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# Effects of Transparency on Behaviour in the European Parliament

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#### **Abstract**

How do EU decision-makers respond to greater public visibility of their actions? We investigate this question by looking at the effects of the <a href="www.VoteWatch.eu">www.VoteWatch.eu</a> website on the behaviour of the Members of the European Parliament (MEPs). We randomly selected one-quarter of the MEPs and subjected them to a treatment: an e-mail every month telling them how VoteWatch.eu reports on their activities. Since the launch of VoteWatch.eu in 2009 all MEPs have become more active: with higher attendance rates, and more parliamentary questions, motions, and speeches. We also found that particular types of MEPs changed their behaviour in response to greater transparency. Treated MEPs from some political groups and member states became more active than non-treated MEPs from the same groups and states. We also found that whether an MEP was elected by a closed-ballot or an open-ballot electoral system affected how some of the MEPs responded to greater transparency.

#### Introduction

A common critique of the European Union (EU) is that it is "too distant from its citizens" (e.g. discussions by think tanks, such as Centre for European Reform, <a href="www.cer.org.uk">www.cer.org.uk</a>, or Open Europe, <a href="www.openeurope.org.uk">www.openeurope.org.uk</a>). However, new initiatives, new technologies, and particularly the internet, have reduced the costs of collecting and communicating activities by elected politicians and offer the promise of providing information to citizens about decision-making which until recently was only available to well-informed media commentators or interest groups. In the US, for example, websites like <a href="www.votesmart.org">www.votesmart.org</a> and <a href="www.votesmart.org">www.opencongress.org</a> offer information about the voting behaviour and other activities of Members of Congress. Similar websites on the UK House of Commons include <a href="www.theyworkforyou.com">www.theyworkforyou.com</a> and <a href="www.publicwhip.org.uk">www.publicwhip.org.uk</a>. Could making the business of the EU available for more detailed scrutiny – for example, by publishing the voting records of elected EU decision-makers – make EU affairs more responsive to the public?

The answer to this question is not as straightforward as one might initially think. Empirical evidence from other contexts suggests that greater transparency of parliamentary activities increases the responsiveness of legislators to their voters (e.g. Carey 2009). Nevertheless, some studies also suggest that greater transparency can lead to "pandering" by politicians, and hence worse policy outcomes (e.g. Meade and Stasavage 2008; Stasavage 2005). There is also evidence that transparency can lead to greater incentives for parties to control how their members behave, which can reduce the responsiveness of individual politicians to voters (e.g. Malesky et al. 2011).

A key issue in determining the potential effects of greater transparency is whether voters can use new information to reward or punish politicians for what voters perceive to be 'good' or 'bad' behaviour. In elections to the European Parliament, which is the institution we investigate in this paper, some EU member states use 'open-ballot' electoral systems, where voters choose between different politicians from the same political party. Others use 'closed-ballot' systems, where voters only choose between blocks of candidates from different political parties. Potentially, greater information about how MEPs behave might make MEPs more responsive to voters in countries with open-ballot systems, but might not have any effect in countries with closed-ballot systems.

But, generally the effect of transparency on legislative behaviour is not straightforward to identify using observational data. The introduction of legislative transparency, such as the publication of voting records on-line, usually occurs at the same time for all parliamentarians in a given legislature. This makes it difficult to identify the effect of transparency independently from the effect of other factors which coincide with the timing of new transparency initiatives. As a result, one way researchers have tried to isolate the effect of transparency on legislative behaviour is to use randomized experiments. In these experiments the records of a randomly selected group of politicians are communicated to the public in some form, and then researchers look at whether the politicians in this 'treatment group' behave differently to the other politicians (in the 'control group').

We conducted an experiment in the European Parliament which allows us to elaborate on these insights in several ways. First, while the publication of electronic voting records happened simultaneously for all MEPs, the online reporting of these records was made available by an independent body (VoteWatch.eu) rather than on the European Parliament's own website. This means that MEPs were not uniformly aware that most of their legislative activities were publicly accessible. Hence, we are able to investigate differences between MEPs, and investigate their behaviour as they increasingly became aware that their records were public. Also, because MEPs are elected under different electoral rules across member states, we are able to look at the effect of these electoral rules on how MEPs respond to greater transparency.

Our experiment is based on the data and work carried out by VoteWatch.eu, an organisation set up in May 2009, just before the June 2009 European Parliament elections. VoteWatch.eu tracks the behaviour of MEPs, and our experiment was launched in January 2011 in an attempt to capture the potential impact of VoteWatch.eu's reporting so far, as well as the effect of transparency more generally. The experiment involved informing a randomly selected group of MEPs about the information on VoteWatch.eu about their legislative records over a six-month period, and then comparing the behaviour of these MEPs to the behaviour of all other MEPs.

We find that increased transparency in the European Parliament has encouraged MEPs to generally be more active. We observe a higher attendance rate and more parliamentary questions, motions and speeches since formal policy records became

electronically available to the public in a user-friendly manner on VoteWatch.eu. Variations occur, however, when looking into differences between groups of MEPs, and when taking into account the different electoral systems that these politicians are elected from. It matters whether MEPs are from small or large electoral districts, openor closed-ballot systems, and which party political affiliations they are associated with. In sum, these findings contribute to the existing literature with more detailed results regarding what factors motivate responsiveness of legislators to their principals; be they local voters, a wider national electorate, or a party leadership.

The rest of the paper is organized as follows. We first discuss some of the existing research on the effect of transparency on parliamentary behaviour. In Section 2 we discuss the various policy activities that MEPs are involved with in the European Parliament, and in Section 3 we explain the set-up and our expectations with regards to the experiment. Section 4 presents the results and the final section concludes.

#### I. Effects of Transparency

Transparency in representative democracies is generally found to increase responsiveness to stakeholders (e.g. Carey 2009). Elected representatives will, as 'agents' of an electorate, seek to prove their worth as reliable decision-makers, and if their legislative performances are put to public scrutiny, their behaviour is likely to be more closely connected to the public's opinions and preferences over policy. Conversely, if voters are uninformed, they are unable to sanction the behaviour of politicians, who in turn may act solely in their self-interest or for the benefit of a specific segment of their constituents (Besley and Burgess 2002; Malesky et al. 2010).

Nevertheless, a number of conflicting findings emerge when more specific questions are asked about the application of the various kinds of transparency measures available as a means for ensuring accountability. For example, is transparency desirable at all stages of a policy process, and in relation to all aspects of the negotiations as well as negotiators? Or, should voters be informed only about details of the final legislative outcome of most fundamental policy decisions – such as budgets, constitutional matters, trade agreements, economic and social regulation?

Not all empirical results or inferences from formal models of transparency suggest that transparency should always increase the responsiveness of legislators to voters. A common concern – highlighted in research on bargaining in international organisations and committee settings – is that transparency can become an opportunity for politicians to pander for votes, rather than to work to enact the most socially beneficial outcomes (e.g. Keohane 2002; Stasavage 2005; Mead and Stasavage 2008; Naurin 2008). The problem according to these contributions is that representation of different opinions, as well as expert guidance and exchange of information, cannot take place in honest deliberations if negotiations are available to the public. Also, access to information regarding decision-makers' potential need for external consultation by lobbyists may hinder most efficient policy outcomes (Frankel 2001).

In the EU context, Naurin (2007) has shown that transparency reforms had a negative effect on representatives in the European Council, the meeting of EU Heads of Government, who feared that the negotiations between lobbyists and politicians would become public. Naurin argues that publicity led to less efficient negotiations and fruitful side-deals, leading to limited improvements in policies. Practitioners in the EU as well as in many national political systems share this perception (Hagemann and De Clerck-Sachsse 2007; Carey 2011; De Schoutheete 2011). These concerns were also highlighted by government representatives in a recent case before the European Court of Justice, brought by Access Info, an NGO working on transparency and civil liberties (European Court of Justice, case T233/09).

Transparency's key liability is, according to this line of thought, that legislators may possess – or be in a position to acquire – a better understanding of policy problems, and of proposed solutions, than their constituents, and fail to deploy that knowledge when acting in the limelight as faithful representatives. Hence, a decision to keep individual legislator's positions secret would ensure that *politics* is taken out of *policy-making*, and give elected representatives the freedom to deliberate and decide on policy content in private, which in turn produce more efficient processes as well as legislative outcomes.<sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> Other recent formal analyses have sought to identify the conditions under which transparency in legislative deliberations and actions can be either normatively attractive or unattractive. Snyder & Ting (2005) argue that voting transparency ought to be appealing both to citizens and legislators, to the former because transparency exposes potential betrayals of citizens' interests, and to the latter because it

However, there may be a difference between legislative politics in national or larger parliamentary assemblies and bodies and decision-making in executive committees or intergovernmental decision-making fora (such as the EU Council, the European Central Bank, or the World Trade Organization<sup>2</sup>). The literature on national parliamentary systems has found that there are direct effects of transparency on legislators' performances both during election campaigns as well as in legislative negotiations. Increased access to information about candidates' legislative records and political performances enables voters to choose the best candidates and punish those who do not fulfil their mandate (Besley and Prat 2006). While in office, politicians are forced to perform in the interest of the voters as they know constituencies can scrutinize their political records, and evaluate whether performances corresponds with public opinion (Snyder and Ting 2005). For instance, in the US, observations have been reported that publication of voting records is associated with higher levels of observed effort on the part of politicians (Canes-Wrone et al. 2002). So, from this branch of the literature we find convincing evidence that politicians generally respond to transparency in parliamentary assemblies and legislatures with better performances when legislative records are made public (cf. Carey 2009, 2011).

The electoral connection in legislative politics can also mean different things in different parliamentary contexts (cf. Carey 2009). Where citizens vote for parties rather than politicians, and where parties are powerful legislative organizations – for example in many European parliamentary democracies - greater legislative transparency is likely to mean greater 'collective accountability' through parties. In this context, greater transparency should encourage parties to work harder to enforce party discipline and individual politicians to hence become more responsive to their legislative party leaders. On the other hand, where citizens vote for individual politicians rather than parties, and where parties are relatively weak legislative organisations – for example in the US, and in many other presidential systems – greater transparency is likely to mean greater 'individual accountability'. In this context, greater legislative transparency

makes enforceable commitments to constituent interests possible, and the rewards that might follow from such commitments attainable.

<sup>&</sup>lt;sup>2</sup> For discussions of transparency in international organizations see e.g. Stasayage 2004; Maede & Stasavage 2008; Hagemann & Lenz (forthcoming) 2013; Keohane 2002; Risse 2000; Nielson & Tierney 2003; Hawkins et al. 2003; Martin 2002.

should lead to more direct responsiveness of legislators to 'their' voters and less responsiveness to their legislative party leaders.

However, such individual accountability requires that information about each legislator's actions is available to the public, and that the public in turn takes an interest in this information. Since this electoral connection is often not complete – nor perhaps always efficient in modern, complex democracies – maximum legislative individualism does not necessarily produce individual accountability. But, as new technologies and demands for scrutiny of politicians' specialized activities have amplified, there has been a trend towards public demands for greater individual accountability, even in countries with traditions of party-based collective accountability (e.g. Carey 2007).

#### II. Transparency and Behaviour in the European Parliament

In the European Parliament, MEPs engage in several different types of policy activities. One of the easiest activities to monitor is how they vote in plenary votes. There are three types of votes in the European Parliament: a 'show of hands votes'; 'electronic votes', where a vote is taken using voting machines and the number of Yes, No, and Abstain votes are recorded, but how each MEP votes is kept secret; and 'roll-call votes', where how each MEP voted is recorded in the minutes and published at the end of the day. It is these roll-call votes that VoteWatch.eu have put on-line, and hence made available for closer scrutiny by the public. About one-third of votes are by roll-call. Roll-call votes are required on certain issues, including all final votes on legislative reports (since 2009), and roll-call votes on any other issue can be requested either by a political group or by 5 per cent of MEPs (up to 24 hours before a vote is due to take place). There were 6,149 roll-call votes in the 2004-09 session of the European Parliament, and most important or contentious votes are usually processed by roll-call.

In addition to voting, in plenary MEPs must sign an attendance register (to be able to claim travel expenses), can ask 'parliamentary questions' (usually of the Commission), can propose motions for debate, and can make speeches. All these activities are recorded in the official minutes, and can hence be reported to the public.

