

INTRA-PARTY POLITICS, COHESION, AND LEGISLATIVE GRIDLOCK

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ABSTRACT

Where the preferences of party members are more diffuse, it becomes more difficult for legislative party leaders to discipline their members, making agenda control a more attractive means of maintaining party cohesion on the legislative floor. Thus, when disciplinary resources are limited, increases in intra-party polarisation will increase the range of proposals blocked by party leaders. Using roll-call data and a new dataset of legislative ‘blocking’, I show that these relationships hold in the European Parliament, where agenda control and ‘carrot and stick’ disciplinary powers are held by different sets of parliamentary actors. These findings have implications for our understanding of European Parliament politics specifically, and for the relationship between intra-party dynamics and legislative gridlock more generally.

How do leaders of legislative parties control their members in roll-call votes? What are the consequences of such control for policy outcomes? Political parties are ubiquitous in democratic politics (Schattschneider, 1942; Aldrich, 1995), and a critical determinant of legislative party success is the degree to which party members vote cohesively in roll-call votes.¹ From an electoral perspective, parties that vote cohesively in legislative votes are more likely to develop a strong party brand which signals competence to voters (Cox and McCubbins, 1993, 2005). From a legislative perspective, by voting cohesively, parties can secure long-term policy bargains between party members (Weingast, 1979; Carrubba and Volden, 2000), induce other actors to make favourable proposals (Dewan and Spirling, 2011), and strengthen their leader's hand in intra-parliamentary bargaining by signalling strength and reliability to potential coalition partners (Bowler, Farrell and Katz, 1999).

When the preferences of party members diverge, leaders can use two broad strategies to compel their members to vote cohesively. On the one hand, party leaders can make use of traditional disciplinary tools to cajole legislators to toe the party line (Sieberer, 2006; Carey, 2007; Benedetto and Hix, 2007; Becher and Sieberer, 2008). Alternatively, leaders may strategically manipulate the legislative agenda to prevent divisive legislation from coming to the plenary floor (Rohde, 1991; Cox and McCubbins, 2005). However, identifying the effects of such 'negative' agenda control on party voting cohesion is empirically challenging, as the parties with strongest control over the parliamentary agenda also tend to be those endowed with a wide range of disciplinary resources. Although the dynamics of party behaviour within the legislature are interesting in their own right, distinguishing the effects of agenda control from those of discipline is also important because – as I argue below – the two mechanisms have different implications for legislative outcomes.

This paper considers the relationship between intra-party preference heterogeneity and negative agenda control in the legislature. I use a simple spatial framework, which builds on existing models of agenda-setting (Cox and McCubbins, 2005), to evaluate the effects of

¹I distinguish between cohesion (the frequency with which party members vote together), unity (the ideological similarity between party members), and discipline (the selective incentives used by a leader to enforce cohesion).

agenda control on both party voting cohesion and on the scope of the legislative agenda. I argue that when leaders are concerned with cohesion, they use their power over the agenda to block proposals which substantial minorities of their parties oppose. A desire for cohesion implies that leaders will be sensitive to the preferences of non-median party members, and will act to protect the interests of these members when deciding which proposals are to be considered on the house floor.

The model I describe results in two testable predictions. First, while existing studies focus on the importance of *inter-party* polarisation as a cause of gridlock (Bowling and Ferguson, 2001; Jones, 2001; Tsebelis, 2002; Chiou and Rothenberg, 2003; Binder, 2003; McCarty, 2007; Krehbiel, 2010), I highlight that when party leaders are concerned with maintaining high levels of voting cohesion, *intra-party* polarisation can also lead to significant restrictions on the scope of the legislative agenda. As leaders must satisfy non-median party members, the range of proposals blocked by the party leader will increase as party-member preferences become more diffuse. Second, while polarisation can have pernicious effects on party voting cohesion, this effect is mitigated when a party leader is able to manipulate the legislative agenda. Therefore, when traditional disciplinary mechanisms are unavailable, party leaders can use their control over the legislative agenda to buttress party voting cohesion in the face of intra-party ideological polarisation, but they do so at the potential cost of additional legislative gridlock.

I evaluate the predictions of the model in the setting of the European Parliament (EP), which provides three key advantages. First, traditional tools of party discipline and powers of agenda control are primarily controlled by different sets of political actors in the EP. Members of the European Parliament (MEPs) are affiliated with two parties – their national parties and their European Party Groups (EPGs). National parties control the most important disciplinary resources, and when the leadership of the national parties and the EPGs disagree, MEPs follow the instructions of the national group, causing EPG cohesion to decrease (Hix, 2001, 2004; Faas, 2003; Hix, Noury and Roland, 2005; Klüver and Spoon, 2013). However, I argue that under certain circumstances, it is the EPG leaders who con-

trol the legislative agenda. Specifically, when an EPG holds the median position in the Parliament’s central business-organising body – the Conference of Presidents – its leader is pivotal for agenda-setting decisions. Thus, when an EPG is median, it can manipulate the legislative agenda in order to overcome the collective action problem posed by divisive national parties. Accordingly, the distribution of powers between national and EPG leaders makes it possible to isolate the effects of agenda control on party cohesion.

Second, the absence of an electoral incentive for party cohesion in the EP also makes it possible to isolate a *legislative* incentive for party cohesion. European elections are generally considered to be ‘second order’ (Reif and Schmitt, 1980), with little connection between the actions of parties in the legislature and the behaviour of voters on election day. This implies that EPGs have little incentive to enforce cohesion in order to strengthen the party ‘brand’. Accordingly, evidence of cohesion-inducing behaviour of party group leaders suggests that incentives arising *within* the parliament are also fundamental to the organisation of legislative parties. The implication of this is that parties matter not only because they provide electoral benefits to politicians, but also because they help to solve collective-action problems inside the legislature.

Third, previous empirical work relies heavily on roll-call data to infer the strategic agenda-setting behaviour of party leaders (Cox and McCubbins, 2005; Gailmard and Jenkins, 2007; Anzia and Jackman, 2013; Jenkins and Monroe, 2015). The EP provides an excellent opportunity to *directly* observe instances of negative agenda control, as EPG leaders are able to remove proposals from the legislative agenda at specific points in the policy process, and parliamentary documents record which proposals are removed at these critical junctures. I introduce new data of all proposals considered by EPG leaders over a 10-year period, which enables me to measure the agenda-setting behaviour of party leaders in the EP. I use this data to relate the probability that a legislative proposal is blocked to the internal division of the agenda-setting party group over the issues contained in the proposal. To do so, I develop a novel text-classification procedure which matches party positioning data to legislative proposals in a more systematic fashion than has been possible

previously. I supplement this with a roll-call analysis which examines the consequences of blocking on the cohesion rates of EPGs in parliament. I show that when an EPG holds the median position in the Conference of Presidents, they are able to circumvent the problem of ideological disunity and maintain their high cohesion rates by preventing potentially divisive legislation from coming to the floor.

The paper proceeds as follows. First, I discuss the incentives and strategies that leaders have for maintaining cohesion in legislative votes, and I formalise the agenda-setting argument in the context of a simple spatial model. Second, I discuss the specific context of the EP and derive expectations for the blocking of legislation and the consequent implications for party cohesion. In the third section, I introduce the data and methodology for testing these implications, and in the fourth, I present results. A final section concludes.

THEORY

Why is cohesion a valuable good for party leaders? Many existing studies focus on the *electoral* benefits that cohesive parties offer to their members. For example, Cox and McCubbins (2005, 21) argue that party leaders are motivated by the desire to protect the party ‘brand’ in the eyes of the electorate, and that “a party’s reputation depends significantly on its record of legislative accomplishment.” Party leaders are therefore concerned with avoiding votes on which their party is likely to be defeated, in order to promote an image of legislative strength to voters. Legislative defeats may be especially damaging, but even non-decisive voting defections can have pernicious effects for a party’s electoral prospects when they are interpreted by the electorate as signs of weakness and incompetence. As Kam (2009, 9) argues, dissent from the party line “sends a signal of disunity and disorganisation to voters.” While legislative defeats may be seen as the apex of party leader ineptitude, defections themselves – even if they are not decisive – can nonetheless be damaging for party leaders.

However, in addition to any electoral efficiencies cohesive parties may bring, incentives arising *within the legislature* may also motivate leaders to take actions to maintain the voting cohesion of their parties. First, legislators have incentives to trade votes on issues

which they weakly oppose for the support of their co-partisans on issues that they strongly favour (Weingast, 1979; Weingast and Marshall, 1988; Koford, 1982; Carrubba and Volden, 2000). For example, consider two party members, i and j , who cast votes over policies p_i and p_j . Each legislator will always vote to approve ‘their’ policy, but voting to approve the other member’s policy is costly. Assume that party member i is pivotal on the vote to approve p_j , and j is pivotal for p_i . Assume also that the utility that i gains from the successful passage of p_i is greater than the costs she faces from voting for p_j , and *vice versa* for j .² With such a preference structure, it is clear that both i and j stand to benefit from trading votes – i and j both agree to vote for both proposals, guaranteeing positive payoffs for both members.

However, now assume that votes are taken sequentially, such that the vote on p_i occurs at t_1 and p_j occurs at t_2 . If member j votes to approve p_i at t_1 (which passes), member i no longer has an incentive to cast a costly ‘yea’ vote for p_j at t_2 . As Carrubba & Volden (2000, 264) suggest, the “first voter can vote with the coalition on his bill, and defect thereafter, thus gaining the benefit of receiving his own bill’s benefits while not having to pay for any other bills”. Thus, because votes on log-rolls are not concurrent, the promise by i to vote for p_j is not credible, and, realising this, j will therefore not vote for p_i in the first period. In short, absent some form of commitment-enforcing procedure, the log-roll will quickly unravel. Although both party members would be better off if they voted cohesively across *both* roll-call votes, each member has incentives to defect on *specific* votes on which they disagree with the other member’s position. Cohesion is therefore a valuable public good to all party members, but collective action problems that arise from the inability of legislators to commit to long-run voting strategies leads to an under-provision of cohesion. However, by delegating cohesion-inducing powers to a central party leadership, a party’s members can overcome these problems, and secure the benefits of cooperation.

Second, cohesive party voting may also be important for affecting the behaviour of other legislative actors. For example, Dewan and Spirling (2011) show that when an op-

²That is, the utility i receives for voting for the two policies is $U(p_i) > 0 > U(p_j)$ and $U(p_i) + U(p_j) > 0$, with j ’s preferences defined equivalently.

position party commits to voting cohesively, it can induce the governing party to make more moderate policy proposals which make all members of the opposition better off. The intuition behind this result is simple: by voting cohesively, an opposition party forces a (non-cohesive) governing party to make proposals that satisfy more moderate government members, thereby shifting policy in the direction of the opposition. Therefore, the ability to commit to cohesive voting strategies can lead to significant improvements in policy outcomes for a given party, even when that party does not hold a majority of seats in parliament.

Third, legislative policy outcomes often reflect the relative bargaining power of different parties, where party power is a function of legislative seats (Snyder Jr, Ting and Ansolabehere, 2005). While a party may hold a certain share of the seats in parliament, the party leader may not be able to credibly promise to deliver the equivalent number of votes on any particular proposal. If legislators vote against their party leaders, leading to a lack of cohesion, this reduces the effective voting weight of the party leader in intra-parliamentary bargaining (Fishburn and Gehrlein, 1985; Gehrlein and Fishburn, 1986). As Sieberer (2006, 171) argues, “expected defections from backbenchers might keep party leaders from forming minimum size coalitions which they would otherwise prefer.” Similarly, as interactions between parties within the legislature resemble a repeated game in which deals over policy must be struck on a regular basis, persistent defections might undermine the attractiveness of a party to potential coalition partners. As Bowler et al. (1999, 13) suggest, “political entrepreneurs, who are in the process of building coalitions, would rather not team up with unreliable partners.” Cohesive party voting therefore signals unity to other parliamentary actors and strengthens a leader’s hand in intra-parliamentary negotiations.

