Lost in Transmission:
Evaluating Media Bias Towards the European Union

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Abstract

Previous studies suggest that attitudes towards the European Union (EU) are influenced by the availability of information on supranational institutions and legislation. These studies typically indicate that more informed citizens are more likely to positively evaluate EU institutions and policies. To date, empirical studies have presented evidence on the effect of the consumption of TV and newspapers on euro skepticism. In this case study of Ireland we exploit data from the Irish National Election Study 2011 to identify the effect of internet exposure on public support for the European Union during the current economic crisis. We use broadband availability measured at the micro level as instrument. To allow for heterogeneous treatment effects, we implement local average response functions (LARF). Strikingly, we find that the more citizens are politically informed via the internet, the more they blame the EU for (mis)managing the current economic crisis.

Key Words: European Union, Public Opinion, Economic Crisis, Internet, Ireland.

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Introduction

In some respects the Euro crisis is like multiple plane crashes occurring at the same time where manufacturing design faults, exceptional conditions, pilot errors and mistakes by air traffic controllers all led to disastrous and unexpected results.
Brian Cowen, former Irish Taoiseach

Omne ignotum pro magnifico.
Cornelio Tacito, Julii Agricolae Vita

In this article we examine the extent to which citizens apportion blame to the EU and to the Euro project for the post September 2008 economic collapse in a state that was particularly impacted by the crisis - the Republic of Ireland. Ireland’s Economic and Social Research Institute state that Ireland’s annual GDP has fallen by 6.7 percent between 2008-2011, and that unemployment shot up from 4.5 percent in 2007 to 14.4 percent at the end of 2011.\(^2\) With collapsing revenues, and mounting costs (the latter due to a rapid expansion of social welfare claimants), combined with the spectacular costs of its inept bank bailout scheme - the Irish government found itself effectively frozen out of international bond markets and, in November 2010, was forced to seek an 85 billion bailout financed by the ‘Troika’ of EU, ECB and IMF. The terms of the bailout implied an effective loss of economic sovereignty on Ireland’s part - with the Troika insisting that Ireland make good on 100 percent of the bank guarantee scheme as a condition of the loan, and also making the money conditional on acceptable implementation of an austerity programme - with progress to be evaluated quarterly.

The EU/ECB/IMF, by insisting that Ireland pays 100 percent of Irish bank obligations to their bondholders, while at the same time implementing swingeing austerity measures, have dramatically restricted the policy flexibility of the current Irish government. In the broader Eurozone, analogous bailouts in Greece, Portugal, and, most recently, Spain have similarly restricted the manoeuvring room of national governments, and have notably failed to bring the Eurozone financial crisis to a conclusion. Throughout the crisis, public opinion has had only a marginal role - via dramatic national-level election results in Greece and France in particular. Further-

\(^2\)Data available at http://www.esri.ie/irisheconomy/
more the EU’s directly elected arm, the European Parliament, has been effectively side-lined throughout the crisis - with member states abandoning the ‘Community Method’ of decision making for a more intergovernmental ‘Union Method’. None of this bodes well for a political organisation that has long dealt with accusations of embodying a ‘democratic deficit’. To the extent that EU citizens hold the EU and Euro accountable for the crisis, it may lose its tenuous ‘performance legitimacy’, just at a time when perhaps the most economically appealing solution to the crisis involves a dramatic step towards the ‘ever closer union’ envisaged by the EU’s founders in the Treaty of Rome.

The post-September 2008 economic crisis is also a crisis of European democracy - exposing considerable flaws in extant political arrangements. With the global financial system in the midst of arguably the most severe and prolonged crisis of the postwar era, there is a considerable amount of political blame to go around. While national governments were happy to claim responsibility for the state of the economy during periods of sustained growth and low unemployment, they were quick to point to the perils of globalization, specifically the interdependency of modern economies, and (in Eurozone member states) the importance of the EU as a political actor once the crisis hit. How will citizens apportion blame for the crisis and responsibility for its non-resolution, and on the basis of what information can they reasonably hope to do so? The former question has received next to no scholarly scrutiny to date, although we do review an extensive literature on sentiments towards EU membership, integration and expansion. The latter question has also received little treatment, and scholarship on media effects on public opinion towards the EU has failed to account for the role of the Internet, a technology that has transformed human communications in the past 15 years. The answers to these questions will have a considerable bearing on the democratic future of the EU - and this is why we seek to begin to address them in this article.

This study captures Irish public opinion in February 2011 - using data collected by the Irish National Election Study (INES) shortly after the February 25th general election. We use these data to examine the manner in which citizens attribute blame for the financial crisis across a range of actors, including: the national government; banks; the global financial system; and (the two targets of this study) the EU and the Euro. We are specifically interested in the question of whether citizens’

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3In a recent paper Bechtel, Hainmueller, and Margalit (2012) explore voter attitudes towards bailouts in Germany.
use of the internet as a source of political news exercises a causal influence on their evaluation of the EU and Euro’s culpability in the crisis. Although the advent and mass adoption of internet technologies across the EU has dramatically changed the European media landscape, the role of the web in citizen evaluation of the EU remains empirically underexplored. In this study we make use of natural variation in the availability of broadband in the Republic of Ireland to instrument online news gathering. This methodological approach allows us to examine the causal impact of politicised Internet use on citizen evaluations of the EU. We argue that the near-limitless volume of information available online, combined with the diversity of sources of online news, lead us to anticipate that citizens who access political information online will differ in their understanding of who is to blame for the crisis compared to citizens who rely exclusively on ‘old media’. We also speculate that the international nature of the online news environment means that the EU will feature more in coverage of the crisis than in ‘old’ media, which are far more focused on national issues and political actors. We argue (and present evidence) indicating that those who browse for news should therefore be more likely to blame the EU/Euro for the crisis than those who do not.

In the next section, we review the literature on citizens’ evaluations of the EU, focusing on work that examines the relationship between media consumption and attitudes towards the EU. We also discuss the emerging (mostly theoretical) literature on the effects of Internet consumption on citizens’ political attitudes. We then elaborate on the Irish context of this study - focusing on patterns of voting in Ireland’s nine referendums on EU membership and subsequent treaties and outlining Ireland’s current economic situation and relationship with the EU/ECB/IMF ‘Troika’. We then introduce our data and outline our methodological approach, before proceeding to our analysis - which consistently indicates that using the Internet as a news source results in citizens who attribute considerably more blame to the EU and Euro for the current crisis. We conclude with a discussion of how future research (including our own planned progression of this project) can build on this finding.
1 Literature Review

1.1 Mediated information and attitudes towards the EU

The subject of citizens’ attitudes towards the EU is situated in a larger discussion of the EU’s perceived ‘democratic deficit’ (Anderson and Ellassen, 1996; Marsh and Norris, 1997, Karp et al., 2003). The nature and causes of this ‘democratic deficit’ are multiple: a large part of the scholarship on this topic has centered on issues of EU institutional design and modes of political representation that are primarily national, rather than European in nature (Coultrap, 1999: 108; Kuper, 1998; Scharpf, 1999). Under this rubric, it has been advanced that institutional reforms of the EU (in particular strengthening the directly elected EP) may help to forge greater legitimacy among the citizenry, although, as Karp et al. (2003: 274) point out: “this assumes, of course, that citizens are more likely to place their trust in the EP and be more sceptical of institutions that are beyond their direct control”. However, citizens have proved surprisingly reticent to approve of institutional reforms to those reforms of the EU that have been put to them in referendums - this was most notably the case with the abandoned Constitutional Treaty. Popular rejection of the proposals of the Constitutional Treaty (which included provisions aimed at strengthening the EP) point to non-institutional causes of popular (dis)approval for the EU project.

There are several competing non-institutional explanations for attitudes towards the EU. Firstly, the differential economic benefits of EU membership have been presented as both aggregate and individual-level predictors of the EU’s popular legitimacy (Eichenberg and Dalton, 1993; Gabel, 1998; Gabel and Palmer, 1995; Gabel and Whitten, 1997; Karp et al., 2003; see also Carruba 1997). Secondly, non-economic, identity-related attitudes have also been cited as offering considerable explanatory power regarding individuals’ feelings towards EU integration and expansion. Levels of national identity (Carey, 2002; Hooghe and Marks, 2004) and attitudes towards immigrants (De Vreese and Boomgaarden, 2005) both appear to play a significant role. Thirdly, national incumbent government performance also appears to influence judgements about the EU, with Azrout et al. (2012: 3) explaining that: “as many people are unaware of European affairs, scholars argue that citizens use evaluations of the incumbent government as a proxy for evaluations of the EU (for example, Franklin et al., 1995: 3)”. 

