

Two-level Games and Market Constraints on Politics in Europe

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Financial markets understood the euro crisis as a two-level game. They monitored national politics as a source of both national and European policy. The incentives to conform to the market's preference were weaker for creditor countries than for debtor countries because debtors were providers of their own macroeconomic policy, but each creditor was one of several contributing to bailouts. Worries about default caused investors to sell the bonds of debtors and thereby constrained debtors by raising interest rates. By contrast, if creditor behaviour reduced the probability of a bailout of debtors, the response again would be to sell assets linked to the debtor. The implication is that market responses to creditor elections should have been larger and more turbulent than reactions to debtor elections. We test this theory by analyzing credit default swaps of eleven countries around fifteen elections and conducting a content analysis of 3,126 reports from Bloomberg terminals.

Keywords: elections, international political economy, financial markets, Germany, euro crisis

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‘I think that's the irony of every time we got some Euro crisis speculations back in markets, there is one big beneficiary, and that's the German economy.’ Carsten Brzeski, Chief Economist, ING-DIBA commenting on Italian government formation on Bloomberg TV, 30 May, 2018.

INTRODUCTION

In the context of national politics, the financial market can send signals to political systems about its preferred policies. Indeed, these signals comprise an incentive structure so strong that many perceive it as a constraint on the choice of national macroeconomic policy. The Euro crisis was a two-level game (Putnam, 1988). The financial market monitored national politics as a source of national policy and as a source of European policy. The market sent signals about its preferred policies at both levels. However, market reactions only incentivised conformity to the market's preferred policies in debtor countries, where national macroeconomic policy was of most relevance to the Euro crisis. In the stable creditor countries, international policy, specifically positions on bailouts, were more salient than national macroeconomic policy. Markets were able to signal their preference for EU bailouts but were not able to constrain creditor countries from advocating much lower levels of support than markets preferred. Consistent with this, we show that market reactions to creditor elections during the Euro crisis were larger and more turbulent than reactions to debtor elections. We argue that the incentives to conform to the market's preference were weaker for creditors than debtors because debtors were providers of their own macroeconomic policy, but each creditor was one of several contributing to bailouts. Worries about default caused investors to sell the bonds and related financial instruments of debtor countries. This meant they could constrain

debtors in the short term by raising interest rates. The constraint on creditors was indirect and not immediate. If creditor behaviour reduced the probability of a bailout of debtors, the response again would be to sell assets linked to the debtor. Higher interest rates on assets linked to debtor countries raised the probability of financial and economic instability that was likely to damage creditors in the medium to long term. In the short term, worried investors might even swap the troubled bonds of debtors for the safe bonds of creditors, thereby actually reducing the debt-servicing costs of the creditors. Democratic governments have time horizons of years; politicians in an election campaign have time horizons of weeks. During election campaigns, the pressure on creditor politicians to maintain commitment to bailouts was particularly weak.

In international negotiations, leaders' moves in the international arena interact with their moves in the national political arena. A move at one level is a move on the other. Eurozone bailout negotiations were focused on the dimensions of solidarity (loans for countries in trouble) and austerity (spending cuts and tax increases in troubled countries). We concentrate on elections, the crux of domestic political competition. Both dimensions offered vote-winning opportunities to politicians of all parties across the EU (Raunio, 2016: 245). However, these opportunities were constrained to different extents in debtor and creditor countries. Politicians in debtor countries were aware of the immediate and drastic consequences their statements could have (Ruiz-Rufino and Alonso, 2017: 322). Politicians in creditor countries did not fear immediate consequences for their electorate.

In order to test our theory, we need to measure how markets reacted to elections. We do so by looking at credit default swaps (CDS), which insure against default, and were, therefore, the assets most closely linked to the core issue of the Euro crisis (Brooks, Cunha, and Mosley, 2015: 591). Since markets price information in, we can only observe the effect of surprising developments in financial markets. This means we require an estimate of the information

available to the market on the positions of campaigning parties on the key dimensions of solidarity and austerity. We extract these from 3,129 reports on Bloomberg, the key source of information for financial markets.

We first develop a theory of why creditor elections should have a different impact than debtor elections, focusing on how politicians in creditor countries were less constrained than their debtor counterparts. The next section explains our methodological approach. Then, we test our hypotheses using our estimates of the impact of the elections on financial markets, and also consider alternative explanations to our theory. The penultimate section presents a case study of the German election of 2013 in order to test whether our theory needs an amendment for Germany's special status. Finally, we conclude with some implications for the literatures on how markets constrain democracy and the rise of populism in Europe.

ELECTORAL INCENTIVES AND MARKET REACTIONS TO THE EURO CRISIS

The literature on national politics and financial markets shows that investors do monitor national politics; market movements can send signals to national politics; and these signals can serve as a substantial constraint on national economic policy (Bernhard and Leblang: 2006; Sattler, 2013; Aklin, 2018; McMenamin, Breen and Muñoz Portillo, 2015; Mosley 2003). Of course, there is much debate about exactly what markets monitor, how clear their signals are, and how wide the constraints on policy are. The much smaller literature on EU institutions and markets focuses on how variations in the credibility of institutions and actors influence their ability to assuage markets (Bechtel and Schneider, 2010; Goldbach and Fahrholz, 2011; Smeets and Zimmermann, 2013; Bølstad and Elhardt, 2015).

Due to the inability of the existing supranational structures to manage the crisis, intergovernmental bargaining became more important in the day-to-day politics of the Eurozone. Domestic political competition influences international negotiations and vice versa. In other words, the politics of the Euro crisis were a two-level game (Putnam, 1988). Given these links between democratic politics and bailout negotiations, investors should have incorporated information on electoral competition into the prices of assets linked to sovereign debt in the Euro area.

Bailouts did much to redefine international and domestic politics for Euro members. Euro crisis bailouts consisted of loans with policy conditions – ‘cash for reforms’ (Heins and de la Porte, 2015: 4). Actors contested the terms of these deals across two dimensions: solidarity and austerity. Solidarity refers to the extent to which sovereign debts were internationalized through loans. Austerity refers to the extent of fiscal retrenchment on the part of debtors. Many have debated the causes of the crisis and the appropriateness of political responses (Rommerskirchen, 2015), but most have accepted the centrality of the solidarity and austerity dimensions (Chang and Leblond, 2015: 628).

In bailout politics, the position of the government ultimately matters and is, in turn, composed of the positions of political parties. Individual parties and the government itself will have different incentives, although they will have much in common. Of course, the incentive structure will vary across parties too. We concentrate on the central tendency of the parliament in relation to the solidarity and austerity dimensions. Obviously, the extent to which the average position of the parliament influences policy will vary across political systems. However, we cannot think of a better proxy evaluation of how a member state might position itself in relation to the cash-for-austerity bargain at the centre of bailout politics. Ultimately, the decisions on Eurogroup positions, as well as domestic fiscal policy and acceptance of European bailouts, are made by governments. Nonetheless, the politics of government does

not produce comparable events with rich quantitative and quantifiable information in the way that electoral politics does.

The survival of the Euro required the support of all of the creditors some of the time, notably when a decision had to be taken by unanimity to support a Euro-area country or establish institutions to establish the credibility of the EU's commitment to defending the currency zone. So, the loss of one or two creditor-states was potentially disastrous for the Euro area. Nevertheless, one or two reluctant member-states could be logrolled or pressured into voting for propositions they did not support. Since the creditors never managed to make a totally convincing collective commitment to preserving the Euro, investors and others constantly scrutinised political events and statements to assess the probability that all creditors would defend their partners in the debtor states. In Figure 1 below, the X axis is the number of creditor states supporting bailouts and related institutions and measures. The maximum of six reflects our sample countries: Germany, France, Belgium, the Netherlands, Finland, and Austria. The Y axis is the probability that the creditors will defend the Euro zone. The curve is exponential to indicate that decisions were largely taken unanimously and the consequent importance of the loss of one creditor state.