Finally, defections may signal deeper divisions within the party which a strategic leader would want to avoid. For example, defection in roll-call votes is a strong predictor of party switching (Heller and Mershon, 2009). When legislators consistently find themselves on the losing side of votes promoted by their party leaders, the probability that they will switch their allegiance to other parties increases, and this can have important implications

for their original party's control over important legislative offices. In many parliamentary settings legislative resources are apportioned according to group size (Carroll, Cox and Pachón, 2006),³ implying that if a dissatisfied legislator switches groups, the general legislative resources available to the party leadership decline. Party switching is a common phenomenon, both in the European Parliament, and in other legislative settings (Heller and Mershon, 2005; Desposato, 2006; Heller and Mershon, 2008; Benoit and McElroy, 2009), and to the extent that voting defections signal more profound party division, leaders in such settings will be motivated to limit defections.

These arguments suggest that party cohesion is likely to be valuable to party members because of the internal dynamics of parliamentary politics, rather than because legislators wish to secure a strong party 'brand' under which they can compete in future elections. Overall, however, whether for electoral or legislative reasons, party leaders should be expected to take actions that maintain the cohesion of their parties in legislative votes.⁴ As Bowler et al. (1999, 3) suggest, "the maintenance of a cohesive voting bloc inside a legislative body is a crucially important feature of parliamentary life." How, then, can party leaders ensure that their members vote cohesively in legislative votes?

If party members share sufficiently similar preferences, party cohesion will arise naturally, with little or no help from party leaders. Therefore, the observation of cohesive party voting in legislative roll-calls does not necessarily imply that parties are themselves empirically significant (Krehbiel, 1993). Several studies have shown the importance of homogenous legislator preferences for party cohesion (Skjæveland, 2001; Benedetto and Hix, 2007; Sieberer, 2006; Carey, 2007, 2009; Kam, 2009). However, when the ideological unity of a party declines, leaders can use two broad strategies to compel their members to vote cohesively.

First, leaders can use arsenals of incentives and punishments to change the cost-benefit calculation faced by individual legislators so that defection from the party line is more

³In the European Parliament, for example, committee chairs, seats, and rapporteurships are allocated according to the share of seats each party group holds in the parliament.

⁴I comment on the relevant incentives for party group leaders in the specific context of the European Parliament in the next section.

expensive, and loyalty is more rewarding. For example, the strategic use of career advancement can help cajole individual legislators to follow the party line (Bowler, Farrell and Katz, 1999; Benedetto and Hix, 2007; Becher and Sieberer, 2008; Kam, 2009). By attaching career advancement opportunities to voting behaviour, leaders increase the benefits of party loyalty, and off-set any costs legislators might incur from voting contrary to their own preferences. Additionally, a vote of confidence procedure can encourage party cohesion, as the long-term benefit of staying in power is tied to votes on which legislators face short-term policy losses (Diermeier and Feddersen, 1998). Furthermore, party leaders can impose formal (deselection, revocation of the party whip) or informal (social pressure) sanctions on individual legislators who contravene mandated party behaviour (Kam, 2009). The relative availability of these tools to party leaders will, in part, determine the degree to which ideologically heterogeneous parties vote cohesively.

Second, theories of agenda control (Rohde, 1991; Cox and McCubbins, 2005) focus on party leaders' ability to prevent certain proposals from being considered on the floor of the legislature. Rather than inducing their members to vote the party line, leaders can remove from consideration those bills that threaten to divide their parties. Strategic agenda control can help party leaders to maintain party cohesion in at least two obvious ways. First, when a party leader fears that there exist irreconcilable differences between two or more factions of her party on a given proposal, she can simply remove such a proposal indefinitely from the agenda and avoid the inevitable divisive vote on the house floor. Second, a party leader may choose to *temporarily* withhold a proposal from the plenary floor so as to secure more time to apply pressure to recalcitrant legislators, or to secure changes to the proposal that would make it less divisive to her membership. If some party members strongly desire the passage of a given proposal, delaying legislation may provide sufficient incentive for them to accept changes that would water down the proposal but secure the support of legislators who were previously opposed. A leader can thereby secure legislative compromises that satisfy a larger proportion of her party, and allow the proposal to pass on the floor of the house in a relatively cohesive party vote. Accordingly, even when party leaders cannot exercise

an absolute veto, control over the timing of legislative proposals can still be beneficial in terms of maintaining party cohesion.

How do these unity-providing strategies interact? When preference unity declines, party leaders should be expected to use *both* discipline and agenda control to maximise their chances of controlling cohesive voting blocs in the legislature. One way of conceptualising these different tools is as substitute goods. As Kam (2009, 210) puts it, “party leaders switch from costly or ineffective means of controlling their MPs to less costly and more effective methods.” Empirically, however, this presents a challenge, as it means that the effects of agenda control and discipline on cohesion are hard to disentangle, as both mechanisms often produce equivalent empirical predictions in terms of observed voting behaviour.⁵ In most national settings, governing parties typically control both the legislative agenda and the distribution of political offices that allow them to discipline their members. Thus, observing cohesive party voting of government parties does not help us to identify the effects of strategic agenda setting by party leaders.

Fortunately, the distribution of powers to different parliamentary actors in the EP allows us to isolate the effects of agenda-control on party cohesion. MEPs sit as members of European Party Groups (EPGs) – transnational party federations which are identified primarily by their ideological affiliations, rather than national allegiances. However, within each of these groups are clustered numerous national parties of which MEPs are also members. As described below, while national parties hold the most powerful disciplinary resources in the EP, agenda-setting power lies largely with the EPGs. In the empirical analysis, I exploit this structure to isolate the effects of agenda control on EPG cohesion.

Before turning to this analysis, however, I use a simple spatial model to clarify expectations about how changes in the ideological unity of a party will affect the agenda-setting decisions of party leaders. The intuition is simple: when the ideological unity of a party declines, and ‘carrot and stick’ mechanisms are in short supply, party leaders will use their

⁵An example of this empirical difficulty is demonstrated by the debate between Chandler, Cox and McCubbins (2006) and Honnige and Sieberer (2011) over the sources of party cohesion in the German Bundestag. See also Zubek (2011).

institutional prerogatives to restrict the plenary agenda and avoid votes on policy proposals which would divide their party members.

Consider a uni-dimensional policy space, j , on which legislators have single-peaked preferences, and where a policy proposal p_j is pitted against the status quo q_j . Proposals are considered under open amendment rules meaning that if p_j reaches the house floor it will always pass at the floor median position f_m at final passage. Our focus is on the agenda-setting party, x , which is constituted of N members who can be ordered by their ideal points on dimension j and are represented by the vector x_1, x_2, \dots, x_N . Denote the median member of party x on a given dimension as x_m . The leader of the party has negative agenda-setting power, such that proposals must be approved by the leader before they are considered by the house. As my interest is in isolating the effects of ideological disunity on agenda-setting, I assume that the party leader is not able to discipline her members: she cannot induce members to support a proposal that is further away from their ideal point than the status quo.

The leader of the agenda-setting party is concerned with protecting some arbitrary fraction of her party from being ‘rolled’ on the house floor. *Legislators* are rolled when they vote against a proposal, but the proposal is approved on the floor despite their opposition. As a minimum, a leader will always block proposals that threaten to ‘roll’ a majority of her party. A *party* is rolled when a proposal passes despite a majority of the party’s members voting against. Therefore, for a party with an odd number of N legislators, the minimum number of ‘aye’ voters a leader will tolerate is $\frac{N-1}{2} + 1$. That is, a leader will never permit legislation to be considered on the house floor unless at least a bare majority of her party prefer the floor outcome, f_m , to the status quo position q .⁶

More generally, a leader may be directly concerned with the *cohesion* of her party and thus will block proposals that threaten to make a *substantial minority* of the party worse off. When a leader is concerned with cohesion the minimum number of aye votes she will tolerate is $\frac{N-1}{2} + 1 + k$, where k determines the desired majority size for the leader on a vote

⁶This special case represents the core intuition of other models of agenda-setting (Cox and McCubbins, 2005) and forms a baseline expectation here.

on p_j . Intuitively, k represents the additional number of party members a leader would like to see voting to approve the policy over and above a party-majority of 1.⁷ If a proposal passes on the house floor and fewer than $\frac{N-1}{2} + 1 + k$ party members vote for the policy, the leader suffers a utility loss of l .

I illustrate the argument in the panels of figure 1, which depicts five legislators from two parties on one dimension of conflict. Party x is the agenda-setting party with legislators x_1 , x_2 , and x_3 , where x_2 is the median *party* member. Party y has only two legislators, y_1 and y_2 . Legislator y_2 is the median *floor* legislator (also marked as f_m), and the leader of party y does not possess negative agenda-setting powers. Three status quo locations are labelled q_1 , q_2 and q_3 .

When the leader of x is simply concerned with preventing the majority of the party from being rolled, she will block any proposal addressing a status quo position that the median legislator of her party prefers to the floor outcome. In panel (a), when $k = 0$, the leader will block any proposal that addresses status-quo points in the white-shaded area which ranges from f_m to $2x_2 - f_m$. Proposals addressing status quo points to the left of f_m or to the right of $2x_2 - f_m$ are preferred by at least two party members. By contrast, proposals which address status quo points falling between f_m and $2x_2 - f_m$ will be opposed by x_2 , and therefore by a majority of the party's members. In general, the range of status quo points on which the party leader will refuse to allow new proposals to come to the floor is the 'gridlock interval.' These intervals are depicted in the figure by thick black horizontal lines. Note that the gridlock interval when $k = 0$ is identical to the 'blockout zone' defined in Cox and McCubbins (2005). In the figure, as all status quo points fall outside of the gridlock interval, proposals addressing these points will be approved by the party leader, and will pass on the floor of the house at f_m . Accordingly, when the leader is concerned only with preventing a *party* roll (i.e. when $k = 0$), the distance between the median party member and the median floor legislator determines the range of status quo

⁷The maximum value k can take is $\frac{N-1}{2}$, such that the largest 'aye' coalition that a party leader desires is a *completely cohesive* party. The minimum value of k is 0, indicating the case where a party leader is concerned only with preventing majority-rolls. Note that $N - (\frac{N-1}{2} + 1 + k)$ expresses, for a particular value of k , the number of legislators that the party leader will tolerate being rolled on a given vote.

