Supplementary Information

Contents

This material belongs to the following article:
Bølstad, J. and Elhardt, C. (2017) 'Capacity, Willingness, and Sovereign Default Risk: Reassuring the Market in Times of Crisis'. *JCMS: Journal of Common Market Studies.*

1 A More Detailed Argument

We argue that an adequate model of default risks needs to account for the willingness and capacity to avoid default of actors both at the national and the international level. A country's probability of default is therefore best understood as a function of several more specific probabilities. First, in line with the existing literature, we argue investors have to assess the probability that countries are willing and able to service their debt in full (without external support). We refer to the subjective assessment of this probability as *primary trust* and denote it by $\phi \in (0,1)$. However, investors also have to assess the probability that a country will be rescued by external actors in case it is no longer able to service its liabilities on its own, which we refer to as *secondary trust* and denote by $\eta \in (0,1)$. In sum, investors' overall probability of being paid in full (τ) is the combined probability of a country remaining solvent and the country being rescued in the event of insolvency:

$$\tau = \phi + \eta(1-\phi) \tag{1}$$

Drawing upon the research outlined in the main text, we further argue that investors distinguish between actors' capacity and willingness to avoid defaults. Such considerations are, for instance, evident in the methodologies of the major rating agencies, who assess not only countries' debt servicing capacities, but also political risk – even if the latter is largely assessed qualitatively or by way of proxies (see, for instance, Standard and Poor's, 2011; Moody's, 2013). We define actors' *capacity* as their scope for avoiding default, and we consider this scope at any particular time point as given, representing factors that lie outside of the actors' control. At the national level, capacity is necessarily linked to the notion of fiscal space, while at the international level, other considerations are more relevant, as we discuss in the main text. We further define actors' *willingness* to avoid default as their intended use of their capacity – whether they will indeed avoid defaults if they have the capacity to do so. For national governments, this involves implementing necessary reforms and raising the primary balance of the budget as the cost of debt servicing grows. In contrast, at the international level, this concept entails the willingness to bear the costs of providing sufficient support to prevent the default of illiquid or insolvent countries.

While we let capacity represent factors outside of governments' control, we argue that willingness (or the lack of it) can be signaled through relevant statements and decisions, and the focus of this study is the question of when such signals are effective at shaping investors' trust. We argue not only that investors assess both capacity and willingness, but also that sufficient capacity and willingness are considered to be individually necessary and jointly sufficient conditions for successful efforts to avoid default. Thus, if we let

$\kappa \in (0,1)$ denote the probability that there is sufficient national capacity, and similarly use $\theta \in (0,1)$ for national willingness (conditional on sufficient capacity), $\lambda \in (0,1)$ for international capacity, and $\mu \in (0,1)$ for international willingness (conditional on sufficient capacity), then $\phi = \kappa\theta$, and $\eta = \lambda\mu$. Substituting these definitions for ϕ and η in equation 1, we get:[1]

$$\tau = \kappa\theta + \lambda\mu(1 - \kappa\theta) \tag{2}$$

A key implication of this model is that the effect of signals regarding an actor's willingness is conditioned by this actor's capacity. The precise nature of this interaction becomes clearer if we take partial derivatives of equation 2. With respect to national willingness, this yields:

$$\frac{\delta\tau}{\delta\theta} = \kappa - \lambda\mu\kappa, \tag{3}$$

while we get the following with respect to international willingness:

$$\frac{\delta\tau}{\delta\mu} = \lambda - \lambda\kappa\theta. \tag{4}$$

The most straightforward implication is that the impact of changes in the perceived willingness of an actor is a positive function of this actor's capacity: $\frac{\delta\tau}{\delta\theta}$ is a positive function of κ, and $\frac{\delta\tau}{\delta\mu}$ is a positive function of λ, as $\kappa > \lambda\mu\kappa$ and $\lambda > \lambda\kappa\theta$. Put differently, as an actor's capacity declines, the relevance of this actor's willingness (and signals regarding this

[1]The relationship between default risk $(1-\tau)$ and bond yields is fairly straightforward. For a zero-coupon bond with only one cash flow (C) at maturity (M), the expected cash flow is $E[C] = \tau C$. (For convenience, we let the recovery rate be zero in this discussion.) The yield to maturity is $Y = \sqrt[M]{C/P} - 1$, where P is the price, while the expected rate of return is $E[R] = \sqrt[M]{E[C]/P} - 1$. To keep the expected rate of return constant as the risk of default increases, the price must drop and the yield increase accordingly: $P_1/P_0 = E[C]_1/E[C]_0$. For a risk-neutral investor, this would be sufficient to maintain a bond's attractiveness.

While we focus on default risk as a key determinant of bond spreads (which is consistent with the extremely strong relationship between CDS spreads and bond spreads, both over time and across issuers), other potential factors such as liquidity, taxability, and general risk aversion also deserve some consideration. First, it is worth noting that we analyze daily changes, and thus difference out any permanent differences in taxability or liquidity. Such factors are only relevant in so far as they show daily changes, and they only threaten our inferences in so far as they also covary with our events, yet do so for exogenous reasons – which is unlikely. Put differently, if there are daily shifts in either general risk aversion or concerns over liquidity that systemically covary with our events, then they are also likely to be caused by them. This is consistent with the fact that our placebo test for EU meetings (which is one of the events for which we find the strongest effects) gives no indication that the results are confounded. It is further worth noting we are mainly interested in the overall effects of political actions. While we cannot rule out that a minor part of the effects are due to an alternative mechanism, such as changed perceptions or expectations regarding liquidity, rather than perceptions of default risk, this would not change our conclusions regarding the effects of the events in question.

willingness) is also diminished (all else equal). Yet the importance of willingness at one level also decreases as capacity or willingness at the other level increases, and vice versa. In fact, $\lim_{\lambda\mu\to 1}\frac{\delta\tau}{\delta\theta}=0$, and $\lim_{\kappa\theta\to 1}\frac{\delta\tau}{\delta\mu}=0$, while $\lim_{\lambda\mu\to 0}\frac{\delta\tau}{\delta\theta}=\kappa$, and $\lim_{\kappa\theta\to 0}\frac{\delta\tau}{\delta\mu}=\lambda$. If, for instance, national capacity decreases, this will not only reduce the effect of changes in national willingness, but also increase the impact of changes in international willingness. Comparing the two levels, we see that $\frac{\delta\tau}{\delta\mu}>\frac{\delta\tau}{\delta\theta}$ when $\lambda-\kappa>\lambda\kappa(\theta-\mu)$ and $\frac{\delta\tau}{\delta\mu}<\frac{\delta\tau}{\delta\theta}$ when $\lambda-\kappa<\lambda\kappa(\theta-\mu)$. This is worth keeping in mind, as it qualifies the intuitive expectation that effects will be greater for actors with greater capacity.

2 Data on National Events

In the following, we describe our data in more detail. Starting with the national level, we distinguish between positive and negative signals, coding whether they took the form of statements or decisions. Positive national signals indicate a country's willingness to avoid default by raising the primary balance of its budget and maintaining sustainable public finances. More specifically, this includes statements and decisions to reduce the public deficit in the medium term through various pay and benefit cuts, tax rises, the privatization of state assets, the reduction of tax evasion as well as more structural reforms that aim to increase a country's growth prospects and thus improve its debt-to-GDP-ratio in the longer term. Negative signals, in contrast, indicate a country's limited willingness to ensure the sustainability of its public finances. Here, we include statements and decisions that imply the failure to agree on – or implement – various austerity measures and growth-enhancing reforms, as well as political resistance within the government or parliament against spending cuts, tax rises or structural reforms, and, lastly, the acceptance of any form of debt restructuring – be it voluntary or not.

Our main data source is the online archive of the Financial Times (FT).[2] The FT's webpage does not only contain the articles of the daily print edition but also additional articles by FT writers and material published on the FT' blogs. As one of the world's leading newspapers on economics and business, with an extensive coverage of European politics and markets, we argue that the FT covers the most important political and economic events in the GIIPS – indeed, the FT is itself a major source of information for investors interested in European bond markets.[3] To identify relevant articles, we performed a content analysis using the FT's own online search tool, proceeding in two steps.

[2] Available at <www.ft.com>.

[3] As some might worry that FT as British newspaper would give disproportionate attention to events in Ireland, it is worth noting that the coding does not yield more events for Ireland than for the other countries.

First, we performed a search for news articles on each of the GIIPS countries, published between January 1, 2009 and December 31, 2012, using a combination of keywords such as "Greek" and "Greece" for each respective country. This yielded a very large amount of news articles, which we then – in a second step – coded manually according to our theoretically relevant categories.[4]

As the main aim was to code signals regarding the national willingness to avoid default, our coding focused on statements and decisions by the government, the parliament or key policy makers representing these institutions. Most of the coded news articles were thus either referring to the decisions of collective actors such the national government or parliament, or statements by top officials such as a given country's Prime Minister or Finance Minister. Two brief examples may serve to illustrate our coding strategy: On October 2, 2011, the FT reported "Greek cabinet approves budget cuts"[5] while on June 6, 2011, it reported that Portugal's prime minister was prepared to "go beyond" the country's bail-out agreement.[6] While the first instance was coded as a positive decision, the second was coded as a positive statement.

Our aim is not only to include the key signals of theoretical interest, but also to include all other key events that are likely to influence the outcomes in question. We have therefore also coded relevant positive and negative national news, as well as elections, protests, and strikes. The negative national news category includes such news as downgrades by the three major rating agencies (Standard & Poors, Fitch, and Moody's), the publication of new economic data or forecasts pointing to weaker debt metrics and growth prospects, falling banking stocks and funding problems of banks, failed stress test by banks, weaker performance of national companies, problems with the privatization of state assets, an increase of public deficits by regions, and the evidence of increasing capital flight. The positive news category contains the logical opposites of such elements.

Overall, our national dataset contains 1036 events, of which 107 are negative political signals, and 310 are positive signals, while the remaining 619 are additional events that we include as controls in the analysis. Table S1 shows how these events are distributed across our theoretical categories for each of the GIIPS countries. It is noticeable that

[4] As certain events can give rise to several news stories, we code a given event as taking place on the first day on which it is reported in the news (while similar reports on the following days have been excluded). For most events, such coding is fairly straightforward. In our analyses, we also address this issue by allowing events to have effects on the following day, as well as the day on which they are first reported. This window is further expanded in the robustness checks.

[5] Available at <http://www.ft.com/intl/cms/s/0/17955778-ed13-11e0-be97-00144feab49a.html#axzz2vGyQ3NqG>.

[6] Available at <http://www.ft.com/intl/cms/s/0/81acf4b0-9064-11e0-9227-00144feab49a.html#axzz38w1YrgG1>.

policy makers generally avoid making negative decisions that might call into question their willingness to avoid a default and thus increase the yields they have to pay. Furthermore, the fact that there are almost three times more positive political signals than negative ones suggests that policy makers are genuinely concerned about preserving investors' trust. From a more practical perspective, the relative lack of negative signals (and negative decisions, in particular) makes it harder to test the effect of these signals, and our analysis and discussion will thus be more focused on positive signals – and efforts to reassure the markets.

