0.36** (0.18)	
Political globalization		-0.196 (0.200)
Unemployment # Eco globalization	0.09*** (0.02)	
Eco globalization # Crisis	0.42 (0.33)	
Unemp # Eco glob # Crisis	-0.07* (0.04)	
Unemployment # Pol globalization		0.0384* (0.0229)
Pol globalization # Crisis		0.391 (0.275)
Unemp # Pol glob # Crisis		-0.0578* (0.0297)
wpcgrowth	0.38 (0.24)	0.443* (0.263)
deltaturnout	-0.00 (0.10)	-0.0310 (0.104)
enep	-1.31*** (0.49)	-1.325** (0.552)
coalition	0.56 (1.80)	2.240 (2.024)
Constant	42.46*** (12.99)	40.39** (17.43)
N	168	168
R-squared	0.591	0.508
Countries	38	38

We then produced a model interacting three elements: the period, unemployment, and level of globalization (Tab A.6), and eventually plotted the marginal effects of unemployment representing that triple interaction in Figure A.2. The blue line, with its dotted confidence intervals, represents the situation before the crisis, whereas the brown one represents the Great Recession period.

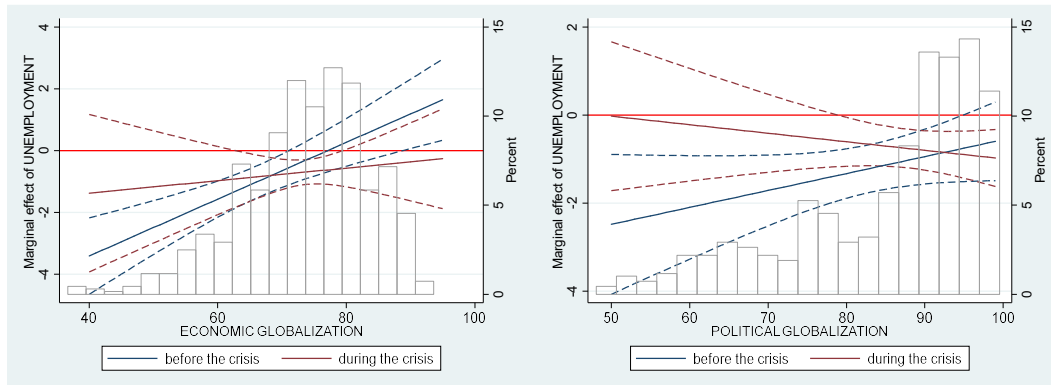


Figure A.2. Interacting crisis, state of economy and different typed of globalization

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 on 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.

Different macroeconomic indices measuring the state of the economy

In this section we test in parallel models employing unemployment, growth and inflation as potential drivers of the economic vote.

As shown in tables A.7 and A.8, the only economic quantity systematically eliciting a punishment/reward effect is unemployment, with the correct negative sign. Also growth presents the expected positive coefficient, yet it is only weakly significant in one of the two periods under consideration. Finally, inflation is the worst performing quantity, and, after the onset of the crisis, its coefficient is oddly positive, probably for the reasons put forward in the article (deflation was a major issue in those years, and not inflation).

Table A.7 The impact of unemployment, growth and inflation on the support for incumbents before the Great Recession

	Before (2000-2007)	Before (2000-2007)	Before (2000-2007)
Lag votes	0.47*** (0.11)	0.55*** (0.12)	0.56*** (0.12)
Unemployment	-1.37*** (0.31)		
Growth Gdp pc		0.17 (0.43)	
Inflation			-0.25 (0.24)
Trend turnout	-0.27* (0.14)	-0.19 (0.16)	-0.22 (0.16)
Enep	-1.53* (0.82)	-2.31*** (0.89)	-2.33*** (0.88)
Coalition	5.11* (2.85)	4.91 (3.16)	5.18* (3.14)
Constant	32.69*** (5.84)	21.56*** (7.05)	22.99*** (6.12)
N	83	83	83
R-squared	0.489	0.359	0.378
AIC	609.9706	627.6892	627.2465
BIC	629.3213	647.0399	646.5972
Countries	38	38	38

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

Note: The R-squared is the overall value of a panel regression with random effects (that does not allow Akaike information criteria). AIC BIC statistics have been estimated from a maximum-likelihood regression that produces substantially similar coefficient (but does not estimate the explained variance)

In addition, the better fit of the models containing unemployment, compared to those employing growth or inflation, further suggests preferring it to the other macroeconomic indices. In both periods, the explained variance and the Akaike information criteria (obtained in a parallel maximum likelihood panel regression, see note to table A.7) clearly indicate the use of unemployment to test our hypotheses.

