

Has the *Grexit* news spilled over into euro area financial markets? The role of domestic political leaders, supranational executives and institutions^(*)

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Abstract

This paper attempts to check whether the Greek exit speculation spilled over into other euro area countries' severing bond yields. Our empirical analysis is based on more than 64,000 news on *Grexit* from December 2014 to October 2015 collected daily via Factiva database. We are able to account for *Grexit* news overall and to distinguish them by single country press, domestic political leaders, supranational executives and institutions. Our results suggest that more news about *Grexit* drives up bond yields of European peripheral countries. By contrast, no effects emerge on other European core countries. Thus, some speculation from *Grexit* news seems to be occurred for the more vulnerable economies only. Moreover, financial markets of peripheral countries react more to *Grexit* news associated to supranational executives and related institutions rather than to domestic politicians and European political bodies, possibly due to a higher perceived credibility of the former with respect to the latter.

JEL classification: E43, E62, G12, G14

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1. Introduction

“A full exit looks bad enough for both Greece and the rest of the euro area that the search is on for alternatives”

The Economist, 11 July 2015

The term *Grexit*, coined by Citigroup’s Willem Buiter and Ebrahim Rahbari in 2012 by combining “Greek” or “Greece” with the word “exit”, refers to the possibility that Greece would have left the euro area as a consequence of its sovereign debt crisis. Since then such concept has gradually entered the common language being picked up by media worldwide. At the same time, international organizations, national governments and investors have started to fear the potential financial and economic consequences of the *Grexit*.

The concept of *Grexit* regained popularity in December 2014 when the Greek Parliament failed to elect a new president, leading to the dissolution of the Parliament on 31 December and the announcement of new elections to be held on 25 January 2015. In the aftermath of the elections, won by the Syriza party, the possibility of the Greek exit from the euro area became even more concrete and restarted to be viewed as a likely outcome, and even as an extreme remedy to the ongoing crisis.¹

The Greek January elections were followed by a period of intense negotiations on a new bailout agreement between the Greek government and its creditors. Such period culminated in the announcement, on 27 June 2015, by the Prime Minister Tsipras - without any prior notice to the Eurogroup - of a national referendum on whether accepting the bailout conditions proposed jointly by the European Commission (EC), the International Monetary Fund (IMF) and the European Central Bank (ECB), the so-called “Troika”, on 25 June 2015. The referendum was, in fact, interpreted as a choice for Greece between remaining in the euro area and leaving it.²

The majority of European leaders have expressed opinion that Greece should remain in the monetary union, while the opposite view came from the UK Prime Minister Cameron. In turn, the ECB president Draghi affirmed that “the euro area was better equipped than it had been in the past to deal with a new Greek crisis” but warned of ‘uncharted waters’ if the situation were to

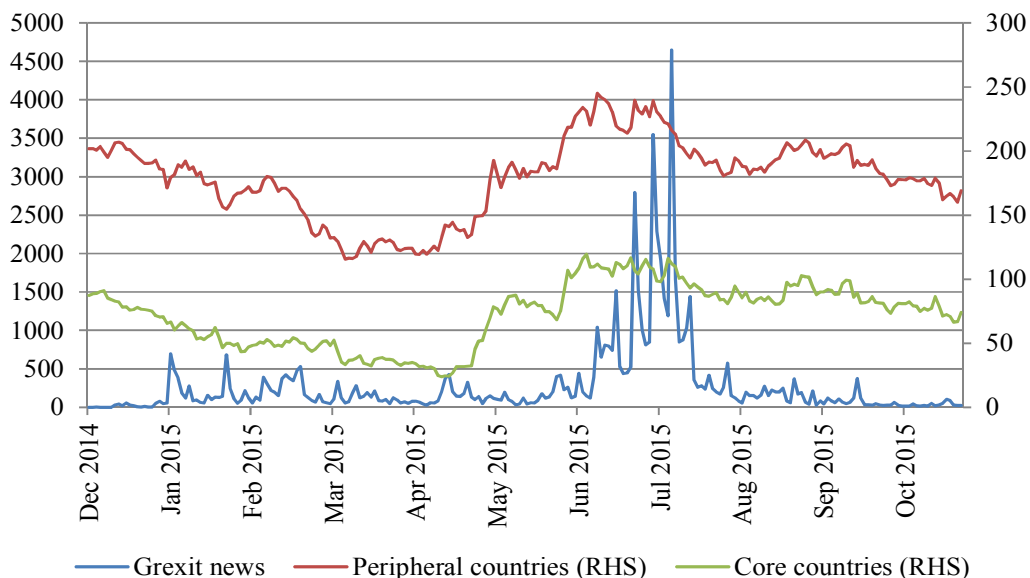
¹ As a matter of fact, a Michael Fuchs, the deputy head of Merkel’s CDU faction in the German parliament, came to saying that “the time when we had to rescue Greece is over. There is no more blackmail potential. Greece is not systemically relevant for the euro” (Rheinische Post, 31 December 2014).

² The Germany’s vice-chancellor, Sigmar Gabriel, affirmed that if the Greeks voted no on Sunday, they were voting “against remaining in the euro”. Moreover, Hollande said: “It’s the Greek people’s right to say what they want their future to be. It’s about whether the Greeks want to stay in the eurozone or take the risk of leaving.” Finally, Jean-Claude Juncker, the commission president, said: “It’s the moment of truth ... I’d like to ask the Greek people to vote yes ... No

deteriorate badly (The Financial Times, 18 April 2015), and he also pointed out that “a strong and credible agreement with Greece is needed, not only in the interest of Greece, but also of the euro area as a whole” (European Parliament, 15 June 2015). In the same vein, the head of the IMF, President Lagarde, stated that the IMF “stands ready” for Greece talks (BBC, 27 June 2015).

As a consequence of the bailout referendum announcement, a widespread anxiety over the Greek future arises. This apprehension was not limited to Greece. Indeed, speculation rose along with the 10-year sovereign bond yields of both core and peripheral European countries,³ together with an intensification in worldwide media news of the *Grexit* word, as shown in Figure 1.

Figure 1 - Daily number of *Grexit* news (worldwide) and 10-year government bond yields of peripheral and core countries (group average basis points).



Notes: Belgium, France, Finland, Germany, and the Netherlands are grouped in the core countries. Ireland, Italy, Portugal and Spain are included in the peripheral countries.
Source: Own elaborations on Factiva and Thomson Reuters Datastream databases.