Table S1: Number of Events at the National Level by Event Type.

	Greece	Italy	Ireland	Portugal	Spain	Total
Sta.Gov.Neg	44	7	19	17	6	93
Dec.Gov.Neg	7	4	0	1	2	14
NA.News.Neg	28	61	92	60	115	356
Sta.Gov.Pos	85	25	11	22	46	189
Dec.Gov.Pos	29	22	17	22	31	121
NA.News.Pos	18	30	41	30	50	169
NA.Prot.Mix	41	13	4	8	12	78
NA.Elec.Mix	4	3	1	2	6	16
Total	256	165	185	162	268	1036

Note: "Sta." refers to statements, "Dec." to decisions, and "NA" to events that fit neither category; "Gov." refers to signals by the national government or parliament, "News" to nationally relevant news, "Prot." to protests, and "Elec." to national elections; "Neg." refers to negative signals, "Neg." to negative, and "Mix." to mixed ones. Protests and elections are included as controls in the analysis, but not discussed as events of theoretical interest.

3 Data on European Events

Turning to the European-level, we rely on data from Bølstad and Elhardt (2015).[7] These data contain relevant statements and decisions by the EU (the European council, the ECOFIN and the Euro-group), as well as statements and decisions by the ECB.[8] Consistent with our coding at the national level, we distinguish between positive and negative European statements and decisions, but we also add a category to encompass mixed sig-

[7]We make a few adjustments to these data, however: We leave aside decisions and statements by rating agencies, as these are also covered by our national-level data, and we add EU meetings that failed to produce relevant decisions, which serve as placebo tests.

[8]Some of the EU decisions in the data also involved the IMF, but the IMF's contributions represented a minor share of all programs, and the IMF played a role in only 7 out of all 55 events we coded for the EU. Likewise, Ireland's rescue package also included minor contributions by the UK, Denmark and Sweden. However, as these contributions were all announced on the same days, their effects are indistinguishable, and as the EU's contributions were by far the largest, we still refer to these events as EU decisions.

nals.[9] Positive signals generally reflect the EU's and the ECB's willingness to provide financial support to the GIIPS and to engage in forms of risk-sharing in order to avoid any restructuring of – or outright default on – sovereign debt by any member of the Eurozone. This includes statements and decisions to bail-out troubled Eurozone economies, to set-up or increase the EFSF (European Financial Stability Facility) or the ESM (European Stability Mechanism), to mutualize debt in the form of Eurobonds or to set up a common deposit insurance scheme for Eurozone banks. For the ECB, we also include statements and decisions relating to its Security Markets Program (SMP), and the Outright Monetary Transactions (OMT), as these programs aim to reassure markets that temporarily illiquid governments will not be forced to default on their debt. In contrast, negative signals reflect actors' reluctance towards all these measures and their acceptance of debt restructuring or defaults inside EMU.

To ensure a comprehensive and complete coverage, the dataset is based on a triangulation of several sources: It combines information obtained from a daily newsflash covering key events in the Eurozone (Eurointelligence, 2014) with the European Commission's own online chronology of the Euro-crisis (European Commission, 2014), as well as two lists of crisis related events provided by Smeets and Zimmermann (2013) and the think-tank Bruegel (2014). As shown in table S2, our European-level dataset contains 28 statements and decisions by the ECB and 45 by the EU. It is also worth noting that it is extremely rare for these actors to send purely negative signals, whether they are statements or decisions.[10] This again illustrates how actors' efforts have centered on reassuring (rather than upsetting) the market. Put differently, the distribution of signals illustrates that the main question at the European level was whether the actors were willing to move forward in sharing the responsibility for guaranteeing Eurozone debt, or whether they would maintain the status quo and risk national defaults.

[9]We code signals as mixed if they include both positive and negative elements. An example is the following statement by the Eurozone released on the Commission's online chronology of the crisis: "European leaders announce that they are willing to prepare a financial assistance package to Greece, in cooperation with the IMF. However, they also announce that this assistance should be considered 'ultima ratio', and would be provided at explicitly punitive interest rates to encourage a quick return to market financing". This information is available at <http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/113563.pdf>.

[10]It should be noted that we exclude three events from the analysis, as they each represent the only occurrence of their type of event. Two of these events also took place on the same day: On February 29, 2012, the ECB and Germany each made their only negative decisions, making it impossible to distinguish their effects. The other event we leave aside in the analysis is a mixed German decision, which neither makes for reliable estimation as it was only observed once. Including these events in the analysis would not change the reported results, however.

Table S2: Number of Events at the European Level by Event Type.

	Negative			Positive			Mixed		Total
	Sta.	Dec.	Int.	Sta.	Dec.	Int.	Sta.	Dec.	
Germany	133	0	0	19	11	0	64	0	227
EU	2	0	0	4	13	0	13	13	45
ECB	2	0	2	3	13	6	2	0	28
Total	137	0	2	26	37	6	79	13	300

Note: "Sta." refers to statements, "Dec." to decisions, and "Int." to ECB interest rate decisions. Decisions of the latter type, as well as German statements and decisions, are included as controls in the analysis, but not discussed as events of theoretical interest.

4 Further Details on the Analysis

This section provides information for which there was insufficient space in the main text. First, we make a few adjustments that are worth noting. In line with most other studies of financial time series, we ignore non-trading days, and treat the data as a continuous time series of trading days. Consistent with this approach, we move all events that take place on non-trading days to the first subsequent trading day, which is the first day on which such events can take effect. At the European level, this applies to 12 events, 8 of which are moved one day, while the remaining 4 are moved two days. At the national level, 93 events are moved one day, 23 are moved two days, and one is moved three days.

A key issue in this study, as in most event studies, is the selection of an event window, within which the effects of an event is analyzed. Theoretically, we would expect financial markets to react very rapidly to relevant news, pricing in new information on the same day as it is released ($t = 0$). However, if news are released late in the day, or investors' decisions are delayed, one might also expect to see some effect on the subsequent day ($t = 1$). This issue can also be assessed empirically: If we select "isolated events" that do not take place close to any other important events, we find that the spreads in question indeed do react according to the expected pattern – mostly on the same day as the events, but also on the next day. We thus focus on a [0-1]-window in our analyses, but (in this appendix) we also report robustness checks, expanding this window in each direction.

Our outcome variable, y, also requires some more consideration. While the initial spreads series are integrated, the differencing provides series with only moderate serial dependency. Diagnostic tests and correlograms suggest that including three lags of the dependent variable is sufficient to capture this dependency, resulting in a third-order autoregressive model, AR(3). Furthermore, the means of the log-differenced series do not differ significantly by country,[11] and this allows us to treat the data as a pooled panel (but note

[11] Judging by either a Hausman test or an F-test of inconsistency between the within-estimator and the pooled-estimator ($p > .9$).

that the supporting information also includes country-specific replications of our model). Turning to the disturbances again, some autoregressive conditional heteroskedasticity (ARCH) remains in our model (Engle, 1982). We address this issue by using a White-type generally heteroskedasticity consistent (HC) covariance matrix when calculating the standard errors (White, 1980). As a robustness check, this appendix also includes country-specific GARCH(1,1) models, as an alternative approach to address the heteroskedasticity (Bollerslev, 1986).[12]

5 Robustness Checks

In this section we report a number of robustness checks. While there are strong theoretical (and empirical) reasons to expect the events in our data mainly to have effects on the same day as they take place, with a possible delayed effect on the next day, it is worth checking whether alternative windows would yield notably different results. Thus, we re-estimate our main model while expanding the event window one day in each direction, testing a window that starts the day before the event [-1,1], and one that lasts two days after [0,2]. Summary information about these models is reported in table S3 and the results are shown in figure S1. The key point to notice, is that there is very little variation in the estimates across the windows (with the exception of negative decisions, for which we at any rate fail to find a significant effect in any model given the large uncertainty surrounding the estimates.) Most notably, the large effects at the European level are very robust to the selection of alternative windows.[13]

Another question is whether our approach to deal with auto-regressive heteroskedasticity (i.e. using HC covariance matrices) is appropriate, or whether GARCH models would yield notably different results. To assess this issue, we estimate our model separately for each country, both as a linear OLS model and as a GARCH model. Diagnostics

[12] Traditionally, non-spherical errors have been considered only to undermine the standard errors of a linear model (while also being a possible indication specification error). Corrected standard errors have thus been a common solution, based on the assumption of appropriate model specification. Recently, King and Roberts (2014) have argued against this approach, based on the view that misspecification is very likely in the presence of non-spherical errors. We thus present GARCH models to assess whether modeling the heteroskedasticity makes a difference for our substantive results.

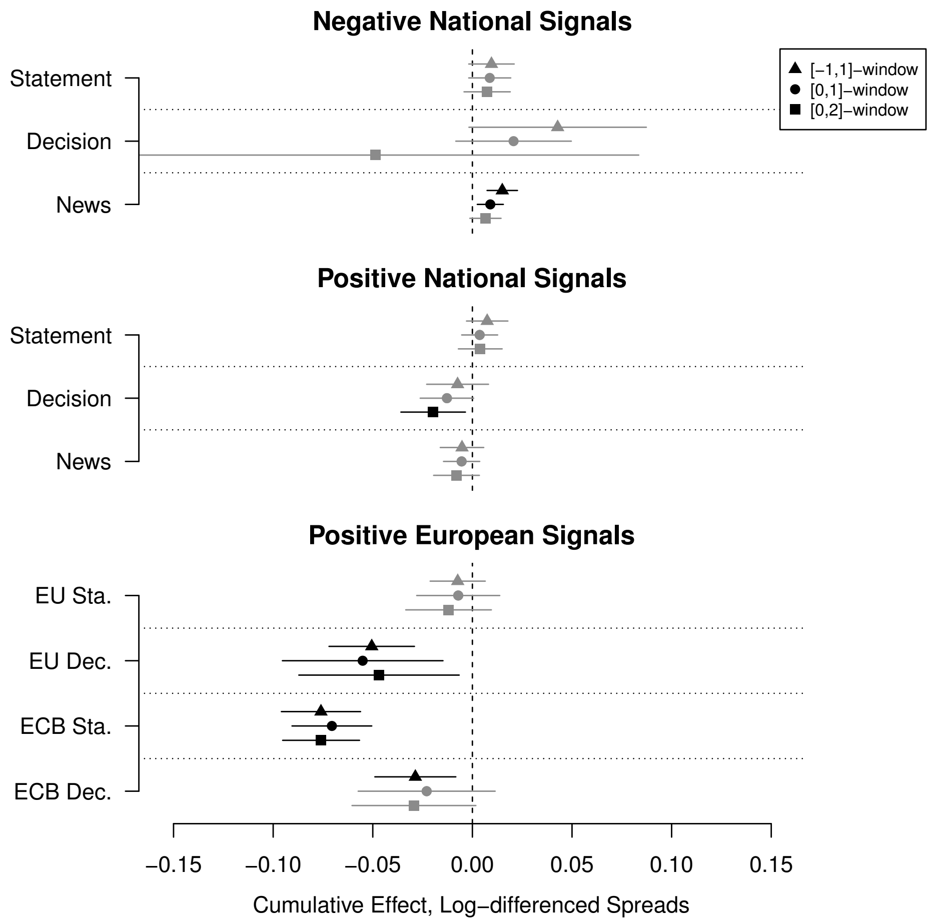
[13] It should also be noted that, in order to draw reliable conclusions, our analysis focuses on short-term reactions than can be identified with reasonable confidence. In contrast, we do not seek to assess how long the effects of the events last, as these over time will blend with others, making it hard, if not impossible to distinguish between them. Nevertheless, it should be noted that the original series of bond spreads are integrated, and thus retain a perfect memory of previous shocks: Unless the effects are completely reversed outside of the windows we investigate, they will indeed have lasting impacts.