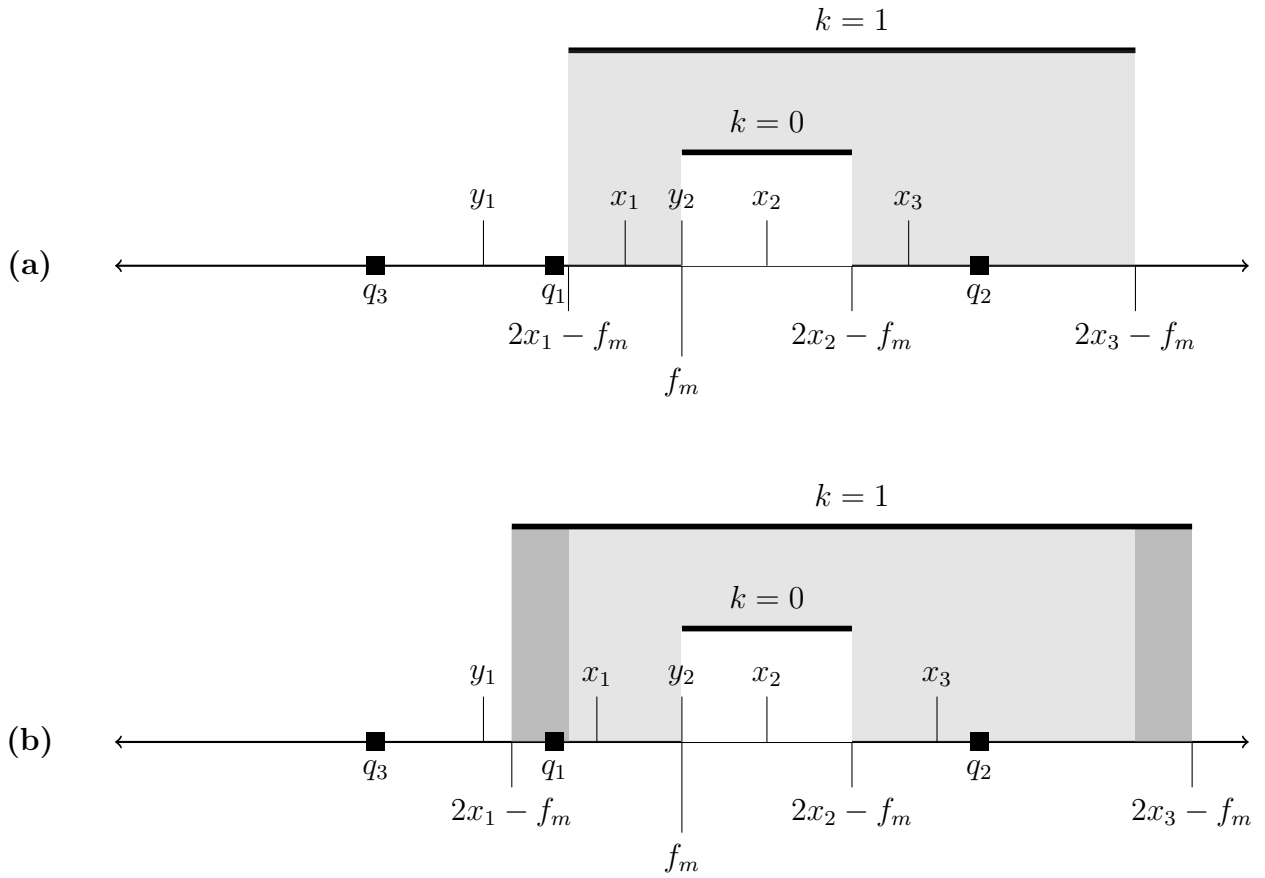
points for which new proposals will be blocked.

However, when the leader is concerned with maintaining the *cohesion* of her party, her blocking decisions must reflect the preferences of members other than the party median. Consider the gridlock interval in panel (a) when $k = 1$. Previously, the leader was sensitive to the preferences of the median member of the party, where in this case the leader blocks proposals that threaten to roll *any* member of her party. Accordingly, the leader will block any proposal addressing a status quo position in the range $2x_1 - f_m$ to $2x_3 - f_m$, thus increasing the range of blocked proposals. In this case a proposal addressing q_2 is rejected: although x_1 and x_2 would prefer a new policy at f_m , x_3 prefers the status quo position. By contrast, proposals addressing q_1 and q_3 will be approved by the leader in both scenarios in panel (a).

In this example, $k = 1$ is equivalent to the party leader demanding that the party votes *unanimously* on the house floor. However, when the party is larger, k can take on any value between 0 and $\frac{N-1}{2}$. The larger k becomes, the higher the cohesion of party x must be on a given proposal before the party leader will approve the proposal for consideration. In general, the pivotal blocking member when $k = 0$ is the median member of the party, x_m . When $k > 0$, however, *two* party members are pivotal for the blocking decision: x_{m+k} on the right of the policy space and x_{m-k} on the left. Accordingly, as k increases, the party leader must cater to the preferences of two non-median members.

How does the gridlock interval change as the ideological unity of a party declines? I capture the idea of a decline in ideological unity through the *polarisation* of the agenda-setting party, where polarisation is a median-preserving shift in the positions of the party members. Increasing polarisation implies that members on the left of x_m move further to the left, and members on the right of x_m move further to the right. Polarisation can be understood either as an exogenous decrease in ideological unity or, conversely, as a decline in the efficacy of more traditional disciplining mechanisms for a leader faced with an already ideologically heterogenous party. In either case, as polarisation increases, so do the incentives for party leaders to restrict the parliamentary agenda.

Figure 1: Intra-party polarisation and the gridlock interval



NOTE: In panel (a), the gridlock interval when the party leader is concerned with preventing a majority-roll ($k = 0$) is depicted as the shaded white area. As the median party member (x_2) prefers f_m to all status quo points, the leader will allow proposals addressing any of these points to be considered on the floor. When $k = 1$, the gridlock interval is depicted by the union of the grey and white shaded areas. Here, proposals addressing q_1 and q_3 are approved for consideration, but the party leader blocks those addressing q_2 because although a majority of the party (x_1 and x_2) are in favour of policy change, x_3 is not. Panel (b) demonstrates the effect of an increase in party polarisation. While the gridlock interval for $k = 0$ is unaffected, the gridlock interval for $k = 1$ increases such that neither q_1 nor q_2 will be approved for consideration on the floor, as proposals addressing these points will not be approved by a sufficient number of party members. The dark grey area indicates the extension to the gridlock interval induced by an increase in intra-party polarisation.

Panel (b) of figure 1 illustrates the effects of polarisation. The party members of x are dispersed more widely around x_2 than in panel (a), while the positions of x_2 , the members of party y , and the status quo points remain the same. The position of x_2 is not affected by an increase in polarisation, and so when the party leader is concerned only with the prevention of majority rolls ($k = 0$), the size of the gridlock interval is unaffected by polarisation. However, when $k > 0$, as the party leader considers the preferences of two non-median party members, intra-party polarisation has significant effects on the range of the gridlock interval. The polarisation shock increases the distance between the pivotal legislators and the floor median f_m , and extends the gridlock interval in both directions. The darker grey shaded areas in panel (b) indicate the increase in the size of the gridlock interval induced by the increase in intra-party polarisation. A consequence is that a proposal addressing q_1 , which was approved by the party leader in panel (a), is now blocked. Although x_2 and x_3 prefer the floor median position to q_1 , the same is not the case for x_1 who would now prefer to preserve this status quo than see a new proposal pass at f_m .

This also clarifies how agenda-control affects the relationship between polarisation and average voting cohesion across all status quo points. Consider first the votes on which x will be divided when *all* proposals are considered on the house floor (that is, in the absence of agenda control). In panel (a), members of x will vote to unanimously approve proposals addressing q_1 and q_3 , but will be divided on those addressing q_2 . In panel (b), after the polarisation shock, proposals addressing both q_1 and q_2 would divide the members of x . Thus, in the absence of agenda-control, polarisation leads to a decline in the cohesion of x . When the leader can control the agenda, by contrast, in panel (a), the party will vote unanimously to approve proposals which address q_1 and q_3 , but proposals changing q_2 will be blocked. After polarisation, proposals addressing q_1 are also blocked by the party leader, but those addressing q_3 are considered on the floor and passed in a unanimous vote by the members of x . Thus because the leader blocks potentially divisive proposals (such as q_1 and q_2), increases in ideological polarisation will have a weaker effect on the average level of cohesion for agenda-setting parties.

Generalising beyond the specific cases illustrated in figure 1, and assuming that status quo points are uniformly distributed across the policy space, there are two central implications of the model. First, when party leaders are concerned with party cohesion, and when they are unable to rely on traditional ‘carrot and stick’ forms of party management, increases in intra-party polarisation of the agenda-setting party will be associated with a larger number of blocked legislative proposals. Second, while the cohesion of a party is negatively associated with polarisation, this effect will be less pronounced when party leaders have negative agenda powers.

Of course, intra-party polarisation will not *necessarily* lead to gridlock. If discipline was a viable strategy for party leaders, side payments or sanctions could induce legislators to vote against their preferences and maintain voting cohesion even in the face of ideological polarisation. The more disciplinary resources are available to party leaders, the weaker we should expect the relationship between polarisation and blocking to be. However, so long as a leader’s disciplinary resources are not unlimited, the central prediction of the model stands: as intra-party polarisation increases, cohesion-oriented party leaders will block a greater range of legislative proposals. Furthermore, while leaders may be able to both advance their policy interests and maintain cohesion by disciplining their members, these actions may have other costs. For example, as Heller & Mershon (2008, 914) suggest, “a legislator for whom the lash of discipline bites too deeply might see moving to a different party as attractive.” When the costs of discipline are high, then, party leaders may prioritise negative agenda control and block divisive proposals rather than forcing their members to vote against their preferences

The model also reveals that by restricting the agenda to prevent divisive bills, leaders face a policy cost: some proposals favoured by a (small) majority of the party are blocked. For example, although x_2 and x_3 would prefer a new policy at f_m to the status quo policy at q_1 , the leader blocks this proposal in panel (b) because of the opposition of x_1 . Such a decision may disappoint legislators x_2 and x_3 , because they know that such a policy, if proposed, would bring them additional utility. If these disappointments come at a signifi-

cant cost to the leader (say, by being denied re-selection in the future), she may prefer to promote legislation that is disliked by a minority of her party, so long as a bare majority of the party are in favour of such proposals. Of course, this simply restates the assumption that in order for polarisation to affect the level of gridlock in a system, party leaders must be at least partially concerned with the *cohesion* of their parties, and not just improving policy for a bare majority of the party.

Applying the insights of the model to a specific setting therefore requires assessing a) the degree to which a party leaders are motivated to maintain cohesion (i.e., k), b) the ability of leaders to discipline their members, and c) the agenda-setting powers of party elites. In the next section I discuss these features in the context of the European Parliament.

COHESION, DISCIPLINE, AND AGENDA-CONTROL IN THE EP

In the European Parliament, the electoral motivation for EPG leaders is likely to be considerably weaker than in domestic legislatures. Research suggests that MEPs are aware of the electoral consequences of their voting behaviour (Lindstädt, Slapin and Vander Wielen, 2011), and the relevance of the EPGs to EP elections has grown over time, particularly in the most recent elections where EPGs nominated “Spitzenkandidaten” (lead candidates) for the Commission presidency for the first time. Nevertheless, European elections are commonly interpreted as ‘second order’ (Reif and Schmitt, 1980), fought on the basis of national issues rather than on the legislative records of the EPGs themselves. Furthermore, it seems likely that – to the extent that voters pay any attention to the internal politics of the EP – national parties are likely to be rewarded for taking positions that are distinct from those of their EPGs, rather than for loyally supporting them within the legislature.

However, as argued above, there are several reasons to think that long-run intra-party voting cohesion is associated with efficiencies that arise solely *within* the legislative process. Thus, although the electoral connection may be weak in the EP, we should nevertheless expect many of these benefits to motivate EPG leaders to maintain cohesion. First, as with other legislatures, individual MEPs are unlikely to be able to construct stable winning coalitions on their own. Cohesive parties in the EP allow legislators to reduce the transaction

costs associated with forming coalitions across multiple policy issues, which leads to less volatile behaviour across votes and makes parliamentary politics more predictable (Hix, Noury and Roland, 2007, 89). Accordingly, individual MEPs, and the national parties of which they are members, stand to benefit in the long-run from committing to cohesive voting strategies that support a common EPG line.