Yet another strand of the debate has examined the role of the media coverage of EU politics and the EU’s institutions, and it is this strand that most closely informs the research presented in this article. Several analyses of the sources of the EU’s democratic deficit argue that the media is failing to act as a legitimacy-building intermediary between the EU and its citizens - pointing to the low levels of attention displayed towards EU affairs in national media coverage (Anderson and McLeod, 2004; De Vreese, 2002; Meyer, 1999) and the non-emergence of a European-level media system or ‘public sphere’ (Grimm, 2004; Scharpf, 1999; Schlesinger, 1999). De Vreese et al. (2006) provide empirical evidence on this topic - their descriptive findings of coverage of the 1999 and 2004 EP election campaigns conclude that “the actors featured in news stories about the elections were generally national political actors and not EU actors” (Vreese et al., 2006 : 497). However, they do notice a marked increase in levels of EU coverage between 1999 and 2004. In terms of tone, De Vreese et al. conclude that most of the coverage of the EU during these campaigns was neutral - though evaluative coverage was generally negative towards the EU in the ‘old’ EU15 member states and mixed in ‘new’ member states. Norris (2000) links the lack of coverage of the EP and negative tone of much coverage of the EU in the news to popular indifference and negative attitudes towards the EU.

From this perspective, the importance of the media in alleviating or contributing to the democratic deficit is due to its ability to influence the emphasis that is placed on the EU as a political actor in the minds of citizens, and to frame the EU in either a positive, negative or neutral manner. Thus, greater coverage of the EU in national media should increase the perceived salience of the EU as a political actor, leading to citizens who are both more attentive to and informed about EU politics. The notion that the media’s ordering of the importance of political issues and actors is closely tied to the public’s perception of the importance of these issues and actors (known as the media ‘agenda setting’ hypothesis) is both theoretically well-developed and empirically well-supported (see: Scheufle and Tweksbury, 2007 for a review).

However, Karp et al. (2003) note that the direction of the relationship between levels of EU knowledge and EU support is theoretically ambiguous. On the one hand, an approach based on cognitive mobilization theory would lead us to “expect a positive relationship between political knowledge and legitimacy” (p. 275). Familiarity with the EU may make it appear less distant and threatening - Ingleheart (1970) was an early advocate of the argument that more politically skillful citizens
will be more supportive of EU integration, and there is some empirical evidence that this is the case (Janssen, 1991: 467) and also that citizens who are interested in EU politics are more likely to support their country’s continuing participation in the EU (Anderson, 1998: 586). On the other hand, greater knowledge of the EU may lead to less support for it, if greater knowledge brings with it a greater awareness of the democratic deficiencies of EU decision making, and greater sensitivity to accusations of non-transparency and lack of democratic accountability by those critical of the EU.

Several empirical research papers have addressed the relationship between media coverage of EU affairs (typically in national newspaper and television outlets) and citizens’ attitudes towards the EU and electoral behavior in EU referendums and elections to the European Parliament (EP). Work in this tradition has been mostly experimental or quasi-experimental in nature. Typically, exposure of treatment groups to specific media content is used to explain support for the EU generally (De Vreese and Boomgarden, 2003; Semetko et al., 2003), support for EU enlargement (Schuck and De Vreese, 2006), or support for accession of specific countries (for example, Maier and Rittberger, 2008).

Projects involving observational data (i.e., survey data and media content analyses) have had mixed findings to date. For instance, more intense media coverage of the EU has been found to be linked to increases in citizens’ levels of knowledge of EU affairs (De Vreese and Boomgaard, 2006). Banducci and Semetko (2004) conclude that individuals are more likely to turn out to vote in EP elections in media environments where the campaign is prominent. However, Karp et al. (2003: 287) find that “evaluations of EU democracy do not appear to be related to media coverage, as frequent exposure to various types of media does not have a significant impart in any of the models”. Furthermore, they find little support for the cognitive mobilisation account; in fact they observe a negative relationship between political knowledge and satisfaction with the EU as a democratic institution (Karp et al., 2003: 287).

As such, the direction of the relationship between levels of EU coverage in the news and support for the EU remains unclear. A more consistent finding is that, as media coverage of the EU increases, citizens come to be more knowledgeable about the EU and to rely less on evaluations of national political circumstances (Azrout et al. 2012; Elenbass et al., 2012 De Vries et al. 2011; Hobolt 2006). Thus, while
it is unclear whether media coverage of the EU has a consistent directional effect, increased coverage of EU affairs does appear to at least make citizens more cognisant of EU affairs and consequently more likely to think about the EU itself (rather than a national-level proxy) when they come to evaluate it as a democratic institution.

As the attribution of blame for the economic crisis to the EU is a relatively novel topic, the extent to which the insights of the above-mentioned literature will apply remain to be seen. We argue below that the high reliance of citizens on mediated information in evaluating EU affairs, combined with relatively consistent findings indicating that media coverage influences citizens’ awareness of EU affairs and tendency to evaluate the EU as an actor in its own right indicate that there is strong potential for media to exert a ‘priming’ effect on citizens’ evaluations on the EU’s culpability for the economic crisis. Before we do so, however, we briefly outline the emerging literature on the role of the Internet in political opinion formation.

1.2 The internet and its impact on the EU informational landscape

In the above-discussed literature, the role of the Internet has been largely overlooked. The lack of research on subject is a function of both the initially low diffusion of the internet and the complex nature of the World Wide Web. Scholars have preferred to examine newspaper and television coverage of the EU as an influencer of citizen perceptions and attitudes. This scholarly reluctance may be partially attributable to the extraordinary difficulty of characterizing the content that is available online - relative to television or newspapers. The intense fragmentation of content provision that has characterized the more recent development of the ‘Web 2.0’ Internet (see: Anderson, 2007 for a detailed discussion) means that performing content analysis of coverage of a given event or actor on the Internet is a task akin to cleaning the Augean stables.

Two schools of thought have characterized the debate on the effect that the internet may have on political information and political engagement. On the one hand, several scholars (Sunstein 2002; 2012) have argued that the internet emphasises selective exposure, ultimately leading users to reinforce their pre-existent beliefs. They argue that the pull-in nature of the Internet leads individuals to explore the web by searching among information sources and loci that are already in line with
their preferences. Research in this tradition emphasizes the role of habit in navigating the online environment - with people consistently relying on trusted and known sites. Furthermore, some argue that Internet’s extensive reliance on targeted advertising and automated personalisation software create ‘filter bubbles’, where users are exposed primarily to content that reflects their prior choices and dispositions, without necessarily realising that this is the case. These observed trends lead to a prediction that the Internet could render voters both more polarised in their opinions and with fewer and fewer common points of collective reference in political thinking.

On the other hand, while habit and prior preferences do play a significant part in determining one’s online news experience, it appears that ‘accidental’ news exposure still occurs, especially when Internet users consult the sites of general interest news broadcasts as key sources of online news. Tweksbury and Rittenburg characterize the findings of empirical studies on news selectivity as indicating that, for Internet news consumers, “selectivity occurs through a mixture of purposeful evaluation of sites and topics and healthy doses of habit and chance”. The internet’s innate characteristic of being relatively unencumbered by geographical boundaries provides for exchanges of information and ideas across state borders. Exposure to a plurality of sources, especially on web 2.0 platforms, where practically every user is also a content producer, may even happen in spite of the filters that both the user and the sites themselves place on content. These considerations would lead us to anticipate that exposure to diverse, often contradictory information online should serve to provide citizens with a more diverse and international set of perspectives on a given topic.

Unfortunately, there are few empirically-oriented research results to provide us with a solid set of expectations as to the broad question of whether the Internet will serve to polarise public opinion, especially outside of the USA (Tweksbury and Rittenburg, 2012). We argue here that the borderless nature of the Internet (particularly for Ireland’s Anglophone population) mean that it is an environment where individuals are likely to receive more information about the EU than domestic politics (relative to politics coverage in ‘old’ domestic media outlets).
2 The EU and Ireland

In this section, we discuss Ireland’s relationship with the EU in terms of public opinion as expressed in several referendums up to the recent EU Fiscal Compact Referendum - these developments set the context for our study of the effects of Internet exposure on Irish citizens’ proclivity to apportion blame to the EU for Ireland’s economic woes. In this way, we seek to develop a conception of the political debate around the European Union and its evolution that allows us to develop clear, empirically testable hypotheses in the subsequent section.