Table A.8 The impact of unemployment, growth and inflation on the support for incumbents after the Great Recession

	After (2008-2015)	After (2008-2015)	After (2008-2015)
Lag votes	0.72*** (0.09)	0.77*** (0.09)	0.74*** (0.09)
Unemployment	-0.69*** (0.22)		
Growth Gdp pc		0.71* (0.37)	
Inflation			0.31 (0.49)
Trend turnout	0.25 (0.16)	0.26 (0.16)	0.24 (0.17)
Enep	-1.25* (0.70)	-1.39* (0.74)	-1.54** (0.75)
Coalition	0.43 (2.74)	0.10 (2.91)	0.84 (2.95)
Constant	17.51*** (5.07)	8.13 (5.28)	11.02** (5.24)
N	85	85	85
R-squared	0.526	0.491	0.467
AIC	624.56	630.6155	636.3101
BIC	641.6585	647.7141	655.8513
Countries	38	38	38

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1
See note Table A.7 for computation of R-squared and Akaike information criteria

Different measures for unemployment (level vs trend)

One final test of robustness concerns the preference for using the absolute rate of unemployment versus its one-year trend. In the article we already gave some analytical reasons in favour of the first measure, and yet it is necessary to compare them empirically.

In table A.9 we start by comparing the baseline model. To favour the comparison we here report again the models presented in Table 1 in the article, in order to contrast the coefficient of the two covariates of interest, and the fit of the respective models.

Table A.9 The impact of unemployment, growth and inflation on the support for incumbents before the Great Recession

	Before (2000-2007)		After (2008-2015)	
Lag votes	0.52*** (0.11)	0.61*** (0.12)	0.76*** (0.09)	0.77*** (0.10)
Level unemployment	-1.38*** (0.31)		-0.65*** (0.21)	
Trend unemployment		-3.44*** (1.09)		-1.15 (1.09)
Growth Gdp pc	0.36 (0.38)	-0.69 (0.47)	0.63* (0.35)	0.38 (0.49)
Trend turnout	-0.27* (0.14)	-0.13 (0.15)	0.27* (0.16)	0.26 (0.17)
Enep	-1.54* (0.82)	-2.23*** (0.83)	-1.10 (0.68)	-1.29* (0.73)
Coalition	4.64 (2.85)	3.85 (2.97)	-0.23 (2.70)	0.01 (2.87)
Constant	29.20*** (6.57)	23.36*** (6.64)	13.26** (5.42)	8.99* (5.46)
N	83	83	85	85
R-squared	0.490	0.448	0.545	0.498
AIC	610.787	620.249	625.057	631.360
BIC	632.557	642.019	647.041	650.901
Countries	38	38	38	38

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1
See note Table A.7 for computation of R-squared and Akaike information criteria

Whereas, in the model before the Great Recession, the trend variable reaches the same high statistical significance as the level index, the same does not happen in the subsequent years, confirming that the depth and persistence of the crisis changed the drivers of retrospective voting. Small upturns in such bad circumstances were insufficient to change the negative judgement on the incumbents, or their understanding and consideration was cognitively too demanding for retrospective citizens in such an extraordinary period.

Furthermore, also the fit statistics (higher R-squared, and lower AIC and BIC) confirmed that the absolute level of unemployment should be preferred against its short trend.