On 5 July 2015, the bailout conditions were eventually rejected by the majority of Greek people, endorsing the Syriza government’s view against the austerity package imposed to Greece. In the aftermath of the referendum, stock markets across Europe fell, possibly reflecting the investors’ perception that a *Grexit* was a credible scenario, and sovereign bond markets experienced heightened volatility. However, on 13 July 2015 the Greek government accepted a

would mean that Greece is saying no to Europe” (The Guardian, 30 June 2015).
³ In the empirical analysis we consider government bond yields for the most important European countries, divided in core (i.e. Belgium, Finland, France, Germany, and the Netherlands) and peripheral countries (i.e. Ireland, Italy, Portugal, and Spain).

new bailout package involving massive public expenditure cuts and new taxes. A period of clashes within the majority supporting the government resulted in a cabinet reshuffling in July and new elections in September. These events reinforced Tsipras' capacity to further implement austerity measures mitigating, at least temporarily, speculations about the Greek exit from the euro area. At the end, while rumors about the *Grexit* since December 2014 had dramatic consequences for Greece, an explored issue remains to investigate whether such rumors have also spread across Europe.

Our paper attempts to provide an answer to this question by checking whether the *Grexit* speculation spilled over into other euro area countries. In detail, we focus on Ireland, Italy, Portugal, Spain (as peripheral countries) and Belgium, France, Finland, Germany, and the Netherlands (as core countries).⁴ By considering the worldwide press coverage of the *Grexit* a good proxy for this phenomenon, we study the reaction of euro area financial markets to news on *Grexit* content published from all over the world. An innovative aspect of this study lies in the use of Factiva database to collect and construct our news variables. In detail, the empirical analysis is based on a vast set of press daily news on the *Grexit* possibility published from 1 December 2014 until 31 October 2015. The information contained in the dataset allows us to quantify not only the impact of *Grexit* news overall and distinguishing by single country press, but also of those news related to the major political leaders (i.e. Cameron, Hollande, Merkel, Renzi, Tsipras), international executives (i.e., Lagarde and Draghi), and supranational institutions as well (i.e. Council of the European Union, European Parliament, European Council, EC, ECB, IMF). Thus, we can capture news heterogeneity along all these dimensions. More importantly, adopting this disaggregation approach for the total amount of news is useful to better investigate the possible different sources of spillover related to *Grexit*.⁵

Our paper builds on a well-established empirical literature analyzing the reaction of financial markets to macroeconomic, fiscal and monetary policy announcements (see, e.g., Altavilla et al. 2014a; Born et al., 2014; Hayo and Neuenkirch, 2015). A particular stream of this literature has focused on the impact of such news and communications on the sovereign bond yields in the context of the euro area debt crisis (Attinasi et al. 2010; Arru et al., 2013; Beetsma et al., 2013;

⁴ A similar approach is adopted by Beetsma et al. (2013), who focus on the so-called GIIPS countries and other European countries to investigate how "news" affected domestic interest spreads vis-à-vis Germany and how it propagated to other countries during the recent crisis period. More recently, Caporale et al. (2014) consider eight countries belonging to the euro area (Belgium, France, Germany, Greece, Ireland, Italy, Portugal and Spain), distinguishing between the core and peripheral countries – the latter are represented by the GIIPS in their paper – to analyze the effects of newspaper coverage of macro news on their stock returns.

⁵ For instance, checking for the effect of *Grexit* news appeared in one country's press being able to affect another country's government bond yields, and checking for the effect of *Grexit* news related to, respectively, national politics and supranational institutions.

Mohl and Sondermann, 2013; Gade et al., 2013; Altavilla et al., 2014b; Caporale et al., 2014; Falagiarda et al., 2015; Saka et al., 2015; Falagiarda and Gregori, 2015; Bouzgarrou and Chebbi, 2015). Other related studies focus on the effects of decisions by rating agencies regarding rating changes. For instance, Afonso et al. (2012) prove that significant responses occur in the case of government bond yield spreads and CDS spreads in Europe to changes in rating notations from rating agencies and outlook, particularly in the case of negative announcements.

Our study is also close to fresh contributions investigating the contagion effects from Greece to other euro area countries during the sovereign debt crisis. As an example, Mink and de Haan (2013) use the news reports on a Greek bailout to analyze their impact on bank stock prices in 2010 for 48 European banks, finding that news about a bailout does lead to abnormal returns, even for banks without any exposure to Greece or other highly indebted euro countries. Bhanot et al. (2014) show that increases in Greek yield spreads are associated with negative abnormal returns on financial stocks in Portugal, Spain and the Netherlands from 2005 to 2011. More importantly, these abnormal returns are in part driven by ratings downgrades and other unfavorable news announcements about Greece. Finally, Arezki et al. (2011) find that sovereign rating news (especially downgrades) in Greece during the period 2007-2010 had economically significant spillover effects both across euro area countries and financial markets, by increasing financial instability. Moreover, they show that downgrades to near speculative grade ratings for relatively large economies such as Greece have a systematic spillover effects across European countries.⁶

Lastly, we also follow the strand of the literature on the role of the media in influencing financial markets. Some studies document a significant correlation between media activity and financial market activity (e.g., Klibanoff et al., 1998; Engelberg and Parsons, 2011; Dougal et al., 2012; Peress, 2014), also focusing on investor psychology to explain the relationship between news and financial markets (see, e.g., Tetlock, 2007).⁷

Compared to all the previous studies, our paper is the first one, to the best of our knowledge, that checks the presence of spillover effects from Greece to other euro area countries by analyzing European financial markets' reactions on a specific news content such as "*Grexist*" appearing on the press at the global level since the announcement of the Greek parliamentary elections in late 2014.⁸ In addition, our setting allows to study each country individually, considering coefficients

⁶ Likewise, Gande and Parsley (2005), considering sovereign bond spreads data from emerging markets spanning the period 1991 to 2000, find that a country's rating downgrade has a significant negative effect on the sovereign bond spreads of other countries.

⁷ He examines the links between media "pessimism" - generated by "bad news" - and low investor sentiment in the US.

⁸ Actually, some previous studies have attempted to identify the specific news events in one country that affect other

on the independent variables to be different across countries. In detail, we allow the coefficients on all variables to be country-specific and, thus, we avoid to pool the data forcing the coefficients on the independent variables to be identical across countries (see Favero et al., 2010; Favero and Missale, 2012).

Our main results indicate that more news about the Greek exit from the euro area drives up the government bond yields of the peripheral countries excluding Ireland (i.e. Portugal, Italy and Spain). By contrast, no effects emerge in the case of core countries. This would suggest that some speculation effects related to *Grexit* news occur but only for countries viewed to have similar underlying weaknesses as Greece during the observed period. As a matter of fact, general government consolidated gross debt (% GDP) in 2015 in Italy, Portugal and Spain shows the highest level in our sample, following the Greek value of 176.9% (from the last update of EC database on 3 May 2016).⁹ On the other hand, in Ireland the debt-to-GDP ratio was 93.8% in 2015 coupled with a GDP growth rate over 7.5% in the same year.¹⁰

In a nutshell, our evidence would provide support to the more generally “market-based fiscal discipline” mechanism in monetary union,¹¹ according to which financial markets when reacting to *Grexit* news, in our case, are likely to ask higher government risk premia to countries with a high debt-to-GDP ratio (and with substantial fiscal deficits), as our peripheral ones.