2.1 Judicial decisions leading to a long history of voting on Europe and a unique media environment

The most recent referendum on the EU Fiscal Treaty (which took place on May 31st 2012) brings the number of EU referendums held in Ireland to a total of nine. These referendums have taken place throughout the course of Ireland’s membership in the EU - beginning in 1972 with Ireland’s accession to the EEC. The constitutional basis for holding a referendum on Irish accession to the EEC was ‘fairly straightforward’ (O’Mahony, 2009: 433). However, it was not at all clear at the time of Ireland’s accession to the EEC that subsequent treaties would also be subject to referendum approval. The evolution of Irish practice in both holding and managing EU referendums have been strongly influenced by a series of legal challenges taken by individual campaigners against government practice. The government’s decision to proceed by holding a referendum on the Single European Act (SEA) following a successful legal challenge copper-fastened the practice of referendum approval for EU treaties in Ireland - and the practice continues to this day.\(^4\)

Judicial interpretation has also shaped the media environment in which EU referendum campaigns take place. The 1992 Maastricht Treaty referendum campaign

\(^4\)The SEA was originally slated to be passed through the Oireacthas without referendum approval in December 1986, however, this action was successfully challenged in a legal action brought by Raymond Crotty, a development economist and anti-EEC campaigner, who argued that the changes envisioned in the SEA went beyond what the Irish people had consented to in the 1972 referendum (Crotty, 1988). Crotty was successful in his appeal to the Supreme Court (though only narrowly, with a 3:2 majority) which ruled in early 1987 that the SEA ratification would entail an amendment to the Constitution, and would thus require referendum approval to be lawfully ratified.
was heavily biased towards the ‘Yes’ side, who comprised the mainstream political parties, including Labour (with the exception of Sinn Fin, the Socialist Workers’ Party and the Green Party, all parties of marginal importance). The dominance of the ‘Yes’ side was visible throughout the campaign, with the government using public money to campaign for a ‘Yes’ throughout, and with Radio Teilifís Éireann (RTE) the state broadcaster, airing a government television appeal for a Yes vote, with no corresponding airtime for the ‘No’ campaign (O’ Mahony, 2009). Both the use of public monies and the distribution of airtime by RTE in referendum were subsequently successfully challenged in the Irish courts.  

These judgements have led to the current status quo whereby a neutral Referendum Commission, charged with providing the public with neutral information about the referendum issue, is assembled for each referendum campaign, and RTE allocates equal time to ‘Yes’ and ‘No’ sides in all referendum campaigns in its television and radio coverage - regardless of levels of popular support for either side. However, neither the newspapers, nor the Internet are subject to this ruling (indeed, it is difficult to imagine how such a ruling could meaningfully be applied to the campaign coverage available online).

### 2.2 Evidence of low EU knowledge levels and ‘soft’ support for EU integration

Table 1 below details the results and turnout figures for Ireland’s nine European referendums. As we can see, the results have generally been favourable towards the

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5Patricia McKenna, a Europskeptic Green MEP, won a Supreme Court challenge against the constitutionality of government use of public monies to campaign for one side in a referendum campaign in 1995. This decision led to the practice of establishing a neutral ‘Referendum Commission’, charged with explaining the issues surrounding a given referendum to the public without advocating either a Yes or No vote. As a part of this work, the Commission typically produces a leaflet explaining these issues, which is delivered to every household in the country, and more recently Commissions have also developed websites, which contain more in depth information. While the Commission has been criticised for an inability to clarify the key issues in several campaigns, it has nonetheless remained strictly neutral in orientation towards referendum outcomes (c.f. Gallagher, XX PRoI). However, Irish government parties and, indeed, cabinet members continue to campaign vigorously for their preferred outcomes in Irish referendum campaigns - often to the exclusion of other pressing concerns (Kenny, 2012). In terms of campaign coverage, a judicial decision was taken against RTE’s practice of allocating referendum airtime on the basis of popular support for the parties lining up on each side in a case taken by Anothony Coughlan in 1998 (and subsequently confirmed in the High Court in 2000) (O’Mahony, 2009: 433-434).
treaties in question - with the two exceptions being ‘Nice 1’ and ‘Lisbon 1’ in 2001 and 2008 respectively. Both of the two ‘No’ referendums were re-run in the following year (of course, none of the ‘Yes’ referendum decisions have ever been revisited in this manner) - both were resoundingly approved the second time around. This alone indicates that large portions of the Irish population vacillate in their electoral behaviour towards the EU, meaning that referendum campaigns are of considerable significance to the eventual result.6

Table 1 about here

As early as 1995, Sinnott noted that the relatively positive perceptions of EU membership among the Irish public corresponded with relatively poor levels of factual knowledge. He also uncovered a positive correlation between levels of EU knowledge and favourability towards EU integration. Laffan and O’Mahony (2008:128) conclude that low levels of EU knowledge continued to prevail in Irish society into the 2000s. Of all of the treaty referendums, Lisbon 1 was arguably the clearest demonstration of the inability of the majority of the Irish population to understand the question being put to them. O’Mahony (2009: 440) cites post referendum research indicating that lack of knowledge was the leading cause of voter abstention (cited by 46 percent of voters in post-election one survey). She also cites post-election public opinion where 60 percent of the sample indicated that they were either ‘only vaguely aware of the issues involved’ (30 percent) or that they ‘did not know what the treaty was about at all’ (30 percent). Again, a positive correlation between self-reported knowledge levels and the likelihood of supporting the treaty by voting ‘Yes’ was observed in this research. In this context, we would anticipate that EU opinions among the Irish population are not extremely stable, echoing the argument made by Elenbaas et al. (2012: 3) that “information should have a great potential to change existing opinions about the EU because these opinions are generally less

6Garry et al. (2005) presented evidence that voting behaviour in the two Nice referendums was better explained by ‘issue voting’ (i.e., voting on the basis of attitudes towards Europe) than by the ‘second order’ model (i.e., voting on the basis of feelings towards the government and parties in the national arena). Garry et al. (2005) also find evidence that ‘issue voting’ was far more pronounced in the second referendum - where the campaign was of greater intensity and the issue of greater salience. One aspect of Ireland’s EU referendums that does fit Reif and Schmidt’s (1980) ‘second order election’ model is turnout. Apart from the 1972 accession referendum, Irish turnout at EU referendums has been consistently low relative to national elections (where turnout in recent years has varied between the low 60s and mid 70s) - a pattern that is at least partially attributable to low levels of public understanding as to the issues at hand.
established and informed than opinions in more familiar domains of public life”.

Overall then, EU referendums typically produce low turnouts, and consecutive elections on treaties that remain essentially unchanged have produced dramatically different results. We have also observed that EU referendum campaigns can arouse feelings of utter confusion among the majority of the Irish electorate. This is unsurprising, given the low levels of knowledge on EU policies and institutions possessed by the Irish public. One final observation is that the size of the ‘No’ vote has consistently been far greater than the electoral support of those parties advocating a ‘No’. For instance, in the 2008 Lisbon 1 campaign, where 53.4 percent of voters came out against the treaty, Sinn Fein, which then had elected a mere 4 TDs (out of 166) in the 2007 general election, was the only parliamentary party advocating a ‘No’ vote. Thus the Irish party system appears to be imperfectly aligned with its electorate when it comes to EU affairs.

2.3 Recent Developments

Ireland’s political and economic development in the 21st century read somewhat like a Victorian morality tale. A period of extraordinary economic growth from the mid-1990s onwards led the Irish economy to be described as ‘the Celtic Tiger’ - a phrase which rapidly became part of Ireland’s popular and political parlance. In the early part of the new millennium, growth of the Irish economy continued unabated - though much of this growth was driven by what eventually turned out to be a property bubble - fueled by a global supply of cheap and easy credit. In late 2008, however, this cheap supply of credit was abruptly cut off - revealing spectacular holes in the balance sheets of most of Ireland’s major banks.

The scale of the losses of these banks was spectacular, especially given Ireland’s small population size (just over 4.2 million according to the Central Statistics Office, with a GDP of approximately 160 billion euros). However, when the heads of the distressed banks met with the Taoiseach (Irish Prime Minister), Finance Minister and a small number of senior civil servants in the small hours of the morning on September 30th, 2008 - ostensibly to discuss an impending ‘run’ on Anglo-Irish bank, the true scale of the Irish banking system’s losses were unknown to the government. Nonetheless, and in circumstances that have still not been made entirely clear to Irish citizens, the government decided to issue a guarantee on behalf of the state, covering the liabilities of all of Ireland’s troubled banks. The decision was
a truly momentous one - state exposure under the guarantee was reported to run to 330 billion euros, although the public were reassured by Finance Minister Brian Lenihan, who announced that Ireland’s bank bailout would be ‘the cheapest in the world’, words that would come back to haunt him for the remainder of his tenure. Unfortunately, as Mair’s (2011: 3) account makes clear, the government’s decision was ill-informed: “the banks had not been upfront about their liabilities, and the guarantee was eventually to encompass a much larger sum than was envisaged”. Carswell (2011) estimates the gross cost of the bailout at 40 percent of Ireland’s GDP (net costs remain currently unknown).