Table S3: Summary of the Models Reported in Figure S1.

	Model 7	Model 1	Model 8
Reported in Figure	4	1/4	4
Model type	Pooled	Pooled	Pooled
AR(l)	3	3	3
National events	Incl.	Incl.	Incl.
European events	Incl.	Incl.	Incl.
Quarter, Fixed Eff.	Incl.	Incl.	Incl.
No. of Parameters	88	65	88
Observations	5185	5185	5185
Event window	[-1,1]	[0,1]	[0,2]
HC cov. matrix	Yes	Yes	Yes
AR-test, p–value	0.231	0.318	0.214

Note: AR-test refers to a weighted Ljung-Box-type portmanteau test for serial correlation, using 8 lags (Fisher and Gallagher, 2012; Ljung and Box, 1978).

Figure S1: General Results Using Alternative Event Windows.



Note: The error bars give 95% confidence intervals; statistically significant estimates are shown in black, insignificant ones in gray. The standard errors are calculated using generally heteroskedasticity consistent covariance matrices.

suggest that a GARCH(1,1) model is sufficient to capture the heteroskedasticy, and the conditional variance of these models is thus given by:

$$\sigma_t^2 = \omega_0 + \omega_1 \varepsilon_{t-1}^2 + \omega_2 \sigma_{t-1}^2, \tag{5}$$

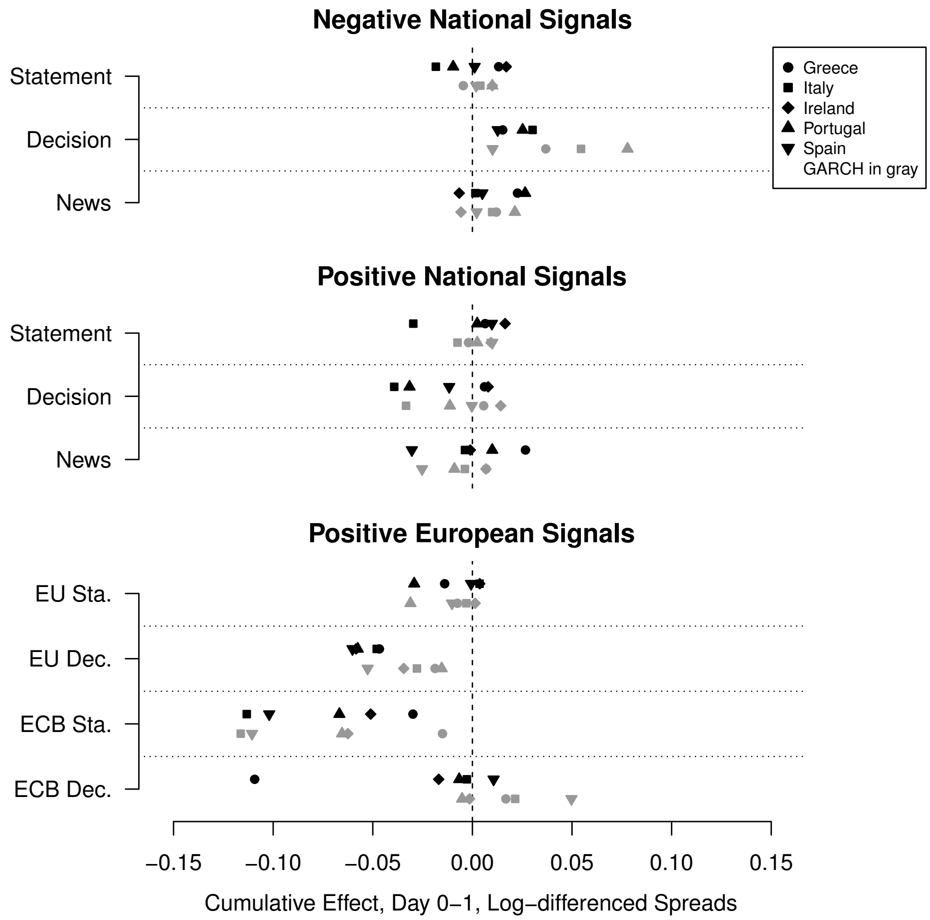
where ε^2 is an ARCH term, σ^2 is a GARCH term. Summary information for the ten models in question is reported in table S4, and the key effects are shown in figure S2 (the full sets of estimates for each model are also reported below). The key point to notice is that the OLS and GARCH models generally agree on the direction and magnitudes of the effects. There is no sign that an alternative modeling strategy would yield substantively different results.

Table S4: Summary of the Models Reported in Figure S2.

	Model 9	Model 10	Model 11	Model 12	Model 13
Model type	OLS	OLS	OLS	OLS	OLS
Country	Greece	Italy	Ireland	Portugal	Spain
AR(l)	3	3	3	3	3
Variance eq. (p, q)	None	None	None	None	None
National events	Incl.	Incl.	Incl.	Incl.	Incl.
European events	Incl.	Incl.	Incl.	Incl.	Incl.
Quarter, Fixed Eff.	Incl.	Incl.	Incl.	Incl.	Incl.
No. of Parameters	65	65	63	65	65
Observations	1037	1037	1037	1037	1037
Event window	[0,1]	[0,1]	[0,1]	[0,1]	[0,1]
AR-test, p-value	0.943	0.541	0.543	0.678	0.522
ARCH-test, p-value	0.711	0.000	0.038	0.000	0.001
HC cov. matrix	Yes	Yes	Yes	Yes	Yes
	Model 14	Model 15	Model 16	Model 17	Model 18
Model type	GARCH	GARCH	GARCH	GARCH	GARCH
Country	Greece	Italy	Ireland	Portugal	Spain
AR(l)	3	3	3	3	3
Variance eq. (p, q)	1,1	1,1	1,1	1,1	1,1
National events	Incl.	Incl.	Incl.	Incl.	Incl.
European events	Incl.	Incl.	Incl.	Incl.	Incl.
Quarter, Fixed Eff.	Incl.	Incl.	Incl.	Incl.	Incl.
No. of Parameters	68	68	66	68	68
Observations	1037	1037	1037	1037	1037
Event window	[0,1]	[0,1]	[0,1]	[0,1]	[0,1]
AR-test, p-value	0.697	0.828	0.495	0.339	0.090
ARCH-test, p-value	0.506	0.265	0.663	0.716	0.588

Note: AR-test refers to a weighted Ljung-Box-type portmanteau test for serial correlation, using 8 lags (Fisher and Gallagher, 2012; Ljung and Box, 1978). For GARCH models, the tests are based on standardized residuals. For OLS models, ARCH-test refers to Engle's LM ARCH test with 8 lags; for GARCH models, ARCH-test refers to a weighted version of the test by Li and Mak using 8 lags (Fisher and Gallagher, 2012; Li and Mak, 1994).

Figure S2: Results by Country Using OLS and GARCH Models.



Note: AR(3)DL estimates are shown in black, AR(3)DL-GARCH(1,1) estimates are shown in gray.

6 Complete Results for All Models

On the following pages, we report the complete sets of estimates for all models used in this study. The numbering of the models correspond to the numbering used in the summary tables reported above as well as those in main document.

Table S5: AR(3)DL Panel Estimates (Model 1)

	t		$t-1$	
	Estimate	Std. Error	Estimate	Std. Error
Intercept	0.004	0.003		
Sta.Gov.Neg	0.005	0.004	0.004	0.004
Dec.Gov.Neg	0.004	0.005	0.016	0.014
NA.News.Neg	0.006***	0.002	0.003	0.002
Sta.Gov.Pos	−0.001	0.003	0.005	0.003
Dec.Gov.Pos	−0.009	0.005	−0.004	0.005
NA.News.Pos	−0.002	0.003	−0.004	0.003
NA.Prot.Mix	0.005	0.004	0.001	0.005
NA.Elec.Mix	0.008	0.008	0.008	0.006
Sta.Ger.Neg	0.006***	0.002	0.001	0.002
Sta.EU.Neg	0.001	0.004	−0.017***	0.006
Int.ECB.Neg	−0.006	0.005	−0.004	0.005
Sta.ECB.Neg	0.020***	0.006	−0.004	0.004
Sta.Ger.Pos	0.000	0.003	−0.007	0.004
Dec.Ger.Pos	−0.007	0.005	−0.032***	0.012
Sta.EU.Pos	−0.007	0.005	−0.000	0.009
Dec.EU.Pos	−0.040***	0.011	−0.015	0.012
Int.ECB.Pos	0.031***	0.012	−0.076***	0.026
Sta.ECB.Pos	−0.037***	0.008	−0.033***	0.006
Dec.ECB.Pos	−0.020**	0.009	−0.003	0.016
Sta.Ger.Mix	−0.005**	0.002	0.005**	0.002
Sta.EU.Mix	−0.011***	0.004	0.005	0.005
Dec.EU.Mix	−0.004	0.006	0.010**	0.004
Sta.ECB.Mix	0.006	0.019	−0.019**	0.010
2009.Q2	−0.007**	0.003		
2009.Q3	−0.008**	0.003		
2009.Q4	−0.003	0.003		
2010.Q1	−0.001	0.004		
2010.Q2	0.014***	0.004		
2010.Q3	−0.003	0.003		
2010.Q4	−0.002	0.003		
2011.Q1	−0.005	0.003		
2011.Q2	−0.001	0.003		
2011.Q3	−0.001	0.004		
2011.Q4	0.001	0.003		
2012.Q1	−0.009**	0.004		
2012.Q2	−0.003	0.003		
2012.Q3	−0.003	0.003		
2012.Q4	−0.004	0.003		
y_{t-1}	0.208***	0.031		
y_{t-2}	−0.063***	0.023		
y_{t-3}	−0.072***	0.024		

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; $R^2 = 0.132$; $N = 5185$. The events have lags [0,1] represented in columns 2-3, and 4-5, respectively. The first quarter of 2009 is base category for the fixed effects. In the first column, events are denoted: Form.Actor.Direction, cf. Tables S1 and S2. The standard errors are based on a generally heteroskedasticity consistent covariance matrix.