Finally, the main findings are confirmed when we refine the analysis focusing on political leaders and institutions. Interestingly, financial markets of peripheral countries react more to supranational authorities rather than to domestic politicians concerning the *Grexit* news content. This could be explained by higher perceived credibility and stronger degree of commitment as intrinsic features of the former with respect to the latter. Indeed, the former are technicians, more independent and basically bounded by a formal public mandate. The latter are politicians and their announcements might be more easily influenced by electoral game motivations and constrained by contingent issues (e.g., changes in priorities of the political agenda, political instability). Likewise, for increasing news on *Grexit* a stronger influence of the technical sphere with respect

countries but they basically refer to Asian countries during the Asian crisis (e.g., Kaminsky and Schmukler, 1999; Baig and Goldfajn, 1999).

⁹ This is combined with high net borrowing of general government (i.e. public deficits) with respect to the situation in core countries and with low GDP growth rates (less than 1% as in Italy), somehow closer to the negative ones experienced by Greece in 2015.

¹⁰ Both these outcomes, combined with a decrease in the unemployment rate (less than 10% in 2015), would be basically a consequence of structural reforms and determined policy efforts experienced in Ireland starting from 2010 - when Ireland could no longer finance itself through national resources - with the international bailout measures. The objectives of such policies included, indeed, restoring the banking sector and implementing fiscal adjustment to relaunch fiscal sustainability and growth-enhancing reforms. As intended, Ireland has completed its program by the end of 2013.

¹¹ For the United States, see e.g., Goldstein and Woglom (1991) and Bayoumi et al. (1995); for the EMU, see Bernoth

to the political one is found only in peripheral countries' financial markets when supranational institutions are considered. The rest of the paper is structured as follows. Section 2 describes data and the empirical methodology. Section 3 shows the main results, while section 4 provides additional evidence. Finally, section 5 concludes.

2. The empirical analysis

2.1 Data and variables

We take advantage from the Factiva database (owned by Dow Jones & Company), which provides and aggregates content from more than 36,000 sources, both license and free, from 200 countries in 28 languages. The database has a broad range of content and it provides both local insight and global perspective on business issues and current events, with a specific focus on current information on companies, industries, and financial markets. The wide range of information is obtained from sources such as newspapers, newswires, industry publications, websites and company reports.¹²

We searched for news containing the word “Grexit”, which is an internationally recognized expression to refer to Greece’s potential withdrawal from the euro area. Even though such word favors cross-country media comparability, it seems to be not actually extensively used in Greece and by Greek people.¹³ Moreover, in May 2015 the term “Grexit” has been appeared 27 times in the Kathimerini newspaper, which is one of the media Greek English language, in contrast to 39 and 31 citations in, respectively, the Handelsblatt (the German daily business newspaper) and the Financial Times. This would suggest that the continental newspaper was likely to be more talkative on that subject with respect to the domestic press, suggesting that the discussion about *Grexit* was more outside than inside Greece. This might also reveal a different general perception on the Greek situation with respect to its real condition as depicted by the domestic media to their citizens..

et al. (2004) and Schuknecht et al. (2009).

¹² More specifically, the Factiva dataset includes information from national, international and regional newspapers (e.g., The New York Times, The Washington Post, The Times, The Wall Street Journal, El Pais, The Financial Times, The Guardian); magazines, journals and trade publications (e.g., Forbes, Newsweek); newswires (e.g., AFP, Reuters, Dow Jones), TV or radio podcasts (e.g., BBC, CNN, ABC, CBS, NBC, Fox); major news and business information websites, blogs and message boards; company reports; photo agencies (e.g., Reuters, Knight Ridder); materials on the EUR-Lex website, giving access to the law of the European Union.

¹³ This would emerge from a web research based on “Google Trends” tool (Panorama, 29 May 2015). It is a public web facility of Google based on *Google Search* showing how often a particular search-term is entered relative to the total search-volume across various regions of the world, and in various languages.

On average, we account for more than 250 news per diem including the word *Grexit* and for more than 64,000 as a whole, from all over the world, during the period December 1, 2014 – October 31, 2015. Even exploiting the richness of the dataset and its information power, we aggregated some *Grexit* news by minor European country press in a single variable, namely “*Other EA*” (formed by Austria, Belgium, Luxembourg, Portugal, Greece, Ireland, Slovenia, Slovakia, Estonia, Malta, Latvia, Lithuania, etc.) in the tables of the results. News by Greece have been also included in this more general group of European countries given the less frequent use of the term “*Grexit*” by the domestic press and, more generally, by Greek people as documented before. On the other hand, we separately considered *Grexit* news by France, Germany, Italy, Spain, and the United Kingdom. Such news, overall and by each country press, represent our key explanatory variables. When we use news by country press, they enter one at a time in the estimation model and serve to capture somehow the spillover effect due to *Grexit* from one country – different from Greece – to others, which are characterized by different economic strength and fiscal stance following the financial crisis.

Another advantage of the dataset is the possibility to associate the *Grexit* news with the major political leaders and institutional figures. In particular, we collect data referred to Cameron, Hollande, Merkel, Renzi, Tsipras as domestic political authorities compared to Draghi and Lagarde as supranational executives. As for the case of *Grexit* news by country press, such kind of variables enter the estimations one at a time. Hence, we change the main explanatory variable taking into account a different source of news heterogeneity across countries. The idea is to capture the same news content in relation to two different spheres, i.e. one more political, looking at domestic policy-makers; the other more “technical”, looking at supranational executives. More importantly, we would analyze their effects on the euro area financial markets.

Finally, we follow the above-mentioned approach to merge and extract news characterized by both the *Grexit* content and the presence of supranational institutions such as the Council of the EU, the European Parliament, the European Council, the EC, the ECB and the IMF. Once more, we try to distinguish the financial markets feelings and reactions to *Grexit* news with respect to the more political vein in Europe – mostly expressed by the first three institutions – and to the more “neutral” sphere – mostly expressed by the last three international bodies.

One shortcoming of all these *Grexit* news is that it is not possible to assign an *a priori* positive or negative “sign” and evaluation (i.e. pro or against the Greek exit) to each sentence.¹⁴ However,

¹⁴ Differently from news on macroeconomic issues with numerical content (e.g., on GDP or unemployment growth rate) for which it is easier to distinguish between “positive” and “negative” news as reported and interpreted by the media (see Caporale et al. 2014 for a recent contribution), the “qualitative” content of *Grexit* news does not allow to define a

what we can infer is how the markets react to a specific content like the possibility of the Greek exit from the euro area as the word “Grexit” immediately and directly suggests. Indeed, a more intense discussion, proved by a high number of *Grexit* news, about the Greek exit could generate fear and tension in the markets since *Grexit* represents an “uncharted waters” (Financial Times, 18 April 2015) scenario being supposed to destabilize the markets. To this respect, we are interested in the number of such daily news in order to measure their intensity (the final decision of the Greek exit was not on top of any single authority) and to test whether variation in those news events is able to affect the stability of European financial market. In doing so, we distinguish between more and less vulnerable economies.