This costly bailout of Ireland’s banks coincided with the collapse of Ireland’s property bubble - leading the disastrous unemployment and GDP growth figures cited in the introduction to this article. The fiscal gap created by these circumstances, and Ireland’s inability to finance its outgoing on the international bond markets led to the EU/ECB/IMF conditional bailout of the Irish exchequer in November 2010. Subsequently, and in shambolic circumstances (Murphy, 2011) the Fianna Fáil/Green coalition government collapsed and a general election was held on February 25th, 2011. The results saw both government parties electorally obliterated, and the current Fine Gael/Labour coalition taking office. The new government has struggled to meaningfully fulfill campaign promises to renegotiate the terms of the bailout (especially the Troika’s insistence on full repayment of guaranteed bank bondholders) - and the Labour Party has been haunted by its ‘Labour’s Way or Frankfurt’s Way’ campaign slogan. In this context, and with the government in the midst of introducing a raft of new taxes (including a highly unpopular property tax) while also cutting public expenditure - the Fiscal Compact referendum unsurprisingly saw the ‘No’ side tying the terms of the Compact with on-going austerity policies. ‘Vote No to Austerity’ was thus a dominant narrative on the ‘No’ side - with Sinn Fein and the United Left Alliance being the parliamentary parties adopting this stance (we therefore control for support for these two parties in our analysis below). The ‘Yes’ side, comprised the government parties and Fianna Fáil, argued that voting Yes was essential to securing on going funding for the Irish state, and adopted a ‘Yes to Stability, Growth and Employment’ frame (which had, ironically also been adopted in the Lisbon 2 campaign). The clear yes vote in the Fiscal Compact referendum reported in Table 1 was thus arguably driven more by fear of being cut off from funding, than by any fundamental support for the provisions of the treaty itself.
3 Theory and Hypotheses

The role of mediated information in opinion formation and political behaviour has been investigated in relation to a large array of issues (Zaller, 1992; Norris 2000; Page and Shapiro, 1992). A number of studies have pointed out that mediated information is especially crucial in citizens’ attitudes towards the EU because of the widespread low knowledge, low interest, and general lack of understanding of EU institutions and mechanisms among members of the public (Dalton and Duval, 1986; Hobolt 2006).

The general challenge of political communication in nation states is amplified in the EU - a political project that spans an entire continent, but where, as Dalton and Duval (1986: 186) observe: “very few citizens have first- or even second-hand contact with Community affairs in Brussels”. Citizens are thus particularly dependent on mediated coverage of day-to-day EU politics (Norris, 2000). Furthermore, the lacklustre ‘second order’ political campaigns for elections to the EP tend to generate few direct contacts with voters, meaning that, again, citizens must rely on mediated information in forming their opinions (Bennett and Entman, 2001; De Vreese et al., 2006). Indeed, citizens have repeatedly reported that they rely heavily on television and newspapers as their principal sources of information on the EU (Eurobarometer, 2007). As such, TV and newspapers are natural targets for scholars interested in understanding the role of mediated information in the formation of citizens’ attitudes the EU.

However, the European (and, indeed world) media environment has been radically altered by the arrival and mass adoption of the Internet as a source of news from the mid-1990s onwards. While research on the nature and effects of online news consumption is still at an early stage, we do know that the Internet is characterized by a heterogeneity of views and perspectives that is far greater than traditional media. Tewksbury and Rittenberg (2012: 223) note that “over-informing audiences is a fairly unique component of online news”. A unique feature of the Internet as a medium is its capacity to act as a vast repository for contemporary and historical information, combined with the incentives that it provides for the provision of ‘niche’ information (i.e., information that is of interest to relatively small audiences) (Anderson 2007). Thinking specifically of EU-related issues we know, for instance, that traditional media tend to present only one side of the ‘story’; the 2009 PIREDEU media study shows that in Ireland only 26 percent of the EU-related media stories

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mention more than one side of an issue/problem. For those citizens whose media menu is limited to traditional media, we can thus expect opinions to be strongly channeled in the direction fostered by those media.

Although previous studies have found that (traditional) media effects are moderated by pre-existent attitudes and levels of political sophistication; they do leave us with the clear methodological expectation that by measuring the content of the outlets (and their biases) we can anticipate the direction in which the effect of media should drive opinions. Without detailed data on the sites that individuals visit when gathering political news, and without content analysis of these sites, it is extremely difficult to accurately measure the content of the Internet: in this sense it remains a ‘black box’ in this research. However, we do know with reasonable certainty that there is more information available on the internet than in newspapers and on TV. We also know that much of the information available is borderless, to the point that some have spoken of the internet as “the end geography” (Mosco, 2004).

We can also safely assume that the sources of news online are more heterogeneous and international in origin than in any ‘old’ national media outlet. Furthermore, most international political actors, journalists, commentators communicate in English, so that a large amount of international English language content is available for grab online - meaning that in Anglophone Ireland, this effect is at its most pronounced. We can therefore anticipate that those citizens whose media menu features the internet would have different opinions from those who have a more limited media diet. This leads us to formulate the following testable hypothesis:

**H1**: Internet use for political information affects Irish citizens’ appraisal of the responsibility of the EU/euro for the economic crisis.

As we do not have access to the content citizens consume online, we can only speculate on the direction of this effect. It is easy to imagine a scenario in which Internet news consumption could lead individuals to attribute greater responsibility to the EU and euro for the crisis. For example, because the Internet is a borderless news environment, particularly for Ireland’s Anglophone population, it follows that, at least in terms of potentially available content, there will be considerably more emphasis on supranational actors compared to the national traditional media landscape. The relatively greater prominence of supranational actors such as the EU in online coverage of the economic crisis could foreseeable lead to a priming effect
(Scheufle and Tewksbury (2007), whereby the repeated association of the EU with the crisis builds a familiar cognitive pathway when individuals come to think about the crisis. Thus, in assigning blame, we may anticipate that Internet users will be more likely to attribute responsibility to the EU, or, formally:

**H2a:** Citizens who use the Internet as a source of political information are more inclined to attribute blame for the economic crisis to the EU and euro.

It is equally conceivable that this proposed relationship could be attributable to the tone of news coverage online - which may contain negative evaluations of the EU as a political actor, which over time may exercise a framing effect on online news consumers. However, we can also imagine a situation in which internet users attribute less responsibility to the EU for the financial crisis - either because coverage of the EU may be more positive online than in the national media, or perhaps online coverage is simply more objective than nationally jaundiced media outlets. This possibility leads us to formulate an alternative hypothesis:

**H2b:** Citizens who use the Internet as a source of political information are less inclined to attribute blame for the economic crisis to the EU and euro.

### 4 Research Design

#### 4.1 Survey Data

The Irish National Election Study was first carried out in 2002. The five-wave panel study initially covered the period 2002-2007, encompassing the Irish general elections of 2002 and 2007. The 2011 general election held on February 25th was called, somewhat unexpectedly on February 1st following the Green party withdraw from government on January 23rd. The new wave of the Irish Election Study aggregates data from 1,863 electors interviewed by the polling company Red C during the election campaign. The study asked respondents about the campaign, voting behavior, media usage, as well as about their political attitudes and evaluations. The final dataset has not yet been released and results presented here are based on a pre-release version.
4.1.1 Dependent Variable

Our dependent variable captures if respondents blame the EU and the Euro for the economic crisis. More specifically, our outcome variable is built on the following question from the INES survey:

“In the past few years the economy has been in recession. How responsible, if at all, are each of the following for the poor economic conditions of the past two years? Extremely responsible (4), Very responsible (3), moderately responsible (2), A little responsible (1), Not at all responsible (0), Don’t know (5).”

The question lists several political and economic actors among which the EU and the Euro. We drop the ‘don’t know’ answers, so we lose 118 observations for the EU and 184 observations for the questions on the Euro. The resulting variables are ordinal and range between 0 and 4. Figure 1 shows the distribution of the two outcome variables.

Figure 1 about here

4.1.2 Treatment

We are interested in the effect of the internet on blaming the EU and the Euro as responsible of the economic crisis. We code a binary variable D that takes the value 1 for respondents who browse online news at least once per week and 0 for respondents who never go online. The set of respondents who browse online news is defined as treatment group, whereas the set of respondents who do not go online is defined as control group (Rubin 1974; Rosenbaum 2002). Further we define $Y_1$ and $Y_0$ as the potential outcomes under treatment and control, that is, the levels of blaming against the EU and the Euro that a respondent would have had with and without going online. For each respondent, the effect of the internet exposure is defined as the difference between these two potential outcomes ($Y_1 - Y_0$).