Table S6: AR(3)DL Panel Estimates, Low Capacity (Model 2)

	t		$t-1$	
	Estimate	Std. Error	Estimate	Std. Error
Intercept	0.006^{*}	0.003		
Sta.Gov.Neg	0.004	0.005	0.006	0.004
Dec.Gov.Neg	−0.000	0.007	0.014	0.020
NA.News.Neg	0.005	0.003	0.006^{*}	0.003
Sta.Gov.Pos	0.001	0.004	0.006	0.004
Dec.Gov.Pos	−0.006	0.008	−0.001	0.007
NA.News.Pos	0.007^{**}	0.004	0.002	0.004
NA.Prot.Mix	0.003	0.005	0.003	0.006
NA.Elec.Mix	0.000	0.014	0.011^{***}	0.004
Sta.Ger.Neg	0.006^{***}	0.002	0.001	0.002
Sta.EU.Neg	0.005	0.004	−0.004	0.003
Int.ECB.Neg	-0.014^{**}	0.006	0.001	0.004
Sta.ECB.Neg	0.009^{**}	0.004	0.004	0.005
Sta.Ger.Pos	0.001	0.004	−0.001	0.005
Dec.Ger.Pos	−0.006	0.006	-0.040^{**}	0.016
Sta.EU.Pos	−0.009	0.006	−0.003	0.010
Dec.EU.Pos	-0.034^{**}	0.015	−0.021	0.016
Int.ECB.Pos	0.037^{***}	0.014	-0.084^{**}	0.037
Sta.ECB.Pos	-0.021^{***}	0.006	-0.027^{***}	0.006
Dec.ECB.Pos	-0.030^{**}	0.013	−0.015	0.026
Sta.Ger.Mix	−0.003	0.003	0.006^{*}	0.003
Sta.EU.Mix	−0.007	0.005	0.009	0.006
Dec.EU.Mix	−0.008	0.007	0.001	0.005
Sta.ECB.Mix	0.015	0.015	−0.008	0.006
2009.Q2	-0.008^{**}	0.004		
2009.Q3	-0.011^{***}	0.004		
2009.Q4	−0.004	0.004		
2010.Q1	−0.005	0.005		
2010.Q2	0.011^{**}	0.005		
2010.Q3	−0.004	0.004		
2010.Q4	−0.006	0.004		
2011.Q1	−0.006	0.004		
2011.Q2	−0.003	0.004		
2011.Q3	−0.004	0.004		
2011.Q4	−0.001	0.004		
2012.Q1	-0.011^{*}	0.006		
2012.Q2	-0.007^{*}	0.004		
2012.Q3	-0.008^{**}	0.004		
2012.Q4	-0.008^{*}	0.004		
y_{t-1}	0.198^{***}	0.047		
y_{t-2}	−0.030	0.028		
y_{t-3}	-0.082^{**}	0.037		

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; $R^2 = 0.143$; $N = 3111$. The events have lags [0,1] represented in columns 2-3, and 4-5, respectively. The first quarter of 2009 is base category for the fixed effects. In the first column, events are denoted: Form.Actor.Direction, cf. Tables 2 and 3. The standard errors are based on a generally heteroskedasticity consistent covariance matrix.

Table S7: AR(3)DL Panel Estimates, Med. Capacity (Model 3)

	t		$t-1$	
	Estimate	Std. Error	Estimate	Std. Error
Intercept	0.001	0.004		
Sta.Gov.Neg	0.007	0.013	−0.012	0.012
Dec.Gov.Neg	0.010	0.007	0.018	0.020
NA.News.Neg	0.007**	0.003	−0.002	0.003
Sta.Gov.Pos	−0.004	0.006	0.003	0.006
Dec.Gov.Pos	−0.010	0.007	−0.012	0.007
NA.News.Pos	−0.012**	0.005	−0.010*	0.005
NA.Prot.Mix	0.013**	0.006	−0.005	0.007
NA.Elec.Mix	0.013	0.009	0.005	0.011
Sta.Ger.Neg	0.006**	0.003	0.000	0.003
Sta.EU.Neg	0.002	0.010	−0.034***	0.010
Int.ECB.Neg	0.004	0.007	−0.011	0.011
Sta.ECB.Neg	0.040***	0.006	−0.014*	0.008
Sta.Ger.Pos	−0.001	0.005	−0.016**	0.008
Dec.Ger.Pos	−0.009	0.007	−0.022	0.016
Sta.EU.Pos	−0.002	0.009	0.002	0.018
Dec.EU.Pos	−0.046***	0.014	−0.007	0.015
Int.ECB.Pos	0.024	0.020	−0.058*	0.032
Sta.ECB.Pos	−0.061***	0.014	−0.049***	0.007
Dec.ECB.Pos	−0.007	0.012	0.012	0.010
Sta.Ger.Mix	−0.008**	0.004	0.004	0.004
Sta.EU.Mix	−0.018***	0.007	−0.003	0.007
Dec.EU.Mix	0.001	0.011	0.023***	0.005
Sta.ECB.Mix	−0.004	0.044	−0.037*	0.020
2009.Q2	−0.005	0.006		
2009.Q3	−0.004	0.006		
2009.Q4	−0.002	0.006		
2010.Q1	0.004	0.006		
2010.Q2	0.018***	0.006		
2010.Q3	0.001	0.005		
2010.Q4	0.003	0.005		
2011.Q1	−0.002	0.005		
2011.Q2	0.004	0.005		
2011.Q3	0.007	0.006		
2011.Q4	0.004	0.006		
2012.Q1	−0.004	0.005		
2012.Q2	0.006	0.005		
2012.Q3	0.005	0.005		
2012.Q4	0.003	0.005		
y_{t-1}	0.214***	0.030		
y_{t-2}	−0.114***	0.030		
y_{t-3}	−0.059**	0.024		

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; $R^2 = 0.144$; $N = 2074$. The events have lags [0,1] represented in columns 2-3, and 4-5, respectively. The first quarter of 2009 is base category for the fixed effects. In the first column, events are denoted: Form.Actor.Direction, cf. Tables 2 and 3. The standard errors are based on a generally heteroskedasticity consistent covariance matrix.

Table S8: Estimates for the Placebo Test with a [-1,1]-Window (Model 4)

	$t+1$		t		$t-1$	
	Estimate	Std. Error	Estimate	Std. Error	Estimate	Std. Error
Intercept			0.003	0.003		
Weak.Gov.Neg	0.003	0.003	0.004	0.004	0.002	0.004
Strong.Gov.Neg	0.023	0.017	0.005	0.005	0.015	0.013
NA.News.Neg	0.007***	0.002	0.006***	0.002	0.002	0.002
Weak.Gov.Pos	0.005*	0.003	−0.002	0.003	0.004	0.003
Strong.Gov.Pos	0.006	0.005	−0.009	0.005	−0.004	0.005
NA.News.Pos	0.001	0.003	−0.002	0.003	−0.004	0.003
NA.Prot.Mix	−0.005	0.004	0.006	0.004	0.000	0.004
NA.Elec.Mix	−0.004	0.006	0.007	0.008	0.007	0.006
Sta.Ger.Neg	−0.001	0.002	0.007***	0.002	0.001	0.002
Sta.EU.Neg	−0.004	0.010	0.001	0.003	−0.015**	0.006
Int.ECB.Neg	−0.026***	0.008	−0.005	0.005	−0.006	0.005
Sta.ECB.Neg	−0.010**	0.004	0.018***	0.006	−0.001	0.005
Sta.Ger.Pos	0.003	0.004	0.001	0.003	−0.006	0.004
Dec.Ger.Pos	−0.004	0.005	−0.006	0.005	−0.032***	0.012
Sta.EU.Pos	0.000	0.004	−0.008	0.006	−0.000	0.009
Dec.EU.Pos	0.005	0.005	−0.041***	0.011	−0.017	0.011
Int.ECB.Pos	0.038***	0.012	0.035***	0.012	−0.074***	0.026
Sta.ECB.Pos	−0.005	0.006	−0.037***	0.008	−0.034***	0.006
Dec.ECB.Pos	−0.006	0.004	−0.020**	0.010	−0.003	0.016
Sta.Ger.Mix	0.001	0.002	−0.005**	0.002	0.006**	0.002
Sta.EU.Mix	0.002	0.004	−0.011***	0.004	0.004	0.005
Dec.EU.Mix	−0.016***	0.004	−0.005	0.006	0.010**	0.004
Sta.ECB.Mix	−0.007	0.010	0.004	0.018	−0.021**	0.010
Dec.EU.Pla	−0.013**	0.006	−0.007	0.006	0.016***	0.006
2009.Q2			−0.006*	0.003		
2009.Q3			−0.007**	0.003		
2009.Q4			−0.002	0.004		
2010.Q1			−0.001	0.004		
2010.Q2			0.014***	0.004		
2010.Q3			−0.002	0.003		
2010.Q4			−0.001	0.003		
2011.Q1			−0.004	0.003		
2011.Q2			0.001	0.003		
2011.Q3			0.000	0.004		
2011.Q4			0.001	0.003		
2012.Q1			−0.007*	0.004		
2012.Q2			−0.002	0.003		
2012.Q3			−0.002	0.003		
2012.Q4			−0.003	0.003		
y_{t-1}			0.200***	0.031		
y_{t-2}			−0.063***	0.023		
y_{t-3}			−0.070***	0.024		

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; $R^2 = 0.144$; $N = 5185$. The events have lags [-1,0,1] represented in columns 2-3, 4-5, and 6-7, respectively. The first quarter of 2009 is base category for the fixed effects. In the first column, events are denoted: Form.Actor.Direction, cf. Tables 2 and 3. The standard errors are based on a generally heteroskedasticity consistent covariance matrix.

Table S9: Placebo Test with a [0,1]-Window (Model 5)

	t		$t-1$	
	Estimate	Std. Error	Estimate	Std. Error
Intercept	0.004	0.003		
Weak.Gov.Neg	0.004	0.004	0.004	0.004
Strong.Gov.Neg	0.004	0.005	0.016	0.014
NA.News.Neg	0.006***	0.002	0.003	0.002
Weak.Gov.Pos	−0.001	0.003	0.005	0.003
Strong.Gov.Pos	−0.008	0.005	−0.004	0.005
NA.News.Pos	−0.002	0.003	−0.004	0.003
NA.Prot.Mix	0.006	0.004	0.001	0.004
NA.Elec.Mix	0.007	0.008	0.008	0.006
Sta.Ger.Neg	0.006***	0.002	0.001	0.002
Sta.EU.Neg	0.002	0.004	−0.017***	0.006
Int.ECB.Neg	−0.006	0.005	−0.004	0.005
Sta.ECB.Neg	0.020***	0.006	−0.004	0.004
Sta.Ger.Pos	0.001	0.003	−0.007	0.004
Dec.Ger.Pos	−0.007	0.005	−0.032***	0.012
Sta.EU.Pos	−0.007	0.005	0.000	0.009
Dec.EU.Pos	−0.040***	0.011	−0.015	0.012
Int.ECB.Pos	0.031***	0.012	−0.076***	0.026
Sta.ECB.Pos	−0.037***	0.008	−0.033***	0.006
Dec.ECB.Pos	−0.020**	0.009	−0.003	0.016
Sta.Ger.Mix	−0.005**	0.002	0.005**	0.002
Sta.EU.Mix	−0.011**	0.004	0.005	0.005
Dec.EU.Mix	−0.004	0.006	0.010**	0.004
Sta.ECB.Mix	0.006	0.019	−0.019**	0.010
Dec.EU.Pla	−0.007	0.006	0.016***	0.006
2009.Q2	−0.007**	0.003		
2009.Q3	−0.008**	0.003		
2009.Q4	−0.003	0.003		
2010.Q1	−0.001	0.004		
2010.Q2	0.014***	0.004		
2010.Q3	−0.002	0.003		
2010.Q4	−0.002	0.003		
2011.Q1	−0.004	0.003		
2011.Q2	−0.000	0.003		
2011.Q3	−0.001	0.004		
2011.Q4	0.001	0.003		
2012.Q1	−0.009**	0.004		
2012.Q2	−0.003	0.003		
2012.Q3	−0.003	0.003		
2012.Q4	−0.004	0.003		
y_{t-1}	0.208***	0.031		
y_{t-2}	−0.062***	0.023		
y_{t-3}	−0.072***	0.024		

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; $R^2 = 0.134$; $N = 5185$. The events have lags [0,1] represented in columns 2-3, and 4-5, respectively. The first quarter of 2009 is base category for the fixed effects. In the first column, events are denoted: Form.Actor.Direction, cf. Tables 2 and 3. The standard errors are based on a generally heteroskedasticity consistent covariance matrix.