Research on how MEPs behave has exploded in the last two decades, in response to the growing powers of the institution, the easy access to data, and the fascinating character of the institution. Several findings from this research are worth highlighting. First, MEPs are more likely to participate in close (roll-call) votes than in lopsided votes (Noury 2004), and are more likely to participate in votes on legislative issues than nonlegislative issues and in votes under legislative procedures where the European Parliament has equal power with the Council than when the parliament simply has a consultative role (Scully 1997). Second, voting in roll-call votes is mainly along transnational group lines rather than national lines, and the 'cohesion' of the groups has increased as the powers of the European Parliament have increased (e.g. Hix et al. 2005). Third, the main dimension of voting, as identified by scaling roll-call votes or looking at aggregate coalition patterns, is the left-right dimension rather than a geographical or pro-/anti-EU dimension (e.g. Kreppel and Tsebelis 1999; Hix et al. 2005, 2006; Høyland 2010). Fourth, parliamentary questions tend to be used by MEPs from parties who are in opposition at the national level (and so are not represented in the Council or Commission) or by MEPs from the smaller political groups (Proksch and Slapin 2010, cf. Raunio 1996). Fifth, speeches tend to be used to explain an MEP's national party's position to other members of his or her EP political group when a national party intends to vote against its group, or by members of the smaller political groups who cannot get access to the legislative agenda (Proksch and Slapin 2010).

A further interesting finding from the literature is that MEPs are torn between two principals: their national parties, and their European political groups. Whereas national parties control candidate selection in elections, career progression and legislative power inside the parliament (such as committee assignments) are controlled by the European political groups (e.g. Raunio 1997; Hix 2002; Kreppel 2002; Kaeding 2004; Whitaker 2005; Høyland 2006; McElroy 2006; Hix et al. 2007).

One factor which influences whether MEPs respond more to pressure from their European political groups or more to pressure from their national parties is the way the MEPs are elected. There is no uniform electoral system in European Parliament elections. Since 1999 all EU member states have used a form of proportional representation to elect their MEPs, but there is considerable variation in the ballot structure and the district sizes used in each member state, as Figure 1 shows. Some form of 'open' ballot, where voters can choose between candidates from the same political party as well as between political parties (either via single-transferable-vote or

open-list proportional representation), was used in 18 of the 27 member states plus Northern Ireland in the 2009 elections, while a 'closed' ballot, where voters can only choose between pre-determined lists of candidates presented by each party. Also, 11 member states either had relatively low magnitude (less than 10) national districts or regional districts, 16 member states had relatively large (greater than 10) national or regional districts, and Spain elected 54 MEPs in one single national district while Germany elected 99 MEPs in one single national district.

#### [Figure 1 about Here]

There is evidence in research on comparative electoral and legislative behaviour that open ballot electoral systems, particularly when combined with larger electoral districts, produce politicians who are more independent from their political parties (e.g. Carey and Shugart 1995, Samuels 1999, Shugart et al. 2005, Portmann et al. 2012). Research on the European Parliament has shown similar effects of the variations in electoral rules used in European Parliament elections (Hix and Hagemann 2009). Specifically, MEPs who are elected under open-ballot systems or in larger districts are more independent from their national political parties and, as a result, are more responsive to pressure from their European political groups in roll-call votes (Hix 2004). Conversely, MEPs who are elected under closed-ballot systems or in smaller districts are more likely to vote with their national political parties and against their European political groups. Related to this, citizens in member states with open ballot electoral systems and smaller district magnitudes are on average better informed about European Parliament elections and are more likely to be contacted by MEPs during election campaigns than citizens in member states with closed ballot electoral systems and larger district magnitudes (Hix and Hagemann 2009).

Nevertheless, despite seven rounds of 'direct elections', European Parliament elections remain very much "second-order national contests": fought by national parties on the performance and popularity of national politicians and national party leaders, rather than on the performance of the MEPs or the political groups in the European Parliament (e.g. van der Eijk and Franklin 1996; Hix and Marsh 2007). As a result, few voters know much, or care much, about the MEPs and what they do inside the European Parliament. In general, then, one cannot expect greater transparency of politics inside the European Parliament to change the way voters' behave in European Parliament

elections. And, in return, if voters are unlikely to pay much attention, MEPs are unlikely to change the way they behave in response to greater transparency. Therefore, the next sections investigate whether transparency has an effect at all on MEPs' engagements in the various legislative activities recorded in the Parliament, and whether their electoral and party political profiles play a role in determining their behaviour in these activities.

#### III. Set up of the Experiment and Empirical Expectations

The <u>www.VoteWatch.eu</u> website was launched in May 2009, just before the seventh set of European Parliament elections in June 2009. The website includes real-time updates of the outcome of votes, including a breakdown of each vote by MEP, European political group, and member state delegation. The website also includes information about MEP attendance rates, how often MEPs vote with or against their European political groups and their national party delegations (their 'loyalty rates'), and the number of questions, motions and speeches by each MEP. In addition, the website reports aggregate voting patterns, such as coalition frequencies by policy area and over time.

Our analysis has two elements. First, we investigate any observable changes in MEPs' behaviour from the parliamentary term preceding 2009 when VoteWatch was introduced, to the period immediately following the VoteWatch launch. While some changes in behaviour may be down to other issues than VoteWatch's presence, there is evidence that certain activities have been directly affected by the increased transparency brought about with the new initiative. We subsequently analyse MEPs' reaction to VoteWatch's reporting by carrying out an experiment over a six-month period from January to July 2011.

#### [Table 1 about here]

We designed the experiment to utilize the information on VoteWatch.eu as follows. We randomly selected one-quarter of the MEPs (184) for treatment, using a 'randomized block' technique, where MEPs were chosen randomly according to two criteria: political group and member state. This ensured that our treatment group was not significantly different from the population of MEPs on these two important characteristics. The number of MEPs by political group and member state in the population and the treatment group are shown in Table 1 (note that there were only

735 MEPs in December 2010 rather than 736 as one MEP had resigned but had not yet been replaced). Table A1 in the Appendix shows some descriptive statistics about the treatment and control groups, and demonstrates that there are no statistically significant differences between these two groups in any key characteristic.

The 'treatment' we used was an e-mail, which we sent to the 184 MEPs in the treatment group on the Friday before each plenary session, informing them about the information on VoteWatch.eu about them. The e-mail was written in a way that suggested that it was sent to all MEPs, as follows:

"Dear XXXX.

VoteWatch.eu is an independent not-for-profit organization which tracks the political behaviour of every MEP. We have <code>[NUMBER]</code> regular visitors of our website which look at the activities of the MEPs as presented on our website.

For example, please see below the information we have on your activities (or follow this link for more details: [LINK TO MEP PAGE ON VOTEWATCH.EU]).

After each plenary session we will send you an e-mail reminding you to check the information we have about you.

Please let us know if you have any questions.

Best wishes,

XXXX

VoteWatch.eu

Parliamentary Questions (PQs) 123
Motions for resolutions 1
Speeches in the plenary 49
Written declarations 0
Reports amended 7
Drafted reports 0
Opinions 1
Attendance to plenary 80.28% (57 out of 71 days in the plenary)
Loyalty to political group 57.20% (445 out of 778 votes)

For detailed information visit: [LINK TO MEP PAGE ON VOTEWATCH.EU]. The information was last updated on [DATE] based on the data published by the official website of the European Parliament on this date. It is possible, therefore, that very recent activities are not yet included, but in this case they will be included in your profile on our next update. Also, please note that the information on reports and opinions regards only those already voted in the EP plenary."

Figure 2 shows an example of an MEP page on VoteWatch.eu. The e-mails were sent in English, but the VoteWatch.eu website is in five different languages: English, French, German, Polish and Romanian.

[Figure 2 about here]

The e-mails were sent every month for six months, starting in January 2011 and finishing in June 2011. At the beginning of July 2011 we collected the data we had for each MEP for each six-month period since the start of the 2009 parliament, focusing on six types of behaviour: (1) attendance rate at plenary sessions; (2) loyalty to political group (per cent of times an MEP votes with the majority of his/her European political group); (3) loyalty to national party (per cent of times an MEP votes with the majority of his/her national party delegation); (4) number of parliamentary questions; (5) number of motions for a resolution; and (6) number of speeches.

What should we expect to observe in the behaviour of the MEPs in the treatment group compared to the MEPs in the control group? First, we would expect MEPs in the treatment group to become more active than MEPs in the control group – so, higher attendance rates and more questions, motions, and speeches – since from the point of view of the public, more active parliamentary representatives are preferable to less active ones, and greater transparency should increase MEP sensitivity to potential public embarrassment and also increase their awareness of their own performance compared to other MEPs.

Our expectations are more mixed, however, when it comes to the voting behaviour of MEPs vis-à-vis their European political groups and national parties. On the one hand, transparency may encourage MEPs to cater more to domestic interests, and hence be more loyal to their national parties and less loyal to their European political groups, fearing negative coverage in the domestic media if they do not do so. On the other hand, transparency may encourage MEPs to vote more with their European political groups, since they would be conscious of the fact that the group whips will be able to monitor their voting behaviour more effectively.

In addition, whether transparency causes MEPs to respond more to their national parties or more to their European political groups may depend on how tightly MEPs are controlled by their national parties. Given what we know about the effect of electoral rules on MEP behaviour, we would expect transparency to encourage MEPs in those member states with closed-ballot electoral systems and lower magnitude electoral districts to become more loyal in their roll-call voting behaviour to *national parties*. We would also expect transparency to encourage MEPs in those member states

with open-ballot electoral systems and higher magnitude electoral districts to become more loyal in their roll-call voting to their *European political groups*.

One problem with trying to use VoteWatch.eu in a legislative transparency experiment, however, is that knowledge about VoteWatch.eu increased for all MEPs from 2009 onwards, not just for the MEPs in our treatment group. The VoteWatch.eu website received more than 12,000 visitors each month during the 2009-2011 period analysed here, and users spent on average twice as long on the website as they did on most media websites. There were over 15,000 references to VoteWatch.eu in print, TV and on-line media in 2010. The European Parliament includes a direct link to VoteWatch.eu on its website, and an increasing number of MEPs use data from VoteWatch.eu on their personal websites and Facebook pages. As a result, many MEPs now regularly check their profiles on VoteWatch.eu. This means that our treatment, via the e-mail, may not have been strong enough to have a significant independent effect on the treatment MEPs in comparison with the general effect of VoteWatch.eu on all MEPs. We hence need to first investigate any general 'VoteWatch effect' on all MEPs, before we consider any effects resulting from our more detailed experiment.

So, to start with we make an assessment of the general impact of increased transparency by comparing the behaviour of the MEPs in the first period of the previous session of the European Parliament (between July 2004 and June 2006), before VoteWatch.eu was launched, to MEP behaviour in the same period in the current session (July 2009 to June 2011). One problem with this observational rather than experimental comparison is that it is difficult to identify the effect of VoteWatch.eu on MEP behaviour independently of other changes that happened between 2004/06 and 2009/11, such as the election of many new MEPs in 2009 or the entry into force of the Treaty of Lisbon in December 2009, which further increased the powers of the European Parliament. Nonetheless, any changes in behaviour may be supportive of certain subsequent inferences about how MEPs in general have responded to growing transparency from one parliamentary term to the next.

We then move on to the results from the experiment. In a standard randomized experiment, a causal effect is identified by comparing the difference in the change in the level of a variable in a treatment group and a control group from the level immediately prior to a treatment to the level immediately after a treatment (in other words, the

difference-in-differences) (esp. Rubin 1974). So, in our experiment we compare the change in the behaviour of the MEPs in the treatment and control groups from the period immediately prior to the treatment (July-December 2010) to their behaviour in the period of the treatment (January-June 2011).

We also compare the change in the behaviour of the treatment and control groups from an earlier period (January-June 2010) to the period of the treatment (January-June 2011). We do this for two reasons. First, there is a potential problem of contamination of the VoteWatch.eu website on the control group, as a result of the growing awareness of the website amongst all MEPs. Although VoteWatch.eu was already well known in January-June 2010, the website was less than a year old at that time, and was less widely used by MEPs than it was in July-December 2010. Second, it might be better to compare behaviour in January-June 2010 and January-June 2011 rather than behaviour in July-December 2010 and January-June 2011, because the former two periods cover similar parliamentary timetables.