[Figure 1]

Since the loss of any one creditor was so detrimental to the provision of the public good of a credible commitment to defend the euro, each creditor country had a very strong long-term incentive to publicly commit to defending the Euro. This effectively flips the exponential graph. The probability that any given creditor will publicly commit to the Euro is very high, as each realises that their contribution is necessary to the provision of the public good. This long-term incentive is the avoidance of the break-up of the Euro, which throughout most of the

crisis, seemed like something which might happen in months or years, not days or weeks. Democracies are sometimes criticised for their short time horizons. Of course, these time horizons depend a lot on the situations of actors within those democracies. Election campaigns can dramatically shorten time horizons for politicians. Time horizons of days or weeks changed the calculus of politicians in creditor countries. Public statements were unlikely to bring down the Eurozone in days or weeks, even if they could cause observers to substantially revise the probability of such a break-up happening in the longer term. So, the curve for the short-term calculation suggests that creditors are much less likely to commit to defending the euro.

[Figure 2]

The situation of debtors was simpler. The probability an individual debtor will commit to a sustainable macroeconomic policy is influenced only by the debtor's time horizons and not by the number of actors. The nation state's name is on the debt contract and no other body is liable. The long-term calculation is that the consequences of default and/or exiting the Eurozone would be so damaging that very difficult economic adjustments should be undertaken in return for bailout funds. This should dwarf any political benefit to spending more domestically or demanding more internationally than the debtor's European partners are prepared to countenance. In the short-term, the cost of equivocation on, or denial of, a sustainable macroeconomic policy is somewhat less, in that a default or Eurozone exit is unlikely to happen within days of a policy shift. However, interest rate rises can and did happen immediately and often threatened to lock the debtor into a downward spiral. Therefore, the difference between the probability of commitment to market-preferred policies in the short and long term was much, much smaller in debtor countries than in creditor countries.

This theory has several observable implications. If creditors are less constrained during elections than debtors, there should be larger market reactions to creditor elections.

H1, Size: Creditor elections will have larger absolute impacts on CDS prices.

More interestingly, as well as being bigger, the impact of creditor elections should be distributed differently. If creditor elections bear on the international level, they suggest different fates for members of the currency union.

H2, Divisiveness: There will be a wider range of impacts on CDS prices between Eurozone members in creditor elections than in debtor elections.

In creditor elections, the international level was more salient than domestic macroeconomic policy. The creditor country's position on bailouts motivated investment decisions more than its own macroeconomic policy. The lower constraint on creditor countries should be evident in market movements.

H3, Election Country: The impact of the election on the CDS price for the election country, relative to other Eurozone members, will be smaller in creditor countries, as it is the debtor countries that are more vulnerable.

More specifically, and more politically, elections in the two types of country divide very different groups. Creditor elections are about whether creditors will support debtors, so the market reactions should sort into these two groups. Debtor elections are primarily about the macroeconomic policy in that country. However, if capital is invested in, or divested from, one country, it has to come from, or go to, somewhere else. Debtor elections provided information on the relative creditworthiness of the troubled countries and inevitably invited comparisons with, and movements of money to and from, the other debtor countries.

H4, Distribution: Creditor elections will divide creditor CDS prices from debtor CDS prices, as markets re-evaluate the likelihood of support for debtors. Debtor elections will divide debtors, as markets re-evaluate which debtor is weakest.

The incentive structure of campaigning politicians in Germany may have been distinctive. Again, threats to put more pressure on debtors offered opportunities to win votes. Such statements were unlikely to affect Germany immediately and drastically. However, Germany was not one of a number of equal creditors. Market hypersensitivity to German politics would have been a reasonable reflection of the country's importance (Warren, 2018: 74). It would have been difficult for German politicians to evade their country's centrality to ameliorating the crisis. Electoral competition in creditor nations during the crisis could have been an example of 'the exploitation of the great by the small' (Olson, 1965). Germany was a large member, a member of a group so large that it had an incentive to provide a public good all by itself. In this case, the public good is the avoidance of statements that could undermine confidence in Europe's troubled debtor nations. Since Germany's incentive was so strong, it could be exploited by smaller countries. They could exploit Germany by indulging in market-inflaming statements in the comfortable knowledge that Germany would not do the same.

H5, Size: Politicians in a dominant economy avoid statements that would undermine confidence in debtors during election campaigns.

Failure to reject the first four hypotheses would suggest our theory is useful. Failure to reject the Hypothesis 5 makes our theory a little more complicated. In the next section, we justify our empirical choices.

METHODOLOGY

Our principal independent variable is the distinction between ‘creditor’ nations and ‘debtor’ nations (Steinberg and Vermeiren, 2016: 388; Regan, 2017: 983). We study elections to the lower house of parliament beginning after the Greek bailout in May 2010 until the Greek election of 2015, and the French presidential election of 2012. Table 1 provides details.

[Table 1]

Our dependent variables are derived from financial market behaviour. We study the impact of elections on 5-year credit default swaps for eleven older Eurozone members.¹ These credit default swaps (CDS) are insurance policies against the default of associated five-year government bonds. In other words, they are bets for and against sovereign default. Our statistical method combines the techniques of event studies and vector auto-regression (VAR). Event studies compare price changes during an event window to a counterfactual derived from a model of price changes during an estimation window. We do not take actual price changes as our dependent variable, but rather the difference between price changes and the changes that would have been observed had there been no election. More details are in the Appendix. We seek to understand the effect of an election, not just on assets linked that country, but on assets associated with ten other countries (Arezhki et al., 2011: 11-12). This introduces endogeneity. If the price of an Irish CDS increases after a German election, it is not clear if this is the impact on Ireland, or the impact of the election on other countries, say Greece, which then feeds through to Ireland’s CDS.

Our prediction model uses VAR, a technique that embraces endogeneity. A VAR has no single dependent variable. It is a system of equations that acknowledges that all variables, and their lags, play a role in determining each other. The model includes the CDS for each sample

¹ We use the logged first difference of the CDS to reduce the impact of outliers and induce stationarity.

country, as well as the equivalent CDS for the UK and US, and the VIX index, as a measure of global risk. An equation for each variable is explained by its own values lagged t-1 to t-10 and each other variable lagged t-1 to t-10, the number of lags having been identified by information criteria. For more information please see the Online Appendix [IPSR_2level_app].

Surprise had two dimensions: shifts in the electorate’s position on solidarity and austerity. Markets focus on new information. Therefore, it is appropriate to anchor both policy scales in the middle with the status quo. The maximum amount of solidarity is to fully internationalise a member’s debt. The minimum is to insist on solely national liability. In the context of an advanced economy in a sovereign debt crisis, the immediate abolition of the budget deficit is an appropriate maximum. The minimum is a fiscally neutral budget or budgetary expansion. Intermediate points of more or less national or more or less austerity make for a five-point ordinal scale that can be treated as continuous. Figure 3 illustrates the range of positions on the dimensions.

[Figure 3]

The policy positions can be interacted with the party’s predicted vote share from opinion polls to give a prediction for the party. The weighted sum of all such party-predictions is the prediction for the central tendency of the national parliament. The difference between this prediction and the outcome is the surprise measure for a given election, as shown below:

$$Surprise_{election} = \sum_{i \in parties} |policy\ position_i * (result_i - prediction_i)| \quad (1)$$

In order to assess the information available to investors we collected stories from Bloomberg searching on ‘Election’ and ‘Country Name’ for the two months prior to and including the election. Bloomberg feeds stories from a wide range of media immediately into its trading terminals. These include newswires, newspapers, broadcast media from various countries, as

well as the financial media. Indeed, much of the content comes from banks and financial institutions, rather than journalists. Newspaper articles generally appear the day before print publication. We coded all 3,129 such reports for parties' positions on austerity and solidarity according to the scheme above. It is important to remember that our focus is the Euro crisis. When assessing austerity positions in creditor campaigns, we do not code references to domestic fiscal policy, only statements in relation to debtor fiscal policy or fiscal policy to be applied to the Euro area as a whole. Europe has remained an issue of limited salience in national elections. Two of the authors independently coded a random sample of 100 reports and obtained a highly satisfactory level of inter-coder reliability. Krippendorff's alpha was 0.91 for austerity and 0.90 for solidarity. We used a weighted moving average of polls to predict vote share. The polls were weighted by an exponential decay function, such that the value for day $t-1$ is weighted at half the value for day t . This rapid decay reflects the fact that it is only the election date that matters, not long-term trends. We apply the same technique to predict policy positions. The Online Appendix [IPSR_2level_app] provides examples of the coding and calculations of the first round of the 2012 French presidential election. We present a case study of the German election of 2013, as we need to examine the evolution of German policy positions during the campaign to assess our hypothesis on whether Germany's politicians behaved differently to other creditor politicians during electoral campaigns. For some larger countries and more dramatic elections, there was a large volume of data. For smaller and more stable countries, there was very little until the eve of the election.