Table S10: Estimates for the Placebo Test with a [0,2]-Window (Model 6)

	t		$t-1$		$t-2$	
	Estimate	Std. Error	Estimate	Std. Error	Estimate	Std. Error
Intercept	0.003	0.003				
Weak.Gov.Neg	0.004	0.004	0.004	0.004	−0.001	0.003
Strong.Gov.Neg	0.003	0.005	0.015	0.014	−0.067	0.065
NA.News.Neg	0.007***	0.002	0.003	0.002	−0.003	0.002
Weak.Gov.Pos	−0.001	0.003	0.006*	0.004	−0.001	0.003
Strong.Gov.Pos	−0.008	0.006	−0.004	0.005	−0.007	0.006
NA.News.Pos	−0.002	0.003	−0.004	0.003	−0.002	0.004
NA.Prot.Mix	0.007*	0.004	0.002	0.005	0.004	0.005
NA.Elec.Mix	0.007	0.008	0.006	0.006	0.002	0.007
Sta.Ger.Neg	0.006***	0.002	0.002	0.002	0.003	0.002
Sta.EU.Neg	0.004	0.004	−0.017**	0.006	0.008	0.007
Int.ECB.Neg	−0.006	0.005	−0.002	0.005	0.004	0.009
Sta.ECB.Neg	0.020***	0.006	−0.002	0.004	0.020***	0.006
Sta.Ger.Pos	0.003	0.003	−0.006	0.004	−0.004	0.003
Dec.Ger.Pos	−0.006	0.005	−0.029**	0.012	0.017***	0.006
Sta.EU.Pos	−0.008	0.006	−0.000	0.009	−0.004	0.005
Dec.EU.Pos	−0.041***	0.011	−0.018	0.012	0.013**	0.005
Int.ECB.Pos	0.031***	0.012	−0.075***	0.026	0.016*	0.009
Sta.ECB.Pos	−0.043***	0.008	−0.033***	0.006	0.001	0.007
Dec.ECB.Pos	−0.019**	0.009	−0.006	0.014	−0.004	0.008
Sta.Ger.Mix	−0.004*	0.002	0.005**	0.002	0.003	0.002
Sta.EU.Mix	−0.010**	0.004	0.005	0.005	−0.005	0.004
Dec.EU.Mix	−0.004	0.006	0.007*	0.004	−0.001	0.005
Sta.ECB.Mix	0.008	0.018	−0.020*	0.010	−0.043**	0.020
Dec.EU.Pla	−0.007	0.006	0.016***	0.006	−0.008**	0.004
2009.Q2	−0.007**	0.003				
2009.Q3	−0.008**	0.003				
2009.Q4	−0.003	0.003				
2010.Q1	−0.001	0.004				
2010.Q2	0.013***	0.004				
2010.Q3	−0.001	0.003				
2010.Q4	−0.001	0.003				
2011.Q1	−0.004	0.003				
2011.Q2	−0.001	0.003				
2011.Q3	−0.000	0.004				
2011.Q4	0.001	0.003				
2012.Q1	−0.008**	0.004				
2012.Q2	−0.003	0.003				
2012.Q3	−0.004	0.003				
2012.Q4	−0.004	0.003				
y_{t-1}	0.218***	0.033				
y_{t-2}	−0.063***	0.024				
y_{t-3}	−0.072***	0.022				

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; $R^2 = 0.147$; $N = 5185$. The events have lags [0,1,2] represented in columns 2-3, 4-5, and 6-7, respectively. The first quarter of 2009 is base category for the fixed effects. In the first column, events are denoted: Form.Actor.Direction, cf. Tables 2 and 3. The standard errors are based on a generally heteroskedasticity consistent covariance matrix.

Table S11: Estimates for the AR(3)DL Panel Model with a [-1,1]-Window (Model 7)

	$t+1$		t		$t-1$	
	Estimate	Std. Error	Estimate	Std. Error	Estimate	Std. Error
Intercept			0.002	0.003		
Sta.Gov.Neg	0.003	0.004	0.004	0.004	0.003	0.004
Dec.Gov.Neg	0.023	0.017	0.004	0.005	0.015	0.013
NA.News.Neg	0.007***	0.002	0.006***	0.002	0.002	0.002
Sta.Gov.Pos	0.005*	0.003	−0.002	0.003	0.004	0.003
Dec.Gov.Pos	0.006	0.005	−0.009	0.005	−0.005	0.005
NA.News.Pos	0.001	0.003	−0.002	0.003	−0.004	0.003
NA.Prot.Mix	−0.005	0.004	0.005	0.004	0.000	0.004
NA.Elec.Mix	−0.005	0.006	0.008	0.008	0.007	0.006
Sta.Ger.Neg	−0.001	0.002	0.007***	0.002	0.001	0.002
Sta.EU.Neg	−0.004	0.010	0.001	0.003	−0.015**	0.006
Int.ECB.Neg	−0.026***	0.008	−0.005	0.005	−0.006	0.005
Sta.ECB.Neg	−0.010**	0.004	0.018***	0.006	−0.001	0.005
Sta.Ger.Pos	0.003	0.004	0.001	0.003	−0.005	0.004
Dec.Ger.Pos	−0.003	0.005	−0.006	0.005	−0.032***	0.012
Sta.EU.Pos	0.000	0.004	−0.008	0.006	−0.000	0.009
Dec.EU.Pos	0.007	0.005	−0.040***	0.011	−0.017	0.011
Int.ECB.Pos	0.038***	0.012	0.035***	0.012	−0.074***	0.026
Sta.ECB.Pos	−0.005	0.005	−0.037***	0.008	−0.034***	0.006
Dec.ECB.Pos	−0.006	0.004	−0.020**	0.010	−0.003	0.016
Sta.Ger.Mix	0.001	0.002	−0.006**	0.002	0.006**	0.002
Sta.EU.Mix	0.002	0.004	−0.011***	0.004	0.004	0.005
Dec.EU.Mix	−0.016***	0.004	−0.004	0.006	0.010**	0.004
Sta.ECB.Mix	−0.007	0.010	0.004	0.018	−0.022**	0.010
2009.Q2			−0.006*	0.003		
2009.Q3			−0.007**	0.003		
2009.Q4			−0.002	0.003		
2010.Q1			−0.001	0.004		
2010.Q2			0.014***	0.004		
2010.Q3			−0.002	0.003		
2010.Q4			−0.001	0.003		
2011.Q1			−0.004	0.003		
2011.Q2			0.001	0.003		
2011.Q3			0.000	0.004		
2011.Q4			0.001	0.003		
2012.Q1			−0.007*	0.004		
2012.Q2			−0.002	0.003		
2012.Q3			−0.002	0.003		
2012.Q4			−0.003	0.003		
y_{t-1}			0.201***	0.031		
y_{t-2}			−0.065***	0.023		
y_{t-3}			−0.072***	0.024		

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; $R^2 = 0.142$; $N = 5185$. The events have lags [-1,0,1] represented in columns 2-3, 4-5, and 6-7, respectively. The first quarter of 2009 is base category for the fixed effects. In the first column, events are denoted: Form.Actor.Direction, cf. Tables 2 and 3. The standard errors are based on a generally heteroskedasticity consistent covariance matrix.

Table S12: Estimates for the AR(3)DL Panel Model with a [0,2]-Window (Model 8)

	t		$t-1$		$t-2$	
	Estimate	Std. Error	Estimate	Std. Error	Estimate	Std. Error
Intercept	0.003	0.003				
Sta.Gov.Neg	0.004	0.004	0.004	0.004	−0.001	0.003
Dec.Gov.Neg	0.003	0.005	0.015	0.014	−0.067	0.065
NA.News.Neg	0.007***	0.002	0.003	0.002	−0.003	0.002
Sta.Gov.Pos	−0.001	0.003	0.006	0.004	−0.001	0.003
Dec.Gov.Pos	−0.008	0.006	−0.004	0.005	−0.008	0.006
NA.News.Pos	−0.002	0.003	−0.004	0.003	−0.002	0.004
NA.Prot.Mix	0.007*	0.004	0.002	0.005	0.004	0.005
NA.Elec.Mix	0.007	0.008	0.006	0.006	0.002	0.007
Sta.Ger.Neg	0.006***	0.002	0.002	0.002	0.002	0.002
Sta.EU.Neg	0.004	0.004	−0.016**	0.006	0.008	0.007
Int.ECB.Neg	−0.006	0.005	−0.002	0.005	0.004	0.009
Sta.ECB.Neg	0.020***	0.006	−0.002	0.004	0.020***	0.006
Sta.Ger.Pos	0.002	0.003	−0.006	0.004	−0.004	0.003
Dec.Ger.Pos	−0.006	0.005	−0.029**	0.012	0.017***	0.006
Sta.EU.Pos	−0.008	0.006	−0.000	0.009	−0.004	0.005
Dec.EU.Pos	−0.042***	0.011	−0.018	0.012	0.013**	0.005
Int.ECB.Pos	0.031***	0.012	−0.075***	0.026	0.016*	0.009
Sta.ECB.Pos	−0.043***	0.008	−0.033***	0.006	0.001	0.007
Dec.ECB.Pos	−0.019**	0.009	−0.006	0.014	−0.004	0.008
Sta.Ger.Mix	−0.004*	0.002	0.005**	0.003	0.003	0.002
Sta.EU.Mix	−0.010**	0.004	0.005	0.005	−0.005	0.004
Dec.EU.Mix	−0.004	0.006	0.007*	0.004	−0.001	0.005
Sta.ECB.Mix	0.008	0.018	−0.019*	0.011	−0.043**	0.020
2009.Q2	−0.007**	0.003				
2009.Q3	−0.008**	0.003				
2009.Q4	−0.003	0.003				
2010.Q1	−0.001	0.004				
2010.Q2	0.013***	0.004				
2010.Q3	−0.001	0.003				
2010.Q4	−0.001	0.003				
2011.Q1	−0.004	0.003				
2011.Q2	−0.001	0.003				
2011.Q3	−0.000	0.004				
2011.Q4	0.001	0.003				
2012.Q1	−0.008**	0.004				
2012.Q2	−0.003	0.003				
2012.Q3	−0.004	0.003				
2012.Q4	−0.004	0.003				
y_{t-1}	0.217***	0.033				
y_{t-2}	−0.063***	0.024				
y_{t-3}	−0.072***	0.022				

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; $R^2 = 0.145$; $N = 5185$. The events have lags [0,1,2] represented in columns 2-3, 4-5, and 6-7, respectively. The first quarter of 2009 is base category for the fixed effects. In the first column, events are denoted: Form.Actor.Direction, cf. Tables 2 and 3. The standard errors are based on a generally heteroskedasticity consistent covariance matrix.