#### **IV. Results**

#### Descriptive Trends and Aggregate Difference-in-Difference Results

Figure 3 shows the average levels of our six behavioural indicators for the first four sixmonth periods in EP6 (July 2004 to June 2006) compared to the same four six-month periods in EP7 (July 2009 to June 2011). To make the two groups of MEPs as comparable as possible we only focus on the 308 MEPs who were present in the first two years of both EP6 and EP7.

#### [Figure 3 about here]

Recall that VoteWatch.eu was launched in May 2009, so did not exist during these four periods in EP6 but did exist in the equivalent periods in EP7 and became increasingly prominent over time in that parliament. One key result is the higher activity of the MEPs in EP7 compared to EP6 across all recorded activities, except for attendance in votes. For some reason attendance dipped in the second and third EP7 periods we investigated, but then went up again in the fourth EP7 period. The dip in those two 6-months periods may reflect the particular agenda of the two parliaments in these two periods rather than an overall trend. In addition, where the number of

questions, motions and speeches are concerned, the performance gap between EP6 and EP7 grew across the comparable two year periods. EP group loyalty and national party group loyalty was also higher in the first two years in EP7 than EP6, which suggests that the groups and national parties may have more closely monitored the behaviour of their MEPs in EP7 than in EP6. These differences between EP7 and EP6 might be explained by the greater transparency of legislative behaviour in the European Parliament resulting from the launch and growing visibility of VoteWatch.eu. Several media reports and accounts from senior officials and politicians have suggested such an effect.<sup>3</sup> Conscious of increased public attention, MEPs became more active: asking more questions, proposing more motions, and making more speeches.

Nevertheless, as mentioned, it is difficult to identify the effect of VoteWatch.eu independently from other factors which co-vary with the timing of VoteWatch.eu from these observational data. By only looking at the same individual MEPs across the two periods, we have excluded the possibility that any differences in the behaviour of the MEPs in EP6 and EP7 are a result of the different cohorts of MEPs in the two parliaments. Nevertheless, there were other changes between the two parliaments which might affect how MEPs behave. For example, the political groups and national parties might be more cohesive in EP7 than EP6 because of the different subjects of votes in the two parliaments. Also, following the entry into force of the Treaty of Lisbon in December 2009, there was greater coverage of the European Parliament in the national media. As a result, although this comparison between MEP behaviour and EP6 and EP7 may be suggestive of a VoteWatch.eu effect since it is the only source which provides detailed reporting on MEPs' legislative activities, the conclusions are far from affirmative.

#### [Figure 4 about here]

Figure 4 consequently presents descriptive data from our experiment, from our six behavioural indicators for the first four six-month periods in EP7, broken down by control and treatment group. Recall that the treatment was applied in the fourth period (January to June 2011), so for the other three periods the levels for the control and treatment groups should be the same. These figures suggest several differences between the control and treatment groups in period 4 that might be caused by greater

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<sup>&</sup>lt;sup>3</sup> E.g. reports in European Voice (2010), and The Financial Times (2009).

awareness of VoteWatch.eu in the treatment group: the attendance and political group loyalty rates appear to be lower for the treatment group, while the number of questions, motions and speeches appear to be higher. On this later point, the number of questions, motions and speeches increased dramatically in period 4 for both the treatment group and the control group of MEPs, but with a greater increase for the MEPs in the treatment group. This might suggest some contagion of our treatment in this period, where MEPs in the control group became aware of VoteWatch's monitoring and heard about the e-mails we were sending to the treatment MEPs (e-mails are easy to share!), which encouraged them to check their own profiles on VoteWatch.eu. The question remains, though, whether any of the differences between the control and treatment groups are statistically significant.

Table 2 presents the aggregate difference-in-differences results for the six types of behaviour. Here, we compare the changes in the behaviour of the control and treatment MEPs in the period of the treatment (January to June 2011) with two other six-month periods: (1) the period immediately prior to the treatment (July to December 2010); and (2) the second period of the new parliament (January to June 2010). We do not compare the treatment period with the first period of the new parliament (July to December 2009), as new MEPs often do not settle into regular behavioural patterns until at least six-months into a new parliament.

#### [Table 2 about here]

At an aggregate level, there are no statistically significant changes in the behaviour of the MEPs in the treatment group compared to the MEPs in the control group. This could suggest that greater legislative transparency does not make much of a difference in the European Parliament. However, this is unlikely, as the descriptive results in Figure 2 suggest that VoteWatch.eu has changed the way the MEPs behave. What is more likely is that either our treatment was not strong enough or there was contagion between the treatment and the control groups, as the MEPs in the both the treatment and control groups were increasingly conscious of the information about them on VoteWatch.eu. Furthermore, although it may not be possible to identify significant effects at a highly aggregated level, it might be possible to identify significant effects of the treatment within particular sub-groups of MEPs.

#### **Electoral System Effects**

As a first step in disaggregating the results from the transparency experiment, Table 3 shows the results of the effect of ballot-structure interacted with the treatment, and controlling for 'district magnitude'. Recall that we expected MEPs elected on open-ballots to be more responsive to the treatment than MEPs elected on closed-ballots. We also expected MEPs in closed-ballot systems to be more tightly controlled by their national parties, and so to respond to greater pressure from national parties as a result of greater transparency.

#### [Table 3 about here]

We do not find any general effect of ballot-structure on the behaviour of the MEPs in our treatment group compared to all the other MEPs throughout each of the periods analysed here. We do find, however, that MEPs elected in open-ballots and in smaller districts were more active during the time of our experiment in January-June 2011 than in the earlier periods. MEPs elected on open-ballots made more speeches than MEPs elected on closed-ballots, and also asked more questions in period 4 than in period 2 (although less questions in period 4 than period 3, interestingly). MEPs from open-ballot systems were also less loyal to their EP groups, which is contrary to our expectations, but might simply reflect that these MEPs generally seek to emphasize their individual profiles more strongly than MEPs elected in closed-ballot systems. Where district magnitude is concerned, we find that MEPs in larger districts were less loyal to their EP groups, participated in fewer roll-call votes, and made fewer speeches. This growing responsiveness of MEPs elected in smaller districts as EP7 progressed may be a result of the growing awareness by these MEPs that their voters are more able to monitor their behaviour. To investigate further we next look at differences between the political groups, and the member state and national party delegations of MEPs.

#### Differences by Political Group, Member State and National Party

Table 4 presents difference-in-differences results for each political group analysed separately, for the two comparison periods. Some results are significant. Treated MEPs in the ALDE and S&D groups attended voting in the plenary more than non-treated MEPs in these groups, while treated MEPs in the G/EFA group attended less. Treated

MEPs in ALDE were more loyal to their European political groups than were non-treated MEPs in this group. There is also some evidence that treated MEPs in ALDE and S&D were more loyal to their national party delegations than were non-treated MEPs in these groups, while treated MEPs in EUL-NGL were less loyal to their national party delegations. There is also evidence that treated MEPs in ALDE and S&D asked more questions than non-treated MEPs in these groups, and treated MEPs in S&D made more speeches than non-treated MEPs in this group. In other words, it appears that the treatment had more of an effect on MEPs in ALDE and S&D, although it is not clear why this was the case.

#### [Table 4.A-B about here]

Table 5 presents difference-in-differences results for each member state delegation of MEPs. These results suggest that MEPs from some member states were more affected by greater legislative transparency than others. For example, treated MEPs from Greece and Latvia attended more than other MEPs from these countries, while treated MEPs from Hungary and the United Kingdom attended less than other MEPs from these countries. Treated MEPs from Denmark were more loyal to their European political groups and less loyal to their national party delegations than were non-treated MEPs from Denmark. In contrast, treated MEPs from Lithuania were less loyal to both their European political groups and their national party delegations than were non-treated MEPs from Lithuania. And, there is some evidence that great transparency reduced loyalty to national parties amongst MEPs from Finland, Luxembourg, the Netherlands and Spain.

#### [Table 5.A-B about here]

As discussed, except for the case of Spain, the MEPs from the member states which appear to have been affected by greater transparency were elected under some form of preferential voting, which limits the ability of national parties to control their MEPs. As a result, greater transparency seems to have made these MEPs more responsive to pressure from their other party principals: the European political groups.

The results also suggest that greater transparency increased the incentives to be more active amongst MEPs from some member states but not others. Treated MEPs from Belgium, Bulgaria, Poland, Portugal, Romania and Sweden asked more questions

than non-treated MEPs from these countries. Treated MEPs from Bulgaria, Ireland, Latvia and the United Kingdom proposed more motions than non-treated MEPs. And, treated MEPs from Cyprus, Malta, Romania and the UK made more speeches than non-treated MEPs. MEPs from Romania and Poland may have been particularly affected because VoteWatch.eu is available in these languages, while MEPs from the UK, Ireland, Cyprus and Malta could be affected because the e-mails were written in English (although many internal communications in the European Parliament are in English only). Moreover, the other member states here are all small states, and questions and speeches may be more useful to MEPs from these states because they are less able to gain access to the plenary agenda via other routes (since legislative reports tend to be written by MEPs from the larger member states).

Finally, Table A2 in the Appendix presents results for the main national party delegations from the five largest member states. Some results are worth highlighting. Treated German SPD MEPs (in S&D) attended less than non-treated MEPs from this party. Treated British Labour MEPs (in S&D) were more loyal to their political group, while treated British Conservative MEPs (in ECR) were less loyal to their political group. In contrast, treated French UMP MEPs (in EPP) were more loyal to their national party, while Spanish PSOE MEPs (in S&D) were less loyal to their national party. These results suggest that greater transparency forced MEPs to respond to their two party principals in different ways, with some responding more to pressure from their European political groups and others responding more to pressure from their national parties. Results for the other MEPs' activities suggest that greater transparency also led MEPs from some national parties to become more active. For example, treated MEPs in the Polish PiS (in ECR) and Spanish PP (in EPP) asked more questions than non-treated MEPs from these parties, treated British Labour MEPs (in S&D) proposed more motions, and treated in the French PS (in S&D) and British Conservatives (in ECR) made more speeches.

#### **Conclusions**

Do elected politicians behave differently if they know their legislative records and formal policy activities are subject to public scrutiny compared to when decision-making is more secretive? The results from existing empirical investigations have been

mixed with regards to the desirability of transparency in legislative politics, although findings from parliamentary settings suggest that legislators are generally more responsive to the public if their actions can be easily observed by the public.

We investigated the effect of increased transparency in the European Parliament by looking into the legislative behaviour of MEPs from the 6th to the 7th European Parliament, when a new online monitoring tool, VoteWatch.eu, became available to the public. The European Parliament is an interesting laboratory for studying the effect of transparency because different politicians within the same institution face different domestic pressures and career incentives. MEPs from some member states, such as the United Kingdom, are subject to more Eurosceptic media and constituents than MEPs from other member states. MEPs from some national parties, such as those from Spain or France, are more tightly controlled by their national parties than MEPs from other member states, such as those from Ireland or Finland. Also, which activities MEPs are likely to pursue as a result of greater transparency may also vary, since MEPs from smaller member states and in smaller political groups find parliamentary questions and speeches more useful than MEPs from larger member states and in larger political groups.

Our results suggest that increased transparency of activities inside the European Parliament has affected the way MEPs behave. During our experiment we discovered that the transparency initiative VoteWatch.eu had possibly had a greater effect on all MEPs than we had first anticipated, and hence may have levelled out some statistical differences between the 184 MEPs in our treatment group and the 552 MEPs in our control group. Nevertheless, our findings suggest that greater transparency has made a difference in the European Parliament. In the first two years after the launch of VoteWatch.eu, MEPs became more active – with higher attendance rates, more questions, more motions, and more speeches. There is some evidence that this increase in activity is because of greater transparency of the activities of *all* MEPs, as a result of growing awareness and use of VoteWatch.eu amongst the MEPs, interest groups, and European and national media.

In addition, when we delved deeper into our experimental results, we find evidence that our transparency treatment did have an effect on certain types of MEPs. For example, treated MEPs in two political groups (S&D and ALDE) became more active

and more loyal to their national political parties than non-treated MEPs in these groups. And, treated MEPs from some of the member states who use open-ballot electoral systems in European Parliament elections became less loyal to their national parties and more loyal to their European political groups than non-treated MEPs from these countries.