Of course, surprise and creditor/debtor status are not the only two variables that might explain variations in the impact of Euro crisis elections on financial markets. However, since these variables are less fundamental and less challenging to measure, we defer them to later. The structure of our data falls outside the patterns for which most methodological precepts are designed. We have many more cases than is usual for comparative case studies but too few

cases to perform formal quantitative tests of our hypotheses. We deal with this intermediate situation in three main ways. First, we are transparent. We display country-by-country results so that readers can see whether our aggregate interpretation is plausible. Second, we take alternative explanations seriously. Third, we adopt an inductive approach and consider the patterns of variables in the cases that appear to be doing the most to drive our conclusions. Fourth, we calibrate our conclusions. This research might be thought of as intermediate between a test of our theory and a plausibility probe (Gerring, 2004).

ASSESSING THE HYPOTHESES

Hypothesis 1 states that creditor elections will have bigger effects on financial markets. We chose the median absolute CAR as an indicator of the size of the impact of elections: absolute because we have no hypothesis on direction and opposite signs can cancel each other out and median because there are only eleven countries and the mean could be misleading. The largest CAR is for Austria 2013, but this may reflect the German election that happened a week earlier. Similarly, we can discount the impact of Belgium's 2014 federal election, which was held on the same day as a European Parliament election. Column 2 of Table 2 shows the figures for the other elections. Germany 2013 and the Netherlands 2012 display a much bigger median impact than other elections. The contrast between these two creditor elections and all others supports our hypothesis. Similarly, the median impact for creditors² is 0.21, much bigger than the median for debtors of 0.13.

[Table 2]

² Excluding Austria 2013 and Belgium 2014

Hypothesis 2 is that creditor elections will be more divisive than debtor elections. We operationalise this as the standard deviation of the eleven country CARs for a given election. Column 3 demonstrates that the German election was almost five times more divisive than any other election. The median for the creditors (excluding Austria 2013 and Belgium 2014) is 0.22 and for debtors it is 0.15. The three Greek elections stand out from the other debtor elections. The French and Finnish elections have low standard deviations comparable to the non-Greek debtor elections. This data supports this hypothesis too.

Hypothesis 3 is that debtor elections will have a greater domestic impact than creditor elections. To test this, we present the election-country CAR as a proportion of the mean CAR for that election across the eleven countries. We can see in Column 4 of Table 2 that the election with the most domestically-focused impact was the Greek election of May 2012, followed surprisingly by Finland 2011. However, Finland is not obviously different to the rest of the sample. If we exclude Austria and Belgium 2014 once again, the impact of elections in the home country was dwarfed by the mean impact in other Eurogroup countries in Belgium 2010, Germany 2013 and, again surprisingly, Portugal 2011. The median score for creditors is 0.94 and for debtors it is 1.13. This is in line with the hypothesis, according to which debtor elections should affect their country more than they do other Euro countries. The numbers themselves are theoretically meaningful. A score of greater than one means that the election had an above-average effect in the election country and a score of below one means that the election had a below average effect. Clearly below one are three creditors (Belgium 2010, Germany 2013, and the Netherlands 2010) and one debtor (Portugal 2011). Three debtor elections are very close to one: Ireland 2011, Greece 2015, and Spain 2011. Of those markedly above one, three are creditors (Finland, France, and the Netherlands 2012) and three are debtors (Greece 2012, May and June, and Italy 2013). While the evidence tends to favour this hypothesis, it is relatively weak.

The final column of Table 2 shows the data Hypothesis 4, which predicts different distributions for creditor and debtor elections. Creditor elections will divide creditors and debtors, as these elections will indicate changes of support for the class of debtors. On average, debtor elections say more about the fate of that individual country and less about the whole currency area. Debtor elections will divide debtors from each other, as investors recalculate the relative creditworthiness of the troubled nations. To measure this, we calculated the difference in CARs between all pairs of countries. Then we calculated the median difference between each pair of debtors and the median difference between each creditor-debtor pair. Finally, we subtracted the debtor-debtor score from the debtor-creditor score:

$$\begin{aligned}
 \text{Distribution} = & \left(\sum_{i \in \text{states}} \text{Median}(CAR_{Debtor\ i} - CAR_{Debtor\ i}) \right) \\
 & - \left(\sum_{i \in \text{states}} \text{Median}(CAR_{Debtor\ i} - CAR_{Creditor\ i}) \right) \quad (2)
 \end{aligned}$$

We predict that larger numbers on this statistic should be associated with debtor elections. The last column of 2 Two shows that Germany 2013 is again an outlier and this was the election that most divided creditors from debtors. A very big division also occurred around the Dutch election of 2010. The median score for creditors was -0.05 and for debtors it was 0.047. A positive score means that the election divided debtors from debtors more than it divided debtors from creditors. All debtor elections, except Greece May 2012, are positive as hypothesised. Five out of seven creditor elections are negative.³ The evidence clearly supports this, our most interesting, hypothesis. Debtor and creditor elections had very different political implications for the currency area.

³ Excluding Austria 2013 and Belgium 2014

This section has presented evidence consistent with our first four hypotheses. However, these patterns may reflect the effect of factors other than the creditor-debtor contrast central to our theory. The next section investigates alternative explanations.

SURPRISE AND OTHER ALTERNATIVE EXPLANATIONS

We conducted a content analysis of Bloomberg reports in order to measure investors' information about the policy positions of parties during election campaigns. Our measures of surprise exhibit considerable variation across the two policy dimensions. Column 2 of Table 3 shows the extent to which election results revealed a surprising shift in an electorate's position on solidarity. Six elections surprisingly shifted towards more solidarity, while six surprisingly moved in the direction of less solidarity. The outlier is Italy which saw an unexpectedly strong performance by the Five-Star Movement, then an advocate of withdrawal from the Euro (Bloomberg News, 2013). The size of the surprise reflects the policy difference between the Five-Star Movement and its competitors multiplied by the difference between their election score and predictions obtained from previous polls. Crucially, there was a ban on the publication of polls in the run-up to the election. A similar rule helps explain the size of the surprise for the two Greek elections of 2012.⁴ The experience of these two elections motivated the Greeks to abandon the poll blackout in 2014. Unlike these three elections, the January 2015 election in Greece heralded a major change in the position of the government, as the radical Syriza took power. However, they had been leading in polls for some months, and all observers could trace changes in support in opinion polls right up until the election itself. Moves away from solidarity are smaller, the two biggest examples being Netherlands 2010 with a

⁴ Polls continued during the campaigns but were not published, so we assume that these polls were not 'public information'.

breakthrough for the populist, anti-Euro Freedom Party, and Finland 2011 when the anti-bailout Finns Party did well. The median absolute score for creditors (excluding Austria 2013) is 0.028 and for debtors it is 0.038. This is a subtle difference in terms of the overall variation. In summary, the groups did not differ systematically in the extent to which their elections should have surprised investors on this dimension.