Table S13: AR(3)DL Estimates for Greece (Model 9)

	t		$t-1$	
	Estimate	Std. Error	Estimate	Std. Error
Intercept	0.002	0.005		
Sta.Gov.Neg	0.005	0.007	0.008	0.005
Dec.Gov.Neg	0.002	0.011	0.013	0.024
NA.News.Neg	0.008	0.008	0.015^{*}	0.009
Sta.Gov.Pos	0.002	0.006	0.005	0.005
Dec.Gov.Pos	0.005	0.008	0.001	0.012
NA.News.Pos	0.013	0.009	0.013	0.012
NA.Prot.Mix	0.000	0.007	−0.002	0.006
NA.Elec.Mix	−0.006	0.025	0.007	0.006
Sta.Ger.Neg	0.008^{*}	0.005	0.002	0.004
Sta.EU.Neg	−0.002	0.008	−0.002	0.006
Int.ECB.Neg	−0.005	0.010	−0.006	0.006
Sta.ECB.Neg	0.004	0.009	0.002	0.007
Sta.Ger.Pos	−0.002	0.007	0.013	0.010
Dec.Ger.Pos	0.006	0.010	-0.051^{*}	0.030
Sta.EU.Pos	0.003	0.012	-0.017^{*}	0.009
Dec.EU.Pos	−0.029	0.028	−0.017	0.031
Int.ECB.Pos	0.061^{***}	0.019	−0.083	0.069
Sta.ECB.Pos	−0.004	0.005	-0.026^{***}	0.006
Dec.ECB.Pos	−0.037	0.025	−0.072	0.072
Sta.Ger.Mix	−0.004	0.006	0.004	0.006
Sta.EU.Mix	−0.006	0.008	0.000	0.006
Dec.EU.Mix	−0.012	0.016	0.006	0.013
Sta.ECB.Mix	0.039	0.042	−0.002	0.012
2009.Q2	−0.008	0.006		
2009.Q3	−0.006	0.007		
2009.Q4	0.005	0.007		
2010.Q1	−0.002	0.009		
2010.Q2	0.018^{*}	0.009		
2010.Q3	−0.003	0.005		
2010.Q4	0.000	0.006		
2011.Q1	−0.002	0.006		
2011.Q2	−0.001	0.006		
2011.Q3	0.005	0.007		
2011.Q4	0.007	0.007		
2012.Q1	−0.013	0.017		
2012.Q2	−0.001	0.006		
2012.Q3	−0.008	0.007		
2012.Q4	−0.010	0.007		
y_{t-1}	0.102	0.065		
y_{t-2}	−0.012	0.041		
y_{t-3}	-0.135^{*}	0.082		

Note: $^{*}\ p < 0.1$, $^{**}\ p < 0.05$, $^{***}\ p < 0.01$; $R^2 = 0.104$; $N = 1037$. The events have lags [0,1] represented in columns 2-3, and 4-5, respectively. The first quarter of 2009 is base category for the fixed effects. In the first column, events are denoted: Form.Actor.Direction, cf. Tables S1 and S2. The standard errors are based on a generally heteroskedasticity consistent covariance matrix.

Table S14: AR(3)DL Estimates for Italy (Model 10)

	t		$t-1$	
	Estimate	Std. Error	Estimate	Std. Error
Intercept	0.001	0.006		
Sta.Gov.Neg	0.002	0.019	−0.020	0.019
Dec.Gov.Neg	0.013	0.009	0.017	0.029
NA.News.Neg	0.007	0.005	−0.006	0.006
Sta.Gov.Pos	−0.019***	0.007	−0.011	0.011
Dec.Gov.Pos	−0.022*	0.012	−0.017	0.012
NA.News.Pos	−0.006	0.006	0.002	0.007
NA.Prot.Mix	0.010	0.009	−0.009	0.008
NA.Elec.Mix	0.009	0.011	0.005	0.025
Sta.Ger.Neg	0.007*	0.004	−0.000	0.004
Sta.EU.Neg	−0.012**	0.006	−0.038**	0.015
Int.ECB.Neg	0.002	0.006	−0.016	0.017
Sta.ECB.Neg	0.034***	0.009	−0.012*	0.007
Sta.Ger.Pos	0.000	0.007	−0.017	0.013
Dec.Ger.Pos	−0.008	0.011	−0.021	0.018
Sta.EU.Pos	−0.001	0.009	0.005	0.022
Dec.EU.Pos	−0.042**	0.017	−0.006	0.018
Int.ECB.Pos	0.029	0.020	−0.066*	0.039
Sta.ECB.Pos	−0.064***	0.012	−0.050***	0.009
Dec.ECB.Pos	−0.005	0.015	0.002	0.012
Sta.Ger.Mix	−0.008	0.006	0.004	0.005
Sta.EU.Mix	−0.020**	0.010	−0.001	0.010
Dec.EU.Mix	−0.000	0.015	0.025***	0.006
Sta.ECB.Mix	0.008	0.060	−0.045	0.037
2009.Q2	−0.007	0.008		
2009.Q3	−0.004	0.008		
2009.Q4	−0.005	0.007		
2010.Q1	0.003	0.008		
2010.Q2	0.015	0.009		
2010.Q3	0.001	0.007		
2010.Q4	0.001	0.007		
2011.Q1	−0.003	0.008		
2011.Q2	0.003	0.007		
2011.Q3	0.015	0.010		
2011.Q4	0.010	0.008		
2012.Q1	−0.005	0.008		
2012.Q2	0.006	0.007		
2012.Q3	0.003	0.008		
2012.Q4	0.002	0.007		
y_{t-1}	0.200***	0.041		
y_{t-2}	−0.125***	0.044		
y_{t-3}	−0.024	0.034		

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; $R^2 = 0.100$; $N = 1037$. The events have lags [0,1] represented in columns 2-3, and 4-5, respectively. The first quarter of 2009 is base category for the fixed effects. In the first column, events are denoted: Form.Actor.Direction, cf. Tables S1 and S2. The standard errors are based on a generally heteroskedasticity consistent covariance matrix.

Table S15: AR(3)DL Estimates for Ireland (Model 11)

	t		$t-1$	
	Estimate	Std. Error	Estimate	Std. Error
Intercept	0.009*	0.005		
Sta.Gov.Neg	0.008	0.006	0.009**	0.004
NA.News.Neg	−0.005	0.004	−0.002	0.004
Sta.Gov.Pos	0.007	0.007	0.009	0.011
Dec.Gov.Pos	0.016**	0.008	−0.008	0.008
NA.News.Pos	0.004	0.005	−0.005	0.005
NA.Prot.Mix	−0.017	0.014	0.043	0.037
NA.Elec.Mix	−0.035***	0.008	0.011	0.010
Sta.Ger.Neg	0.003	0.003	0.004	0.003
Sta.EU.Neg	0.003	0.007	−0.011***	0.004
Int.ECB.Neg	−0.016	0.011	0.011*	0.007
Sta.ECB.Neg	0.014***	0.004	0.003	0.009
Sta.Ger.Pos	0.004	0.005	−0.007	0.006
Dec.Ger.Pos	−0.020*	0.012	−0.024	0.024
Sta.EU.Pos	−0.006	0.007	0.010	0.014
Dec.EU.Pos	−0.038	0.024	−0.021	0.023
Int.ECB.Pos	−0.001	0.016	−0.068	0.053
Sta.ECB.Pos	−0.028***	0.010	−0.023***	0.005
Dec.ECB.Pos	−0.030	0.018	0.013	0.010
Sta.Ger.Mix	−0.002	0.004	0.006	0.004
Sta.EU.Mix	−0.009*	0.005	0.011	0.008
Dec.EU.Mix	−0.002	0.010	−0.003	0.006
Sta.ECB.Mix	0.000	0.019	−0.021**	0.008
2009.Q2	−0.009	0.006		
2009.Q3	−0.014**	0.006		
2009.Q4	−0.010	0.007		
2010.Q1	−0.010	0.007		
2010.Q2	0.006	0.008		
2010.Q3	−0.005	0.007		
2010.Q4	−0.007	0.007		
2011.Q1	−0.008	0.006		
2011.Q2	−0.007	0.006		
2011.Q3	−0.013*	0.007		
2011.Q4	−0.006	0.006		
2012.Q1	−0.012**	0.006		
2012.Q2	−0.010*	0.006		
2012.Q3	−0.009	0.006		
2012.Q4	−0.007	0.006		
y_{t-1}	0.244***	0.048		
y_{t-2}	−0.003	0.036		
y_{t-3}	−0.036	0.041		

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; $R^2 = 0.139$; $N = 1037$. The events have lags [0,1] represented in columns 2-3, and 4-5, respectively. The first quarter of 2009 is base category for the fixed effects. In the first column, events are denoted: Form.Actor.Direction, cf. Tables S1 and S2. The standard errors are based on a generally heteroskedasticity consistent covariance matrix.

Table S16: AR(3)DL Estimates for Portugal (Model 12)

	t		$t-1$	
	Estimate	Std. Error	Estimate	Std. Error
Intercept	0.005	0.006		
Sta.Gov.Neg	−0.007	0.010	−0.003	0.016
Dec.Gov.Neg	0.005	0.018	0.021*	0.011
NA.News.Neg	0.016**	0.007	0.011	0.007
Sta.Gov.Pos	−0.006	0.008	0.008	0.010
Dec.Gov.Pos	−0.031*	0.018	−0.000	0.015
NA.News.Pos	0.011	0.009	−0.001	0.006
NA.Prot.Mix	0.015**	0.007	0.008	0.014
NA.Elec.Mix	0.011	0.013	0.023*	0.013
Sta.Ger.Neg	0.006	0.004	−0.001	0.003
Sta.EU.Neg	0.014**	0.006	−0.001	0.005
Int.ECB.Neg	−0.025	0.018	0.005	0.007
Sta.ECB.Neg	0.008	0.008	0.003	0.008
Sta.Ger.Pos	0.006	0.009	−0.012	0.008
Dec.Ger.Pos	−0.005	0.008	−0.041	0.028
Sta.EU.Pos	−0.020**	0.010	−0.010	0.016
Dec.EU.Pos	−0.034	0.024	−0.024	0.026
Int.ECB.Pos	0.049**	0.025	−0.096	0.063
Sta.ECB.Pos	−0.037***	0.013	−0.030**	0.014
Dec.ECB.Pos	−0.024	0.022	0.017	0.013
Sta.Ger.Mix	−0.002	0.005	0.007	0.006
Sta.EU.Mix	−0.003	0.014	0.016	0.015
Dec.EU.Mix	−0.009	0.011	−0.008	0.008
Sta.ECB.Mix	0.005	0.010	−0.015**	0.007
2009.Q2	−0.008	0.008		
2009.Q3	−0.011	0.008		
2009.Q4	−0.006	0.008		
2010.Q1	−0.000	0.010		
2010.Q2	0.012	0.009		
2010.Q3	−0.002	0.007		
2010.Q4	−0.007	0.008		
2011.Q1	−0.007	0.008		
2011.Q2	−0.002	0.008		
2011.Q3	−0.003	0.007		
2011.Q4	−0.003	0.007		
2012.Q1	−0.009	0.007		
2012.Q2	−0.006	0.007		
2012.Q3	−0.004	0.007		
2012.Q4	−0.004	0.007		
y_{t-1}	0.289***	0.042		
y_{t-2}	−0.089*	0.048		
y_{t-3}	−0.038	0.038		

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; $R^2 = 0.158$; $N = 1037$. The events have lags [0,1] represented in columns 2-3, and 4-5, respectively. The first quarter of 2009 is base category for the fixed effects. In the first column, events are denoted: Form.Actor.Direction, cf. Tables S1 and S2. The standard errors are based on a generally heteroskedasticity consistent covariance matrix.