In general, we observe a dual effect of great transparency in the European Parliament: more active parliamentarians, but also parliamentarians who become more loyal to the party principals who control their career progression inside the European Parliament. This is consistent with findings from other parliaments, and suggests that responsiveness in parliamentary systems is enhanced by the public's access to legislative decision records.

#### References

- Besley, Timothy and Robin Burgess. 2002. "The Political Economy of Government Responsiveness: Theory and Evidence," *Quarterly Journal of Economics*, 117(4), 1415-1451.
- Besley, Timothy and Andrea Prat, 2006. "Handcuffs for the Grabbing Hand? Media Capture and Government Accountability," American Economic Review, 96(3), 720-736.
- Canes-Wrone, Brandice, David W. Brady, and John F. Cogan. 2002. "Out of Step, Out of Office: Electoral Accountability and House Members' Voting." *American Political Science Review* 96(1): 127-140.
- Carey, John M. 2009. *Legislative Voting and Accountability*. Cambridge: Cambridge University Press.
- Carey, John M. 2011. "Transparency and Legislative Behaviour". Paper presented at the Annual Conference of the American Political Science Association, Seattle, September 1-4 2011.
- Carey, John M., and Matthew S. Shugart. 1995. "Incentives to Cultivate a Personal Vote: A Rank Ordering of Electoral Formulas." *Electoral Studies* 14, 417-439.
- Cowley, Philip, and Mark Stuart. 2005. "Being Policed? Or Just Pleasing Themselves? Electoral Rewards and Punishment for Legislative Behaviour in an Era of Localized Campaigning Effects: The Case of the UK in 2005." Presented at the 2005 Annual Conference of the Elections, Public Opinion and Parties section of the Political Studies Association, University of Essex.
- De Schoutheete, Philippe. 2011. "Decision-making in the Union". *Policy Brief* 24, Notre Europe, April 2011.
- Van der Eijk, Cees, and Mark Franklin, Eds. 1996. *Choosing Europe? The European Electorate and National Politics in the Face of Union*. Ann Arbor, MI: University of Michigan Press.
- European Voice 2010. "Lack of Political Will on Public Voting Records." *European Voice*, 14 October 2010.
- Financial Times 2009. "New Website Puts European Parliament under Scrutiny." *Financial Times*, 12 May 2009.
- Follesdal, Andreas and Simon Hix. 2006. "Why there is a Democratic Deficit in the EU: A Response to Majone and Moravcsik". *Journal of Common Market Studies* 44(3): 533-62.
- Frankel, Maurice. "Freedomof Information: Some International Characteristics". Working paper, The Campaign for Freedom of Information, 2001.

- Hagemann, Sara and Julia De Clerk-Sachsse. 2007. "Old Rules, New Game: Decision-Making in the Council of Ministers after 2004". Special Report, Centre for European Policy Studies, Brussels.
- Hagemann, Sara and Harmut Lenz (2012) 'The Effect of Transparency Regulation on Negotiations in the Council of the European Union". LSE European Institute working Paper, available from http://www2.lse.ac.uk/europeanInstitute/staff/academicStaff/hagemann/home.a spx
- Hix, Simon. 2002. "Parliamentary Behavior with Two Principals: Preferences, Parties, and Voting in the European Parliament." *American Journal of Political Science* 46(3) 688-698.
- Hix, Simon. 2004. "Electoral Institutions and Legislative Behavior: Explaining Voting Defection in the European Parliament." *World Politics* 56(1): 194-223.
- Hix, Simon, and Sara Hagemann. 2009. "Could Changing the Electoral Rules Fix European Parliament Elections?" *Politique Européenne* 28: 27-41.
- Hix, Simon, and Bjørn Høyland. 2011. *The Political System of the European Union*, 3<sup>rd</sup> edition, London: Palgrave.
- Hix, Simon, and Michael Marsh. 2007. "Punishment or Protest? Understanding European Parliament Elections." *Journal of Politics* 69(2): 495-510.
- Hix, Simon, Abdul Noury, and Gérard Roland. 2005. "Power to the Parties: Cohesion and Competition in the European Parliament, 1979-2001." *British Journal of Political Science* 35(2): 209-234.
- Hix, Simon, Abdul Noury, and Gérard Roland. 2006. "Dimensions of Politics in the European Parliament." *American Journal of Political Science* 50(2): 494-511.
- Hix, Simon, Abdul Noury and Gérard Roland. 2007. *Democratic Politics in the European Parliament*. Cambridge: Cambridge University Press.
- Høyland, Bjørn. 2006. "Allocation of Codecision Reports in the Fifth European Parliament." *European Union Politics* 7(1): 30-50.
- Høyland, Bjørn. 2010. "Procedural and Party Effects in European Parliament Roll Call Votes." *European Union Politics* 11(4): 597-613.
- Humphreys, Macartan, and Jeremy Weinstein. 2007. "Policing Politicians: Citizen Empowerment and Political Accountability in Africa." Presented at the 2007 Annual Meeting of the American Political Science Association, Chicago, Il.
- Kaeding, Michael. 2004 "Rapporteurship Allocation in the European Parliament: Information or Distribution?" *European Union Politics* 5(3): 353-71.

- Keohane, Robert. 2002. "Global Governance and Democratic Accountability". Miliband Lecture, May 2002. London School of Economics.
- Kreppel, Amie. 2002. *The European Parliament and Supranational Party System: A Study of Institutional Development*. Cambridge: Cambridge University Press.
- Kreppel, Amie, and George Tsebelis. 1999. "Coalition Formation in the European Parliament." *Comparative Political Studies* 32: 933-966.
- Malesky, Edmund, Paul Schuler, and Anh Tran. 2010. "The Adverse Effects of Sunshine: A Field Experiment Testing the Impact of Transparency on Delegate Performance in an Authoritarian Assembly." Presented at the 2010 Annual Meeting of the American Political Science Association, Washington, DC.
- McElroy, Gail. 2006. "Committee Representation in the European Parliament." *European Union Politics* 7(1): 5-29.
- Meade, Ellen and David Stasavage. 2008. "Publicity of Debate and the Incentive to Dissent: Evidence from the US Federal Reserve". *The Economic Journal* 118 (April): 695-717.
- Naurin, Daniel. 2007. *Deliberation behind closed doors: transparency and lobbying in the European Union*, ECPR Press.
- Noury, Abdul. 2004. "Abstention in Daylight: Strategic Calculus of Voting in the European Parliament." *Public Choice* 212: 179-211.
- Portmann, Marco, David Stadelmann and Reiner Eichenberger (2012). "District Magnitude and Representation of the Majority's Preferences: Evidence from Popular and Parliamentary Votes." *Public Choice* 151, 585-610.
- Proksch, Sven-Oliver, and Jonathan B. Slapin. 2010. "Parliamentary Questions and Oversight in the European Union." *European Journal of Political Research* 50(1): 53-79.
- Raunio, Tapio. 1996. "Parliamentary Questions in the European Parliament: Representation, Information and Control." *Journal of Legislative Studies* 2(4): 356-382.
- Raunio, Tapio. 1997. *The European Perspective: Transnational Party Groups in the 1989-1994 European Parliament.* London: Ashgate.
- Rubin, Donald. 1974. "Estimating Causal Effects of Treatments in Randomized and Nonrandomized Studies." *Journal of Educational Psychology* 66(5) 688-701.
- Samuels, David J. 1999. "Incentives to Cultivate a Party Vote in Candidate-Centric Electoral Systems: Evidence from Brazil." *Comparative Political Studies* 32, 487-518
- Scully, Roger M. 1997. "Policy Influence and Participation in the European Parliament." *Legislative Studies Quarterly* 12: 233-252.

- Shugart, Matthew S., Melody E. Valdini and Kati Souminen. 2005. "Looking for Locals: Information Demands and Personal Vote-Seeking Attributes of Legislators Under Proportional Representation." *American Journal of Political Science* 49(2) 437-449.
- Slapin, Jonathan B., and Sven-Oliver Proksch. 2010. "Look Who's Talking: Parliamentary Debate in the European Union." *European Union Politics* 11(3): 333-357.
- Snyder, James M., and Michael M. Ting. 2005. "Why Roll Calls? A Model of Position Taking in Legislative Voting and Elections." *Journal of Law, Economics, and Organization* 21 (1): 153-78.
- Stasavage, David. 2004. "Open-door or closed-door? Transparency in domestic and international bargaining." *International Organization* 58(4):667-703.
- Stokes, Susan C. 2001. *Mandates and Democracy*. Cambridge: Cambridge University Press.
- Whitaker, Richard. 2005. "National Parties in the European Parliament: An Influence in the Committee System?" *European Union Politics* 6(1): 5-28.

Figure 1: Electoral Systems in the 2009 European Parliament Elections

#### **Ballot structure**

		Closed	Open
District	Average district size <10	Poland (4.2) UK-Britain (6.8) France (9.8)	UK-N.Ireland (3) Ireland (3.3) Malta (5) Cyprus (6) Estonia (6) Luxembourg (6) Belgium (8) Slovenia (7) Latvia (9)
size	Average district size >10	Greece (24) Hungary (24) Portugal (24) Romania (35) Spain (54) Germany (99)	Lithuania (13) Denmark (14) Finland (14) Slovakia (14) Italy (15.6) Austria (18) Bulgaria (18) Sweden (19) Czech Republic (24) Netherlands (27)

Note: Average number of MEPs elected in each district in each member state in parentheses.

Table 1: Members of the European Parliament in December 2010

Member State	EPP	S&D	ALDE	G/EFA	ECR	EUL-NGL	EFD	NA	Total
Austria	6(2)	4(1)		2				5(1)	17(4)
Belgium	5(1)	5(1)	5(1)	4(1)	1			2(1)	22(5)
Bulgaria	6(2)	4(1)	5(1)					2	17(4)
Cyprus	2	2(1)				2(1)			6(2)
Czech Republic	2	7(2)			9(2)	4(1)			22(5)
Denmark	1	4(1)	3(1)	2(1)		1	2(1)		13(4)
Estonia	1	1	3(1)	1					6(1)
Finland	4(1)	2(1)	4(1)	2(1)			1		13(4)
France	29(7)	14(3)	6(2)	14(3)		5(2)	1	3(1)	72(18)
Germany	42(10)	23(6)	12(3)	14(4)		8(2)			99(25)
Greece	8(2)	8(2)		1		3(1)	2(1)		22(6)
Hungary	14(3)	4(1)			1			3(1)	22(5)
Ireland	4(1)	3(1)	4(1)			1			12(3)
Italy	35(9)	21(5)	7(2)				9(2)		72(18)
Latvia	3(1)	1	1	1	1(1)	1			8(2)
Lithuania	4(1)	3(1)	2		1		2(1)		12(3)
Luxembourg	3(1)	1	1	1					6(1)
Malta	2(1)	3(1)							5(2)
Netherlands	5(1)	3(1)	6(2)	3(1)	1	2(1)	1	4(1)	25(7)
Poland	28(6)	7(2)			15(4)				50(12)
Portugal	10(3)	7(2)				5(1)			22(6)
Romania	14(4)	11(2)	5(1)					3(1)	33(8)
Slovakia	6(2)	5(1)	1				1		13(3)
Slovenia	3(1)	2(1)	2						7(2)
Spain	23(6)	20(5)	2	2(1)		1		1	49(12)
Sweden	5(1)	5(1)	4(1)	3(1)		1			18(4)
United Kingdom		13(4)	12(3)	5(1)	25(6)	1	11(3)	5(1)	72(18)
Total	265(66)	183(46)	85(21)	55(14)	54(13)	35(9)	30(8)	28(7)	735(184)

Note: Number of MEPs in Treatment Group in parentheses. Abbreviations of EP political groups:

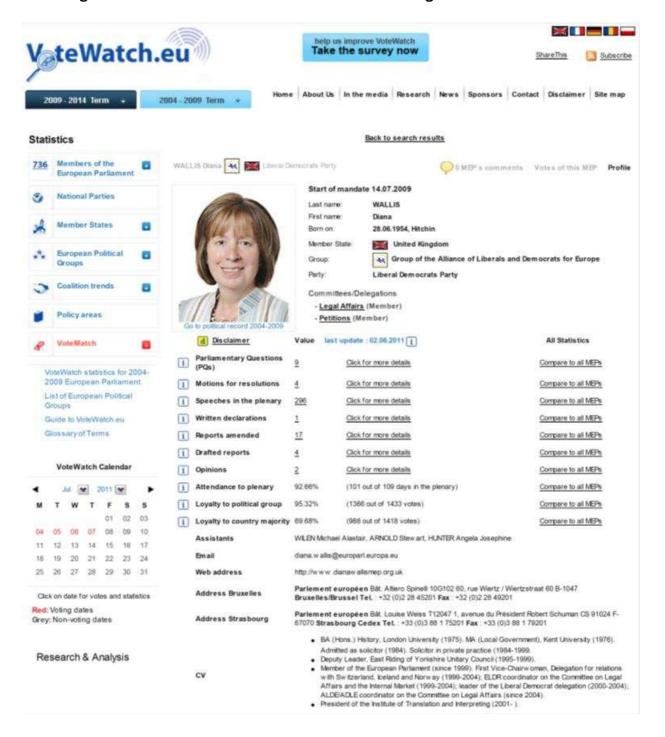
EPP European People's Party (Christian Democrats)
S&D Progressive Alliance of Socialists and Democrats
ALDE Alliance of Liberals and Democrats for Europe

G/EFA Greens/European Free Alliance

ECR European Conservatives and Reformists
EUL-NGL European United Left-Nordic Green Left
EFD Europe of Freedom and Democracy

NA non-attached

Figure 2: VoteWatch.eu Screen Shot of an MEP Page on VoteWatch.eu



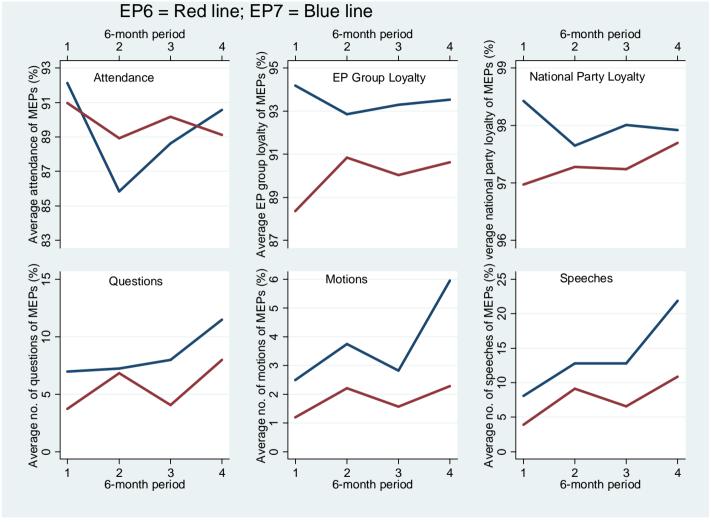


Figure 3: Legislative Behaviour of MEPs in EP6 (2004-06) and EP7 (2009-11)

Note: The graphs show the behaviour of the 308 MEPs who were present in the first two years of both EP6 and EP7. The six-monthly periods are as follows: Period 1 was July-December 2004 for EP6 and July-December 2009 for EP7; Period 2 was January-June 2005 for EP6 and July-December 2010 for EP7; Period 3 was July-December 2005 for EP6 and July-December 2010 for EP7; and Period 4 was January-June 2006 for EP6 and January-June 2011 for EP7.

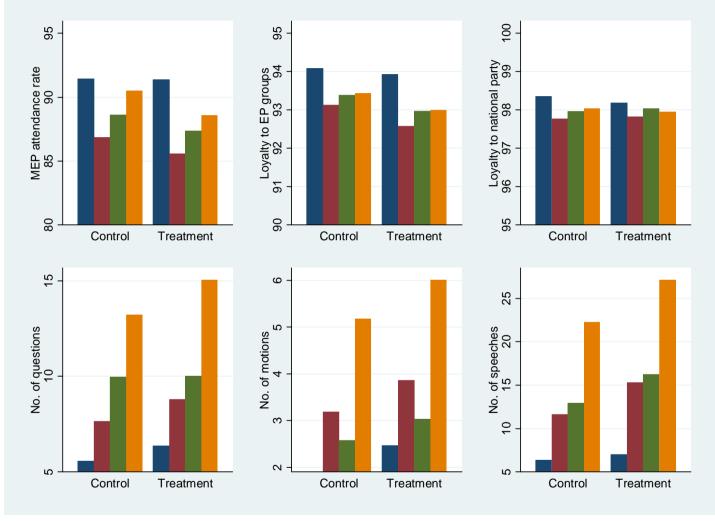


Figure 4: Legislative Behaviour of Control and Treatment Groups of MEPs in EP7

Note: The treatment was introduced in period 4: January-June 2011. The bars show the mean values in each of the four periods, where Period 1 was July-December 2009 (blue bars), Period 2 was January-June 2010 (red bars), period 3 was July-December 2010 for EP7 (green bars), and Period 4 was January-June 2011 (orange bars)

**Table 2: Analysis of Difference-in-Differences** 

		Difference between period 4 (January-June 2011) and period 3 (July-December 2010)								
Dep. variable	Attendance rate	EP group loyalty	National party loyalty	Questions	Motions	Speeches				
Treatment	-0.652	-0.004	-0.172	1.690	0.366	1.495				
	(1.025)	(0.283)	(0.179)	(1.486)	(0.485)	(1.738)				
Constant	1.855***	0.068	0.076	3.293***	2.596***	9.308***				
	(0.513)	(0.141)	(0.090)	(0.743)	(0.242)	(0.869)				
N	732	703	720	732	732	732				
R-squared	0.001	0.0000	0.001	0.002	0.001	0.001				
		Difference bet	ween period 4 (January-June 2	2011) and period 2 (Jan	uary-June 2010)					
Dep. variable	Attendance rate	EP group loyalty	National party loyalty	Questions	Motions	Speeches				
Treatment	-0.535	0.170	-0.148	0.657	0.154	1.243				
	(1.054)	(0.317)	(0.224)	(1.405)	(0.476)	(2.128)				
Constant	3.653***	0.259*	0.275***	5.629***	2.005***	10.647***				
	(0.526)	(0.158)	(0.112)	(0.702)	(0.238)	(1.063)				
N	729	699	717	729	729	729				
R-squared	0.0004	0.0004	0.001	0.0003	0.001	0.0001				

Table 3: Analysis of Difference-in-Differences, With Electoral System Interactions

	Difference l	between period	l 4 (January-Jun	e <b>2011) and pe</b> ri	od 3 (July-Dece	mber 2010)
Dep. variable	Attendance rate	EP group loyalty	National party loyalty	Questions	Motions	Speeches
Treatment	-0.650	-0.128	-0.206	1.478	0.309	1.562
	(1.141)	(0.316)	(0.199)	(1.653)	(0.541)	(1.926)
Open ballot	-2.167	-0.799**	-0.045	-3.785**	-0.061	2.672
system	(1.343)	(0.365)	(0.238)	(1.945)	(0.637)	(2.266)
Treatment*	0.107	0.647	0.177	1.279	0.293	-0.414
Open ballot	(2.589)	(0.709)	(0.456)	(3.748)	(1.228)	(4.367)
District	-0.019	-0.007*	-0.003	-0.032	-0.003	-0.067***
magnitude	(0.015)	(0.004)	(0.003)	(0.022)	(0.007)	(0.025)
Constant	2.806***	0.411**	0.176	4.885***	2.689***	10.648***
	(0.735)	(0.204)	(0.129)	(1.065)	(0.349)	(1.240)
N	732	703	720	732	732	732
R-squared	0.006	0.009	0.004	0.004	0.001	0.016
	Difference	between perio	d 4 (January-Jui	ne 2011) and per	iod 2 (January-	June 2010)
Dep. variable	Attendance rate	EP group loyalty	National party	Questions	Motions	Speeches

	Difference	between perio	d 4 (January-Jui	ne 2011) and per	iod 2 (January-	June 2010)
Dep. variable	Attendance rate	EP group loyalty	National party loyalty	Questions	Motions	Speeches
Treatment	-0.012	0.138	-0.047	1.278	0.219	1.345
	(1.172)	(0.354)	(0.250)	(1.561)	(0.531)	(2.353)
Open ballot	1.168	-0.681*	-0.007	4.012**	0.780	5.376**
system	(1.380)	(0.409)	(0.298)	(1.839)	(0.625)	(2.772)
Treatment*	-2.681	0.195	-0.517	-3.350	-0.369	-0.757
Open ballot	(2.655)	(0.792)	(0.571)	(3.536)	(1.202)	(5.330)
District	-0.031**	-0.007*	-0.003	-0.026	-0.004	-0.079**
magnitude	(0.015)	(0.005)	(0.003)	(0.021)	(0.007)	(0.031)
Constant	4.902***	0.600***	0.355**	5.592***	1.976***	11.813***
	(0.905)	(0.228)	(0.161)	(1.003)	(0.341)	(1.512)
N	729	699	717	729	729	729
R-squared	0.009	0.007	0.003	0.006	0.004	0.021

Table 4: Analysis of Difference-in-Differences by Political Group

#### 4.A. Differences between period 4 (January-June 2011) and period 3 (July-December 2010)

Pol. group	EPP	S&D	ALDE	G/EFA	ECR	EUL-NGL	EFD
Dep. variable			A	ttendance ra	te		
Treatment	1.419	-1.226	-8.201***	-0.257	-2.282	4.151	4.454
	(1.633)	(1.963)	(3.255)	(3.170)	(3.228)	(5.743)	(6.372)
Constant	-0.062	1.795*	4.092***	3.872**	3.940**	6.168**	4.732
	(0.814)	(0.968)	(1.618)	(1.600)	(1.614)	(2.955)	(3.307)
N	258	181	85	55	56	34	26
R-squared	0.003	0.002	0.071	0.0001	0.009	0.016	0.020
Dep. variable			Ε	P group loyal	ty		
Treatment	-0.278	0.005	1.107*	0.461	0.883	-1.447	-2.060
	(0.273)	(0.365)	(0.699)	(0.694)	(1.031)	(2.097)	(2.824)
Constant	0.170	-1.346***	2.380***	0.104	3.307***	-2.033*	-1.854
	(0.136)	(0.180)	(0.348)	(0.350)	(0.515)	(1.079)	(1.465)
N	257	181	85	55	56	34	26
R-squared	0.004	0.0000	0.029	0.008	0.013	0.015	0.022
Dep. variable			Nati	ional party lo	yalty		
Treatment	-0.277	0.256	-0.060	-0.246	0.352	-1.525**	-0.037
	(0.245)	(0.277)	(0.373)	(0.416)	(0.718)	(0.660)	(0.940)
Constant	0.093	-0.469***	0.523***	0.502**	0.589*	-0.307	0.410
	(0.122)	(0.137)	(0.187)	(0.210)	(0.359)	(0.340)	(0.486)
N	257	180	83	55	56	34	26
R-squared	0.005	0.005	0.0003	0.007	0.004	0.143	0.0001
Dep. variable				Questions			
Treatment	2.247	0.841	3.653*	-3.476	1.286	-5.196	13.308
	(2.908)	(1.046)	(2.385)	(2.959)	(2.858)	(3.870)	(22.978)
Constant	0.722	2.591***	5.109***	4.976***	4.643***	8.640***	13.263
	(1.448)	(0.516)	(1.185)	(1.493)	(1.429)	(1.991)	(11.922)
N	258	181	85	55	56	34	26
R-squared	0.002	0.004	0.028	0.025	0.004	0.053	0.014
Dep. variable				Motions			
Treatment	-0.166	0.552	0.972	-0.242	2.357	-0.787	0.917
	(0.875)	(0.587)	(1.846)	(2.322)	(2,213)	(1.681)	(1.028)
Constant	3.026***	1.175***	3.266***	4.171***	3.786***	4.120***	1.368**
	(0.436)	(0.290)	(0.918)	(1.172)	(1.106)	(0.865)	(0.534)
N	258	181	85	55	56	34	26
R-squared	0.0001	0.005	0.003	0.0002	0.021	0.007	0.032
Dep. variable				Speeches			
Treatment	-1.403	10.294***	2.108	-2.845	2.286	-9.298	4.759
	(2.828)	(3.647)	(2.441)	(4.205)	(2.363)	(13.628)	(17.648)
Constant	10.340***	6.956***	6.797***	6.488***	6.286	16.520**	25.526***
	(1.409)	(1.798)	(1.213)	(2.121)	(1.182)	(7.011)	(9.157)
N	258	181	85	55	56	34	26
R-squared	0.001	0.043	0.009	0.009	0.017	0.014	0.003