Specifically, our treatment is built on the following question from the INES survey:

“On a scale of 0-7 where 0 means ‘never’, 1 means one day a week, 2 means two days a week, and so on until 7 means ‘every day’ of the week, how often do you
browse online for news”.

We recoded this ordinal variable as a dummy to facilitate the interpretation of our results. We could also think of browsing online news as an ordinal treatment, but that would further complicate the identification strategy (Imbens and Wooldridge 2008; Kern and Hainmueller, 2009: 383). Our results are similar if we code as zero, these respondents who browse online political news only once a week. In our dataset, 311 respondents go online to browse political news, i.e. 20 percent of our sample. Figure 2 shows the distribution of this variable. We note that in the 2007 survey only 11 percent of the respondents declared to use the internet to gather information on politics, whereas in the 2002 survey a mere 5 percent of the respondents declared to go online.

Figure 2 about here

4.1.3 Covariates

As Kern and Hainmueller (2009: 387) note, “Even though the use of a natural experiment reduces the danger of confounding, some imbalances between the treatment and control groups might exist”. Rosembaum (1984) warns on the post-treatment bias, i.e., including variables that are themselves affected by the instrument or the treatment. Thus, we include covariates parsimoniously.

In the baseline model we include important economic characteristics such as living in rural areas, income, level of education, and age. That is standard practice in individual level data analysis. Moreover, in the extensive model, we also include a variable capturing how many times in a week respondents read newspapers.\(^7\) Indeed, there is evidence that Irish newspapers are biased in favor of the EU. Furthermore, we add a variable Left that scores one if respondents are ideologically close to Sinn Féin and United Left Alliance, which are euroskeptic parties.\(^8\)

\(^7\)As robustness check, we also include variables on TV, national radio, and local radio. We obtain similar results, which are available upon request.

\(^8\)The question from the survey was the following: We have a number of political parties in Ireland each of which would like to get your vote. How probable is it that you will ever give your first preference vote to the following parties? Please use the numbers on this scale to indicate your views, where 1 means ‘not all probable’ and 10 means ‘very probable’. We code the variable Left one if respondents score eight or more than eight for either Sinn Féin or United Left Alliance.
Figure 3 shows the distributions of the covariates, whereas the correlation among covariates is showed in the Appendix. Note that missing data are treated as additional categories, i.e., we do not drop missing values of covariates.

Figure 3 about here

4.2 Econometric Strategy

Our identification strategy is similar to Kern and Hainmueller’s (2009: 380-388) one. Thus, we follow closely them to estimate the causal effect of the internet on the probability of blaming the EU and the Euro for the economic crisis.

As common in social studies, we confront the fundamental problem of causal inference: the impossibility of observing the counterfactual, i.e., the outcome for the same unit in the absence of the treatment. The ideal way to overcome this problem when trying to estimate the causal effect of the internet would be to conduct an experiment. Specifically, we could randomly assign the possibility of browsing political news online to individuals. Given random assignment, we could then simply compare individuals who go online with individuals who do not go online. The difference between the average attitude towards the EU and the Euro for the treated group and the average of the respective indicator for the control group would constitute the causal effect of the internet, since both groups are comparable with respect to observed and unobserved confounding factors.

With observational data things become trickier, since browsing political news online is not randomly assigned to individuals. A way for comparing individuals who use the internet for political news with individuals who do not would be to control for these characteristics that are likely to affect both the probability of going online and attitude towards the EU and Euro. For instance, we could use multivariate regressions or matching with a set of control variables. However, this approach would not help us with the selection on the unobservables that are correlated with the treatment and the outcome variable. That would induce correlation between the dependent variable and the error term undermining causal inference.

Instrumental variables are a more effective identification strategy. In particular, we exploit the fact that not every village has broadband coverage during the period under investigation. We code a binary instrument Z based on information about
where respondents live. This dummy variable scores 1 if respondents live in a town with broadband coverage and 0 if respondents live in town without broadband coverage. Figure 2 shows the distribution of the instrument. Since broadband coverage is an original variable, we detail below how we built this instrument.

We first encoded the geographical (latitude and longitude) location of respondents, and then performed a search for broadband availability for each respondent’s geographical location. The 1,754 respondents to the INES 2011 were based in 309 different geographical locations (six respondents per location figure in the survey). We searched for broadband coverage/availability in each location by consulting availability information supplied by major broadband providers and, additionally, by using two online services which provide detailed information on broadband coverage by location (getbroadband.ie). For those locations without broadband coverage we also performed a final check by searching for the keywords “location+broadband” on google.ie. Figure 4 shows Irish towns with and without broadband coverage on the map of Ireland.

Figure 4 about here

An example demonstrates the precision of our instrument. Carkerbeg is a small village in County Cork with less than 1000 residents. Carkerbeg does not have broadband coverage. Buttevant is a medieval market town in County Cork with 1,667 residents according to the 2006 census. Buttevant is less than five miles away from Carkerbeg. However, Digiweb, Eircom, and Vodafone provide broadband coverage in Buttevant. The monthly price of a subscription ranges from 19 euro to 48 euro depending on the speed.

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9 These two websites were accessed between October 2011 and December 2011. Note that the INES survey was run between January and March 2011. We speculate that it is very unlikely that a village without broadband coverage during the survey got coverage in the period in which we collected the data on our instrument, i.e., few months later. However, we do not have data to rule out this possibility.

10 For all those locations whose name was present in more than one county we used “location+broadband+constituency”.

11 We calculated the distance using the STATA 12 command GEODIST.

12 Information available on getbroadband.ie [accessed in December 2011].
We have previously noted that the number of Irish citizens who go online to browse political news increased sharply over the past decade. Similarly, in the Appendix we show that the percentage of households with broadband connection was only 20 percent in 2006 (CSO, 2006). Even in Dublin, all which has now broadband coverage, only 32 percent of households have broadband connections in 2006. Thus, if the internet has an effect on attitude towards the EU, such an effect is the product of a recent shock produced by technological changes and not of a long-term trend.

Combining our treatment D with our instrument Z and relying the terminology used by Angrist, Imbens, and Rubin (1996), we distinguish four categories:

1. $D_0 = 0$ and $D_1 = 1$. Compliers are respondents who browse political news online if they live in villages with broadband coverage, but who do not browse political news online if they live in villages without broadband coverage.

2. Always-takers: $D_1 = D_0 = 1$. These are respondents who always browse political news online, no matter where they live.

3. Never-takers: $D_1 = D_0 = 0$. Similarly, these are respondents who never browse political news online, no matter where they live.

4. Defiers: $D_0 = 1$ and $D_1 = 0$. These are respondents who browse political news if they live in villages without broadband coverage, but who do not browse political news online if they live in villages with broadband coverage.

Compliers amount to 43 percent in our sample.\textsuperscript{13} In the Appendix we show some socio-economic characteristics of compliers versus the other three categories. The two groups appear to be well balanced in relations to these variables.\textsuperscript{14} Although we cannot individually identify compliers in our sample, IV estimations in general, and LARF estimator in particular, allow us to estimate average treatment effects for the subgroup of compliers under certain assumptions that we will discuss in the next subsection.

\textsuperscript{13}See Appendix for a breakdown of the 4 categories, i.e., Online, $\sim$ Online, Broadband, and $\sim$ Broadband.

\textsuperscript{14}All these variables come from the 2011 INES survey and are described in the Appendix.
4.2.1 Identification Assumptions

According to Abadie (2003: 234-235), the following four non-parametric assumptions allow to identify causal effects in an instrumental variable (IV) model. Remind that $Y$ represents the potential outcome, $Z$ be the instrument, i.e., living in a village with broadband coverage, $D$ be the treatment, i.e., if an individual looks at political news online, and $X$ represents a vector of covariates.

1. Independence of the instrument: conditional on $X$, the random vector $(Y_{00}, Y_{01}, Y_{10}, Y_{11}, D_0$ and $D_1)$ is independent of $Z$ for each $z \in (0, 1)$.

2. Exclusion of the instrument: $P(Y_{1d} = Y_{0d}|X) = 1$ for $D \in (0, 1)$.

3. First stage: $0 < P(Z = 1|X) < 1$ and $P(D_1 = 1|X) > P(D_0 = 1|X)$.

4. Monotonicity: $P(D_1 \geq D_0|X) = 1$.

Let’s explore if these assumptions are met. We begin from the most innocuous ones. Assumption four requires that it is not the case that there are people who would have browsed political news online if they had lived in a village without broadband coverage, but they would have not browsed political news online if they had lived in a village with broadband coverage. It is safe to rule out this possibility that seems unlikely.