[Table 3]

Column 3 shows the same calculations, but for surprising shifts in positions on austerity. The austerity dimension generated less surprise and variation is more restricted. Again Italy stands out. The Five-Star Movement advocated the abandonment of austerity and pre-blackout polls did not anticipate their election result. Another difference is the positive skew of the austerity variable. This means that elections tended to occasion surprising demands by electorates for less austerity, but little in the way of surprising demands for more austerity. By contrast, with the exception of Italy, surprising demands for more and less solidarity were relatively balanced. Two of the four small shifts towards austerity were in debtor countries (Ireland and Portugal), while two were in creditor countries. Again, the median absolute score is larger for debtors than for creditors (0.018 versus 0.010), and again this is a small amount in terms of the overall variation. Medians suggest little difference in the extent to which creditor and debtor elections delivered policy-relevant surprises. In summary, surprise cannot account for differences in financial market reactions to Euro crisis elections.

Three additional variables potentially influence the size of the impact of an election, as assessed in our Hypothesis 1. Firstly, perhaps our calculations reflect the timing rather than the location of the election. Financial market impacts may reflect the intensity of the crisis at that point of time, instead of a reaction to a particular election campaign. An indicator of the overall stress of the Euro area sovereign credit default swap market is the ITraxx SovX for

‘Western Europe’. This ranges from a high of 361 at the Spanish election in November 2011 to a low of 24 for the Greek election of 2015. The index is negatively correlated with the median absolute CAR of the eleven sovereign CDS across the elections. The median score for creditors was 166.94 and for debtors, it was 187.375.⁵ This variable does not weaken our conclusions.

It might be that investor reactions reflect the relative importance of national debts to the overall sovereign debt market, rather than the politics of the Euro. This is distinct from the pressure on any individual sovereign debtor. The dollar value of outstanding debt in 2012, at the height of the Euro crisis, is a measure of the relative importance of countries to the market. According to the IMF the outstanding debts of our countries in 2012 ranged from 0.190 trillion dollars for Ireland to 2.596 trillion US dollars for Germany. The size of debt is positively correlated with the median absolute CAR, but once Germany is excluded, the correlation switches to negative. The median score for creditors was 0.461 and for debtors it was a very similar 0.429.⁶ Our findings on creditor nations are not epiphenomena of their role in the debt market.

Finally, it is possible that investors are reacting to features of the institutional configuration of national politics, rather than the international politics of the Euro crisis. While political scientists agree that the number of actors required to make a decision is a fundamental difference between democracies (Breen and McMenamin, 2013), there are contradictory theories on how investors might view such differences. One is that the fewer the actors required to make a decision, the bigger the impact of elections. In this scenario, elections in majoritarian systems are likely to signal decisive shifts of power (Bechtel, 2009; Sattler, 2013). On the other hand, Putnam argues that the governments of consensual countries are more constrained

⁵ Excluding Belgium 2014 and Austria 2013

⁶ Excluding Belgium 2014 and Austria 2013

in international negotiations. Therefore, a consensual country's position in international negotiations will be especially sensitive to shifts in support at elections. We use the Political Constraints Index⁷ to summarise the decision-making context of our sample countries. It ranges from 0.21 for Portugal to 0.72 for Belgium. There is a big difference between the creditors and debtors. The median score for creditors is 0.6, while for debtors it is only 0.41. Nonetheless, there is only a weak positive association between political constraints and the absolute CAR. The Netherlands is the second most constrained polity in our sample, just after Belgium. It is possible that the nature of the Dutch political system contributed to some of the distinctive patterns in the financial market reaction to Dutch elections. However, the data do not suggest that distinctive political institutions drove the overall differences between creditors and debtors.

French political institutions are particularly distinctive in the context of this article. Four rounds of popular voting decide the composition of the executive and the legislature. We have only conducted an event study for the first round of the presidential election, as the second round and legislative election are hard to separate from the first round. This means that the impact of the French election has undoubtedly been underestimated. Since France is classified as a creditor nation, this means that had we been able to capture the cumulative impact of the French elections, there would have been even stronger support for our hypotheses.

⁷ We use POLCONV (Henisz 2002), which refers to the legislative and executive institutions at stake in general elections.

Finally, we consider each country individually in terms of all variables, highlight outliers, and use them to reassess our theory. Germany's values are extreme in relation to the absolute impact, divisiveness, and distribution. The other distinctive case is Netherlands 2012, which is an outlier in terms of absolute impact and distribution. Germany is not an outlier on any other variable. Its debt is the largest, but it is not so far ahead of Italy and France. Its election was not particularly surprising; happened when the crisis itself was far from its height; and has political institutions that display aspects of both consensus and majoritarian democracy. Surely, its political status as the dominant creditor underlines the distinctiveness of market reactions to its election. The Netherlands does have a highly consensual political system, but market reactions to the 2010 election were relatively unremarkable. It seems likely that reactions to the 2012 election represent the interaction of its status as the largest of Germany's key allies, France having changed its stance with the election of François Hollande, and the intensity of the crisis in September 2012. The shift towards centrist parties had been widely expected in advance. Italy 2013 and Greece May 2012 were, by far, the most surprising elections, but this strengthens, rather than weakens, the evidence for our theory. The other three controls do not have obvious outliers and extremes are not associated with distinctive elections. This interactive case analysis appears to underline the importance of creditor status in the German case. In relation to our second Dutch election, it reminds us that historical events are usually explained by a combination of factors. Nonetheless, markets' perception of the difference between creditor and debtor elections is probably one of the more important of these.

AN (EXTRA)ORDINARY CREDITOR? THE 2013 GERMAN ELECTION

Hypothesis 5 stated that responsible German politicians would be unable to use the Euro crisis to chase votes. In this view, Germany was so important to the Eurozone that it could waver, even during an election campaign. We have already seen that the German election of 2013 had massive effects on Eurozone CDS prices and that the German election was not a surprise for traders in the Eurozone CDS market. Here we investigate whether these outcomes occurred in spite, or partly because, of the campaigning of German politicians. Figure 2 shows the CAR for each country at the German election of 2013. As Hypothesis 1 predicts for creditor elections, the overall impact is very large. Consistent with Hypothesis 2, there is a large standard deviation. The CAR for Germany does not fit our third hypothesis. It is the second largest of the eleven, not below average as we expected for creditor elections. This election is a good example of the pattern predicted by Hypothesis 4. Five out of six creditors see a reduction in the cost of their CDS and all five debtors see an increase. Overall, the election appears to have led to a substantial redistribution from debtors to creditors.

[Figure 4]

The German election of 2013 was bound to return Angela Merkel and the Christian Democratic Union (CDU) / Christian Social Union (CSU) to power. However, their coalition partner was uncertain, as was the position of the German people on continuing to support bailouts. Merkel's outgoing coalition partner was the Free Democratic Party, which had lost popularity. Polls predicted it would do just about well enough to pass the five per cent threshold and return to parliament. Merkel's management of the Euro crisis had been popular in Germany. Nonetheless, a new party, Alternative for Germany (AfD), gained traction with its message of no further support for Greece and a much harder line with other debtor countries. Most did not expect it to pass the threshold, but it threatened to drag the CDU and CSU to more radical positions on the Euro to secure their previously unthreatened right wing. In the end, the CDU/CSU did about two per cent better than had been suggested in the last week of polls;

the FDP just failed to get into parliament for the first time since its foundation; and the AfD did much better than predicted but also did make the threshold. A shift in the position of the CDU in the last week of the campaign was as important as the results.