For the sake of clarity we report some examples of news belonging to our dataset:

“European markets are braced for a wave of contagion from Greece on Monday, with heavy losses for southern European government bonds and regional stock markets expected as investors scramble to discount a possible “Grexit” that most had still assumed was unlikely as late as Friday afternoon.” (Reuters News, 28 June 2015).

“For years, German Chancellor Angela Merkel and other European leaders have said that Greece will stay in the euro no matter what, but it now appears that the 18 other states of the euro zone are hunkering down and preparing for a ‘Grexit,’ as a Greek departure has been dubbed.” (The Washington Post, 5 July 2015).

“Accusing Greece of ‘egotism’ and “betrayal” EU Commission president Jean-Claude Juncker said a ‘no’ vote would ‘look like Greece wants to distance itself from the eurozone’. That is very close to telling the Greeks that a ‘no’ vote would be tantamount to the so-called Grexit.” (The Sunday Independent, 5 July 2015).

To capture the financial stability and how markets react to *Grexit* news, we use the changes in 10-year government bond yields as dependent variable.¹⁵ Indeed, investors possibly look at their own sovereign bonds as well as at sovereign bonds in other euro area countries to infer country’s financial security and healthy fiscal position, say lower default probabilities due to lower debt-to-GDP ratios. The idea is that news about the Greek exit may impact differently on other sovereign bond yields, via the domestic interest rate channel compared to the foreign one, regardless of

clear negative or positive sign. Moreover, the huge number of news collected (more than 64,000) and the various languages makes difficult any attempt aimed at categorizing such news.

¹⁵ The choice of sovereign bond yields instead of government spreads would be preferable in order to better focus on country specific issues. In fact, when government spreads are implemented, it is needed a benchmark country and movement in its spread may affect the final outcome (Dunne et al., 2002).

holding Greek sovereign bonds.

One could expect that a decline in the aggregate financial market returns and a widespread anxiety over the Greek future, especially during intense periods of *Grexit* news, mostly appear in countries with troubles concerning their long-lasting government debt sustainability as a spillover effect. On the other hand, European countries more fiscally healthy are likely to suffer less for *Grexit* news even becoming a sort of “safe-haven asset” for national and international investors, easily bearing the market scrutiny.

2.2 The methodology

We assess the spillover effects of the Greek exit news onto the 10-year sovereign bond yields of the main European countries by considering the impact of daily news based on the *Grexit* term and collected over the period December 1, 2014 – October 31, 2015.

In detail, we implement a standard Generalised Autoregressive Conditional Heteroskedastic (GARCH) model, originally proposed by Bollerslev (1986), which is able to modelling the time-varying volatility of bond yields and used for similar purposes (e.g., Kim et al., 2004; Bhanot et al., 2014). The conditional mean of the model is an augmented autoregressive process:

$$\Delta B_t = \alpha + \beta \Delta B_{t-1} + \gamma \Delta Grexit_t + \delta ECB_NSMPnews_t + \boldsymbol{\eta} \mathbf{X}_t + \boldsymbol{\varphi} \mathbf{W}_t + \varepsilon_t \quad (1)$$

where ΔB_t is the change in the of end-of-day sovereign bond yields for each country at time t ; ΔB_{t-1} is the lagged dependent variable to remove autocorrelation; $\Delta Grexit_t$ is the daily change in the number of *Grexit* news extracted through the Factiva database; $ECB_NSMPnews_t$ takes into account ECB non-standard monetary policy news; \mathbf{X}_t is a vector of common controls for all countries, composed by two indicators: (i) the European volatility index (VSTOXX) to control for financial turmoil (see also Arghyrou and Kontonikas, 2012; Glick and Leduc, 2012); (ii) a risk aversion indicator, calculated as the difference between US AAA corporate bond yields and US 10-year government bond yields to account for global risks and as a factor explaining crises on financial markets (Codogno et al., 2003, Favero et al., 2010).

Finally, we also introduce additional country-specific control variables stemming from releases of news macroeconomic data, \mathbf{W}_t , which could have affected our dependent variables.¹⁶ These data on macroeconomic releases are collected via Bloomberg and consist of expectations of market participants about all available macroeconomic variables in the respective country. The

¹⁶ This approach was proposed by Altavilla et al. (2014b) and Falagiarda et al. (2015).

expected values are median forecasts collected up to one day before the official data release. We compute the difference between the actual value on the day of release and its expected value. The series are standardized. They can be considered as a measure of the surprise content about the most relevant macroeconomic data releases in the countries of our sample. This procedure allows us to control for possible movements in our dependent variables which are due to unexpected changes in macroeconomic variables, different from *Grexit* news. Variables definition and their descriptive statistics are reported in Table 1.

It is worth noting that there could be potential issues of reverse causality between *Grexit* news and sovereign bond yields of European countries in our sample. To deal with this, we implement a standard check in time series analysis (see Hamilton 1994) as also used in Gade et al. (2013), by running Granger causality tests for each country separately.¹⁷ We find no evidence of Granger causality from our dependent variables to *Grexit* news.¹⁸ These results are consistent with the idea that end-of-day sovereign bond yields of euro area countries do not influence the discussion about the *Grexit* option in the same day.

Another diagnostic check we implemented is testing for autocorrelation in standardized residuals. To this purpose, we apply the portmanteau test for white noise (Box and Pierce, 1970; Ljung and Box, 1978) and we cannot reject the null hypothesis of independently distributed residuals up to five and ten orders. Hence, residuals are independently distributed.

¹⁷ In detail, we implement the test regression by investigating whether lagged values (up to four) of the daily end-of-day change of bond yields help in forecasting the daily change in the number of *Grexit* news, by controlling for other exogenous variables and the lags of the dependent variable as well.

¹⁸ For the sake of completeness, we also apply the Granger test on Greece, finding that the endogeneity cannot be ruled out in this case. Therefore the direction of causality between Greek bond yields and *Grexit* news is likely to be questioned. For this reason and for our original interest in capturing the potential spillover effects of such news from Greece to other European financial market, we leave out Greek bond yields (as dependent variable) from the dataset.

Table 1 - Variables definition, source and summary statistics.