Assumption three requires that $Z$ (broadband coverage) is a strong instrument for $D$ (online). In other words, $Z$ must be highly correlated with $D$ conditional on $X$. Figure 5 shows that living in village without broadband coverage is strongly correlated with the probability of not browsing political news online. Only a few respondents who live in village without broadband coverage browse political news once or twice in a week. Conversely, living in a village with broadband coverage is strongly associate with browsing political news online. The correlation between exposure and online is .41. Moreover, when we regress exposure on online controlling for a large number of covariates, exposure is statistically significant and the t-statistic is larger than 10.

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15 See the Appendix for further details.
Assumptions one and assumption two are trickier to justify. Assumption one states that the village in which a respondent lives is ‘as good as randomly assigned’ once we condition on control variables. Assumption two states that Z (broadband coverage) explains the variation of the dependent variable only through its effect on D (browsing online news). These two assumptions together imply that once we control for a set of covariates, living in a village without broadband per se should not impact directly respondents’ probability of blaming the EU and the Euro for the crisis (but only through D).

A way to make sure that these two assumptions are met is to show that villages with broadband coverage are similar to villages without broadband coverage in relations to characteristics that might affect the attitude towards the EU during the crisis. Our advantage is that we can rely on an extensive number of individual-level characteristics from our survey. In particular, we focus on socio-economic characteristics, use media other than internet, political attitude, level of trust in institutions, and concerns about respondents’ economic situation.\textsuperscript{16}

However, before quantitatively showing that assumptions one and two hold, we note a couple of issues. First, Ireland lags significantly behind the EU and the OECD in terms of broadband penetration. Second, an engineer at Commission for Communications Regulation (ComReg), interviewed by the authors in December 2011, claimed that “broadband penetration has been often developed randomly by the Irish government. This happened due to the lack of institutional capacity. It was not infrequent that villages originally included in a plan to extend broadband coverage remained left out because of a sudden shortage in financial resources”.\textsuperscript{17}

Let’s begin with socio-economic characteristics. As Figure 6 shows, villages with broadband coverage are very similar to villages without broadband coverage in terms of age, income, job position, and social class. Only the level of education and knowledge about politics seem higher in villages with broadband coverage compare to villages without broadband coverage, though the median is the same.

\textsuperscript{16}All these variables come from the 2011 INES survey and are described in the Appendix.

\textsuperscript{17}In releasing this statement the ComReg engineer required anonymity at the time of the interview. We are not the first ones to argue that broadband access is randomly assigned. For a similar research design, see a study on the role of the internet on sex crime in Norway (Bhuller et al. 2011).
What about use of media other than the internet? Figure 7 shows that respondents in villages with broadband coverage watch TV as much as respondents in villages without broadband coverage. Similarly, the variables that capture how frequently respondents listen to national radio and local radio in a week appear to be balanced between the two groups of villages. The variable that captures how frequently respondents watch read newspaper is the only one to show a different median between the two groups, though a similar distribution. In the section Additional Evidence, we explore the combining effect of the internet and tradition media on attitude towards the EU in greater detail.

Let’s now have a look at variables capturing political attitudes that might influence the attitude towards the EU (Figure 7). Since the left-right dimension is not a useful in Irish politics, we focus on questions that describe the position of respondents on the economic dimension and the social dimension. Also in this case the broadband constituency seems well balanced with the no-broadband constituency. Respondents who live in villages with broadband coverage do not appear to be more social conservative or more left-wing economically. Importantly, the question on whether the EU unification went to far shows a similar distribution for the broadband constituency compare to the no-broadband constituency.

Regarding the level of trust, distribution of all the questions is well balance between respondents who live in villages with broadband and respondents who live in villages without broadband (Figure 7). Trust in the police (Gardai) is the only exception, but this variable is unlikely to affect attitude toward the EU. Again, we highlight that there is no evidence that respondents in broadband areas are more euro-skeptic that respondents in no-broadband areas.

A final set of questions that we explore concerns how worry respondents are in relation to their economic situation. Even for these question the two constituencies...
appear to be well balanced. This is important because a possible concern could be that the crisis hit harder in areas without broadband than in areas with broadband. In turn, that might drive a negative attitude towards EU policies during the crisis for respondents who live in villages without broadband. Figure 7 seems to rule out such a concern.

Figure 7 about here

In sum, there is little evidence that differences among villages with and without broadband coverage could pose a threat to the exclusion restriction, especially after including a large set of covariates.

4.2.2 Estimation Techniques

We implement different models to estimate the causal link between internet and the probability of blaming the EU and the Euro. In addition to the traditional 2SLS estimation and following Kern and Hainmuller (2009: 388), we also implement the local average response functions (LARF) estimator, which has been recently developed by Abadie (2003). LARF does not assume constant treatment effects, but it allows for heterogeneous treatment effects. Put simply, it allows to estimate the effect of the treatment on our outcome for the sub-population of compliers.

Moreover, LARF seems more appropriate than the Wald estimator (LATE) that does not incorporate covariates. There may be other channels through which browsing online news can affect our outcome. LARF allows us to estimate the impact of internet exposure on the probability of our outcome variable by averaging across all the control variables included into our models.

We adjust standard errors for clustering within the 43 constituencies.\(^\text{19}\) As it is common practice, we use the Eicker-Huber-White sandwich estimator for the 2SLS models, whereas we bootstrap (100 replications) standard errors for the LARF estimations (Davison and Hinkley 1997: 101-103; Kern and Hainmuller 2009: 388).

\(^{19}\text{Results are similar if we adjust standard errors for clustering within the 309 villages.}\)
5 Results

For each dependent variable we begin by running a naïve ordered probit model in which we do not instrument for browsing online news. In both models (1) and (6) Online is negative, tough it is statistically significant at the conventional level only in Model (1). This result implies that browsing online news decreases the probability of blaming the EU and the Euro for the current crisis. As explained above, it is likely that these estimates are confounded by selection into treatment and so coefficients are biased.

To correct for this bias we estimate baseline models as well as extensive models using LARF and 2SLS (Table 2 and Table 3). In both baseline model and extensive model, Online coefficient is positive and statistically significant at the 95 percent confidence level. Thus, people who browse online news hold a more negative attitude towards the EU and the Euro than people who do not go online. The magnitude of the effect is substantial ranging between 1.74 and 1.85 for the question on blaming the EU and between 1.76 and 1.92 for the question on blaming the Euro.\(^\text{20}\)

Another way of showing the effect of the variable Online on our outcome variables is to rely on the persuasion rate built by Della Vigna and Gentzkow (2007).\(^\text{21}\) In our case, the persuasion rate is 24 percent for blaming the EU and 26 percent for blaming the Euro.\(^\text{22}\) Such a high value of the persuasion rate can be explained by the fact that respondents who go online are still a small percentage of the whole sample. Indeed, Della Vigna and Gentzkow (2007: 645) argue that “if the persuadable population is small, a small change in behavior can imply a high impact of persuasion”.

In the next section we explore these findings in greater detail and provide further tests. Here we implement a couple of robustness checks to account for heterogene-

\(^{20}\)Regarding 2SLS, (1) the Kleibergen-Paap test shows that our models are not underidentified; (2) the Cragg-Donald Wald F statistic is always larger than 10; (3) the Hansen J statistic shows that our equations are exactly identified.

\(^{21}\)See Appendix for further detail on the persuasion rate.

\(^{22}\)Surveying the previous literature, Della Vigna and Gentzkow (2007) find that the persuasion rate is rarely larger than 20 percent.
ity among geographical areas in Ireland. First, we drop the Dublin area, in which every village has broadband coverage, to make sure that Dublin-specific characteristics are not driving our results. Second, we include constituency fixed effects in the 2SLS regressions to control for confounding factors at the level of the 43 Irish constituency.\footnote{We are unable to use village fixed effects, since we have on average of six respondents per village and our instrument does change within village.} As Table 4 shows, results are unchanged.

Table 4 about here

6 Additional Evidence

In the following subsections we further explore implications and robustness of our main findings. Tables and figures that show the results of these additional analyses are available in the Appendix.

6.1 Placebo Tests

Previous results show that respondents who browse online news are significantly more likely to blame the EU and the Euro for the current economy crisis than respondents who do not go online. We believe that this finding is interesting per se. However, so far our analysis has not provides a direct test of the mechanism linking the internet to attitude towards the EU. It might be that respondents who go online hold different views on several other-than-EU issues compare to respondents who go online. This possibility would not undermine our previous results, but it would cast doubt on the fact that such results are EU-specific.