Figure 3 plots the evolution of Christian Democratic Union policy. There is substantial variation in the positions adopted on both austerity and solidarity. The subtler movements in the last fortnight reflect an increase in the number of relevant reports and are therefore aggregates of multiple reports rather than coding of one text, as is usual for previous days when there was only one report. The early statements on both dimensions emphasise the status quo. However, by early September the CDU is communicating that it would be comfortable with more solidarity towards debtors. In the last two weeks, several statements move the CDU back to the status quo, perhaps in response to the pressures of the election campaign and the electorate's reluctance to commit more money. In relation to austerity, the CDU moves from the status quo to demanding greater austerity from bailed-out countries, again at the beginning of September. It returns to the status quo in mid-September, but in the last fortnight a number of articles signal a shift back towards increased austerity again. The large financial market reaction makes sense in this context. The late moves away from solidarity and towards austerity can be interpreted as a weakening of the commitment of the Euro area's key creditor to its debtors. Moreover, the CDU's positions were volatile over the campaign as a whole. This would have undermined confidence, whether interpreted as unclear preferences of Europe's most important political party and/or hypersensitivity of its preferences to political competition. This is consistent with our theory of the incentives facing creditor politicians during elections. They were tempted to adopt positions, which weakened further the position of debtors. The CDU's move towards more austerity and its abandonment of earlier suggestions it would countenance more solidarity explain the reaction of the market, which interpreted the election as a shift of risk from creditors to debtors. German politicians risked

the stability of the Eurozone during the election. They did not feel substantially constrained by their country's position as the dominant creditor. In spite of the limited surprise of the election results, they had a massive effect on CDS values. German politicians were ordinary, even if Germany occupied an extraordinary position. We reject Hypothesis 5 and cleave to our theory at its simplest: creditor politicians were not constrained from seeking votes by getting tough on debtors.

[Figure 5]

Conclusions

We emphasize the different incentives of campaigning politicians in debtor and creditor countries. This theory predicts that financial market reactions to creditor elections will be bigger across the Euro area; have a greater standard deviation of impacts; be relatively smaller in the election country itself; and divide creditors from debtors. We also presented a possible amendment to the theory to take account of Germany's large member status that could have countervailed the usual incentives of creditor politicians. Each of these hypotheses is politically important and potentially helps to explain why it was so hard for Europe to agree a credible long-term response to the crisis. Campaigning politicians from creditor countries did not receive clear signals from financial markets that reminded them of their long-term enlightened self-interest in helping their debtor-country counterparts. On the contrary, elections in creditor countries tended to underline the difference between creditors and debtors. Indeed, even politicians in dominant Germany felt relatively free to chase votes by demanding more for debtors in return for less.

In order to protect their investments market participants generally would have preferred the creditors to be more generous in relation to solidarity and more flexible in relation to the

austerity than the creditors tended to be in practice and threatened to be at elections and other times. Rejection of these preferences of the market, and of the European elite, was a position particularly associated with right-wing populists in creditor countries. The market also would have preferred the debtors to be less demanding of the creditors and more committed to austerity than tended to be in practice and threatened to be at elections and other times. Rejection of these preferences of the market, and of the European elite, was a position particularly associated with left-wing populists in debtor countries. The market constrained leftist populists in debtor countries who demanded international solidarity and rejected domestic austerity but facilitated, or at least did not discourage, rightist populists in creditor countries who rejected international solidarity and demanded international austerity. So, absent the migration crisis of 2015, the incentive structure outlined here may have been important in ensuring the medium-term growth of right-wing populists in creditor countries. However, any such effect was surely overwhelmed by the tilt such populists took towards an anti-immigration and Islamophobic stance in 2015 and afterwards. On the other hand, had they not established an identity and organisation through the Euro crisis, such populists may not have been able to take such an effective advantage of the migration crisis.

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TABLE 1 Sample elections and countries

‘Creditors’	‘Debtors’
Austria 2013	Greece 2012 (May), 2012 (June), 2015
Belgium 2010, 2014	Ireland 2011
Finland 2011	Italy 2013
France 2012 (Presidential)	Portugal 2011
Germany 2013	Spain 2011
Netherlands 2010, 2012	

Notes. We study only the first round of French elections. The second round decides who will be president, but the first round allows our econometric technique to establish a cleaner counterfactual. A similar logic dissuaded us from including the legislative election, which was hardly separate from the preceding presidential election.

TABLE 2 Financial market impacts of Euro crisis elections

	<i>H1: Size of Impact</i>	<i>H2: Divisiveness</i>	<i>H3: Election Country Impact</i>	<i>H4: Distribution of Impact</i>
Creditors				
Belgium 2010	0.280	0.227	0.067	-0.084
Finland 2011	0.087	0.119	2.268	0.006
France 2012	0.065	0.083	1.526	-0.015
Netherlands 2010	0.144	0.231	0.446	-0.295
Netherlands 2012	0.475	0.218	1.434	0.072
Germany 2013	0.781	1.016	0.265	-0.932
Median	0.212	0.223	0.940	-0.049
Debtors				
Greece 2012 May	0.231	0.211	3.357	0.047
Greece 2012 June	0.174	0.181	1.740	0.080
Greece 2015	0.134	0.202	0.985	0.106
Ireland 2011	0.047	0.059	1.130	0.007
Italy 2013	0.076	0.125	1.334	0.026
Portugal 2011	0.118	0.102	0.135	0.006
Spain 2011	0.192	0.146	1.017	0.082
Median	0.134	0.146	1.130	0.047

TABLE 3 Surprising policy shifts at elections

	<i>Solidarity</i>	<i>Austerity</i>
Creditors		
Austria 2013	0.01	0
Belgium 2010	-	-
Belgium 2014	-	-
Finland 2011	-0.084	0
France 2012	-0.028	0.027
Netherlands 2010	-0.062	-
Netherlands 2012	0.002	-0.017
Germany 2013	-0.021	-0.010
Absolute Median	0.025	0.010
Debtors		
Greece 2012 May	0.099	0.079
Greece 2012 June	0.038	-0.003
Greece 2015	0.031	0.027
Ireland 2011	-0.039	-0.005
Italy 2013	0.207	0.143
Portugal 2011	-0.010	-0.018
Spain 2011	-	0.003
Absolute Median	0.038	0.018

Notes. There were no relevant mentions of Solidarity in the Bloomberg reports for Belgium 2010 and 2014, as well as Spain 2011. There were no relevant mentions of Solidarity in the Bloomberg reports for Belgium 2010 and 2014 and the Netherlands in 2010. Positions were reported for Austria 2013 and Finland 2011, but they were statements of support for the status quo, making for a zero in the table.