4.B. Differences between period 4 (January-June 2011) and period 2 (January-June 2010)

Pol. group	EPP	S&D	ALDE	G/EFA	ECR	EUL-NGL	EFD
Dep. variable			Α	ttendance ra	te		
Treatment	1.780	-4.030**	-7.907**	4.768*	0.937	6.471	7.131
	(1.770)	(1.821)	(3.226)	(3.173)	(3.740)	(5.408)	(6.579)
Constant	2.281***	3.624***	5.699***	3.458**	8.248***	5.647**	3.941
	(0.877)	(0.900)	(1.613)	(1.601)	(1.870)	(2.783)	(3.414)
N	257	180	84	55	56	34	26
R-squared	0.004	0.027	0.068	0.041	0.001	0.043	0.047
Dep. variable			Ε	P group loyal	ty		
Treatment	-0.168	-0.136	0.733	0.034	2.086	-1.081	-0.489
	(0.284)	(0.523)	(0.898)	(1.558)	(1.558)	(1.740)	(2.550)
Constant	-0.505***	-0.622**	0.462	-0.634*	4.323***	-2.688***	2.076*
	(0.141)	(0.259)	(0.449)	(0.354)	(0.779)	(0.895)	(1.323)
N	256	179	84	55	56	34	26
R-squared	0.001	0.0004	0.008	0.0000	0.032	0.012	0.002
Dep. variable			Nati	onal party lo	yalty		
Treatment	-0.147	-0.057	0.478	-0.235	0.668	-0.596	0.653
	(0.242)	(0.278)	(0.521)	(0.181)	(0.818)	(0.667)	(0.562)
Constant	0.367***	-0.026	0.219	0.069	1.165***	-0.689**	0.322
	(0.120)	(0.138)	(0.264)	(0.091)	(0.409)	(0.343)	(0.292)
N	256	179	82	55	56	34	26
R-squared	0.002	0.0002	0.010	0.031	0.012	0.024	0.053
Dep. variable				Questions			
Treatment	-1.413	2.559**	3.286	-2.923	3.881	-4.480	1.602
	(1.527)	(1.010)	(2.443)	(3.629)	(3.405)	(6.473)	(28.926)
Constant	4.206***	2.691***	7.095***	6.780***	4.690***	9.480***	29.684*
	(0.756)	(0.500)	(1.222)	(1.831)	(1.703)	(3.330)	(15.009)
N	257	180	84	55	56	34	26
R-squared	0.003	0.035	0.022	0.012	0.024	0.015	0.0001
Dep. variable				Motions			
Treatment	-0.521	0.211	0.571	1.411	2.477	-1.613	0.722
	(0.772)	(0.567)	(2.352)	(1.972)	(2.016)	(1.306)	(1.003)
Constant	2.108***	0.971***	4.619***	2,732***	1.952*	2.280	0.421
	(0.382)	(0.280)	(1.176)	(0.995)	(1.008)	(0.672)	(0.520)
N	257	180	84	55	56	34	26
R-squared	0.002	0.001	0.001	0.010	0.009	0.046	0.021
Dep. variable				Speeches			
Treatment	-2.979	11.600**	1.222	-3.784	1.786	-9.698	5.887
	(3.674)	(4.847)	(2.863)	(4.829)	(2.075)	(15.015)	(17.893)
Constant	12.407***	8.059***	8.016***	6.927***	4.857***	18.920**	25.684***
	(1.819)	(2.396)	(1.432)	(2.437)	(1.037)	(7.725)	(9.284)
N	257	180	84	55	56	34	26
R-squared	0.003	0.018	0.002	0.012	0.014	0.013	0.005

Table 5: Analysis of Difference-in-Differences by Member State

#### 5.A. Differences between period 4 (January-June 2011) and period 3 (July-December 2010)

Dep. variable				Attendance rate	<u> </u>	
Mem.state	Greece	Hungary	UK			
Treatment	14.933**	-10.284**	-5.612*			
rreatment	(5.840)	(4.815)	(3.473)			
Constant	1.637	3.116	5.612***			
<b>3</b> 01.3tat	(3.050)	(2.295)	(1.737)			
N	22	22	72			
R-squared	0.246	0.186	0.036			
Dep. variable				EP group loyalt	у	
Mem.state	Denmark	Lithuania				
Treatment	5.484*	-3.883**				
	(2.561)	(1.647)				
Constant	-0.567	0.960				
	(1.421)	(0.824)				
N	13	12				
R-squared	0.294	0.357				
Dep. variable				lational party loy	alty	
Mem.state	Denmark	Lithuania	Luxembourg	Netherlands	Spain	
Treatment	-0.466**	-2.127***	-2.164***	-0.619*	-0.588**	
	(0.190)	(0.680)	(0.366)	(0.377)	(0.293)	
Constant	-0.041	0.413	-0.126	0.033	0.261*	
	(0.106)	(0.340)	(0.150)	(0.199)	(0.145)	
N	13	12	6	25	49	
R-squared	0.353	0.495	0.897	0.105	0.079	
Dep. variable				Questions		
Mem.state	Belgium	Bulgaria	Poland	Portugal	Romania	
Treatment	12.764*	-4.385*	2.732*	-15.729**	4.860*	
	(7.343)	(2.225)	(1.655)	(7.466)	(3.210)	
Constant	5.235	4.385***	1.184	7.063*	0.640	
	(3.501)	(1.079)	(0.810)	(3.899)	(1.580)	
N	22	17	50	22	33	
R-squared	0.131	0.206	0.054	0.182	0.069	
Dep. variable				Motions		
Mem.state	Bulgaria	UK				
Treatment	2.808*	2.907**				
	(1.733)	(1.351)				
Constant	0.692	1.315				
	(0.841)	(0.675)				
N	17	72				
R-squared	0.149	0.062				
Dep. variable				Speeches		
Mem.state	Malta	UK				
Treatment	12.333**	12.574**				
	(3.752)	(6.265)				
Constant	2.667	7.593**				
	(2.373)	(3.132)				
N	5	72				
R-squared	0.783	0.054				

Note: The baseline in all models is the Control Group. Estimated by OLS regression. Standard errors in parentheses. \*  $p \le .10$ , \*\*  $p \le .05$ , \*\*\*  $p \le .01$ . Only significant results reported.

#### 5.B. Differences between period 4 (January-June 2011) and period 2 (January-June 2010)

Dep. variable				Attendance rate	·	
Mem.state	Latvia					
Treatment	23.068**					
	(8.574)					
Constant	-2.578					
	(4.287)					
N	8					
R-squared	0.547					
Dep. variable				EP group loyalty	,	
Mem.state	Denmark					
Treatment	5.778*					
	(3.618)					
Constant	0.239					
	(2.007)					
N	13					
R-squared	0.188					
Dep. variable			ı	National party loyo	alty	
Mem.state	Denmark	Finland	Lithuania	Luxembourg	•	
Treatment	-0.696*	-1.821*	-1.432***	-2.992***		
	(0.351)	(0.877)	(0.405)	(0.694)		
Constant	0.123	0.719	0.266	-0.268		
	(0.195)	(0.506)	(0.202)	(0.283)		
N	13	12	12	6		
R-squared	0.263	0.301	0.556	0.823		
Dep. variable				Questions		
Mem.state	Belgium	Bulgaria	Poland	Romania	Sweden	
Treatment	15.988**	-5.519*	3.254**	6.520*	2.321*	
Treatment	(6.512)	(3.245)	(1.460)	(3.665)	(1.501)	
Constant	4.412	6.769***	-0.421	0.480	0.429	
<b>C</b> 01.3tut	(3.105)	(1.573)	(0.715)	(1.805)	(0.708)	
N	22	17	50	33	18	
R-squared	0.232	0.162	0.094	0.093	0.130	
Dep. variable				Motions		
Mem.state	Ireland	Latvia		Wictions		
Treatment	3.833*	5.667***				
rreatment	(2.331)	(1.540)				
Constant	-0.500	0.333				
	(1.217)	(0.770)				
N	11	8				
R-squared	0.231	0.693				
Dep. variable				Speeches		
Mem.state	Cyprus	Malta	Romania	UK		
Treatment	5.500*	16.167**	-6.730*	15.926**		
HEALINGIIL	(2.391)	(5.142)	(4.207)	(7.933)		
Constant	3.000*	-1.667	12.480***	6.574*		
Constant	(1.381)	(3.252)	(2.072)	(3.967)		
N	6	5	33	72		
R-squared	0.569	0.767	0.076	0.054		
squareu	0.505	0.707	0.070	0.054		

Note: The baseline in all models is the Control Group. Estimated by OLS regression. Standard errors in parentheses. \*  $p \le .10$ , \*\*  $p \le .05$ , \*\*\*  $p \le .01$ . Only significant results reported.

## Appendix

**Table A1: Descriptive Analysis of Treatment and Control Groups** 

		Treatme	nt group			Contro	l group			
Other variables	Mean	SD	Min	Max	Mean	SD	Min	Max	t-stat F	Pr( T > t )
Female	0.332	0.035	0	1	0.325	0.020	0	1	-0.167	0.868
Re-elected in 2009	0.511	0.037	0	1	0.472	0.021	0	1	-0.916	0.360
EPP group	0.347	0.035	0	1	0.352	0.020	0	1	0.105	0.917
S&D group	0.239	0.032	0	1	0.250	0.018	0	1	0.308	0.758
ALDE group	0.114	0.024	0	1	0.116	0.014	0	1	0.074	0.941
G/EFA group	0.076	0.020	0	1	0.074	0.011	0	1	-0.075	0.940
ECR group	0.076	0.196	0	1	0.076	0.011	0	1	0.006	0.995
EUL-NGL group	0.049	0.016	0	1	0.045	0.009	0	1	-0.198	0.843
EFD group	0.038	0.014	0	1	0.034	0.008	0	1	-0.226	0.821
non-attached	0.043	0.015	0	1	0.038	0.008	0	1	-0.323	0.747
Austria	0.022	0.011	0	1	0.024	0.006	0	1	0.145	0.885
Belgium	0.027	0.012	0	1	0.031	0.007	0	1	0.253	0.800
Bulgaria	0.022	0.011	0	1	0.024	0.006	0	1	0.145	0.885
Cyprus	0.011	0.008	0	1	0.007	0.004	0	1	-0.471	0.638
Czech Republic	0.027	0.012	0	1	0.031	0.007	0	1	0.253	0.800
Denmark	0.022	0.011	0	1	0.016	0.005	0	1	-0.481	0.631
Estonia	0.005	0.005	0	1	0.009	0.004	0	1	0.475	0.635
Finland	0.022	0.011	0	1	0.016	0.005	0	1	-0.481	0.631
France	0.098	0.022	0	1	0.098	0.013	0	1	0.007	0.994
Germany	0.136	0.025	0	1	0.134	0.015	0	1	-0.054	0.957
Greece	0.033	0.013	0	1	0.029	0.007	0	1	-0.246	0.806
Hungary	0.027	0.012	0	1	0.031	0.007	0	1	0.253	0.800
Ireland	0.016	0.009	0	1	0.016	0.005	0	1	0.003	0.998
Italy	0.098	0.022	0	1	0.098	0.013	0	1	0.007	0.994
Latvia	0.011	0.008	0	1	0.011	0.004	0	1	0.002	0.998
Lithuania	0.016	0.009	0	1	0.016	0.005	0	1	0.003	0.998
Luxembourg	0.005	0.005	0	1	0.009	0.004	0	1	0.475	0.635
Malta	0.011	0.008	0	1	0.005	0.003	0	1	-0.774	0.439
Netherlands	0.038	0.014	0	1	0.033	0.008	0	1	-0.348	0.728
Poland	0.065	0.018	0	1	0.069	0.011	0	1	0.175	0.861
Portugal	0.033	0.013	0	1	0.029	0.007	0	1	-0.246	0.806
Romania	0.043	0.015	0	1	0.045	0.009	0	1	0.107	0.915
Slovakia	0.016	0.009	0	1	0.018	0.006	0	1	0.164	0.870
Slovenia	0.011	0.008	0	1	0.009	0.004	0	1	-0.217	0.828
Spain	0.065	0.018	0	1	0.067	0.011	0	1	0.091	0.928
Sweden	0.022	0.011	0	1	0.025	0.007	0	1	0.278	0.781
United Kingdom	0.098	0.022	0	1	0.098	0.013	0	1	0.007	0.994