To rule out this possibility, we run several placebo tests on models that have dependent variables unrelated to the EU. If we find that the variable Online is not statistically significant in these models, we can confidently claim that there is a specific link between using the internet and attitude towards the EU. We are fortunate that our survey is very generous in providing alternative dependent variables.

First, let’s recall the question on which our two dependent variables were originally built:
“In the past few years the economy has been in recession. How responsible, if at all, are each of the following for the poor economic conditions of the past two years? Extremely responsible (4), Very responsible (3), moderately responsible (2), A little responsible (1), Not at all responsible (0), Don’t know (5).”

Among the other institutions listed in this question there are Irish government and bankers. In line with our previous analysis, we drop the ‘don’t know’ answers. Table 5 (in the Appendix) shows that respondents who go online are not more likely to blame these institutions as responsible of the crisis. Regarding the Irish government the negative coefficient of Online is particularly interesting, given the extremely low popularity of the Fianne Fáil government at the time in which the survey was conducted. We find that respondents who browse online news are less likely to blame their government for the crisis, though the coefficients are not statistically significant at the conventional level.

Second we rely on the following question, which allows us to test the effect of the internet on some crucial socio-economic issues:

“I will now read out some statements. Please tell me to what extent you Disagree or Agree with each statement. ‘strongly disagree’ 0, ‘disagree’ 1, ‘disagree slightly’ 2, ‘neither agree or disagree’ 3, ‘slightly agree’ 4, ‘agree’ 5, ‘strongly agree’ 6.”

Specifically, we use four statements from this question. The first two statements captures the effect of the internet on issues related to the social dimension, whereas the last two questions captures the effect of the internet on issues related to the economic dimension.

1. “There should be very strict limits on the number of immigrants coming to live in Ireland”;
2. “A working mother can establish just as warm and secure a relationship with her children as a mother who stays at home”;
3. “The presence of large international companies is good for the Irish economy”;
4. “Ireland should limit the import of foreign products in order to protect its national economy”;
We find little evidence that respondents who browse online news hold different views on socio-economic issues compared to respondents who do not go online (Table 6 and Table 7 in the Appendix). Coefficients of the LARF estimator are always not statistically significant at the conventional level. Regarding 2SLS, Online is statistically significant at the 95 percent confidence level in Model 22 and Model 26. Specifically, respondents who go online hold a more positive view on immigration and a more negative view on MNCs than respondents who do not go online. However, such results do not appear very robust and do not square with the euroskeptic type, who is usually socially conservative.

6.2 The Role of Traditional Media

In the theory section we suggested that traditional media in general, and newspapers in particular, tend to be biased in favor of the EU. This allows us to indirectly test whether the internet modifies respondents’ attitude towards the EU or whether respondents select online news since they are closer to respondents’ political view.\footnote{For an extensive discussion on news selectivity, see Tewksbury and Rittenberg, 2012: 83-104.} How do we do that? We implement two different tests.

First, we split the original sample in two groups: (1) these respondents who read a newspaper five times or more in a week; (2) these respondents who read a newspaper less than five times in a week.\footnote{Ideally, we would like to use an interaction term between the variables Online and Newspaper. However, that would require that we find two other instruments, which we do not have, to endogenize the three variables, i.e., Online, Newspaper, and the interaction term between these two variables.} Then we run our baseline models on these two sub-samples. Results (Table 8 and Table 9 in the Appendix) show that Online is still positive and statistically significant at the conventional level in both sub-samples and for both dependent variables with 2SLS. For the sub-sample Newspaper<5, Online is not statistically significant at the conventional level with LARF, though the coefficient is still positive. That might be explain by the fact that the number of observations dampens dramatically in this sub-sample.

In any case, there is preliminary evidence that browsing online news increases the probability of blaming the EU and the Euro also for these respondents who are exposed to traditionally pro-EU media, i.e., newspapers. In other words, the more informed are respondents, the more they hold a negative attitude towards the EU
during the crisis.

Second, a skeptical reader might still note that there is a large heterogeneity among newspapers in terms of EU coverage, i.e., some newspapers being pro-EU and some others being less euro-enthusiastic. We are fortunate that a question from the survey asks which newspaper(s) respondents regularly use for political information. We rely on this question to split the original sample in two groups: (1) these respondents who read the *Irish Times* and *Irish Independent*, which are generally pro-EU newspapers; (2) these respondents who read the *Irish Examiner*, the *Irish Star*, the *Evening Herald*, and the *Irish Sun*, which are less euro-enthusiastic newspapers. Again, we run our baseline models on these two sub-samples.

Table 10 and Table 11 (in the Appendix) show that the variable Online is positive and statistically significant at the conventional level in both sub-samples and for both dependent variables with 2SLS. When we perform LARF, coefficients of the variable Online are not always statistically significant at the conventional level, though they are still positive. The aforementioned considerations on the sample size hold here as well.

We want to highlight the importance of this result. Even for these respondents who read regularly *Irish Times* and *Irish Independent*, browsing online news increase the probability of a negative attitude towards the EU and the Euro. In sum, there is evidence that the internet has a blaming effect also for these respondents who are confronted with different viewpoints on EU issues. This finding should mitigate the concern that in relation to the EU respondents “make exposure decisions that reflect their predisposition and [...] prefer attitude-consistent news” (Tewksbury and Rittenberg, 2012: 86).

### 6.3 Informed Citizens and the Internet

One of the key findings of our analysis is that informed citizens are more like to blame the EU and the Euro for the current crisis. As we highlighted above, this result run partially against the previous literature as well as the conventional wisdom claiming that a negative attitude towards the EU can be explained by lack of knowledge of its policies and legislation (Sattler and Urpelainen, 2012).
Since we are unable to capture which website(s) respondents visit, it might be argued that browsing online news does not always imply to be more knowledgeable about politics. In this section, we explore the impact of the internet on respondents’ political knowledge relying on several variables from the INES survey. Specifically, we use as dependent variables answers from the following questions:26

- Who is the current Irish Commissioner to the EU?
- Who is the current First Minister of Northern Ireland?

The dependent variables are ordinal and score zero if respondents know the correct answers. Table 12 in the Appendix show the results. The variable Online is always negative and statistically significant at the conventional level. Thus, respondents who browse online news are more knowledgeable about politics than respondents who do not go online.27

6.4 Asking Help to Geography

Balancing villages characteristics is crucial for correctly identifying our models. We implement two further analyses in which we exploit villages geographical location to sharpen our identification strategy.28

First, we match broadband coverage (our instrument) on distance from the closest village in the other group.29 For instance, if a village has broadband coverage, e.g., Buttevant, we calculated the distance (in miles) from the closest village without broadband coverage, e.g., Carkerbeg. Close villages are likely to have more balanced characteristics than villages that are far away from one another. For instance, we know that socio-economic characteristics are usually geographically clustered. The

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26 The question has the following preamble: Now I would like to ask you some factual questions about politics. It doesn’t matter if you know the answers or not, we are just interested to see how close people are to politics in Ireland.

27 We obtain similar results if we use a variable capturing interviewer record judgment on how knowledgeable the respondent is about politics. We do not rely on this variable as main test since it is a rather discretionary assessment. Results are available upon request.

28 Ideally, we would like to implement spatial regression discontinuity looking at neighboring villages. However, such an analysis would be problematic in our case since we can only rely on an average of six respondents per village. Moreover, we are unable to consider village boundaries as discontinuity, since we do not know respondents’ place of residence at such a disaggregate level.

29 For a similar approach, see Imai and Van Dyk, 2004.
Kernel distribution of the variable Distance is provided in the Appendix.

By matching on Distance, we ‘lose’ 18 observations. All the 18 observations belong to the treatment group. These are the villages that are unusually far from the closest village in the control group. Although the number of observations unmatched is very small, the overall $L_1$ balance measure, which captures imbalance with respect to the full joint distribution, drops significantly from 0.27 to 0.13, i.e., matching reduces the imbalance of the full joint distribution by more than 50 percent. We run again our main models, baseline and extensive without these unmatched observations, obtaining similar results (Table 13 and Table 14 in the Appendix). We note that, as expected, the effect of the variable Online on the probability of blaming the EU and the Euro is stronger in virtually every model compare to the analysis without matching.

Second, we run the baseline models only for the sub-sample of villages for which Distance is lower than 12, i.e., the value of the 75th percentile of Distance distribution.30 We recall that in such cases villages with and without broadband are not farther than 12 miles. Again, the rationale for doing so is to improve the balance of villages characteristics. In the Appendix we show that Education and Newspaper, which are partially unbalanced in the full sample, are perfectly balanced for villages that are 12-mile close one another. Even with this rather conservative sub-sample of villages, Table 15 (in the Appendix) shows that our results remain unchanged.