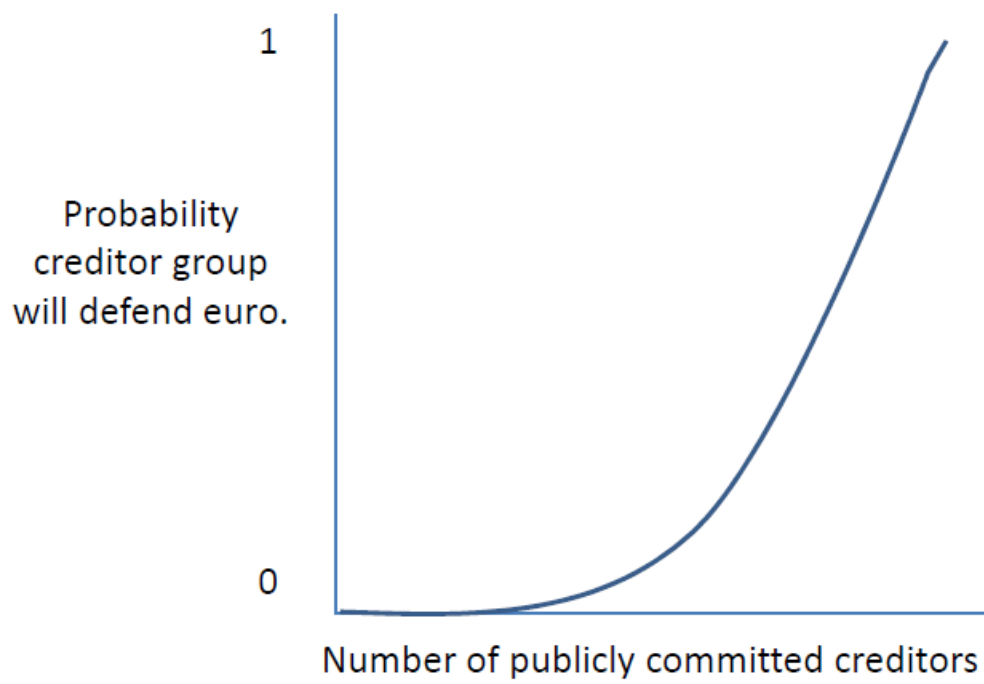


FIGURE 1 Creditors and defence of the Euro

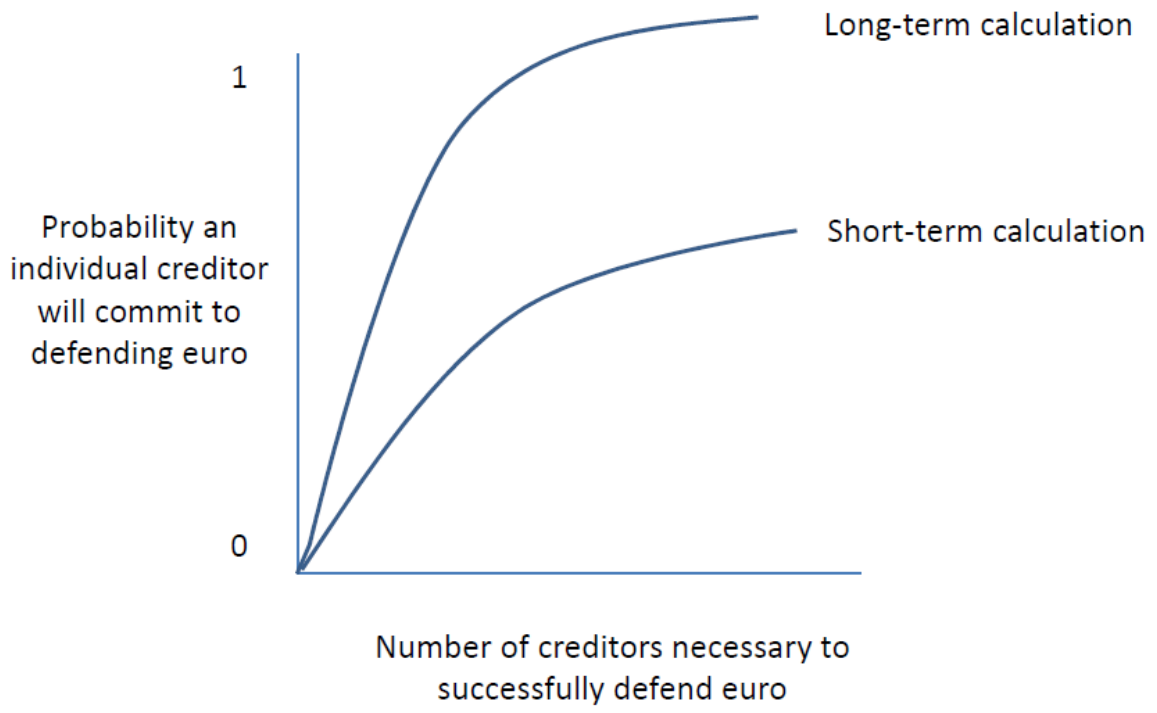


FIGURE 2 Creditors and time horizons

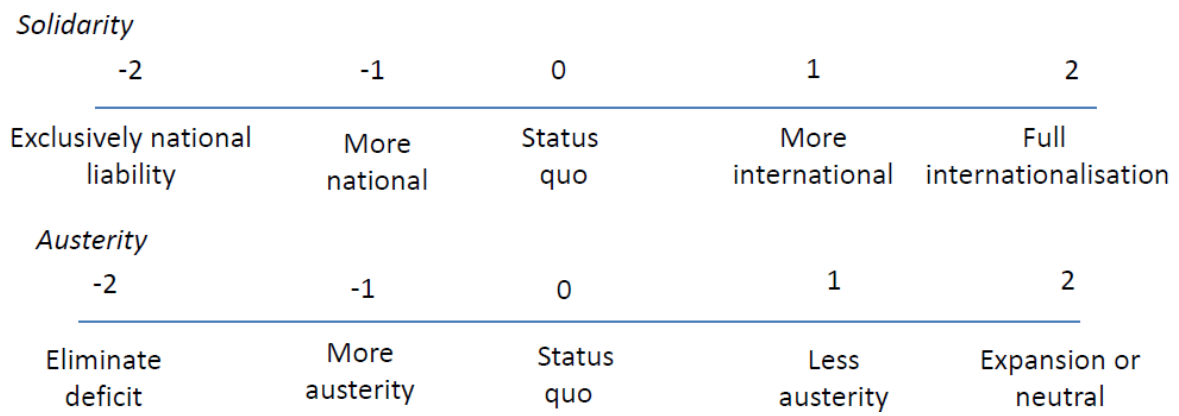


FIGURE 3 Range of positions on solidarity and austerity

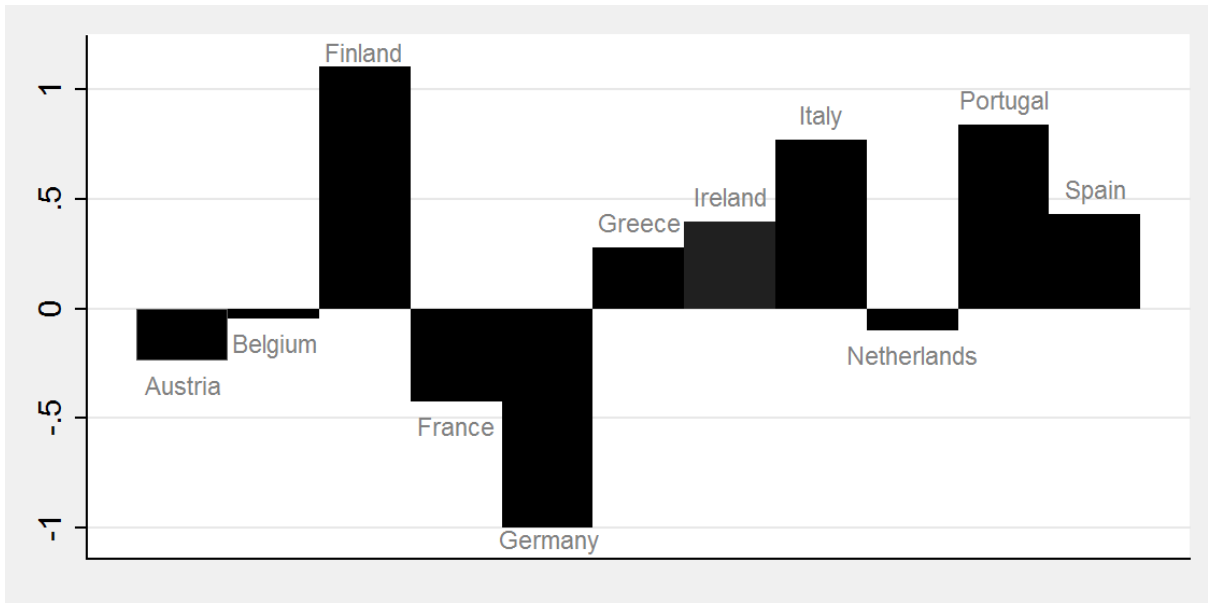


FIGURE 4 German election of 2013. The bars represent Cumulative Abnormal Returns for the five-year sovereign credit default swap associated with each country's debt.