Table S17: AR(3)DL Estimates for Spain (Model 13)

	t		$t-1$	
	Estimate	Std. Error	Estimate	Std. Error
Intercept	0.000	0.005		
Sta.Gov.Neg	0.006	0.018	−0.005	0.010
Dec.Gov.Neg	0.005	0.010	0.008	0.014
NA.News.Neg	0.005	0.004	−0.000	0.004
Sta.Gov.Pos	0.001	0.008	0.008	0.007
Dec.Gov.Pos	−0.002	0.008	−0.009	0.008
NA.News.Pos	−0.014*	0.008	−0.016**	0.007
NA.Prot.Mix	0.014	0.009	−0.002	0.011
NA.Elec.Mix	0.015	0.012	0.007	0.012
Sta.Ger.Neg	0.005	0.004	0.001	0.003
Sta.EU.Neg	0.014	0.013	−0.030**	0.013
Int.ECB.Neg	0.008	0.015	−0.008	0.013
Sta.ECB.Neg	0.042***	0.009	−0.014	0.013
Sta.Ger.Pos	−0.003	0.008	−0.016	0.010
Dec.Ger.Pos	−0.007	0.011	−0.022	0.024
Sta.EU.Pos	−0.001	0.014	−0.000	0.027
Dec.EU.Pos	−0.050**	0.022	−0.010	0.023
Int.ECB.Pos	0.019	0.035	−0.050	0.049
Sta.ECB.Pos	−0.056**	0.024	−0.046***	0.011
Dec.ECB.Pos	−0.009	0.018	0.020	0.014
Sta.Ger.Mix	−0.006	0.006	0.006	0.005
Sta.EU.Mix	−0.017*	0.009	−0.003	0.010
Dec.EU.Mix	0.002	0.016	0.022***	0.007
Sta.ECB.Mix	−0.014	0.065	−0.028***	0.008
2009.Q2	−0.003	0.009		
2009.Q3	−0.004	0.008		
2009.Q4	0.000	0.008		
2010.Q1	0.003	0.008		
2010.Q2	0.021**	0.009		
2010.Q3	−0.000	0.007		
2010.Q4	0.005	0.007		
2011.Q1	−0.002	0.007		
2011.Q2	0.004	0.007		
2011.Q3	0.004	0.009		
2011.Q4	0.002	0.008		
2012.Q1	−0.002	0.007		
2012.Q2	0.005	0.007		
2012.Q3	0.005	0.007		
2012.Q4	0.003	0.007		
y_{t-1}	0.226***	0.041		
y_{t-2}	−0.105**	0.042		
y_{t-3}	−0.094***	0.034		

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; $R^2 = 0.106$; $N = 1037$. The events have lags [0,1] represented in columns 2-3, and 4-5, respectively. The first quarter of 2009 is base category for the fixed effects. In the first column, events are denoted: Form.Actor.Direction, cf. Tables S1 and S2. The standard errors are based on a generally heteroskedasticity consistent covariance matrix.

Table S18: AR(3)DL-GARCH(1,1) Estimates for Greece (Model 14)

	t		$t-1$	
	Estimate	Std. Error	Estimate	Std. Error
Conditional mean equation:				
Intercept	−0.005	0.015		
Sta.Gov.Neg	−0.002	0.004	−0.003	0.003
Dec.Gov.Neg	0.005	0.018	0.031	0.044
NA.News.Neg	0.004	0.005	0.008	0.006
Sta.Gov.Pos	−0.004	0.005	0.002	0.004
Dec.Gov.Pos	0.005	0.011	0.001	0.006
NA.News.Pos	−0.002	0.008	0.009	0.011
NA.Prot.Mix	0.004	0.005	−0.002	0.009
NA.Elec.Mix	0.013	0.040	0.020	0.020
Sta.Ger.Neg	0.003	0.003	0.003	0.002
Sta.EU.Neg	0.007	0.010	0.004	0.004
Int.ECB.Neg	0.005	0.004	0.004	0.006
Sta.ECB.Neg	0.015	0.009	0.011	0.009
Sta.Ger.Pos	−0.003	0.004	0.005	0.007
Dec.Ger.Pos	−0.022***	0.006	−0.040***	0.014
Sta.EU.Pos	−0.003	0.014	−0.005	0.018
Dec.EU.Pos	−0.011**	0.005	−0.007	0.011
Int.ECB.Pos	0.005	0.014	0.015	0.017
Sta.ECB.Pos	0.003	0.006	−0.018**	0.008
Dec.ECB.Pos	0.017**	0.008	−0.001	0.004
Sta.Ger.Mix	0.003	0.003	0.002	0.004
Sta.EU.Mix	−0.011	0.008	−0.008	0.009
Dec.EU.Mix	−0.010**	0.004	0.008	0.010
Sta.ECB.Mix	0.004	0.007	−0.004	0.013
2009.Q2	0.006	0.016		
2009.Q3	−0.007	0.016		
2009.Q4	0.007	0.015		
2010.Q1	0.007	0.018		
2010.Q2	0.012	0.017		
2010.Q3	0.006	0.015		
2010.Q4	0.005	0.016		
2011.Q1	0.007	0.015		
2011.Q2	0.004	0.016		
2011.Q3	0.012	0.016		
2011.Q4	0.007	0.015		
2012.Q1	0.010	0.017		
2012.Q2	0.001	0.017		
2012.Q3	−0.001	0.015		
2012.Q4	−0.006	0.016		
y_{t-1}	0.316***	0.070		
y_{t-2}	−0.024	0.068		
y_{t-3}	−0.032	0.052		
Conditional variance equation:				
Intercept	0.000	0.000		
ε^2_{t-1}	0.483***	0.110		
σ^2_{t-1}	0.516***	0.104		

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; $N = 1037$. The events have lags [0,1] represented in columns 2-3, and 4-5, respectively. The first quarter of 2009 is base category for the fixed effects. In the first column, events are denoted: Form.Actor.Direction, cf. Tables S1 and S2.

Table S19: AR(3)DL-GARCH(1,1) Estimates for Italy (Model 15)

	t		$t-1$	
	Estimate	Std. Error	Estimate	Std. Error
Conditional mean equation:				
Intercept	0.007	0.006		
Sta.Gov.Neg	0.014	0.030	−0.010	0.014
Dec.Gov.Neg	0.027***	0.009	0.027*	0.015
NA.News.Neg	0.011***	0.004	−0.002	0.005
Sta.Gov.Pos	−0.002	0.009	−0.005	0.007
Dec.Gov.Pos	−0.021**	0.010	−0.012	0.009
NA.News.Pos	−0.001	0.006	−0.003	0.007
NA.Prot.Mix	0.012	0.008	−0.008	0.009
NA.Elec.Mix	0.011	0.014	0.003	0.020
Sta.Ger.Neg	0.005	0.004	0.001	0.003
Sta.EU.Neg	−0.003	0.006	−0.044**	0.022
Int.ECB.Neg	0.007	0.006	−0.011	0.011
Sta.ECB.Neg	0.034***	0.009	−0.007	0.010
Sta.Ger.Pos	−0.001	0.006	0.001	0.009
Dec.Ger.Pos	−0.023*	0.012	0.004	0.012
Sta.EU.Pos	0.001	0.015	−0.004	0.022
Dec.EU.Pos	−0.018	0.014	−0.010	0.012
Int.ECB.Pos	0.008	0.029	−0.032	0.026
Sta.ECB.Pos	−0.056***	0.011	−0.060***	0.011
Dec.ECB.Pos	0.015	0.009	0.007	0.007
Sta.Ger.Mix	−0.008	0.005	0.001	0.006
Sta.EU.Mix	−0.016**	0.008	0.006	0.006
Dec.EU.Mix	0.003	0.010	0.015**	0.007
Sta.ECB.Mix	0.036	0.055	−0.084***	0.011
2009.Q2	−0.010	0.007		
2009.Q3	−0.008	0.010		
2009.Q4	−0.012	0.008		
2010.Q1	−0.003	0.008		
2010.Q2	−0.001	0.010		
2010.Q3	−0.004	0.008		
2010.Q4	−0.007	0.009		
2011.Q1	−0.010	0.007		
2011.Q2	−0.005	0.008		
2011.Q3	−0.001	0.009		
2011.Q4	−0.002	0.008		
2012.Q1	−0.010	0.009		
2012.Q2	−0.001	0.008		
2012.Q3	−0.006	0.008		
2012.Q4	−0.007	0.007		
y_{t-1}	0.233***	0.038		
y_{t-2}	−0.170***	0.038		
y_{t-3}	0.006	0.038		
Conditional variance equation:				
Intercept	0.000**	0.000		
ε^2_{t-1}	0.275***	0.081		
σ^2_{t-1}	0.597***	0.120		

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; $N = 1037$. The events have lags [0,1] represented in columns 2-3, and 4-5, respectively. The first quarter of 2009 is base category for the fixed effects. In the first column, events are denoted: Form.Actor.Direction, cf. Tables S1 and S2.