**Table A2: Analysis of Difference-in-Differences of Large National Party Delegations** 

2.A. National Party Delegations – Attendance Rates

Delegation	Ger EPP	Ger S&D	Ger ALDE	Fra EPP	Fra S&D	Fra ALDE	UK ECR	UK S&D	UK ALDE
Dep. var.			A	Attendance ra	te, period 4	– period 3 dij	ference		
Treatment	5.182	-7.701*	4.894	5.182	1.516	-2.830	-2.461	0.482	-20.704**
	(5.208)	(4.328)	(6.333)	(3.801)	(2.997)	(5.175)	(4.926)	(7.913)	(8.745)
Constant	-4.110	2.346	-4.894	3.155	-2.109	3.725	5.238*	5.026	11.378**
	(2.541)	(2.211)	(3.166)	(1.826)	(1.387)	(2.988)	(2.367)	(4.390)	(4.373)
N	42	23	12	26	14	6	26	13	12
R-squared	0.024	0.131	0.056	0.072	0.021	0.070	0.010	0.0003	0.359
Dep. var.			A	Attendance ra	te, period 4	– period 2 dij	ference		
Treatment	4.126	-8.363**	-2.920	0.544	-3.793	-5.378	-3.289	-9.347	-4.932
	(4.937)	(3.660)	(8.653)	(3.183)	(4.985)	(7.443)	(6.014)	(7.177)	(6.865)
Constant	-2.267	5.031***	0.537	4.856**	1.890	10.023*	10.343***	13.031***	5.139
	(2.409)	(1.869)	(4.326)	(1.529)	(2.308)	(4.297)	(2.889)	(3.981)	(3.432)
N	42	23	12	26	14	6	26	13	12
R-squared	0.017	0.199	0.011	0.001	0.046	0.115	0.012	0.134	0.049
Delegation	Ita	Ita	Ita	Pol	Pol	Pol	Spa	Spa	
Delegation	EPP	S&D	ALDE	EPP	S&D	ECR	EPP	S&D	
Dep. var.			F	Attendance ra	te, period 4	– period 3 dij	ference		
Treatment	2.784	6.358	-28.390	-9.127*	9.946	2.381	-5.192	0.0793	
	(5.419)	(4.991)	(23.371)	(3.963)	(6.835)	(5.519)	(5.330)	(4.587)	
Constant	-0.667	-1.118	3.390	2.085	-0.716	-0.001	3.010	2.541	
	(2.788)	(2.379)	(13.494)	(2.297)	(3.653)	(2.850)	(2.722)	(2.294)	
N	34	22	6	28	7	15	23	20	
R-squared	0.008	0.075	0.087	0.081	0.157	0.014	0.043	0.0000	
Dep. var.			A	Attendance ra	te, period 4	– period 2 dij	ference		
Treatment	-2.982	4.957	-27.365	-6.588	-4.533	2.590	-4.509	-6.232	
	(5.182)	(8.304)	(20.820)	(5.474)	(5.843)	(5.757)	(4.659)	(4.526)	
Constant	7.616**	0.487	5.485	2.095	-0.822	2.565	1.824	2.536	
	(2.666)	(3.959)	(12.021)	(2.534)	(3.123)	(2.973)	(2.380)	(2.322)	
N	34	22	6	28	7	15	23	19	
R-squared	0.010	0.018	0.127	0.053	0.107	0.015	0.043	0.100	

2.B. National Party Delegations – EP Group Loyalty

Ger	Ger	Ger	Fra	Fra	Fra	UK	UK	UK
EPP	S&D	ALDE	EPP	S&D	ALDE	ECR	S&D	ALDE
		EP	group loyalty	, period 4 – pe	eriod 3 differe	ence		
0.119	-0.454	1.047	-0.104	0.602	-1.270	-0.718	2.602	0.230
(0.524)	(0.811)	(1.657)	(0.598)	(0.648)	(0.782)	(1.414)	(1.885)	(1.611)
-0.001	-0.712*	3.053***	0.376	-2.001***	2.240***	3.403***	-1.139	5.613***
(0.255)	(0.414)	(0.828)	(0.287)	(0.300)	(0.451)	(0.679)	(1.046)	(0.805)
42	23	12	26	14	6	26	13	12
0.001	0.015	0.038	0.001	0.067	0.247	0.011	0.070	0.002
		EP	group loyalty	, period 4 – pe	eriod 2 differe	ence		
-0.111	-0.576	1.757	-0.822	-0.006	2.238	0.784 (1.057)	3.444**	-0.850
(0.417)	(0.936)	(1.469)	(0.766)	(0.628)	(1.835)		(1.484)	(3.610)
0.276	-0.081	-0.270	(0.368)	-2.87/***	-1.298	6.755***	-8.549***	2.777
(0.203)	(0.478)	(0.734)		(0.291)	(1.059)	(0.508)	(0.823)	(1.805)
42	23	12	26	14	6	26	13	12
0.002	0.018	0.038	0.006	0.0000	0.089	0.022	0.268	0.006
lta	Ita	Ita	Pol	Pol	Pol	Spa	Spa	
EPP	S&D	ALDE	EPP	S&D	ECR	EPP	S&D	
-0.654	1.074	-0.055	-0.441	-1.728	0.779	-0.925*	-0.020	
(0.648)	(1.238)	(3.625)	(0.657)	(1.704)	(1.813)	(0.593)	(0.560)	
1.033***	-2.014***	1.875	1.211***	-0.012	4.131***	-0.359	-0.834***	
(0.334)	(0.590)	(2.092)	(0.310)	(0.911)	(0936)	(0.303)	(-0.280)	
34	22	6	27	7	15	23	20	
0.031	0.036	0.0001	0.018	0.171	0.014	0.061	0.0001	
		EP	group loyalty	, period 4 – pe	eriod 2 differe	ence		
-0.645	0.768	-1.625	-0.175	0.243	1.436	-0.064	0.400	
(0.764)	(0.979)	(4.028)	(0.629)	(2.034)	(1.604)	(0.420)	(0.538)	
-0.784*	1.510***	0.650	0.330	-0.838	-1.238	0.029	0.296	
(0.393)	(0.467)	(2.326)	(0.296)	(1.087)	(0.828)	(0.214)	(0.276)	
34	22	6	27	7	15	23	19	
0.022	0.030	0.039	0.003	0.003	0.058	0.001	0.031	
	0.119 (0.524) -0.001 (0.255) 42 0.001  -0.111 (0.417) 0.276 (0.203) 42 0.002  Ita EPP  -0.654 (0.648) 1.033*** (0.334) 34 0.031  -0.645 (0.764) -0.784* (0.393) 34	Color	EPP         S&D         ALDE           0.119         -0.454         1.047           (0.524)         (0.811)         (1.657)           -0.001         -0.712*         3.053***           (0.255)         (0.414)         (0.828)           42         23         12           0.001         0.015         0.038           EP           -0.111         -0.576         1.757           (0.417)         (0.936)         (1.469)           0.276         -0.081         -0.270           (0.203)         (0.478)         (0.734)           42         23         12           0.002         0.018         0.038           Ita         Ita         Ita           EPP         S&D         ALDE           EP           -0.654         1.074         -0.055           (0.648)         (1.238)         (3.625)           1.033***         -2.014***         1.875           (0.334)         (0.590)         (2.092)           34         22         6           0.031         0.036         0.0001           EP           <	EPP         S&D         ALDE         EPP           0.119         -0.454         1.047         -0.104           (0.524)         (0.811)         (1.657)         (0.598)           -0.001         -0.712*         3.053***         0.376           (0.255)         (0.414)         (0.828)         (0.287)           42         23         12         26           0.001         0.015         0.038         0.001           EP group loyalty           -0.111         -0.576         1.757         -0.822           (0.417)         (0.936)         (1.469)         (0.766)           0.276         -0.081         -0.270         2.259***           (0.203)         (0.478)         (0.734)         (0.368)           42         23         12         26           0.002         0.018         0.038         0.006           Ita Ita Ita Pol Repp swp loyalty           -0.654         1.074         -0.055         -0.441           (0.648)         (1.238)         (3.625)         (0.657)           1.033***         -2.014***         1.875         1.211***           (0.334)         (0.590)         (2.092)	EPP         S&D         ALDE         EPP voluployalty, period 4 − period 4 − period (0.524)           0.119         -0.454         1.047         -0.104         0.602           (0.524)         (0.811)         (1.657)         (0.598)         (0.648)           -0.001         -0.712*         3.053***         0.376         -2.001****           (0.255)         (0.414)         (0.828)         (0.287)         (0.300)           42         23         12         26         14           0.001         0.015         0.038         0.001         0.067           EP group loyalty, period 4 − period 4 − period (0.417)           (0.936)         (1.469)         (0.766)         (0.628)           0.276         -0.081         -0.270         2.259***         -2.877****           (0.203)         (0.478)         (0.734)         (0.368)         (0.291)           42         23         12         26         14           0.002         0.018         0.038         0.006         0.0000           Ita Ita Pol Pol S&D           EPP         S&D         ALDE         EPP         S&D           -0.654         1.074         -0.055         -0.441	EPP         S&D         ALDE         EPP volvolvy, period 4 − period 3 difference           0.119         -0.454         1.047         -0.104         0.602         -1.270           (0.524)         (0.811)         (1.657)         (0.598)         (0.648)         (0.782)           -0.001         -0.712*         3.053***         0.376         -2.001***         2.240****           (0.255)         (0.414)         (0.828)         (0.287)         (0.300)         (0.451)           42         23         12         26         14         6           0.001         0.015         0.038         0.001         0.067         0.247           EP group loyalty, period 4 – period 2 difference           -0.111         -0.576         1.757         -0.822         -0.006         2.238           (0.417)         (0.936)         (1.469)         (0.766)         (0.628)         (1.835)           0.276         -0.081         -0.270         2.259***         -2.877***         -1.298           (0.203)         (0.478)         (0.734)         (0.368)         (0.291)         (1.059)           42         23         12         26         14         6           0.002	EPP         S&D         ALDE         EPP wolvalty, period 4 − period 3 differential (0.524)         1.047         −0.104         0.602         −1.270         −0.718           (0.524)         (0.811)         (1.657)         (0.598)         (0.648)         (0.782)         (1.414)           -0.001         −0.712*         3.053***         0.376         −2.001***         2.240***         3.403***           (0.255)         (0.414)         (0.828)         (0.287)         (0.300)         (0.451)         (0.679)           42         23         12         26         14         6         26           0.001         0.015         0.038         0.001         0.067         0.247         0.011           EP group loyalty period 4 – period 2 different           -0.111         -0.576         1.757         -0.822         -0.006         2.238         0.784           (0.417)         (0.936)         (1.469)         (0.766)         (0.628)         (1.835)         (1.057)           0.276         -0.081         -0.270         2.259****         -2.877****         -1.298         6.755****           (0.203)         (0.478)         (0.734)         (0.368)         (0.291)         (1.059)         (0.508)<	Part