Variables	Definition	Source	Mean	Std. Dev.	Min.	Max.
Dependent variables						
10-year government bond yields	End-of-day 10-years government bond yields (used in Δ)					
<u>Peripheral countries</u>						
<i>Ireland</i>	End-of-day 10-years government bond yields (used in Δ)	Elaborations on Datastream	1.21	0.27	0.66	1.78
<i>Italy</i>	End-of-day 10-years government bond yields (used in Δ)	Elaborations on Datastream	1.76	0.30	1.14	2.41
<i>Portugal</i>	End-of-day 10-years government bond yields (used in Δ)	Elaborations on Datastream	2.44	0.39	1.55	3.26
<i>Spain</i>	End-of-day 10-years government bond yields (used in Δ)	Elaborations on Datastream	1.76	0.32	1.15	2.42
<u>Core countries</u>						
<i>Belgium</i>	End-of-day 10-years government bond yields (used in Δ)	Elaborations on Datastream	0.85	0.26	0.34	1.33
<i>Finland</i>	End-of-day 10-years government bond yields (used in Δ)	Elaborations on Datastream	0.69	0.25	0.19	1.16
<i>France</i>	End-of-day 10-years government bond yields (used in Δ)	Elaborations on Datastream	0.84	0.25	0.35	1.32
<i>Germany</i>	End-of-day 10-years government bond yields (used in Δ)	Elaborations on Datastream	0.54	0.21	0.07	0.98
<i>Netherlands</i>	End-of-day 10-years government bond yields (used in Δ)	Elaborations on Datastream	0.69	0.26	0.22	1.20
Explanatory variables						
<i>Grexit news</i>	Number of daily news (used in Δ) containing the word “Grexit” from all over the world	Elaborations on Factiva	274.73	517.47	0	4,648.00
<u>Country press</u>						
	Number of daily news (used in Δ) containing the word “Grexit” by a single country press:					
<i>France</i>		Elaborations on Factiva	22.98	55.24	0	562.00
<i>Germany</i>		Elaborations on Factiva	66.22	113.98	0	957.00
<i>Spain</i>		Elaborations on Factiva	19.23	46.09	0	461.00
<i>Italy</i>		Elaborations on Factiva	28.10	61.17	0	626.00
<i>United Kingdom</i>		Elaborations on Factiva	13.60	24.80	0	188.00
<i>Other EA</i>		Elaborations on Factiva	27.98	55.76	0	530.00
<u>Political leaders & executives</u>						
	Number of daily news (used in Δ) containing the word “Grexit” associated to:					
<i>Cameron</i>		Elaborations on Factiva	2.44	6.03	0	55.00
<i>Hollande</i>		Elaborations on Factiva	6.10	23.39	0	259.00
<i>Merkel</i>		Elaborations on Factiva	14.59	38.99	0	357.00
<i>Renzi</i>		Elaborations on Factiva	1.27	5.37	0	59.00
<i>Tsipras</i>		Elaborations on Factiva	1.47	4.70	0	50.00
<i>Draghi</i>		Elaborations on Factiva	4.49	8.18	0	54.00
<i>Lagarde</i>		Elaborations on Factiva	3.00	7.81	0	55.00
<u>Institutions</u>						
	Number of daily news (used in Δ) containing the word “Grexit” associated to:					
<i>Council of the EU</i>		Elaborations on Factiva	0.96	4.03	0	56.00
<i>European Parliament</i>		Elaborations on Factiva	2.91	11.39	0	114.00
<i>European Council</i>		Elaborations on Factiva	0.75	3.18	0	35.00
<i>European Commission</i>		Elaborations on Factiva	4.96	12.53	0	140.00
<i>ECB</i>		Elaborations on Factiva	16.72	35.36	0	320.00
<i>IMF</i>		Elaborations on Factiva	17.53	32.29	0	185.00
Common control variables						
<i>EuroVix</i>	European volatility index (VSTOXX), used in daily basis point changes	Elaborations on Datastream	23.99	4.67	16.33	40.80
<i>Risk Aversion</i>	Difference between US AAA corporate bond yields and US 10-year government bond yields (used in daily basis point changes)	Elaborations on Datastream	0.66	0.09	0.51	0.90
<i>ECB non-standard MP news</i>	Dummy equal to 1 for ECB non-standard monetary policy announcements	Elaborations on Falagiarda et al. (2015)	0.04	0.19	0	1.00

Notes: Summary statistics are calculated for variables expressed in levels over the whole period. Information for additional country-specific control variables (i.e. W_t) related to news macroeconomic data are not reported in the table for the sake of space.

3. Main results

Our empirical analysis produces a number of novel results supporting the evidence that the *Grexit* speculation spilled over into other euro area countries during the observed period, with relevant differences across countries.

Specifically, in Table 2 we report results when the variable *Grexit news* in equation (1) is measured by the daily change in the whole amount of *Grexit* news appeared in the press at the global level since 1 December 2014 to 31 October 2015. The most relevant issue to be noted is that the *Grexit* speculation spilled over into peripheral countries only, with the exception of Ireland. On the other hand, no statistically significant effects emerge for core countries.

Table 2 – *Grexit* news and government bond yields.

	Δ (10-year Government bond yields)									
	Peripheral countries				Core countries					
	Ireland	Italy	Portugal	Spain	Belgium	Finland	France	Germany	Netherlands	
yield (t-1)	0.15*	0.02	0.08	-0.04	0.00	-0.00	0.02	-0.04	0.03	
	(0.09)	(0.08)	(0.07)	(0.07)	(0.08)	(0.08)	(0.09)	(0.08)	(0.08)	
<i>Grexit</i> news	0.06	0.20***	0.39***	0.24***	0.04	-0.08	0.05	0.01	-0.03	
	(0.05)	(0.07)	(0.07)	(0.07)	(0.09)	(0.11)	(0.07)	(0.07)	(0.06)	
EuroVix	0.02	0.22***	0.33***	0.23***	-0.11***	-0.09***	-0.09**	-0.15***	-0.10***	
	(0.03)	(0.05)	(0.07)	(0.05)	(0.04)	(0.03)	(0.04)	(0.03)	(0.03)	
Risk Aversion	-0.05	0.12	0.26	0.08	-0.26	-0.23	-0.21	-0.33*	-0.37*	
	(0.20)	(0.35)	(0.42)	(0.30)	(0.19)	(0.22)	(0.23)	(0.17)	(0.21)	
ECB non-standard MP news	-2.03	-0.52	-3.42	-2.79	-2.92**	-2.65**	-2.38*	-1.74*	-2.79**	
	(1.32)	(1.89)	(2.73)	(1.92)	(1.26)	(1.11)	(1.25)	(1.01)	(1.14)	
Observations	234	234	234	234	234	234	234	234	234	

Notes: GARCH(1,1) regressions of daily basis point changes in the sovereign bond yields on full sample period (1 December 2014–31 October 2015). Robust standard errors in parentheses. *** (**, *) indicates statistical significance at 1% (5%, 10%) respectively. *Grexit news* and *yiled(t-1)* variables are expressed in Δ as indicated in equation (1). Coefficients on *Grexit news* are rescaled and multiplied by 100.