Table S20: AR(3)DL-GARCH(1,1) Estimates for Ireland (Model 16)

	t		$t-1$	
	Estimate	Std. Error	Estimate	Std. Error
Conditional mean equation:				
Intercept	0.009	0.009		
Sta.Gov.Neg	0.005	0.007	0.005	0.008
NA.News.Neg	−0.004	0.003	−0.002	0.002
Sta.Gov.Pos	0.005	0.008	0.005	0.008
Dec.Gov.Pos	0.013**	0.006	0.002	0.008
NA.News.Pos	0.005	0.004	0.001	0.005
NA.Prot.Mix	−0.010	0.016	0.039	0.040
NA.Elec.Mix	−0.030***	0.007	0.003	0.010
Sta.Ger.Neg	0.000	0.002	0.001	0.004
Sta.EU.Neg	−0.002	0.008	−0.016***	0.003
Int.ECB.Neg	−0.013	0.010	0.010*	0.005
Sta.ECB.Neg	0.016**	0.007	0.006	0.007
Sta.Ger.Pos	0.004	0.004	−0.007*	0.004
Dec.Ger.Pos	−0.040***	0.014	−0.011	0.007
Sta.EU.Pos	−0.007	0.014	0.008	0.015
Dec.EU.Pos	−0.016	0.018	−0.018**	0.008
Int.ECB.Pos	−0.025	0.021	−0.020	0.026
Sta.ECB.Pos	−0.029***	0.008	−0.034***	0.008
Dec.ECB.Pos	−0.005	0.005	0.004	0.007
Sta.Ger.Mix	−0.001	0.003	0.002	0.003
Sta.EU.Mix	−0.007	0.006	0.003	0.007
Dec.EU.Mix	−0.002	0.007	−0.000	0.005
Sta.ECB.Mix	0.016	0.015	−0.014***	0.005
2009.Q2	−0.003	0.013		
2009.Q3	−0.016	0.011		
2009.Q4	−0.009	0.011		
2010.Q1	−0.009	0.010		
2010.Q2	−0.009	0.014		
2010.Q3	−0.005	0.012		
2010.Q4	−0.006	0.011		
2011.Q1	−0.005	0.009		
2011.Q2	−0.005	0.010		
2011.Q3	−0.010	0.012		
2011.Q4	−0.006	0.010		
2012.Q1	−0.012	0.010		
2012.Q2	−0.006	0.010		
2012.Q3	−0.010	0.010		
2012.Q4	−0.008	0.010		
y_{t-1}	0.261***	0.042		
y_{t-2}	0.001	0.048		
y_{t-3}	−0.068	0.049		
Conditional variance equation:				
Intercept	0.000	0.000		
ε^2_{t-1}	0.164***	0.063		
σ^2_{t-1}	0.804***	0.075		

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; $N = 1037$. The events have lags [0,1] represented in columns 2-3, and 4-5, respectively. The first quarter of 2009 is base category for the fixed effects. In the first column, events are denoted: Form.Actor.Direction, cf. Tables S1 and S2.

Table S21: AR(3)DL-GARCH(1,1) Estimates for Portugal (Model 17)

	t		$t-1$	
	Estimate	Std. Error	Estimate	Std. Error
Conditional mean equation:				
Intercept	-0.002	0.006		
Sta.Gov.Neg	0.000	0.008	0.010	0.009
Dec.Gov.Neg	0.002	0.018	0.076***	0.019
NA.News.Neg	0.007	0.007	0.015**	0.007
Sta.Gov.Pos	-0.008	0.005	0.011	0.008
Dec.Gov.Pos	-0.010	0.010	-0.001	0.007
NA.News.Pos	-0.000	0.007	-0.009	0.006
NA.Prot.Mix	0.013**	0.006	0.027***	0.009
NA.Elec.Mix	0.007	0.010	0.016	0.017
Sta.Ger.Neg	0.004	0.003	-0.001	0.003
Sta.EU.Neg	0.011	0.009	-0.001	0.004
Int.ECB.Neg	-0.035**	0.017	-0.009	0.007
Sta.ECB.Neg	0.005	0.009	-0.002	0.012
Sta.Ger.Pos	0.001	0.009	-0.007	0.009
Dec.Ger.Pos	-0.013**	0.007	-0.012*	0.007
Sta.EU.Pos	-0.015	0.017	-0.016	0.013
Dec.EU.Pos	-0.009	0.013	-0.007	0.010
Int.ECB.Pos	0.011	0.014	0.008	0.013
Sta.ECB.Pos	-0.031	0.020	-0.034	0.030
Dec.ECB.Pos	-0.001	0.006	-0.004	0.009
Sta.Ger.Mix	-0.004	0.003	-0.003	0.003
Sta.EU.Mix	0.007	0.011	0.007	0.010
Dec.EU.Mix	-0.017**	0.008	-0.011	0.007
Sta.ECB.Mix	0.021*	0.012	0.014**	0.006
2009.Q2	0.003	0.008		
2009.Q3	-0.004	0.010		
2009.Q4	-0.002	0.009		
2010.Q1	0.007	0.014		
2010.Q2	0.004	0.016		
2010.Q3	0.010	0.009		
2010.Q4	0.004	0.008		
2011.Q1	0.004	0.008		
2011.Q2	0.018**	0.008		
2011.Q3	0.005	0.009		
2011.Q4	0.003	0.007		
2012.Q1	0.009	0.011		
2012.Q2	0.003	0.009		
2012.Q3	0.005	0.009		
2012.Q4	-0.000	0.008		
y_{t-1}	0.294***	0.055		
y_{t-2}	-0.063	0.040		
y_{t-3}	0.042	0.050		
Conditional variance equation:				
Intercept	0.000	0.000		
ε^2_{t-1}	0.295***	0.082		
σ^2_{t-1}	0.704***	0.085		

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; $N = 1037$. The events have lags [0,1] represented in columns 2-3, and 4-5, respectively. The first quarter of 2009 is base category for the fixed effects. In the first column, events are denoted: Form.Actor.Direction, cf. Tables S1 and S2.

Table S22: AR(3)DL-GARCH(1,1) Estimates for Spain (Model 18)

	t		$t-1$	
	Estimate	Std. Error	Estimate	Std. Error
Conditional mean equation:				
Intercept	-0.014^{**}	0.007		
Sta.Gov.Neg	0.009	0.022	-0.007	0.015
Dec.Gov.Neg	0.002	0.009	0.008	0.011
NA.News.Neg	0.003	0.004	-0.001	0.004
Sta.Gov.Pos	0.001	0.006	0.009	0.007
Dec.Gov.Pos	-0.001	0.007	0.000	0.008
NA.News.Pos	-0.013^{*}	0.008	-0.013^{**}	0.005
NA.Prot.Mix	0.008	0.011	0.003	0.008
NA.Elec.Mix	0.010	0.014	0.015	0.012
Sta.Ger.Neg	0.003	0.004	-0.002	0.003
Sta.EU.Neg	0.024	0.018	-0.035^{*}	0.019
Int.ECB.Neg	0.011	0.009	-0.001	0.008
Sta.ECB.Neg	0.042^{**}	0.018	-0.006	0.022
Sta.Ger.Pos	-0.002	0.010	-0.005	0.008
Dec.Ger.Pos	-0.026	0.018	-0.010	0.017
Sta.EU.Pos	-0.005	0.013	-0.005	0.021
Dec.EU.Pos	-0.034^{**}	0.015	-0.018	0.014
Int.ECB.Pos	-0.015	0.060	0.013	0.039
Sta.ECB.Pos	-0.054^{*}	0.031	-0.056^{***}	0.021
Dec.ECB.Pos	0.023^{*}	0.014	0.027^{***}	0.010
Sta.Ger.Mix	-0.001	0.006	0.004	0.006
Sta.EU.Mix	-0.013^{*}	0.007	0.005	0.006
Dec.EU.Mix	-0.001	0.012	0.011	0.008
Sta.ECB.Mix	0.035	0.046	-0.006	0.020
2009.Q2	0.011	0.011		
2009.Q3	-0.004	0.024		
2009.Q4	0.014^{*}	0.008		
2010.Q1	0.016^{*}	0.008		
2010.Q2	0.027^{**}	0.012		
2010.Q3	0.015^{*}	0.008		
2010.Q4	0.016^{*}	0.008		
2011.Q1	0.012	0.008		
2011.Q2	0.014^{*}	0.008		
2011.Q3	0.022^{*}	0.011		
2011.Q4	0.015	0.011		
2012.Q1	0.012	0.009		
2012.Q2	0.020^{**}	0.008		
2012.Q3	0.018^{**}	0.008		
2012.Q4	0.015^{*}	0.008		
y_{t-1}	0.248^{***}	0.057		
y_{t-2}	-0.134^{***}	0.049		
y_{t-3}	-0.060	0.042		
Conditional variance equation:				
Intercept	0.000	0.000		
ε^2_{t-1}	0.344^{**}	0.139		
σ^2_{t-1}	0.553^{**}	0.228		

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; $N = 1037$. The events have lags [0,1] represented in columns 2-3, and 4-5, respectively. The first quarter of 2009 is base category for the fixed effects. In the first column, events are denoted: Form.Actor.Direction, cf. Tables S1 and S2.

References

Bollerslev, T. (1986) ‘Generalized autoregressive conditional heteroskedasticity’. *Journal of econometrics*, Vol. 31, No. 3, pp. 307–327.

Bølstad, J. and Elhardt, C. (2015) ‘To Bail Out or Not to Bail Out? Crisis Politics, Credibility, and Default Risk in the Eurozone’. *European Union Politics*, Vol. 16, No. 3.

Bruegel (2014) ‘Eurocrisis Timeline’. Available at <http://www.bruegel.org/blog/eurocrisistimeline/>. Accessed 13 February 2014.

Engle, R. F. (1982) ‘Autoregressive conditional heteroscedasticity with estimates of the variance of United Kingdom inflation’. *Econometrica: Journal of the Econometric Society*, Vol. 50, No. 4, pp. 987–1007.

Eurointelligence (2014) ‘Eurozone Blog’. Available at <http://www.eurointelligence.com>. Accessed 13 February 2014.

European Commission (2014) ‘Eurozone Blog’. Available at <http://ec.europa.eu/economy_finance/crisis/2010-05_en.htm>. Accessed 13 February 2014.

Fisher, T. J. and Gallagher, C. M. (2012) ‘New Weighted Portmanteau Statistics for Time series Goodness of Fit Testing’. *Journal of the American Statistical Association*, Vol. 107, No. 498, pp. 777–787.

King, G. and Roberts, M. E. (2014) ‘How Robust Standard Errors Expose Methodological Problems They Do Not Fix, and What to Do About It’. *Political Analysis*, Vol. 23, No. 2, pp. 159–179.

Li, W. and Mak, T. (1994) ‘On the Squared Residual Autocorrelations in Non-Linear Time Series with Conditional Heteroskedasticity’. *Journal of Time Series Analysis*, Vol. 15, No. 6, pp. 627–636.

Ljung, G. M. and Box, G. E. (1978) ‘On a measure of lack of fit in time series models’. *Biometrika*, Vol. 65, No. 2, pp. 297–303.

Moody’s (2013) ‘Rating Methodology Sovereign Bond Ratings’. *Moody’s Investors Service*, pp. 1–22.

Smeets, D. and Zimmermann, M. (2013) ‘Did the EU Summits Succeed in Convincing the Markets during the Recent Crisis?’ *JCMS: Journal of Common Market Studies*, Vol. 51, No. 6, pp. 1158–1177.

Standard and Poor's (2011) 'Sovereign Government Rating Methodology And Assumptions'. *Global Credit Portal*, pp. 1–43.

White, H. (1980) 'A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity'. *Econometrica: Journal of the Econometric Society*, Vol. 48, No. 4, pp. 817–838.