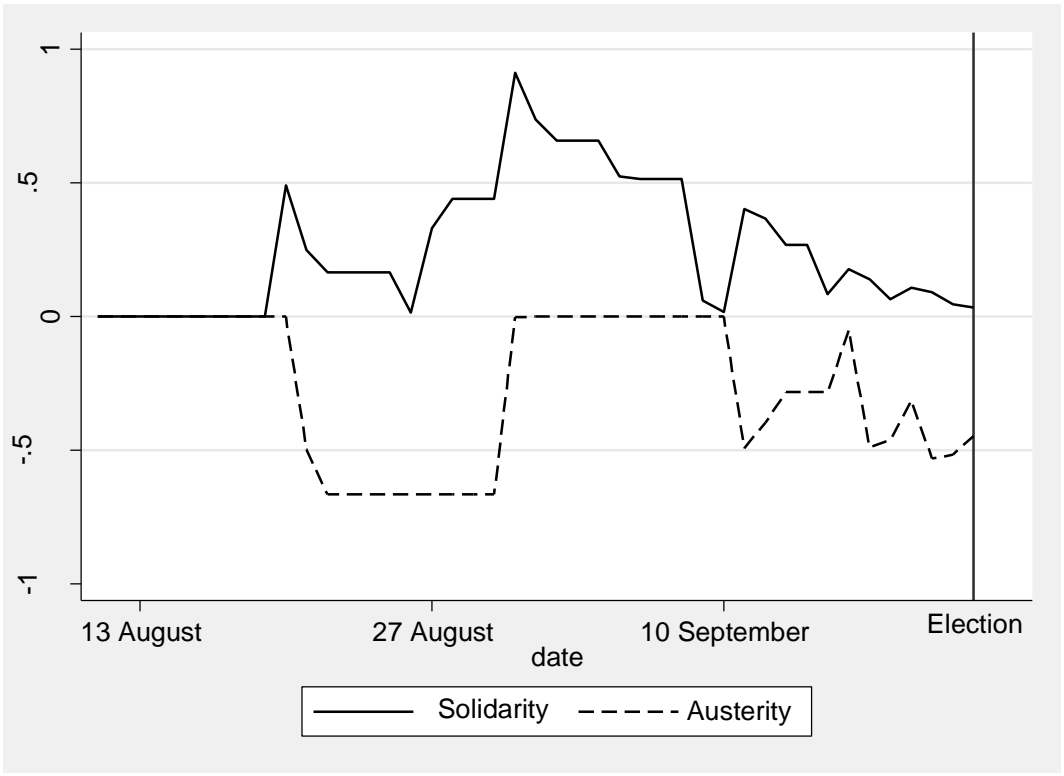


FIGURE 5 CDU policy during the 2013 campaign. Moving average with an exponential decay factor derived from content analysis as described in the text.

Online Appendix

Here is some more detail on how we generated a counterfactual, as if an election had not happened; how we calculated the impact of the election; and how we calculated how surprising the election was.

1. Counterfactual

The credit default swap (CDS) figures contain some massive outliers. Think of Greece in 2012. Therefore, we have logged them to reduce the impact of extreme numbers. The CDS themselves are also unsuitable for times-series analysis because of the way the series change over time varies. We take the first difference in order to induce stationarity. In other words, we look at change from day to day to ensure that the process generating the data does not change over time, as can be seen in Figure A1, which shows the first difference of the logged Irish CDS.

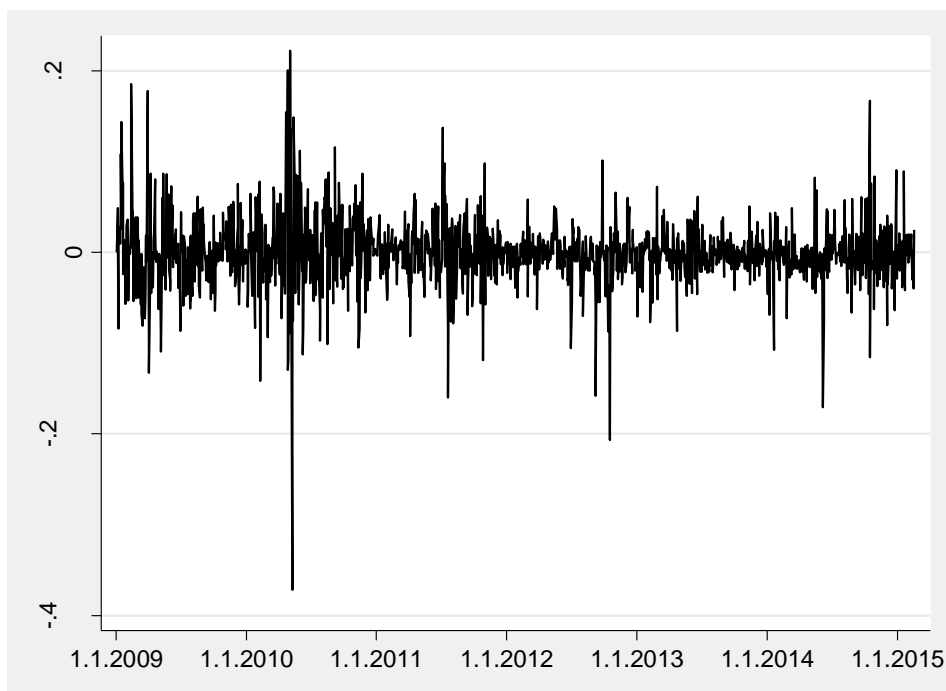


FIGURE A1. Irish Credit Default Swap Series

We present the lags indicated by various statistics in Table A1. Lag selection is often described as more of an art than a science. There was a lot of variation across lags and across lag-selection statistics. However, the longer the lags included, the shorter the estimation datasets for several of the elections. Although the maximum number of lags for some election-statistic combinations was more than ten, we thought ten was a good cutoff in balancing the length of the estimation dataset and the number of lags. Table A2 shows that the equation has a very high R-squared, so there is perhaps little to be gained from adding further lags.

TABLE A1 Lags indicated by various statistics for VAR equations by election

Election	LR	FPE	AIC	HQIC	SBIC
AUT 2013	8	9	8	8	0
BEL 2010	12	1	12	0	0
BEL 2014	12	12	12	12	0
FIN 2011	12	0	12	0	0
FRA 2012 P	12	12	12	12	0
FRA 2012 L	11	11	11	11	11
DEU 2013	10	11	10	10	0
GRC 2012 M	10	11	10	0	0
GRC 2012 J	12	1	12	0	0
GRC 2015	12	1	12	0	0
IRL 2011	12	0	12	0	0
ITA 2013	12	1	12	0	0
NLD 2010	11	11	11	11	11
NLD 2012	10	10	10	10	10
PRT 2011	12	0	12	0	0
SPA 2011	12	12	12	0	0

TABLE A2 Proportion of Variance Explained for each Eurozone Bond, Greek election of June 2012

	<i>R-squared</i>
Austria	0.87
Belgium	0.87
Finland	0.86
France	0.88
Germany	0.91
Greece	0.89
Ireland	0.86
Italy	0.88
Netherlands	0.89
Portugal	0.83
Spain	0.92

VAR models are often used to explore Granger-causality, which uses the lags in VAR equations to empirically test whether a change in one variable explores a change in another. For example, one could investigate whether a change in the Greek CDS Granger-caused a change in the Portuguese CDS. We do not look at the relationships between the CDS series. Instead, we look at the political shock of an election result. Obtaining a prediction from a VAR is a strategy to avoid omitted variable bias, by increasing the chances we are not confounding the impact of the election with some other process working through the financial system. Since this is our aim, it does not matter that many of the variables might be collinear. We are not interested in the coefficients from the VAR equations, just the overall prediction.

The VAR system of equations for the fourteen variables and ten lags is as follows:

$$\begin{aligned}
\Delta y1_t &= \alpha1 + \beta_{1,1}^1 \Delta y1_{t-1} + \beta_{1,2}^1 \Delta y2_{t-1} + \dots + \beta_{1,14}^1 \Delta y14_{t-1} + \dots + \beta_{1,1}^{10} \Delta y1_{t-10} \\
&\quad + \beta_{1,2}^{10} \Delta y2_{t-10} + \dots + \beta_{1,14}^{10} \Delta y14_{t-10} + e1_t \\
\Delta y2_t &= \alpha2 + \beta_{2,1}^1 \Delta y1_{t-1} + \beta_{2,2}^1 \Delta y2_{t-1} + \dots + \beta_{2,14}^1 \Delta y14_{t-1} + \dots + \beta_{2,1}^{10} \Delta y1_{t-10} \\
&\quad + \beta_{2,2}^{10} \Delta y2_{t-10} + \dots + \beta_{2,14}^{10} \Delta y14_{t-10} + e2_t \\
&\dots \\
\Delta y14_t &= \alpha14 + \beta_{14,1}^1 \Delta y1_{t-1} + \beta_{14,2}^1 \Delta y2_{t-1} + \dots + \beta_{14,14}^1 \Delta y14_{t-1} + \dots + \beta_{14,1}^{10} \Delta y1_{t-10} \\
&\quad + \beta_{14,2}^{10} \Delta CDS2_{t-10} + \dots + \beta_{14,14}^{10} \Delta y14_{t-10} + e14_t \quad (A1)
\end{aligned}$$

We have also provided the STATA code [replication.do] and dataset [replication_file.dta].