### 2.C. National Party Delegations – National Party Loyalty

Delegation	Ger EPP	Ger S&D	Ger ALDE	Fra EPP	Fra S&D	Fra ALDE	UK ECR	UK S&D	UK ALDE
Dep. var.	LFF	300		al party loya				300	ALDL
Treatment	-0.226	-0.341	0.598	0.940*	0.251	-1.560	0.252	1.097	-0.026
	(0.491)	(0.686)	(0.895)	(0.461)	(0.719)	(0.902)	(1.167)	(1.258)	(0.323)
Constant	-0.409*	-0.438	-0.054	-0.275	-0.081	0.175	0.642	-0.944	0.756***
	(0.240)	(0.350)	(0.447)	(0.222)	(0.333)	(0.521)	(0.560)	(0.698)	(0.161)
N	42	23	12	26	14	6	26	13	12
R-squared	0.005	0.012	0.043	0.148	0.010	0.428	0.002	0.065	0.001
Dep. var.			Nation	al party loya	lty, period 4 -	period 2 dif	ference		
Treatment	-0.443	-0.438	1.021	1.527**	0.028	0.480	1.431	1.778	1.429
	(0.433)	(0.911)	(0.711)	(0.688)	(0.492)	(2.944)	(1.145)	(1.306)	(1.378)
Constant	0.490**	-0.059	-0.494	0.435	0.358*	-1.310	1.352**	-1.316*	0.471
	(0.211)	(0.466)	(0.355)	(0.331)	(0.228)	(1.700)	(0.550)	(0.724)	(0.689)
N	42	23	12	26	14	6	26	13	12
R-squared	0.026	0.011	0.171	0.136	0.0003	0.007	0.061	0.144	0.007
Delegation	Ita	Ita	Ita	Pol	Pol	Pol	Spa	Spa	
	EPP	S&D	ALDE	EPP	S&D	ECR	EPP	S&D	
Dep. var.			Nation	al party loya	lty, period 4	– period 3 dif	ference		
Treatment	0.106	1.574	0.538	-0.645	-1.449	1.529	-0.732	-0.582*	
	(0.856)	(1.313)	(2.326)	(0.644)	(1.513)	(1.713)	(0.527)	(0.360)	
Constant	0.090	-0.678	3.768**	0.437	-0.296	0.376	0.481*	0.100	
-	(0.441)	(0.626)	(1.343)	(0.306)	(0.809)	(0.885)	(0.269)	(0.180)	
N	34	22	6	27	7	15	23	20	
R-squared	0.001	0.067	0.013	0.0002	0.155	0.058	0.084	0.078	
Dep. var.			Nation	al party loya	lty, period 4 -	- period 2 dif	ference		
Treatment	-0.745	0.101	0.120	-0.168	-0.264	-0.267	-0.136	0.093	
	(1.006)	(1.104)	(3.926)	(0.685)	(1.633)	(1.120)	(0.487)	(0.415)	
Constant	0.103	0.087	4.390*	0.231	-0.326	0.275	0.233	0.143	
	(0.518)	(0.526)	(2.267)	(0.323)	(0.873)	(0.578)	(0.249)	(0.213)	
N	34	22	6	27	7	15	23	19	
R-squared	0.017	0.0004	0.0002	0.002	0.005	0.004	0.004	0.003	

#### 2.D. National Party Delegations – Questions

Delegation	Ger EPP	Ger S&D	Ger ALDE	Fra EPP	Fra S&D	Fra ALDE	UK ECR	UK S&D	UK ALDE
Dep. var.	Questions, period 4 – period 3 difference								
Treatment	-1.000	1.980	-0.111	-1.700	4.182	-6.500	-1.467	8.250	8.222
	(1.105)	(1.348)	(2.691)	(2.386)	(3.298)	(6.192)	(5.332)	(6.489)	(9.342)
Constant	2.000***	0.353	1.111	3.200***	3.818**	10.000**	8.300***	2.000	7.778
	(0.539)	(.688)	(1.345)	(1.146)	(1.527)	(3.575)	(2.561)	(3.600)	(4.671)
N	42	23	12	26	14	6	26	13	12
R-squared	0.020	0.093	0.0002	0.021	0.045	0.020	0.003	0.049	0.072
Dep. var.			(	Questions, pe	riod 4 – perio	od 2 differenc	re e		
Treatment	-1.763	2.069	6.111**	-2.417	6.576*	-6.250	1.150	4.833	8.556
	(1.247)	(1.285)	(2.118)	(3.089)	(3.087)	(7.584)	(6.450)	(5.134)	(7.022)
Constant	3.063***	0.765	1.889*	2.250	2.091	9.250*	9.350***	6.667**	7.111*
	(0.609)	(0.657)	(1.059)	(1.484)	(1.429)	(4.379)	(2.098)	(2.848)	(3.511)
N	42	23	12	26	14	6	26	13	12
R-squared	0.048	0.110	0.454	0.025	0.274	0.145	0.001	0.075	0.129
Delegation	Ita	Ita	Ita	Pol	Pol	Pol	Spa	Spa	
	EPP	S&D	ALDE	EPP	S&D	ECR	EPP	S&D	
Dep. var.			(	Questions, pe	riod 4 – perio	od 3 differenc	e		
Treatment	5.418	-3.600*	-1.750	-1.409	1.000	9.932**	5.304*	-0.467	
	(11.809)	(1.987)	(13.380)	(1.510)	(1.755)	(3.994)	(2.859)	(2.033)	
Constant	-2.640	7.000***	13.750	1.409**	1.000	0.818	-0.471	1.867	
	(6.076)	(0.947)	(7.725)	(0.699)	(0.938)	(2.053)	(1.460)	(1.016)	
N	34	22	6	28	7	15	23	20	
R-squared	0.007	0.141	0.004	0.032	0.061	0.322	0.100	0.003	
Dep. var.			(	Questions, pe	riod 4 – perio	od 2 differenc	æ		
Treatment	-3.037	-1.541	0.000	2.485	-2.000	6.818*	8.980**	-0.371	
	(3.146)	(2.435)	(7.056)	(1.720)	(1.296)	(3.341)	(3.639)	(2.138)	
Constant	12.640***	7.941***	13.500**	-0.818	0.000	0.182	-0.647	2.571**	
	(1.619)	(1.161)	(4.074)	(0.796)	(0.693)	(1.725)	(1.859)	(1.097)	
N	34	22	6	28	7	15	23	19	
R-squared	0.033	0.020	0.0000	0.074	0.323	0.243	0.225	0.002	

2.E. National Party Delegations – Motions

Delegation	Ger EPP	Ger S&D	Ger ALDE	Fra EPP	Fra S&D	Fra ALDE	UK ECR	UK S&D	UK ALDE	
Dep. var.		300	ALDL			d 3 difference	LCN	300	ALDL	
Treatment	-1.763	-0.265	-1.889	0.950	-2.939	14.250	4.150	8.833***	-1.556	
	(1.884)	(0.722)	(3.313)	(2.067)	(2.651)	(9.214)	(3.253)	(1.839)	(1.654)	
Constant	3.063***	0.765**	3.556*	1.550	3.273**	0.750	2.350	0.667	1.889**	
-	(0.919)	(0.369)	(1.656)	(0.969)	(1.227)	(5.319)	(1.563)	(1.020)	(0.827)	
N	42	23	12	26	14	6	26	13	12	
R-squared	0.021	0.006	0.032	0.009	0.093	0.374	0.064	0.677	0.081	
Dep. var.	Motions, period 4 – period 2 difference									
Treatment	-2.081	-0.686	-0.222	-0.383	-2.667	14.500	3.367	7.056**	-3.778	
	(1.926)	(0.811)	(4.140)	(2.141)	(2.953)	(10.509)	(3.017)	(2.670)	(3.583)	
Constant	2.281**	0.353	2.889	1.550	3.000**	1.500	1.800	-0.556	4.444**	
	(0.940)	(0.414)	(2.070)	(1.029)	(1.367)	(6.067)	(1.449)	(1.481)	(1.791)	
N	42	23	12	26	14	6	26	13	12	
R-squared	0.028	0.033	0.0003	0.001	0.064	0.323	0.049	0.388	0.100	
Delegation	Ita	Ita	lta	Pol	Pol	Pol	Spa	Spa		
	EPP	S&D	ALDE	EPP	S&D	ECR	EPP	S&D		
Dep. var.				Motions, per	iod 4 – perio	d 3 difference				
Treatment	3.956*	-1.200	-4.250	-2.697	-0.200	1.795	2.382	1.200		
	(2.127)	(1.350)	(4.797)	(3.718)	(2.077)	(5.063)	(2.086)	(1.021)		
Constant	1.600	1.000	7.250*	5.364***	1.200	8.455***	0.118	0.600		
	(1.094)	(0.644)	(2.770)	(1.721)	(1.110)	(2.614)	(1.065)	(0.511)		
N	34	22	6	28	7	15	23	20		
R-squared	0.098	0.038	0.164	0.020	0.002	0.010	0.059	0.071		
Dep. var.				Motions, per	iod 4 – perio	d 2 difference				
Treatment	2.542	-1.106	-3.500	-1.727	-2.600	0.614	2.010	0.671		
	(1.785)	(0.887)	(7.284)	(2.819)	(2.729)	(5.226)	(1.769)	(1.302)		
Constant	1.680*	1.706***	7.500	2.727**	1.600	3.636	-0.176	0.929		
	(0.919)	(0.423)	(4.206)	(1.305)	(1.459)	(2.698)	(0.903)	(0.668)		
N	34	22	6	28	7	15	23	19		
R-squared	0.060	0.072	0.055	0.014	0.154	0.001	0.058	0.015		

2.F. National Party Delegations – Speeches

Delegation	Ger EPP	Ger S&D	Ger ALDE	Fra EPP	Fra S&D	Fra ALDE	UK ECR	UK S&D	UK ALDE
Dep. var.	Speeches, period 4 – period 3 difference								
Treatment	-2.594	2.765	0.222	-0.700	10.879***	0.750	6.617**	38.028	14.889
	(2.595)	(1.804)	(3.152)	(4.294)	(3.402)	(9.173)	(3.146)	(28.997)	(11.502)
Constant	4.594***	1.235	4.778***	5.700***	2.455	10.250	6.050***	12.222	3.444
	(1.266)	(0.921)	(1.576)	(2.063)	(1.575)	(5.296)	(1.511)	(16.084)	(5.751)
N	42	23	12	26	14	6	26	13	12
R-squared	0.024	0.101	0.001	0.001	0.460	0.002	0.156	0.135	0.144
Dep. var.				Speeches, pe	riod 4 – perio	d 2 differenc	e		
Treatment	-0.369	0.069	-2.778	-5.767	8.364**	1.750	5.717*	55.000	11.222
	(3.241)	(1.690)	(4.888)	(5.320)	(2.964)	(11.753)	(3.079)	(38.517)	(7.722)
Constant	4.469***	1.765**	2.111	8.100***	2.636*	17.250*	4.450***	11.000	2.778
	(1.581)	(0.863)	(2.444)	(2.566)	(1.372)	(6.786)	(1.479)	(21.366)	(3.861)
N	42	23	12	26	14	6	26	13	12
R-squared	0.0003	0.0001	0.031	0.047	0.400	0.006	0.126	0.156	0.174
Delegation	Ita	Ita	Ita	Pol	Pol	Pol	Spa	Spa	
	EPP	S&D	ALDE	EPP	S&D	ECR	EPP	S&D	
Dep. var.				Speeches, pe	riod 4 – perio	d 3 differenc	e		
Treatment	-11.834	1.200	6.750	-3.985	11.300**	-1.705	-0.637	-1.467	
	(12.616)	(4.605)	(5.822)	(6.075)	(4.188)	(6.420)	(2.755)	(1.936)	
Constant	21.280***	3.000	0.250	10.318***	3.200	8.455**	2.471*	3.867***	
	(6.491)	(2.195)	(3.361)	(2.812)	(2.239)	(3.315)	(1.407)	(0.968)	
N	34	22	6	28	7	15	23	20	
R-squared	0.027	0.003	0.064	0.016	0.593	0.005	0.003	0.031	
Dep. var.				Speeches, pe	riod 4 – perio	d 2 differenc	e		
Treatment	-15.982	1.729	5.000	0.288	-1.100	1.409	-1.167	-1.757	
	(16.026)	(4.963)	(5.050)	(3.975)	(2.529)	(5.116)	(1.680)	(2.131)	
Constant	31.760***	4.471*	3.000	6.545***	4.600**	5.091*	1.000	1.357	
-	(8.245)	(2.366)	(2.915)	(1.840)	(1.352)	(2.642)	(0.858)	(1.093)	
N	34	22	6	28	7	15	23	22	
R-squared	0.030	0.006	0.197	0.0002	0.036	0.006	0.023	0.039	