Second, in the EP, legislators frequently switch their EPG affiliations from one group to another (Benoit and McElroy, 2009; McElroy and Benoit, 2010). As many legislative goods are distributed proportionately according to group size, party group switching can reduce an EPG's share of important positions such as committee chairs and rapporteurships, as well as diluting their influence in the main business organising body, the Conference of Presidents. Approving legislation on which a particular national party is frequently opposed can lead to frustration with the EPG leadership and may risk all legislators from the national party switching their allegiance to a rival party group.

A case in point is given by the British Conservative Party who left the European People's Party (EPP) to form the European Conservatives and Reformist Group (ECR) in 2009. The decision to leave the EPP followed a period in which the Conservatives frequently found themselves on the losing side of votes promoted by the EPP group leadership. In the session before the Conservatives left the EPP, they were 'rolled' approximately 20% more often than other national parties in the parliament, and more than *twice* as often as other national parties in the EPP.⁸ These legislative defeats were often attributed to the failure of the EPP leadership to protect the interests of the Conservatives. As one Conservative MEP put it, "Our views have not been represented in the Conference of Presidents... we don't influence the EPP but, instead, are compromised by its agenda." (Van Orden, 2006) Although a systematic analysis of the relationship between 'rolls' and party switching is beyond the scope of this paper, EPG leaders clearly have strong incentives to cater to their constituent national parties, and maintain high cohesion rates. Failure to do so can lead to a permanent weakening of the EPG's position in parliament.

Third, the multi-level legislative process in the EU means that EPG leaders are con-

⁸See appendix section S1 for the results of my regression analysis.

cerned not only with signalling their strength internally to other party groups, but also externally to political actors in the Council and the Commission. For example, using expert survey data, König et al. (2007, 299) show that the more cohesive party groups are in the Parliament, the higher the probability that the Parliament will “win” in conciliation committee bargains with the Council. The importance of cohesion for securing preferential policy bargains in the bicameral process is also acknowledged by parliamentary actors themselves. For instance, in a plenary debate on the Europe 2020 strategy, Jerzy Buzek – then President of the EP – argued, “If we want to influence the situation in the Union, we have to organise a big majority which supports the resolution.” (Buzek, 2010) In sum, the inter-institutional nature of EU policy-making reinforces the incentives for maintaining high levels of party cohesion.

Overall, although the electoral incentives for party cohesion may be weaker than for party leaders in national parliaments, incentives arising from *within the legislature* suggest that EPG leaders will use their institutional powers to encourage party cohesion in roll-call votes. This is consistent with the view of Hix et al. (2007, 217), who see the development of the EP as a “case of party formation for the sole purpose of solving collective action problems internal to the legislature.” To what extent, then, can party group leaders in the EP use discipline and agenda control to enforce cohesion?

In the EP, the strongest disciplinary powers are held by *national* party leaders. The leaders of the EPGs have some control over the allocation of legislative positions (such as committee seats, chairs, and rapporteurships) giving them a limited ability to structure the incentives of office-seeking MEPs within the parliament (McElroy, 2001; Faas, 2003), but the incentives generated by the electoral system give significant power to the national parties. Candidates for the European Parliament are selected by their national parties, and not by the EPGs. Because national parties can make credible deselection threats, they are therefore in a strong position to discipline their MEPs to toe the EPG line (Hix, Noury and Roland, 2007, 146). The critical question is whether in times of conflict between these two principals MEPs follow their EPG or national party leaders. The overwhelming answer

to this question is that it is to national parties, and not EPGs, that MEPs are ultimately responsive (Hix, 2002, 2004; Hix, Noury and Roland, 2007; Faas, 2003; Ringe, 2010). As the national parties within an EPG become more ideologically polarised, they are therefore less willing and able to whip their MEPs to follow a common EPG line and thus the voting cohesion of the EPG declines (Hix, Noury and Roland, 2007, 132-146).

If national parties possess the most powerful disciplinary resources, which actors have the ability to control the agenda in the EP? As there has never been a single majority party in the parliament, agenda powers are widely dispersed, with key positions allocated to the EPGs according to a strict proportionality rule. No single party, therefore, can ‘cartelize’ agenda-setting offices in the EP (Cox and McCubbins, 2005). Additionally, for legislative issues, the gatekeeping right of initiative resides with the European Commission, with the parliament only able to initiate non-legislative resolutions. More generally, previous studies suggest that there are few formal negative agenda-setting powers available to the EPG leaders (Hix, Noury and Roland, 2007, 105-131).

However, as the EP has grown in legislative stature, the EPGs have reformed the internal rules of the Parliament to their own benefit by centralising institutional power structures (Kreppel, 2002; Whitaker, 2011). These reforms helped to increase the power of the EPGs relative to the national parties, and “the most stunning example of this was the creation of the Conference of Presidents.” (Kreppel, 2002, 102) The Conference is a political body responsible for the organisation of parliamentary business, and it is attended by the President of the Parliament, and the leaders of the EPGs. The EPG leaders are therefore afforded special institutional powers that are not available to other actors. Notably, the Conference is not attended by national party leaders in the Parliament, and has thus come to be used as an instrument of centralised control for the EPGs (Kreppel, 2002, 210).⁹

The EP’s rules of procedure make clear that the Conference “shall take decisions on the

⁹ Similar business-organising bodies are found in other legislative settings, such as the College of Leaders in the Brazilian Câmara dos Deputados, the Council of Elders in the German Bundestag, and the Chamber Directorate in the Argentine House of Representatives. Each of these institutions has important agenda-setting powers, and share many procedural similarities to the Conference (Neto, Cox and McCubbins, 2003; Chandler, Cox and McCubbins, 2006; Calvo and Sagarzazu, 2011).

organisation of Parliament’s work and matters of legislative planning” and that it “shall draw up the draft agenda of Parliament’s part sessions.” (European Parliament, 2011, Rule 25) In practice, at the beginning of every part-session, the Conference is presented with a *draft agenda*, which is amended before being finalised. Crucially, amendments may remove items from the agenda, preventing debates and votes on these issues from occurring on the plenary floor. Once approved, a *final draft agenda* is distributed to members of the Parliament. By removing legislation from the draft agenda, members of the Conference of Presidents can effectively prevent legislative proposals from progressing. The Conference therefore has the opportunity, at critical junctures in the legislative process, to control the passage of legislation. With respect to the argument that “plenary time is the sine qua non of legislation” (Cox and McCubbins, 2005, 10), these junctures clearly represent important negative agenda-setting opportunities for EPG leaders in the Parliament. Accordingly, while national party leaders control the main disciplining powers in the EP, it is EPG leaders who, under certain conditions, make agenda-setting decisions. What is crucial, then, is to determine who is able to exercise the negative agenda-setting powers that are held collectively by the Conference of Presidents.

Decision making in the Conference strives for unanimity, but can recourse to simple majority voting, with each group leader’s vote being weighted according to the size of that party in the Parliament.¹⁰ As the rules of procedure for the parliament make clear, “where a consensus cannot be reached, the matter shall be put to a vote subject to a weighting based on the number of Members in each political group.” (European Parliament, 2011, Rule 24). Agenda-setting decisions in the EP are therefore not made by a majority party with special institutional privileges, but rather in a decision-making game in the Conference. How, then, are we to understand who is able to make blocking decisions?

In a unidimensional policy space, it is the median voter who is pivotal in decision-making under majority-rule (Black, 1948). The critical feature of decision-making in the Conference is that, although decisions are made by simple majority vote, party leaders are able to vote *as if their parties were completely united*. Therefore, within the Conference, it

¹⁰The President of the Parliament presides over meetings, but does not vote.

is the leader of the *median* EPG who is decisive in agenda-setting decisions. Only the party that controls the median position in the Conference can prevent legislation from coming to the floor. Any individual party, or coalition of parties, to either the right or the left of the median party will have fewer than half the seats in the Parliament – and thus votes in the Conference – and so the median party is a necessary member in any blocking coalition. Therefore, when the leader of the median party is concerned that a proposal will divide her party, she can use her position in the Conference and vote with the entire weight of her party group in order to block the proposal.

In conjunction with the analyses in the previous section, this suggests a prediction about the effect of changes to the ideological unity of the median party in the Conference of Presidents. As national parties within an EPG become less united ideologically, the EPG is more likely to face legislative proposals that threaten to divide its members. Additionally, the discipline mechanism that drives party cohesion also declines as national party preferences become more diffuse because national parties are less willing to whip their MEPs to follow a common EPG line. Because EPG leaders have strong incentives to maintain cohesion, as preferences polarise and discipline declines we expect parties with agenda-setting powers to block a larger number of legislative proposals.

HYPOTHESIS 1: The greater the ideological polarisation of the median EPG on a given proposal, the greater the probability that the proposal will be blocked by the Conference of Presidents.

This has a direct corollary for party cohesion on the parliament floor. When there is greater ideological polarisation among national parties within an EPG, the national party leaders will be less willing to discipline their members to follow a common group line, and the cohesion of the EPG will decline (Hix, Noury and Roland, 2007, 132-146). However, if the median EPG is able to remove items from the agenda on which it is particularly polarised, the effect of polarisation on voting cohesion will be less pronounced for EPGs when they hold the median position in the Conference of Presidents than when they do not. That is, we should expect that if the party group leaders are indeed strategically

manipulating the floor agenda, then this behaviour should also be detectable by examining the relationship between polarisation and EPG cohesion in roll-call votes.

HYPOTHESIS 2: While the cohesion of an EPG will decline as intra-party preferences become more diffuse, this relationship will be weaker for votes that address dimensions on which the EPG holds the median position in the Conference of Presidents.

Before progressing, it is also important to clarify expectations for the relationship between party polarisation and cohesion *in the absence of agenda control*. If we expect the cohesion of median parties to be less sensitive to intra-party polarisation even when these parties are unable to block proposals, then empirical evidence in favour of hypothesis 2 would not necessarily identify the effects of agenda control on EPG cohesion. In appendix section S2 I provide a simple analysis of the relationship between party position, party polarisation, and voting cohesion in a context in which no actor can block proposals from being considered on the plenary floor. The analysis reveals that, in the absence of agenda control, the cohesion of median parties will in fact be *more* sensitive to increases in ideological polarisation than non-centrist parties. The intuition behind the analysis is straightforward: when a party is median, increases in the polarisation of its members results in many instances when members of the party find themselves on opposite sides of an issue. When a party is relatively extreme, polarisation is less consequential because the members of the party are sufficiently far from the point separating ‘yeas’ from ‘nays’ on roll-call votes that they will vote together despite their relative ideological differences. Consequently, hypothesis 2 suggests a relationship between intra-party polarisation and cohesion in the European Parliament that is directly opposed to the predictions of a model without agenda control.

Taken together, the hypotheses here suggest two distinct observable implications of the argument that EPG leaders use their strategic control over the plenary agenda to block legislative proposals that threaten to divide their members. In the next sections I introduce new data and methods to test these hypotheses.