In detail, the sign of the *Grexit* news coefficient is positive and statistically significant for Italy, Portugal and Spain, meaning that a daily increase in the *Grexit* news leads to an increase in their government bond yields. As one could expect, Southern European countries have been recently more scrutinized by the global financial markets for their higher vulnerability concerning domestic public finances, which would question their financial stability as well. On top of this, the *Grexit* spilled over financial tensions. In fact, all these troubles seem to be amplified by the *Grexit* financial turbulence and by how international investors perceive the peripheral countries' situation when the media activity on *Grexit* increases around the world.

A different pattern seems to be observed for core and more economically stable countries, where the potential speculation effect due to *Grexit* news does not emerge, revealing a lower sensitivity of their financial markets to such news. The improved fiscal position and the declined path of public debt in the case of Ireland in 2015 would explain why such country could be considered less vulnerable to negative shocks and no heavily affected by *Grexit* news speculation.

Similar interesting differences in the results between core and peripheral countries have been also found by Caporale et al. (2014). In their case, peripheral countries correspond to the GIIPS group wherein yield spread volatility react more strongly to macro news volatility. Our results are also closer to those by Mink and de Haan (2013) and Bhanot et al. (2014), even though they focus on general news about Greece. In detail, the former prove that worrying news about the economic situation in Greece may lead investors to reconsider the valuation of exposures to other countries facing similar problems in 2010, e.g., Portugal, Ireland and Spain in their sample, according to a “wake-up call” hypothesis.¹⁹ The latter find a significant impact of changes in Greek yield spreads on Portuguese and Spanish financial firms’ abnormal returns due to ratings downgrades and other unfavorable news announcements about Greece during the period 2005-2011.

The ECB non-standard monetary policy news (*ECB non-standard MP news* in Table 2) has an interesting effect. Even though these actions were justified on the basis of events within the euro area,²⁰ their effect appears to be different for core *versus* peripheral countries of our sample. In detail, ECB non-standard monetary policy news generate a decrease in the change of government bonds for the former group of countries, while there is not a statistically significant effect for the latter. This would suggest that unconventional monetary policy announcement may be more beneficial for less troubled economies, generally characterized by a better fiscal stance, with respect to peripheral and more troubled countries. By contrast, there are different previous contributions (e.g., Szczerbowicz, 2015, Falagiarda and Reitz, 2015) suggesting that periphery euro-zone countries are supposed to benefit the most from such non-standard monetary policy. However, in the period of our analysis, the non-standard policy mainly relates to the Quantitative Easing (QE hereafter). To this extent, our result is consistent with recent policy works (Demertzis and Wolff, 2016), finding that periphery bond yields fell significantly after the Draghi’s July 2012

¹⁹ According to some authors (see, for instance, Goldstein et al., 2000; Bekaert et al., 2011), a crisis initially restricted to one country may provide new information prompting investors to reassess the vulnerability of other countries, which spreads the crisis across borders. Another view reflecting this situation is described by a “learning effect” (Mink and de Haan, 2103) suggesting that the probability that other GIPS-countries would manage sustainable fiscal policy is small if Greece does not succeed to credibly commit itself. This would give rise to the abnormal returns in GIPS-countries after news about Greece’s economic situation.

²⁰ As an example, in January 2015 it was announced the expanded Asset Purchase Program (APP), which adds a purchase program for public sector securities (PSPP) to the existing private sector asset purchase programs to address the risks of a too prolonged period of low inflation (see Falagiarda et al. 2015).

“whatever it takes” speech. Whereas, the announcement and the effective beginning of the QE (respectively, on 22 January and 9 March 2015) did not seem to have had a very relevant effect on these countries’ yields.

As for the European VIX (namely *EuroVix* in Table 2), it also affects differently peripheral and core countries. In detail, bond yields of the former group increase in the presence of financial turmoil, while bond yields of the latter decrease. Overall, this finding on *EuroVix* could suggest a flight-to-quality effect, considering the better credit ratings of core countries compared to peripheral ones. Such effect has been recently confirmed by the document presented to the European Parliament (2016) by the Directorate-General for Internal Policies of the Union according to which banks in the core countries are buying bonds from their own governments, while banks in the periphery zone acquire bonds from governments of core countries, reflecting a lack of confidence in their own economies’ performance.

All the results presented in Table 2 have been tested adding up to 7 lags of the dependent variables to further control for autocorrelation and they are confirmed. Moreover, we run regressions splitting the sample by the bailout referendum date (i.e. on 5 July 2015). For the pre-referendum period, the main results of Table 1 are confirmed: peripheral countries (excluding Ireland) have been negatively affected by *Grexit* news, while core countries did not. When considering the post-referendum period, we do not find any statistically significant results for both groups of countries.²¹

Then, we refine the analysis by distinguishing *Grexit* news by country press as reported in Table 3. In detail, the variable *Grexit* in equation (1) is now replaced by news on the Greek exit coming from the French, German, Spanish, Italian, British and other European press, used one at a time. Looking at Table 2 we note that, while for government bond yields of core countries there is no effect of *Grexit* news regardless of country press, government bond yields of peripheral countries strongly react to increasing news. This is true not only for news coming from the domestic country press (i.e. *Grexit* news from the Italian press on Italian bond yields), but also for news coming from other euro area country press. This would suggest the existence of a twofold spillover dimension: one concerning the effect of *Grexit* news on countries’ financial stability different from the Greek one; one related to the effect of *Grexit* news appeared in one country’s

²¹ This finding is not surprising. In fact, after the referendum the Greek exit event did not realize although the referendum outcome rejected the bailout conditions, insinuating the real possibility for Greece to leave the euro area. As nothing similar happened, intuitively the financial markets relieved. In addition, shortening the period from July to December implies that both the government bond yields movement and the number of *Grexit* news have diminished considerably with respect to the pre-referendum period (remember also Figure 1). Therefore, the lower variation in both the dependent and independent variables makes more difficult to detect any statistically significant relationship between the two phenomena.

press being able to affect another country's bond yields.

As for the magnitude, the *Grexit* news effects are larger for Portugal, followed by Spain and Italy, possibly reflecting the different fragility perceived by financial markets. Moreover, it is interesting to notice that *Grexit* news from countries outside the euro area, such as the United Kingdom, would affect even more strongly government bond yields in peripheral Europe.

Table 3 – *Grexit* news by country press and government bond yields.