6.5 2012 Referendum on the European Fiscal Compact

On May 31th the Republic of Ireland voted to amend the Irish constitution in order permit Ireland to ratify the 2012 European Fiscal Compact (Treaty on Stability, Coordination and Governance in the Economic and Monetary Union). Although the referendum is not related to the economic crisis per se, it nonetheless has broad implications for the EU governance, and the poll was presented by domestic and international media as a ‘yes’ vote or ‘no’ vote to Brussels, given the deep political and economic difficulties faced by the Union.

Irish voters backed the fiscal treaty by a large majority – with 60.3% voting ‘yes’

30Our results are similar if we take Distance < 10. Data available upon request.
and 39.7% voting ‘no’. Only five of the 43 Irish constituencies rejected it. Such a referendum, which was the only one held in any EU member country on the Fiscal Compact, represents an unique opportunity to re-estimate the effect of the internet on attitude towards the EU. Specifically, we use original data from 1,000 electors interviewed by the polling company Red C the same day in which the referendum was held. We try to keep the research design as close as possible to the one presented above. Below we describe the main variables.

Our dependent variable is a dummy that scores one if the respondent voted ‘yes’ and zero if the respondent voted ‘no’.

Our treatment captures whether or not respondents went online to browse for political news on the Fiscal Treaty at least once during the referendum campaign. Importantly, in this survey we are able to know which websites respondents visit. Specifically, 47% of respondents went online to browse political news; 38% browsed newspaper website; 19% browsed political blogs and forums; 24% went on the EU Commission website. As above, we instrument our treatment using broadband coverage. Finally, we control for age, social grade, working status, level of support for the current government, and knowledge about the Fiscal Treaty (self-assessed).

Results are provided in the Appendix. In summary we find that: (1) browsing online political news has a negative effect on the probability of voting ‘yes’ to the referendum on Fiscal Compact; (2) such a negative effect does *not* depend on the type of websites visited by respondents, i.e., the negative effect holds across websites; (3) the negative effect also holds for these respondents who visited pro-EU website, i.e. the EU Commission, and Euroskeptic websites, i.e., political blogs and forums. Given the overwhelming majority that the ‘Yes’ vote received in the referendum, the negative impact of the Internet on the approval of the Fiscal Compact strongly reinforces and further validates the results obtained from the 2011 Irish elections.

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\(^{31}\)We dropped these observations in which respondents refused to answer, i.e. 24, observations.

\(^{32}\)We not are able to use LARF with these data, since the number of compliers is too low. Results are not sensitive to the type of instrumental variable models used, i.e. we obtain similar results with IVREG, TREATREG, and BIPROBIT.
7 Conclusion

This paper has explored the role of the Internet in the public’s evaluation of the European Union and the Euro common currency during the on-going economic downturn. The analysis of survey data, together with detailed geographical information on broadband availability in the Republic of Ireland, provided us with evidence of the differences that exist between individuals who use the Internet to gather news and individuals who do not. While the two groups appear very similar with regard to a number of socio-economic and attitudinal indicators, they substantially differ in their evaluation of the EU and the euro. In short, individuals who use the Internet to gather political news attribute greater blame to the EU and the euro for the economic crisis. Controlling for levels of political information and knowledge, we could not disprove that the Internet has an impact in forming political evaluations. Additionally, we performed a number of controls for geographical location; and controlling for individuals’ distance from the capital allowed us to rule out the effect of an urban/rural cleavage. A variable capturing the distances between areas covered by broadband availability and areas not covered, allowed us to match and balance our sample, again the results remained unchanged. Finally, we performed placebo tests on whether the use of the Internet generated additional differences in terms of opinion on national actors (the government, the banks, etc.) in relation to the crisis, which proved that the effect of the Internet on people’s evaluation applies only to the euro and the EU.

Our study clearly speaks to the literature on the role of information on attitudes towards the European Union and the integration process, but looks at a slightly different and more specific issue, namely the extent to which the EU and the euro are blamed for the current economic crisis by a sub set of (Irish) EU citizens. As such, our study looks an important and hitherto unexplored issue and it does so by using a quasi-experimental set up. Our findings, while empirically sound, are conceptually complex to interpret. Difficulties arise mostly from two unknown elements in our research design, both of which stem from the difficulty of characterising the Internet as a news medium. Firstly, we have no information on what websites were browsed by those citizens who used the Internet for political information. Second, we do not know the content of the websites browsed. Moreover, no previous literature informs us on what may be driving Internet surfers to be more critical of the EU and the euro.

Our finding indicates that those individuals who used the Internet to gather
political information regard the EU and the euro as significantly more responsible for the economic crisis than those who do not have access to the web. Such a finding seems to suggest that the information they came across on the web emphasises the responsibilities of international actors and international issues. However, this is an ex post explanation that at the moment we are not able to confirm. A content analysis of popular internet news sources could provide useful information on the type, and direction of information on the EU/euros responsibility for the crisis. So far, we have characterized the Internet as a black box, whose content is not accessible to us. However, we see the Internet as a space that by its own nature is richer and more cosmopolitan than traditional media. While we cannot trace back the mechanism that leads Internet users to be more critical of the EU, in its capacity of managing the crisis, web surfers are clearly getting extra information, facts and opinions that negatively affect their evaluation of the EU in relation to the crisis. Contextual factors may be playing a primary role here; Ireland was granted a bail out from the EU/ECB/IMF in November, 2010, which generated discussion at the elite as well as at the citizen level. However, to date, public attitudes on the crisis have been only limitedly explored in the political science literature (Marsh and Mikhaylov, 2012) and the attribution of blame to super-national institutions like the EU is completely unexplored. Also, the effect of the Internet in determining political attitudes with the citizenry remains underexplored, while some studies have found a correlation between online news consumption and turnout (Gibson et al., 2012).

Our findings clearly point at the Internet being somewhat responsible for citizens’ negative evaluation of the EU and the common currency. Further developments of this research will aim to open the black box in order to better understand type of extra information the Internet provides citizens with. We are relatively confident that the internet represents an addition to traditional media and that it acts as thought provoking agent in citizens’ minds. Those who are exposed to this agent inevitably experience consequences of such an exposure, while the reasons why those consequences manifest themselves in terms of negative evolution of supra-national agents remain to be explored.

**Bibliography**


Cambridge, MA, USA.


Table 1: 40 years of European Referendum Results on the Republic of Ireland (1972-2012). Source for results and turnout between 1972-2008 (O’Mahony, 2009: 431), for Lisbon 2 and the European Fiscal Compact (www.electionsireland.org).

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Table 2: Is the EU responsible for the crisis? LARF: bootstrapped standard errors. 2SLS: robust standard errors clustered by constituency. Online instrumented with broadband coverage. The baseline model includes living in rural areas, income, education, and age. The extensive model adds also reading newspapers and being ideologically close to Sinn Féin and United Left Alliance. Response categories for the outcome variables are coded as ‘not at all responsible’ 0, ‘a little responsible’ 1, ‘moderately responsible’ 2, ‘very responsible’ 3, ‘extremely responsible’ 4.

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95 percent confidence interval in parentheses
Table 3: Is the Euro responsible for the crisis? LARF: bootstrapped standard errors. 2SLS: robust standard errors clustered by constituency. Online instrumented with broadband coverage. The baseline model includes living in rural areas, income, education, and age. The extensive model adds also reading newspapers and being ideologically close to Sinn Féin and United Left Alliance. Response categories for the outcome variables are coded as ‘not at all responsible’ 0, ‘a little responsible’ 1, ‘moderately responsible’ 2, ‘very responsible’ 3, ‘extremely responsible’ 4.

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Table 4: Robustness Checks. LARF: bootstrapped standard errors. 2SLS: robust standard errors clustered by constituency. Online instrumented with broadband coverage. The baseline model includes living in rural areas, income, education, and age. Response categories for the outcome variables are coded as ‘not at all responsible’ 0, ‘a little responsible’ 1, ‘moderately responsible’ 2, ‘very responsible’ 3, ‘extremely responsible’ 4.

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95 percent confidence interval in parentheses
Figure 1: Distribution of the dependent variables. Note: ‘don’t know’ are coded five.
Figure 2: Distribution of treatment and instrument.
Figure 3: Distribution of the covariates.
Figure 4: Geographical distribution of the instrument.
Figure 5: Browsing online news in villages with and without broadband.
Figure 6: Villages with broadband coverage versus villages without broadband coverage. The graphs show balance in villages socio-economic characteristics.
Figure 7: Villages with broadband coverage versus villages without broadband coverage. The graphs show balance in villages characteristics in relation to media, political attitude, trust, and concerns about the crisis.