DATA AND METHODOLOGY

Empirically evaluating partisan agenda-setting behaviour is non-trivial, and much existing work relies on the analysis of roll-call votes to make inferences about the agenda-setting actions of party elites.¹¹ While I present a roll-call analysis below, simply documenting an association between agenda-control and party cohesion requires a large inferential leap that the latter is a product of the former. As Krehbiel (2006, 22) suggests, “the corresponding recommendation is not to abandon roll-call analysis but rather to...supplement it with other kinds of data whenever possible.” I therefore introduce a new metric for measuring the agenda-setting behaviour of EPG leaders in the Conference which I use to examine the conditions under which leaders prevent proposals from reaching the plenary floor.

MEASURING NEGATIVE AGENDA CONTROL

The task of directly observing instances of legislative blocking seems especially daunting when, by definition, negative agenda setting entails the absence of issues, rather than their presence. I make progress by collecting a new dataset which focuses on one key agenda-setting juncture in the EP’s legislative process where EPG leaders are able to prevent proposals from reaching the plenary agenda. As noted above, at each monthly meeting of the Conference, party group leaders are presented with a *draft* agenda which they are able to modify before it is presented to the parliament as a *final-draft* agenda. To determine whether the Conference of Presidents blocked a proposal, I compared draft agendas to final-draft agendas and recorded which proposals were removed.¹² The unit of analysis is therefore proposals that feature on the draft agendas presented to the Conference, and the dependent variable, *Blocked*, is equal to one if a proposal was blocked (i.e. appeared on the draft agenda for one part-session but was absent from the final-draft agenda), and zero otherwise. Systematically comparing these agendas therefore isolates the role played by EPG leaders in the process of agenda setting in the parliament.

¹¹See, for example, Cox and McCubbins (2005); Gailmard and Jenkins (2007); Anzia and Jackman (2013); Robinson (2015); Jenkins and Monroe (2015). See Clinton (2012) for a review.

¹²Unfortunately, while the minutes of each meeting of the Conference are publicly available, they do not systematically document the removal of legislative reports from the final-draft agenda.

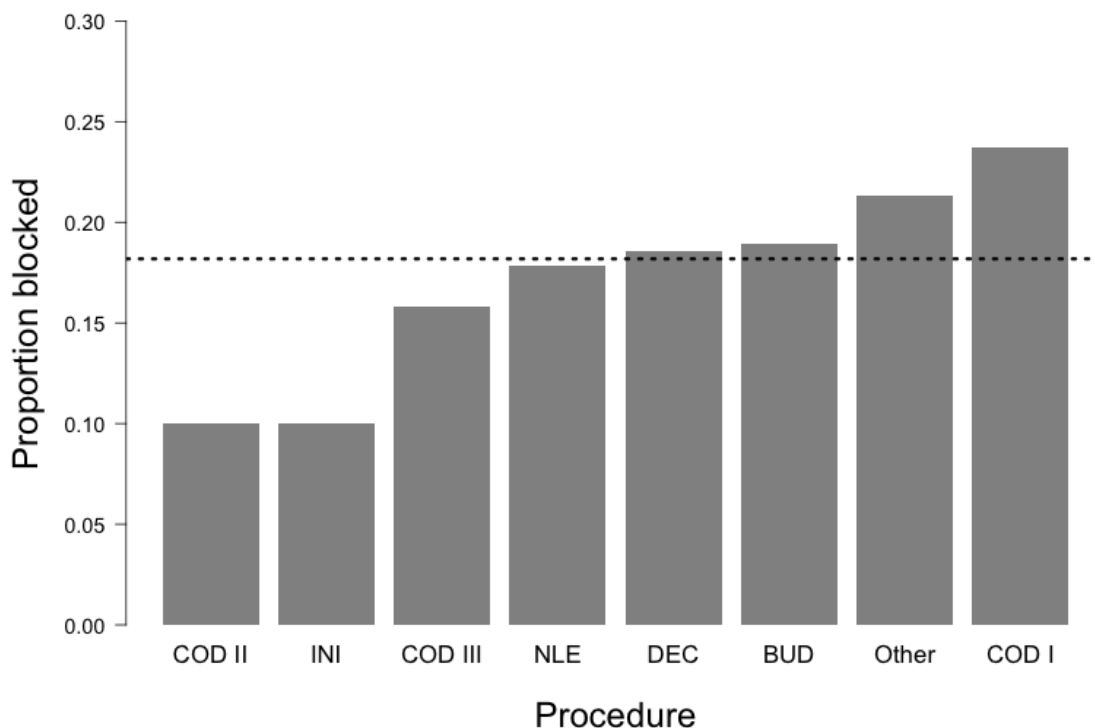
The sample consists of all proposals presented to the Conference of Presidents from September 2004 to April 2014: a total of 4,300 observations. I wrote an automated routine in the *R* programming language (R Core Team, 2015) to download and process all draft and final-draft agendas in the study period from the European Parliament website. Each proposal is assigned a unique identifier for a given part-session which remains constant between the draft and final-draft agendas for that session, meaning that if the name of a proposal changes between the two agendas, it is still possible to determine whether it has been removed. I searched each draft and final-draft agenda pair for potential proposals, and recorded which proposals were blocked by the Conference. This data constitutes a comprehensive record of the parliamentary proposals considered by the Conference, and provides a unique opportunity to observe agenda-setting behaviour directly.

The central claim is that this metric captures purposive negative agenda-setting behaviour by party leaders. Before turning to the main analysis, I validate this measure by showing that it reflects intuitive expectations about blocking behaviour. I demonstrate (a) that the measure captures patterns of blocking which reflect the institutional constraints that party leaders face under different legislative procedures; and (b) that party leaders block reports more often when they have less power to shape the legislative agenda at earlier stages in the policymaking process.

First, while the Conference is able to block legislation indefinitely during the first reading stage of the ordinary legislative (co-decision) procedure, at second reading it is subject to externally-defined time limits.¹³ If the metric employed here is valid, it should capture the institutional difference in agenda-setting powers across first and second readings. Figure 2 shows the proportion of blocked proposals by legislative procedure, and the institutional difference shows up very clearly: while 24% of first reading co-decision proposals (COD I) are blocked by the Conference, the equivalent figure for second-reading reports (COD II) is just 10% (a significant difference: $p < 0.001$). In addition to validating the blocking measure, this difference is also of substantive interest: when party leaders in the Conference

¹³Once the Council has stated its common position at second reading, the Parliament has three months in which to approve, reject, or amend the proposal. (European Union, 2012).

Figure 2: Proportion of proposals blocked, by legislative procedure



NOTE: The figure shows the proportion of proposals in the sample that were blocked by the Conference of Presidents. The horizontal dashed line gives the overall sample mean, and the bars give the mean for each legislative procedure.

have institutional prerogatives to set the plenary agenda, they make use of these powers.

We might also expect EPG leaders to block legislation less often when their ability to shape the agenda in other stages of the legislative process is greater. For example, under the own-initiative (INI) procedure, party leaders have veto power at earlier stages of the legislative process. INI proposals must be approved by the Conference prior to being drafted. Accordingly, party group leaders should be expected to block divisive proposals at the initial approval stage, and long before they reach the agenda-setting stage considered here. Figure 2 provides evidence of such strategic behaviour: own-initiative reports are blocked in just 10% of cases observed in the data – a significant difference from the mean proportion of reports blocked by the Conference ($p < 0.001$). Overall, these results suggest that the blocking measure captures salient patterns of behaviour in the EP.

A potential objection is that while I identify whether a proposal was removed from the draft agenda or not, this measure does not capture whether the proposal reappears on later draft agendas, nor the length of time before any such reappearance occurs. As argued above, it is not necessary for a party leader to prevent the consideration of a proposal indefinitely to reap the benefits of agenda-setting power. However, it is clear that by focussing on individual part-sessions, we are missing potentially valuable information. A more nuanced analysis would be to directly model the *duration* for which a proposal is delayed by the Conference of Presidents.¹⁴ Unfortunately, such an analysis is not possible with this data. While it is possible to accurately identify proposals that are removed before the presentation of a final-draft agenda of a given part-session, the identifying proposal numbers are not used consistently across different sessions, and the names of the reports often change from one agenda to the next. This makes it very difficult to tell whether a report has resurfaced at a later point in time. I proceed by analysing the simple binary choice (*Blocked, Not Blocked*) taken by the Conference in a given session, but it is important to acknowledge this limitation when drawing conclusions from the findings below.

MEASURING PARTY POLARISATION

The theoretical analysis indicated that as the median (agenda-setting) party group becomes more polarised, the party leader will have incentives to block a greater number of legislative proposals. Measuring agenda-setter polarisation requires, first, identifying the median EPG for each proposal, and second, measuring the internal ideological polarisation of that group on that proposal. I draw from the data in McElroy and Benoit (2007, 2010, 2012), which provides expert survey placement of both national parties and EPGs across a number of distinct policy dimensions.¹⁵ I identify the median party group by taking the median of the expert survey scores on each dimension, weighted by the number of MEPs in each group.¹⁶

¹⁴ Haber (2015) provides such an analysis in the UK House of Commons, for example.

¹⁵As with any measure of party positions, expert surveys are subject to potential measurement error. However, research has shown that of the available options, expert surveys tend to produce accurate data for party positioning, and consistently outperform the most common alternative – party manifesto data (Marks et al., 2007).

¹⁶Table S2 gives the identity of the median group on each dimension in EP6 and EP7.

The polarisation of the median group is calculated by taking the MEP-weighted standard deviation of the expert survey scores for *national* parties within the median EPG on each policy dimension. Higher standard deviation scores imply that the national parties within an EPG are more polarised in the sense given in the theoretical section.

A central measurement issue in this analysis is mapping the proposals to the expert survey dimensions used for measuring party group positions. As there are nearly 4000 unique proposals in the data, manual categorisation is unfeasible, and would regardless require a great deal of *ad hoc* judgement. A simple approach commonly used in the existing literature is to assign proposals to the expert survey dimensions according to the committee to which the proposal pertains (e.g. Klüver and Spoon (2013)). However, it is often unclear how best to assign committees to dimensions. For example, should proposals from the Internal Market and Consumer Protection Committee be assigned to the ‘Economic’ dimension, or the ‘Deregulation’ dimension? Similarly, such an approach would exclude the possibility that proposals may pertain to a number of policy dimensions simultaneously. For instance, should a proposal for increased taxation of carbon-dioxide emitting motor vehicles¹⁷ count as an economic issue, or an environmental one? On such a proposal, we might expect the polarisation of the median group on *both* of these dimensions to influence the probability that the proposal is blocked by the Conference.

To overcome this problem, I develop a probabilistic classification of proposals to expert survey dimensions using a set of *legislative summaries* which describe the content, purpose, and background of each legislative proposal.¹⁸ I use the textual information in the legislative summaries to assign proposals to each expert survey dimension based on the words the parliamentarians use themselves to describe the content of the proposals. This approach has two main benefits. First, by making use of the text data, I am able to match proposals to expert survey dimensions in a way that closely mirrors intuitive understandings of the *ex ante* defined meaning of those dimensions. Second, because the classification is

¹⁷“Proposal for a Council Directive on Passenger Car Related Taxes” (Commission, 2005)

¹⁸These summaries were collected from the European Parliament website – www.europa.eu – and an example text is given in appendix figure S2.

probabilistic, this allows for the possibility that proposals can address multiple issue areas simultaneously.