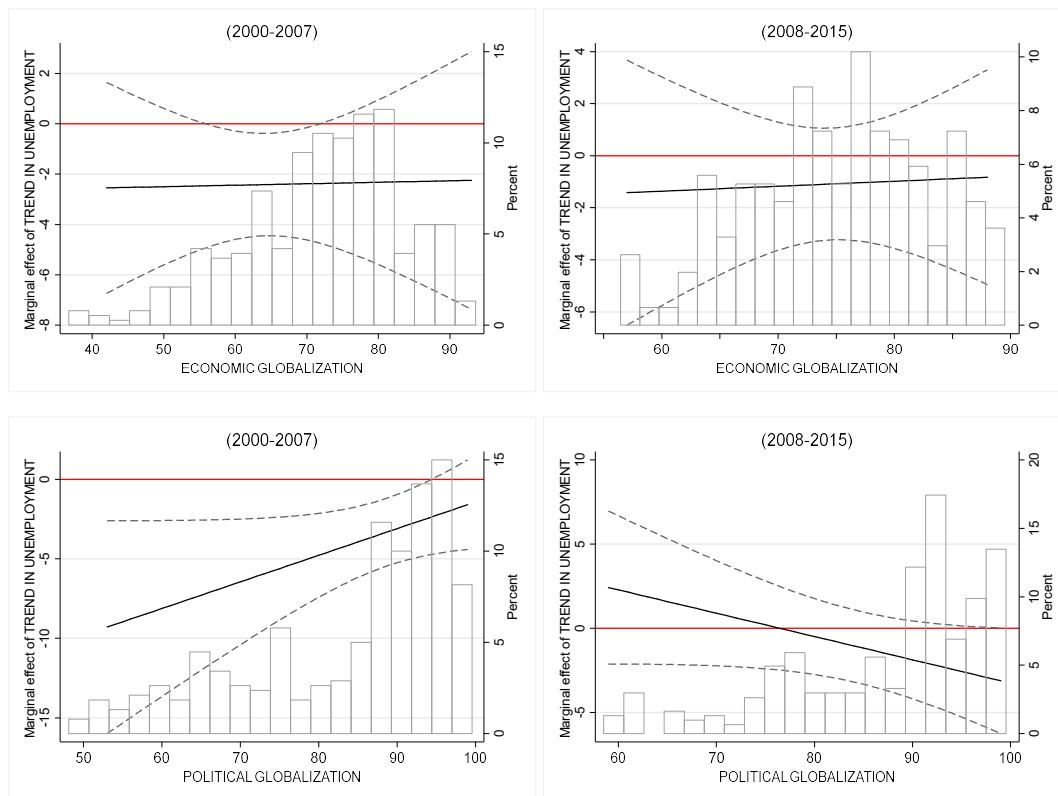


Figure A.3. Marginal effects of trend in unemployment at different levels of economic and political globalization in the two periods.

The same could be said by considering the interaction with economic and political globalization (see figure A.3), in which only one graph out of four (the one with political conditioning before the crisis) presents some relevant and systematic conditional effect.

Further examples

In the article, we noted 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 on 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 submit 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 the instrument to fulfil 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.

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.4.

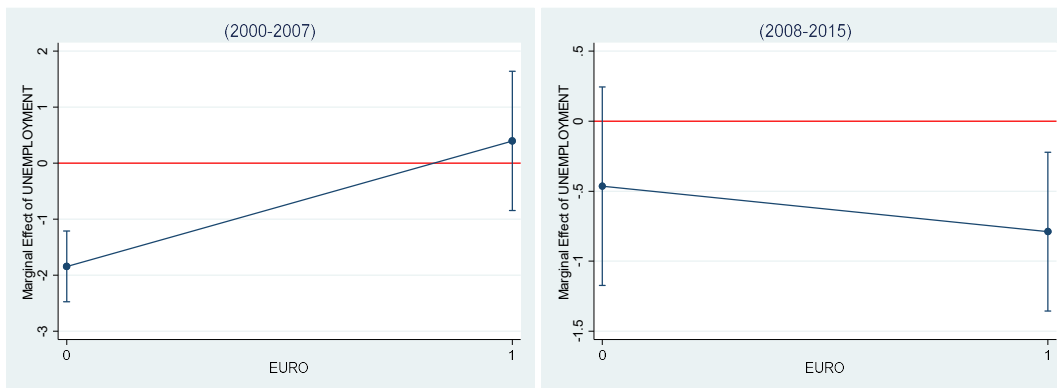


Figure A.4. Marginal effects of unemployment rate, before (left) and during (right) the crisis, for countries adopting (1) or not (0) the Euro as common currency.

Interestingly, all other things being equal, shared membership of the Euro-zone blurred the effect of unemployment 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 were 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.

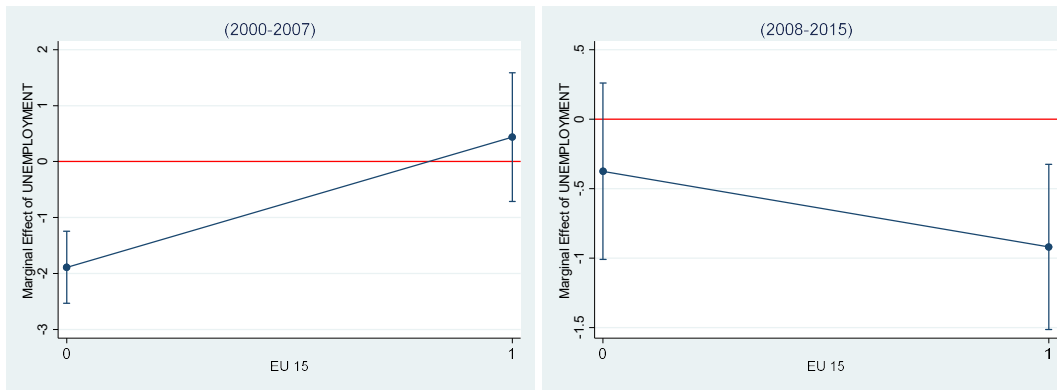


Figure A.5. Marginal effects of unemployment rate, before (left) and during (right) the crisis, for EU 15 countries (1) or not (0).

A system of external conditionalities thus makes the electoral response to the state of the economy more rigid. Yet even dense institutional relationships may have similar results, as is demonstrated by checking the same models interacted with a dummy variable representing the fifteen “historical” members of the European Union. 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 aggregates.

Yet, as is shown in figure A.5, the results are similar to those of figure A.4 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.