	$\Delta(10\text{-year Government bond yields})$									
	<i>Peripheral countries</i>				<i>Core countries</i>					
	Ireland	Italy	Portugal	Spain	Belgium	Finland	France	Germany	Netherlands	
France	0.20 (0.49)	1.20* (0.69)	2.55*** (0.65)	1.38** (0.63)	-0.01 (0.61)	-0.81 (0.80)	0.31 (0.60)	-0.21 (0.51)	-0.37 (0.47)	
Germany	0.27 (0.25)	0.71** (0.34)	1.60*** (0.33)	0.89*** (0.34)	0.13 (0.34)	-0.41 (0.49)	0.22 (0.32)	0.03 (0.31)	-0.13 (0.28)	
Spain	0.60 (0.52)	1.12 (0.87)	2.44*** (0.92)	1.54* (0.82)	0.14 (0.95)	-1.28 (0.96)	0.10 (0.86)	-0.33 (0.70)	-0.63 (0.68)	
Italy	0.53 (0.40)	1.91*** (0.50)	3.16*** (0.51)	1.77*** (0.52)	0.45 (0.76)	-0.35 (0.93)	0.58 (0.66)	0.41 (0.69)	-0.13 (0.57)	
United Kingdom	1.58 (1.21)	3.00* (1.68)	5.05*** (1.62)	4.11** (1.60)	1.98 (1.50)	-0.10 (1.61)	1.38 (1.35)	1.04 (1.40)	0.90 (1.18)	
Other EA	0.49 (0.45)	1.30* (0.67)	2.73*** (0.65)	1.65*** (0.64)	0.23 (0.77)	-0.58 (0.90)	0.32 (0.70)	0.06 (0.64)	-0.39 (0.59)	
Observations	234	234	234	234	234	234	234	234	234	

Notes: GARCH(1,1) regressions of daily basis point changes in the sovereign bond yields on full sample period (1 December 2014–31 October 2015). Robust standard errors in parentheses. *** (**, *) indicates statistical significance at 1% (5%, 10%) respectively. *Grexit news* variables (e.g., *France*, *Germany*, etc.) are used one at a time and expressed in Δ . Their coefficients are rescaled and multiplied by 100. Controls and the lagged dependent variable are included in the estimations but not reported in the table for each regression.

This finding sounds quite familiar to a very fresh analysis proposed by Manasse (Il Sole 24 Ore, 26 June 2016) on what would happen to the perception of sovereign risk for several European countries in the case of a different country exit, i.e. “Brexit” victory at the referendum (on 23 June 2016). Indeed, he argues that the effects of “Brexit” on credit default swaps (CDS) 5-year spreads are quite limited for all the countries, with the exception of Italy, Spain and Portugal wherein the risk of default is higher in the case of “Leave” option – as actually happened – than in the case of “Remain”. The common denominator of these events seems to be the wave of increased uncertainty in the financial markets, leading to an escape from the sovereign debt of the most fragile countries in the euro area. Indeed, even though the economic strength of the United Kingdom is higher with respect to that of Greece, meaning that *Brexit* is likely to impact more heavily than *Grexit* in economic terms on Europe (Pastor, 2016), the latter may be even more

financially destabilizing for certain European countries and politically contagious for the future of the whole EMU.

4. Additional evidence

This part of the analysis focuses on the relationship between the *Grexit* news and the role of executive and international institutions, distinguishing between political and technical authorities. We now consider news where the *Grexit* content is merged with such institutional agents and we replace *Grexit* equation (1) with this set of variables, used one at a time. We intend to understand whether political and technical actors are perceived differently from financial markets. In relation to executives, we distinguish between domestic political leaders (i.e. Cameron, Hollande, Merkel, Renzi and Tsipras) and supranational authorities (i.e. Draghi and Lagarde), as shown in Table 4.

Table 4 – *Grexit* news by political leaders & executives and government bond yields.

	$\Delta(10\text{-year Government bond yields})$									
	Peripheral countries				Core countries					
	Ireland	Italy	Portugal	Spain	Belgium	Finland	France	Germany	Netherlands	
Cameron	2.78 (4.46)	15.21*** (5.83)	21.99*** (5.81)	17.86*** (6.17)	4.74 (3.96)	0.50 (6.33)	5.23 (3.38)	1.21 (3.33)	1.14 (2.75)	
Hollande	0.67 (0.95)	1.57 (1.97)	4.01** (1.77)	2.54* (1.43)	0.39 (1.84)	-0.19 (1.82)	0.89 (1.45)	0.60 (1.33)	-0.51 (1.13)	
Merkel	0.96 (0.67)	1.62 (1.07)	4.11*** (1.08)	2.61*** (0.92)	1.00 (0.93)	0.06 (1.08)	1.06 (0.77)	0.61 (0.80)	0.21 (0.69)	
Renzi	5.90 (4.21)	5.66 (8.96)	14.40 (9.57)	8.19 (7.15)	3.87 (7.03)	2.22 (5.69)	4.43 (6.42)	4.86 (5.54)	-1.57 (4.63)	
Tsipras	5.44 (5.66)	9.56 (9.32)	4.84 (16.53)	15.89 (10.34)	8.91* (4.98)	10.11* (5.41)	10.06* (5.63)	5.71 (4.33)	5.77 (5.55)	
Draghi	2.04 (3.55)	11.12*** (4.29)	24.99*** (4.12)	14.47*** (4.42)	2.66 (3.83)	0.25 (4.00)	1.08 (4.17)	0.67 (3.87)	-0.36 (3.42)	
Lagarde	-3.94 (3.57)	1.69 (4.32)	7.04 (4.31)	-5.48 (5.31)	-3.68 (2.96)	-3.01 (3.34)	-3.00 (3.40)	5.17** (2.26)	-4.51 (3.21)	
Observations	234	234	234	234	234	234	234	234	234	

Notes: GARCH(1,1) regressions of daily basis point changes in the sovereign bond yields on full sample period (1 December 2014–31 October 2015). Robust standard errors in parentheses. *** (**, *) indicates statistical significance at 1% (5%, 10%) respectively. *Grexit news* variables (e.g., *Cameron*, *Hollande*, etc.) are used one at a time and expressed in Δ . Their coefficients are rescaled and multiplied by 100. Controls and the lagged dependent variable are included in the estimations but not reported in the table for each regression.

The financial stability of core countries is not statistically significantly affected by *Grexit* news associated with political leaders and executives. Some exceptions (at a lower level of

statistical significance) occur only in the case of Tsipras for Belgium, Finland and France. This is possibly due to a higher anxiety perceived by the financial markets when the European integration is challenged by the leader of the most troubled country in the euro area.

As for peripheral countries, more news about *Grexit* related to prime ministers and international executives would lead to an increase in the government bond yields of such countries. Statistically significant effects arise only in the case of certain political leaders (i.e. mostly Cameron and Merkel, followed by Hollande), characterized by a more relevant role within Europe.

Concerning supranational executives, the figure of the ECB President Draghi combined with the *Grexit* content of news would exert more influence compared to both the coefficients on IMF President Lagarde and on other political leaders for the financial markets of more troubled economies. The fact that President Draghi appears to be the most effective (in terms of coefficient magnitude) could depend on his perception by the European financial markets, which are likely to consider him as the most relevant (with respect to the non-European executives) and the most credible (with respect to the national political leaders) authority within the euro area. Broadly speaking, if Draghi would say “Grexit” this may increase, *de facto*, the credibility of such a scenario.