A simple example helps to clarify the intuition. Consider a proposal j that is presented to the Conference for approval. Imagine that 75% of proposal j is concerned with economic issues, but 25% concerned with environmental issues. If this is the case, it is not only the polarisation of the agenda-setting EPG on economic issues, but also of the agenda-setter on environmental issues that will determine whether proposal j is blocked by the Conference. As the identity and polarisation of the agenda-setting party group varies across policy dimensions, it is important to take account of our uncertainty as to which policy dimension such a proposal truly pertains. For example, if the median economic EPG is highly polarised, but the median environmental EPG has a low level of polarisation, then simply assigning j to the economic dimension will lead to an upward bias in our estimate of the effect of party polarisation on blocking in the Conference. I therefore use the legislative summaries to estimate the probability that each proposal pertains to each expert survey dimension, and use these probabilities to calculate a weighted polarisation score for the median party group(s) on each proposal.

The classification proceeds as follows.¹⁹ First, I select a subset of proposals for each expert survey dimension which relate clearly to the dimension at hand. I define a short dictionary of words for each policy dimension, and search each of the legislative proposals for these words.²⁰ Each proposal is given a score for each dimension which is simply the sum of the number of times a word from the relevant dictionary is found in each proposal. I take the proposals with the highest scores (those at or above the 97th percentile) for each dimension, and exclude any texts assigned to multiple dimensions. The resulting mutually-exclusive subsets include between 80 and 100 texts for each of the 7 policy dimensions, and they form the training set in what follows.

¹⁹The classification approach is similar to Blei, Ng and Jordan (2003), though I use a penalised multinomial model rather than a support vector machine for classification. The multinomial model has the advantage of producing the predicted probability that each proposal is associated with each of the expert survey dimensions in the data.

²⁰The dictionaries for each dimension are presented in table S3 in the appendix.

I begin by converting the raw summary texts into a set of features that can be used to predict dimension assignment. I follow common practice by stemming,²¹ removing ‘stop words’,²² and dropping very infrequently appearing words. I then construct a document-word matrix, which records the number of times each of the remaining 3634 unique words in the corpus occurs in each summary, and apply a series of unsupervised topic models to the document-word matrix in order to construct predictive features for classification of the proposal texts.²³ I use the Correlated Topic Model (Blei and Lafferty, 2006) which assumes that the relative frequency with which terms co-occur within different documents gives information about the topics that feature in those documents.²⁴ The two main inputs into the model are a user-specified number of topics, T , and the document-word matrix for the corpus of documents.

The model returns a $D \times T$ matrix of topic proportions – denoted θ – that describe the fraction of each legislative summary $d \in \{1, 2, \dots, D\}$ that is from each topic $t \in \{1, 2, \dots, T\}$. A common problem with topic models is that it is not clear *a priori* how many topics the researcher should estimate, and existing solutions (e.g. Blei, Ng and Jordan (2003)) aim to select the model that best predicts textual data out of sample. In this case, by contrast, I am interested in predicting the dimension classification described above. Because the number of topics that will do this best is unclear, I estimate K topic models for all integer topic counts from 20 to 120. This results in 101 separate θ_k matrices, with typical elements $\theta_{td(k)}$: the proportion of proposal-text d in topic t from topic-model k . These matrices therefore provide summaries of the substantive content of each proposal, and can be used to predict the expert survey dimensions that each proposal addresses.

I then use the θ_k matrices as the model matrix²⁵ for a series of penalised multinomial

²¹Words such as ‘school’, ‘schools’ and ‘schooling’ all become ‘school’.

²²Such as ‘and’, ‘if’, ‘the’, ‘but’ and ‘of’.

²³An alternative approach would be to train a model on the word-frequency matrix directly, but with over 3000 unique words, this would be computationally burdensome. Furthermore, Blei, Ng and Jordan (2003) show that using a topic model to reduce dimensionality can, in fact, lead to *greater* classification performance than relying on the raw text counts alone.

²⁴I implement the model as the null model for the Structural Topic Model (Roberts et al., 2014). The CTM is similar to Latent Dirichlet Allocation (LDA), but allows for a covariance structure between topics, and has been shown to have greater predictive accuracy than LDA (Blei and Lafferty, 2006).

²⁵Because the topic proportions for each legislative summary ($\theta_{d(k)}$) sum to one, I could exclude one of

regressions predicting the discrete dimension classification in the training set, repeating the exercise K times – once per topic model. These models therefore predict the dimension to which a given text pertains as a function of the topic proportions. I then calculate the predicted probability that each legislative summary – in both the training and test sets – is associated with each of the 7 expert survey dimensions. The intuition here is that by building the model with the labeled training data, we are able to learn the topics (clusters of words) that are most associated with each dimension. We then project the topics of the test and training data onto the estimated multinomial model to recover the probability that each proposal is associated with each dimension.

As overfitting is a common problem in multinomial logistic regression estimation, and as the number of topics in these models is large as K increases, I use penalised models in this second stage.²⁶ A nested K-fold cross-validation procedure is used to select the best fitting model: the inner-loop of the cross validation is used to select the appropriate value of λ *within* each of the penalised models, and the outer-loop is used to select *between* the K penalised models. The outer-loop indicates that the 94-topic model provides the lowest misclassification rate in the cross-validation procedure.²⁷ In the analysis I present basic results from all K topic models, and give a more detailed discussion of the estimates from the 94-topic model.

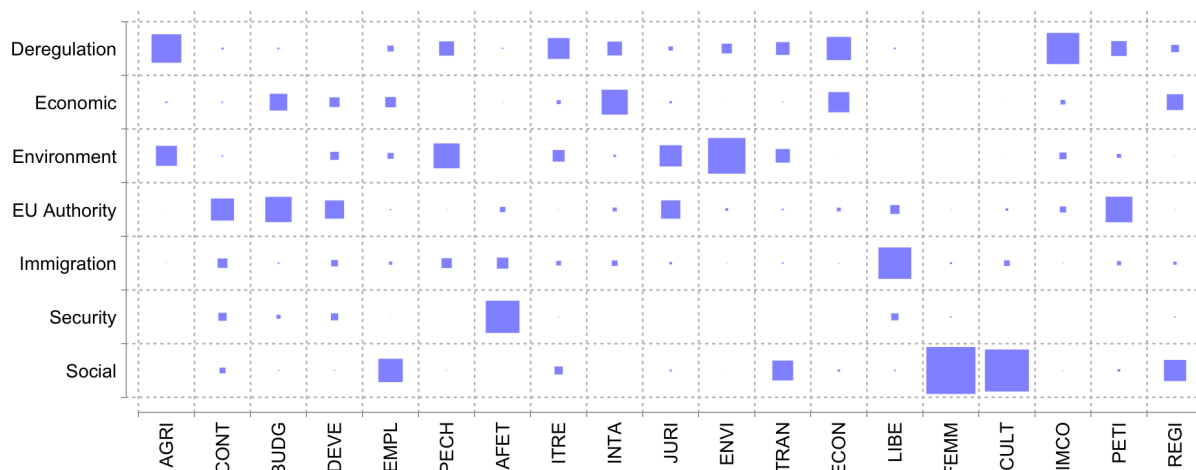
Before turning to the model specification and results, I validate the performance of the classification. First, table S4 in the appendix presents the titles of the legislative proposals for which the (94-topic) multinomial model gives the highest predicted probabilities for each dimension. Across all 7 policy dimensions, the results are highly consistent with intuitive expectations. For the ‘Immigration’ dimension, for example, the proposals with the highest probability are concerned with visa waiver schemes and the Schengen Borders Code. Similarly, the ‘Security’ dimension’s top proposals pertain to the situation in Afghanistan, the European Security Strategy, and the anti-missile shield. The classifier also appears to

the topics or the intercept term. The two approaches give identical predicted probabilities, and I choose to exclude the intercept term.

²⁶As implemented using the **glmnet** package in R (Friedman, Hastie and Tibshirani, 2010).

²⁷Figure S3 in the appendix depicts the model fit statistics for all K topic models.

Figure 3: Proposal committee of origin by expert survey dimension



NOTE: The plot shows the proportion of proposals from each parliamentary committee (x-axis) that are categorised to each of the expert survey issue dimensions (y-axis) in the text classification procedure. Larger squares correspond to a higher proportion of proposals from a given committee being categorised to a given dimension.

discriminate successfully between the related ‘Deregulation’ and ‘Economics’ dimensions: the former is populated mostly by proposals relating to the regulation of products in the single market, while proposals assigned to the latter deal with broader economic issues such as the Eurozone, trade, and economic governance.

Second, figure 3 depicts the proportion of proposals from each parliamentary committee that are assigned to each of the expert survey dimensions.²⁸ The blue boxes are scaled such that when 100% of proposals from a given committee are allocated to a given dimension, the square has an area of 1, and will fill the dashed box that contains it. Accordingly, larger squares correspond to a higher proportion of proposals from a given committee being categorised to a given dimension. Again, the results are reassuring: proposals from committees such as the environment (ENVI) and fisheries (PECH) are assigned to the ‘Environment’ dimension, proposals on women’s affairs (FEMM) and culture (CULT) are allocated almost exclusively to the ‘Social’ dimension, and the ‘Security’ dimension is mostly populated by proposals deriving from the committee on foreign affairs (AFET). The figure also makes

²⁸For clarity, here I use a discrete classification and assign a proposal to the dimension on which it has the *highest* probability from the penalised model.

clear a key advantage of the method: different proposals from the same committee can be allocated to more than one expert survey dimension. For example, proposals from the ECON committee are roughly equally divided between the ‘Economic’ and ‘Deregulation’ dimensions. Overall, these checks suggest that the classification procedure is successfully assigning proposals to the relevant expert survey dimensions.

With these classifications in hand, I use the predicted classification probabilities to calculate the weighted polarisation of the median EPG on each proposal. For each proposal, I multiply the polarisation of the agenda-setting EPG on each dimension by the probability that each dimension features in the proposal. Taking the sum of these values gives me the dimension-weighted polarisation score for the proposal. For example, if a proposal has a 0.75 probability of being classified as economic, and a 0.25 probability of being environmental, with median EPG polarisation scores of 3 and 2 respectively, the weighted median polarisation score for that proposal would be $.75 * 3 + .25 * 2 = 2.75$. Repeating this calculation for all proposals in the data set gives a continuous variable – *Agenda-Setter Polarisation* – that I use in the main analysis.²⁹

Hypothesis 1 suggests that the Conference of Presidents will block legislation more often when the agenda-setting party group on a proposal is less ideologically united. As the outcome variable, *Blocked*, is binary, to investigate this hypothesis I estimate logistic regression models of the form:

$$\text{logit}(Y_{j(a)}) = \beta_1 \text{Agenda.Setter.Polarisation}_j + X'_j \gamma + \zeta_c + \phi_p + \epsilon_{j(a)} \quad (1)$$

where $Y_{j(a)}$ is the binary response variable indicating whether proposal j (on agenda a) is blocked or not, and $\epsilon_{j(a)}$ is an idiosyncratic error term. β_1 is the quantity of interest, identifying the association between the ideological polarisation of the median party group and the probability of blocking in the Conference of Presidents.

In order to account for other potential factors that may influence the probability of blocking, I include a matrix of covariates, X'_j . First, as emphasised in the theoretical

²⁹Results from an alternative approach in which I simply assign a proposal to the dimension for which it has the highest predicted probability are given in appendix figure S4 and the results from the cross-validation-selected model are given in table S5.

analysis, the distance between the agenda-setting party and the floor median should also predict blocking behaviour.³⁰ I therefore control for the absolute distance between the median EPG and the median national party on each dimension using the expert survey data described above. I also control for the polarisation of the parliament as a whole on each dimension, as well as for the average ‘saliency’ of each policy dimension.³¹ As depicted in figure 2, the agenda-setting power of EPG leaders appears to vary by legislative procedure, and thus I control for the procedure of each proposal.