2. Impact

The impact of an event on a country's CDS is the residual from its equation, known in finance as the abnormal return. It is usual to look at impact over a number of days known as an event window, in which case, the impact is the cumulative abnormal return (CAR). The outcome of event studies depends somewhat on the estimation window, but even more on the event window, which is shorter and therefore more sensitive. Our estimation window is t-215 to t-16.⁸ This was the shortest window that could accommodate the large number of lags in our prediction model. The three-week insulation period reflects the shortest sample time between the official calling of an election and the election itself. There is no theory that guides the length of event windows. We select our window empirically (Bølstad and Elhardt, 2015: 9).

⁸ See Table A2. Gaps in the Greek CDS require shorter estimation windows for Austria 2013, Belgium 2010, and Belgium 2014.

Line graphs of the mean CAR across all elections and countries (N=165) suggest a clear impact from t-3 to t+3 (Figure A2). This should establish a rigorous estimate of the impact of elections across the Eurozone.

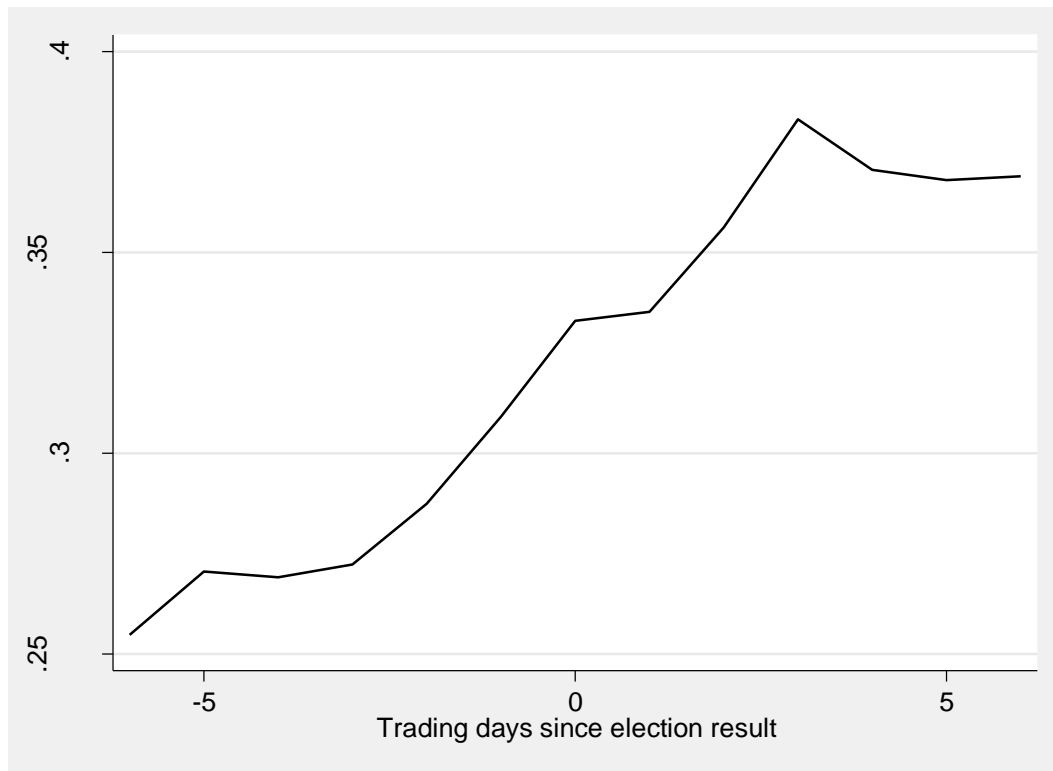


Figure A2. Selecting the Event Window

3. Surprise

We use the first round of the French Presidential election to show how the surprise variable is calculated. Table A3 summarises the policy positions observable from the Bloomberg articles. Twenty-two articles mentioned at least one policy position for one candidate. This represents approximately ten per cent of the articles covering the election in the Bloomberg archive. Thirty-two positions were mentioned and only for the leading three candidates: President Nicolas Sarkozy (Union for the Presidential Majority), François Hollande (Socialist Party), and Marine Le Pen (National Front). Like most elections, it focused on domestic matters. Fiscal

policy was perhaps the dominant policy theme of the election. However, we have been careful to distinguish between policy positions on domestic fiscal policy and policy positions on the fiscal policy of the Eurozone debtor countries. This entered the campaign through discussion of the Fiscal Treaty. This was an international treaty, inspired by Germany, to enshrine fiscal rules in legislation. This was seen as a way of ensuring that crisis countries would be able to pay back their debts or at least that support for bailouts would be maintained in Germany. Hollande wanted to renegotiate the treaty to reorient it, and European fiscal policy, towards growth. Sarkozy had supported the treaty, but avoided specific reference to it in Bloomberg's coverage of the campaign. He did make some more general comments about fiscal policy in the Eurozone. On April 15, it was reported that he thought more growth was necessary. However, a number of articles on April 20 and April 22 said that he supported the status quo. In the last days of the campaign, Sarkozy had aimed to stoke fears that Hollande's economic policies would escalate the European debt crisis and cause financial markets to lose trust in France. These statements advocated the status quo for European fiscal policy. Sarkozy and Hollande both campaigned to change the European Central Bank's mandate to focus on growth as well as inflation. However, since this is, strictly speaking, a matter of monetary, not fiscal, policy, we ignore it here. There are four mentions of Hollande's support for a further internationalisation of debt, but nothing about Sarkozy, partly perhaps because it could be assumed that he supported the status quo. The National Front advocated France's withdrawal from the Euro, thereby removing the key rationale for solidarity with troubled debtor nations. The abolition of the Euro strongly suggests, although does not inevitably imply, strict national liability for debt. Le Pen was hardly very concerned about the effects of austerity on debtor nations, but she did reject the Fiscal Treaty, thereby removing one fiscal straitjacket.

We collected the results of thirty-six opinion polls from Wikipedia, again for the two months before the election. We used a weighted moving average of these polls to predict the vote. The

polls were weighted by an exponential decay function, such that the previous day's value is weighted at half that of the previous day. This rapid decay reflects the fact that it is only the election day that matters, not so much long-term trends in support.

Table A3. Surprise Data for the French Presidential Election

	Sarkozy		Hollande		Le Pen		N
	Debt	Fiscal	Debt	Fiscal	Debt	Fiscal	
Article-Mentions	0	6	4	16	5	1	32
Position Prediction	-	.009 (status quo)	1 (more international)	1 (less austerity)	-2 (fully national)	1 (less austerity)	32
Poll Prediction	26.42		27.79		16.06		36
Election Result	27.18		28.63		17.9		-

Each of the three major candidates did better than predicted in the first round of voting. For Hollande and Sarkozy the increases were relatively marginal. However, for Le Pen the 1.8 percentage point increase was almost 11 and a half percent better than her predicted vote. Recall that surprise is the difference between the weighted policy position for the prediction and the policy position weighted by the actual election result. Fiscal policy moved 0.026 towards austerity and, due to Le Pen's extreme position on the re-nationalisation of debt, debt policy moved 0.029 towards national liability.