Technicians are, in fact, normally bound only by mandate and task of their institution (e.g., among others, the ECB inflation targeting for Draghi), making them more independent from any political pressure. Different preferences (e.g., on monetary policy) between politicians and independent central bankers – representing their institution – usually occur because of the existence of different constituencies (Ehrmann and Fratzscher, 2011). Accordingly, politicians primarily focus on national economic objectives rather than on the euro area as a whole. At the end, this different approach would lead investors to see “executive-technicians” as more transparent and neutral.²² As a consequence, they would be also considered more reliable with respect to national political leaders according to a well-documented credibility-trust nexus (for a theoretical view point, see Barro and Gordon, 1983; for empirical evidence on Europe see Ehrmann et al. 2013). In any case, it is worth to remark that, in our case, it is not possible to extract the Draghi’s position – or someone else position – with respect to the Greek exit only by looking at the number and its daily change of news linked thereto. However, it is interesting to appreciate a different reaction of financial markets to different individual authorities concerning the *Grexit* news content.

²² As an example, Van der Cruysen and Eijffinger (2008) have reported on a survey of German households on the

Finally, we also check for the effects of *Grexit* news associated with the main international institutions, either political (i.e. Council of the European Union, European Parliament, European Council) or technical (i.e. EC, ECB, IMF). These results are shown in Table 5 and mimic the logic used for estimations reported in Tables 3 and 4 about *Grexit* news variables.

Table 5 – *Grexit* news by international institutions and government bond yields.

	Δ (10-year Government bond yields)									
	<i>Peripheral countries</i>				<i>Core countries</i>					
	Ireland	Italy	Portugal	Spain	Belgium	Finland	France	Germany	Netherlands	
Council of the EU	3.48 (4.31)	6.23 (13.14)	8.00 (19.80)	3.44 (17.14)	-1.37 (5.73)	-5.26 (8.50)	0.27 (7.85)	-7.78 (9.64)	-5.80 (4.96)	
European Parliament	-3.92 (3.46)	2.00 (5.04)	10.89** (5.09)	6.44 (5.09)	-8.48** (3.48)	-9.88*** (3.32)	-9.68*** (3.72)	-12.81*** (3.05)	-11.74*** (3.42)	
European Council	-2.32 (5.70)	2.26 (17.49)	7.30 (25.89)	-1.28 (21.32)	-6.34 (8.80)	-6.11 (11.18)	-5.59 (9.59)	5.61 (11.63)	-9.91 (9.52)	
European Commission	1.97 (2.18)	4.17* (2.53)	10.19*** (3.41)	5.20* (2.72)	-0.21 (1.82)	0.04 (2.58)	-3.27* (1.82)	-0.88 (1.78)	-3.64** (1.78)	
ECB	1.14 (1.16)	6.00*** (1.16)	8.41*** (1.46)	5.15*** (1.70)	1.02 (0.89)	-0.58 (1.52)	0.89 (0.74)	0.07 (0.69)	0.29 (0.64)	
IMF	1.46 (1.43)	4.98*** (1.34)	6.59*** (1.53)	3.40** (1.59)	0.73 (1.11)	-1.24 (1.56)	1.37 (1.01)	0.64 (1.03)	-0.14 (0.87)	
Observations	234	234	234	234	234	234	234	234	234	

Notes: GARCH(1,1) regressions of daily basis point changes in the sovereign bond yields on full sample period (1 December 2014–31 October 2015). Robust standard errors in parentheses. *** (**, *) indicates statistical significance at 1% (5%, 10%) respectively. *Grexit news* variables (e.g., on *Council of the EU*, *European Parliament*, etc.) are used one at a time and expressed in Δ . Their coefficients are rescaled and multiplied by 100. Control variables and the lagged dependent variable are included in the estimations but not reported in the table for each regression.

Looking at Table 5, it is easy to note that coefficients on *Grexit* news related to supranational technical institutions (i.e. below the line in Table 5) are always statistically significant and positive across the specifications for peripheral governments' bond yields (except Ireland). By contrast, no statistically significant effects emerge on those countries when looking at the European political authorities (i.e. above the line in Table 5). Overall, this result is basically in line with findings in Table 4. Therefore, it would provide support for a different markets' reaction to the political sphere *versus* the technical one for more vulnerable economies.

As for core countries, a lack of statistical significance of *Grexit* news emerges regardless of the supranational institutions considered. Actually, some exceptions occur in the case of news associated with the European Parliament, showing a negative and statistically significant coefficient across specifications. The intuition behind this result may lie in the fact that the aim of

perceived transparency of the ECB finding that trust in the ECB and perceived transparency are positively correlated.

making Europe and, more precisely, the European Union more compact and stable, is one of the main goals of the European Parliament. This would possibly foster a flight-to-quality effect towards core countries, providing more benefit to such more stable economies and, finally, resulting in a decrease in their government bond yields.

5. Conclusions

This paper analyzes the spillover effects due to *Grexit* possibility on euro area financial markets since the beginning of the political instability in late 2014 in Greece. In detail, we quantify the impact of the specific news content “*Grexit*“, appearing on the daily press at the global level, on the 10-year government bond yields of some stressed and non-stressed European countries. We rely on a novel dataset from which we can extract a huge set of up-to-date daily news on *Grexit* published from 1 December 2014 until 31 October 2015.

Our empirical analysis produces a number of interesting results that basically show that the Greek exit speculation spilled over into other euro area countries’ severing bond yields. In detail, we find an asymmetric reaction of the financial market to the amount of *Grexit* news in our sample. More news on *Grexit* drives up the government bond yields of peripheral countries only (i.e. Italy, Portugal and Spain), excluding Ireland. This would suggest that spillover effects related to *Grexit* news content has occurred but only for more vulnerable economies during the investigated period.

Overall, such exercise on *Grexit* news provides support to a more general view according to which political news and uncertainty about government policy could negatively affect countries’ financial stability (see also Pastor and Veronesi, 2012, 2013; Kelly et al. 2016). What we add to this statement is that negative spillover effects due to *Grexit* news would emerge from Greece to other euro area countries. More importantly, such effects are heavier for more scrutinized economies in light of their worst fiscal position and financial vulnerability.

New insights have been obtained exploiting news variability and focusing on the *Grexit* content associated with the major European political leaders, supranational executives and related institutions. In a nutshell, our results suggest that only political authorities of leader countries in Europe (basically France and Germany during the observed period) would affect the financial markets of peripheral countries when *Grexit* news increases. At the same time, robust evidence emerges in the case of the most important figure of the ECB, the president Draghi. On top of this novelty, the “Troika” would be more relevant than the political counterparts in Europe (i.e.

Council of the EU, European Parliament and European Council) for such countries when the debate on *Grexit* becomes more intense. This would reveal stronger influence of “Troika” on financial markets, especially in the case of more troubled economies.

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