Another concern is that some parties may simply be more obstreperous than others, regardless of their level of internal polarisation. If some party groups block legislation often, and are marked by unusually high levels of polarisation, then this will confound the main effect of interest. To overcome this problem, I also include fixed-effects (ϕ_p) for the identity of the party group that holds the median position on the dimension for which a given proposal has the highest probability of association. As some policy areas may be more prone to delay than others, I also include fixed-effects (ζ_c) for the committee responsible for each proposal in some models.

Plenary time is a scarce resource (Cox and McCubbins, 2011), and blocking may occur if the agenda is more constricted at certain times due to external factors. To account for this possibility, I include a control variable for the number of proposals submitted to a given draft agenda, under the assumption that larger numbers of proposals will increase the probability of blocking. I also control for the number of days between the date of the draft agenda and the end of the parliamentary session, with the expectation that the closer the parliament is to the recess, the more leaders will try to expedite the legislative process. Finally, in order to account for the potential non-independence of proposals within a draft agenda, in all models I use cluster-robust standard errors, clustering on the draft-agenda.

³⁰This prediction relates to the distance between x_2 and f_m in figure 1.

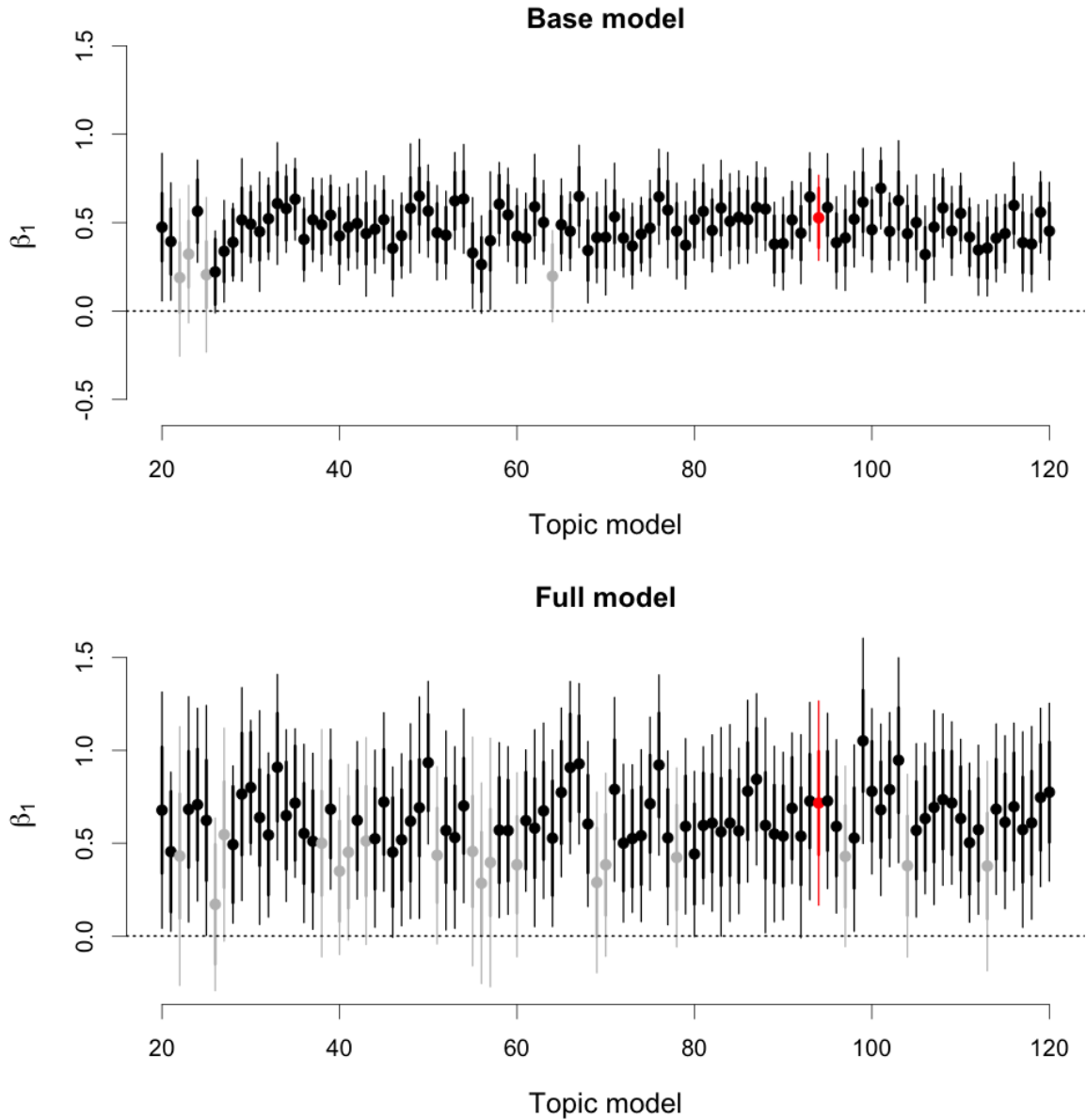
³¹These measures are also derived from the expert survey data: the polarisation of the parliament is the MEP-weighted standard deviation of the positions of all the national parties on a given dimension, and saliency is the MEP-weighted mean of the saliency of a dimension to all parties. As with the measurement of the *Agenda-Setter Polarisation* variable, for each of these expert survey measures, the score for each proposal is the sum of the scores for each dimension, weighted by the probability that the dimension is relevant to that proposal.

Establishing credible causal inferences from observational data such as those considered here is notoriously difficult. This paper makes progress by exploiting a new form of legislative blocking data which allows us to directly observe which bills are removed from the agenda, and by employing a measurement strategy that ties legislative proposals to the positions of parliamentary actors in a more systematic fashion than has been possible previously. These methodological innovations help to move the analysis closer to important theoretical arguments regarding negative agenda control, but they do not provide a solution to the more ubiquitous problem of identifying causal effects from non-experimental data. Accordingly, I do not claim that the results presented here are causally identified, as there are surely very many reasons why legislative proposals are blocked by the Conference of Presidents. However, the analyses presented below – which control for a large range of possible alternative explanations – can help to establish whether the available evidence is broadly consistent with the claims made in the theoretical section above.

RESULTS

Figure 4 plots the β_1 coefficients from equation 1 that result from the classification procedure for each of the K topic models, along with the cluster-robust confidence intervals. The top panel of the figure presents results from a baseline bivariate logistic model, and the bottom panel depicts the estimates from the full model in equation 1. Estimates presented in black represent cases where the relationship between agenda-setter polarisation and blocking is significant ($p < 0.05$), and insignificant relationships are coloured in grey. The points and lines in red indicate the estimate from the 94-topic model preferred by the cross-validation procedure. In general, in both the baseline and the full models, the coefficient is positive and sizeable in magnitude. Focussing on the full model, the estimated coefficient is positive in all models and the estimates are also, for a large part, statistically significant. Notably, the estimates from the model selected by cross-validation are close to the centre of the distribution of coefficients in terms of magnitude, and are statistically significant in both the baseline model and the full model.

Figure 4: β_1 estimates by topic model



NOTE: The plot shows the β_1 coefficient – representing the effect of *Agenda-Setter Polarisation* on the probability of blocking – for each of the K topic models. Thick confidence intervals are calculated from traditional standard errors, and thin lines represent those from cluster-robust errors. The top panel gives the results of the baseline models (model 1 in the regression tables), and the bottom panel gives the estimated coefficients from the full models with fixed-effects and covariates (model 4). The cross-validation selected model (table 1) is presented in red.

Table 1 presents the detailed results from the 94-topic model selected by cross-validation.³² Model 1 provides naive estimates of the effect of agenda-setter polarisation on legislative blocking by the Conference of Presidents. Model 2 includes covariates, and fixed-effects for the median party group, and for committee are included in models 3 and 4 respectively.

Table 1: Median party group polarisation and legislative blocking

	<i>Blocked</i>			
	(1)	(2)	(3)	(4)
Agenda-Setter Polarisation	0.527*** (0.123)	0.579*** (0.200)	0.766*** (0.238)	0.716** (0.281)
Constant	-2.699*** (0.282)	-1.588 (1.923)	0.736 (2.396)	-1.767 (3.184)
Covariates	×	✓	✓	✓
Median Group FEs	×	×	✓	✓
Committee FEs	×	×	×	✓
Observations	4,300	4,300	4,300	4,300
Akaike Inf. Crit.	4,042.809	3,946.850	3,933.339	3,915.512

NOTE: Logistic regressions with cluster robust standard errors (clustered by draft agenda) shown in parentheses. *p<0.1; **p<0.05; ***p<0.01

Consistent with the theoretical prediction, across all specifications, the estimated effect of *Agenda-Setter Polarisation* on legislative blocking is positive, and is significantly different from zero. In terms of the magnitude of the effect, the main coefficient from model 4 – the most conservative model – indicates that increasing the polarisation of the agenda-setting group by one unit increases the odds of a proposal on that dimension being blocked by approximately 48%. An increase of one standard deviation from the mean level of polarisation is associated with an increase of 7 percentage points in the probability of blocking. In sum, these findings therefore support the theory that parties screen out potentially divisive legislation when they hold agenda-setting power.

³²Estimates for covariates are presented in appendix table S6.

VOTING COHESION

The theoretical analysis suggests that if leaders use negative agenda control to block legislation on which they are divided, median EPGs in the Conference will be able to maintain cohesion in spite of increasing polarisation of their constituent national parties (hypothesis 2). I therefore assess the relationship between polarisation and party group cohesion by examining all roll-call votes for the 6th and 7th European Parliament from 2004 to 2014. The data is from www.votewatch.eu, a public website which records all European Parliament roll-call votes. For each of the 13,158 votes in the sample, I calculate a cohesion score for each EPG on that vote, resulting in a total of 95,443 vote-party observations. I use the cohesion measure introduced in Desposato (2005), which corrects for potential ‘small party bias’ and has an intuitive interpretation as the probability that two randomly-selected members of party p vote together on bill j . When a party is completely united, then the probability that two randomly-selected members vote together is equal to one. When a party is completely divided, the measure is equal to zero.³³

The agenda-setting EPG on each dimension is identified in the manner discussed above, and I use the same text-based classification procedure used in the previous analysis to calculate the probability that each vote addresses each policy dimension.³⁴ Accordingly, I construct a continuous measure which captures the agenda-setting power of each party group on each vote ($AgendaSetting_{pj}$). The intuition is that if a given EPG holds the median position on *all* the dimensions that are relevant to a given vote, then it will have an agenda-setting score of one. If a group does not hold the median position on *any* of the expert survey dimensions that are at play in a given vote, then its agenda-setting score will be zero. It is also possible that, as a vote may address multiple policy dimensions, more than one party group will hold at least some agenda-setting power. For example, for a vote made up of 75% economic issues, and 25% environmental issues, where the EPP is median

³³Appendix table S7 replicates the analysis for another commonly used measure of voting cohesion: the ‘agreement index’ used by Hix et al (2007). Reassuringly, the results using this alternative measure are statistically and substantively very similar.

³⁴As each vote is associated with one of the texts presented to the Conference, I use the same θ_k probability matrices from each of the topic models to measure the dimensions associated with each vote.

on the economic dimension and ALDE is median on the environmental dimension, their agenda-setting scores for that vote will be 0.75 and 0.25 respectively.

I measure the internal polarisation of each EPG on each vote ($Polarisation_{pj}$) by calculating the MEP-weighted standard deviation of the expert survey scores for *national* parties within each group. These scores are then multiplied by the dimension classification probabilities of each vote, and then summed to produce a continuous measure of polarisation for each group on each vote. Recall that in the absence of agenda control, parties at the centre of the policy space will be *most* affected by increases in ideological polarisation of their constituent members.³⁵ However, if the leader of an EPG is able to control the plenary agenda, they will be able to block bills on which their constituent national parties are most divided, and thus the effects of polarisation on cohesion will be *lower* for the agenda-setting party group.

To assess the cohesion hypotheses I estimate linear models of the following form:

$$C_{pj} = \alpha + \beta_1 AgendaSetter_{pj} + \beta_2 Polarisation_{pj} + \beta_3 AgendaSetter_{pj} * Polarisation_{pj} + \lambda_p + \zeta_c + X'_j \phi + \epsilon_{pj} \quad (2)$$

β_2 identifies the effect of polarisation on cohesion for EPGs without agenda-setting power. The equivalent effect for agenda-setting party groups is given by the sum of β_2 and β_3 . In the absence of agenda-control, we would expect $\beta_2 + \beta_3 < \beta_2 < 0$, as when leaders are unable to block proposals coming to the floor, it is the median group (the agenda-setter) who is most at risk of division. Thus, a negative value of β_3 would be consistent with a model in which the median party group is unable to control the agenda, while a positive value would provide evidence for the agenda-setting story told above.

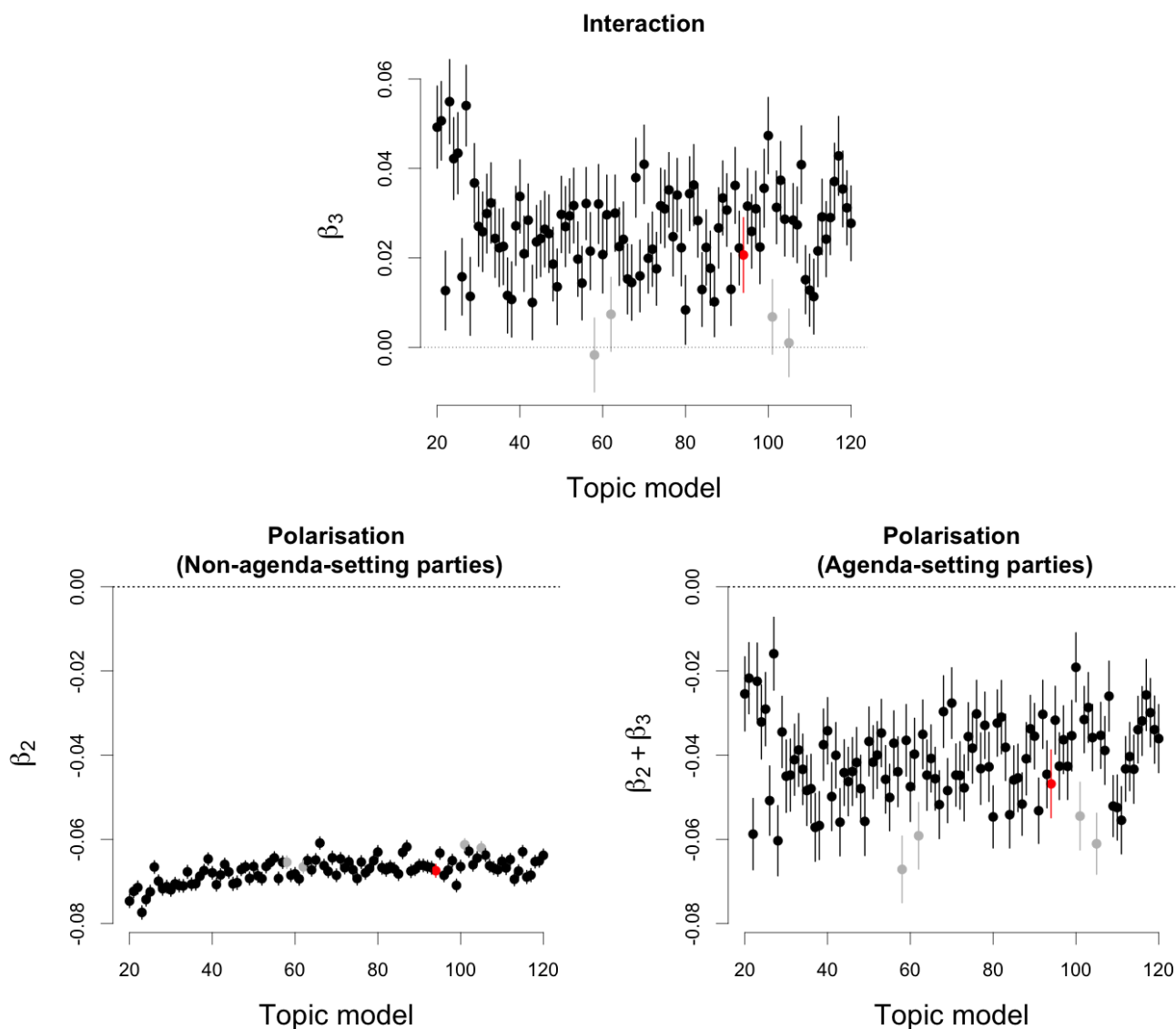
I include a number of control variables to reduce the possibility of omitted variable bias. First, the further an EPG is from the median position on the parliament floor, the less likely it is to be divided on roll-call votes (Krehbiel (2006); see also hypothesis 3 in section S2 of the appendix). I therefore control for the distance between each party group and the floor median position on each vote. Second, in line with previous research (Klüver and Spoon,

³⁵See hypothesis 5 in section S2 of the appendix.

2013) I include a variable which measures the salience of a vote to a given group. Both the salience measure and distance measures are calculated at the party-vote level using the same expert survey data as for the previous analysis. I construct vote-level measures for each EPG by multiplying the expert survey scores by the probability that a given vote pertains to each dimension, and then summing these weighted scores. Additionally, as Hix, Noury and Roland (2007) find that cohesion is higher amongst larger EPGs, I control for the number of MEPs that are members of an EPG in each parliamentary term. I also control for the legislative procedure under which the vote takes place, and for whether a vote is the final vote on a given proposal (Hix, Noury and Roland, 2007). I also control for the overall margin of victory in a given vote, with the expectation that parties will be more cohesive when the parliament is more united as a whole on a given issue.

Finally, in some specifications I include two sets of fixed-effects. First, to account for the possibility that cohesion is higher on average in some policy areas than others, I include fixed-effects for the policy area (as recorded in the roll-call files) of each vote (ζ_c). Second, I also include party group fixed-effects (λ_p). The inclusion of the latter fixed-effects is particularly important, as it ensures that the estimates of the main parameters of interest are identified solely through within-EPG variation in agenda-setting power and party polarisation. As the agenda-setting EPGs are also the largest parties in the parliament, it is possible that omitting these effects would confound the main estimates: there may be other reasons that these groups are less affected by internal polarisation than the smaller party groups. In all regressions I calculate cluster-robust standard errors, clustering on the legislative proposal to which a vote pertains.³⁶

Figure 5: Estimated effect of polarisation on cohesion for agenda-setting and non-agenda-setting party groups



NOTE: The panels depict the estimated effects of interest for each of the K topic models. Significant effects are coloured black, and insignificant effects are coloured grey. The red point represents the estimated effect for the 94-topic model preferred by the cross-validation procedure. The top panel plots the interaction effect (β_3), and the bottom panels give the estimated marginal effect of party polarisation on voting cohesion for agenda-setting ($\beta_2 + \beta_3$) and non-agenda-setting (β_2) party groups.

RESULTS

Figure 5 plots three sets of coefficients for each of the topic models. The top panel depicts the β_3 interaction coefficient. Although there is significant variability in the estimates of the interaction effect, it is nevertheless possible to distinguish a clear pattern. The interaction effect is positive in 100 of the 101 topic models and significant in 97 cases. This result is consistent with negative agenda-setting by the leaders of the European party groups, and inconsistent with a model where leaders are unable to control the agenda. The bottom left-panel depicts the β_2 coefficient, which represents the effect of polarisation on cohesion for non-agenda-setting party groups (*Agenda-Setting* = 0). The bottom right panel gives the sum of β_2 and β_3 , and indicates the effect of polarisation on cohesion for EPGs who hold the agenda-setting position in the Conference of Presidents (*Agenda-Setting* = 1). As is clear from the figure, for groups that hold the balance of power in the Conference, the effect of polarisation on cohesion is considerably smaller than the effect for non-agenda-setting groups. Thus, although polarisation reduces voting cohesion for all party groups, this effect is significantly less for those groups who are able to control the plenary agenda.

Table 2 presents the details results for the 94-topic model. Model 1 gives the estimates for a baseline model including only the *Agenda-Setting* and *Polarisation* variables, and their interaction. Model 2 introduces covariates, and fixed-effects for policy area and party group are included in models 3 and 4 respectively. Across all specifications the interaction effect is positive and statistically significant, implying that the voting cohesion of agenda-setting party groups is less sensitive to increases in polarisation than that of non-agenda-setting groups. Focussing on the most conservative estimates (model 4), an increase of one standard deviation in polarisation for non-agenda-setting EPGs is associated with a

³⁶Recorded roll-call votes in the European Parliament do not represent a random sample of votes taken (Gabel and Carrubba, 2004; Carrubba et al., 2006) and may be subject to selection bias (Hug, 2009). If groups call roll-calls on votes on which they are generally more cohesive, the cohesion scores derived from such scores are likely to be upwardly biased. For this to affect the analysis at hand, however, it would have to be the case that such strategic behaviour worked differently for agenda-setting and non-agenda-setting party groups. Note that the analysis presented here attempts to model the effects of (a different form of) selection bias directly: here we are interested in establishing whether the selection of *proposals* that reach the plenary floor affects the cohesion rate of the agenda-setting party.

Table 2: Agenda-setting, polarisation, and cohesion

	<i>Party group cohesion</i>			
	(1)	(2)	(3)	(4)
Agenda-Setting	0.047*** (0.008)	0.069*** (0.008)	0.013 (0.008)	0.049*** (0.010)
Polarization	-0.074*** (0.001)	-0.058*** (0.001)	-0.061*** (0.001)	-0.067*** (0.001)
Interaction	0.034*** (0.003)	0.031*** (0.003)	0.055*** (0.004)	0.021*** (0.004)
Constant	0.993*** (0.002)	0.793*** (0.007)	0.740*** (0.008)	0.835*** (0.008)
Covariates	×	✓	✓	✓
Dimension FEs	×	×	✓	✓
EPG FEs	×	×	×	✓
Observations	95,443	88,804	88,804	88,804
R ²	0.131	0.129	0.142	0.236

NOTE: OLS regressions with cluster robust standard errors (clustered by legislative proposal) shown in parentheses. *p<0.1; **p<0.05; ***p<0.01

decrease in cohesion of approximately 5.5 percentage points. By contrast, for agenda-setting groups, increasing polarisation by one standard deviation is associated with a decrease in cohesion of only 3.9 percentage points. Overall, these results suggest that the effect of internal polarisation on voting cohesion is systematically different for groups who are able to control the plenary agenda than it is for groups without such control.

The evidence presented here suggests that the closer an EPG is to the political centre, the less it will be affected by internal polarisation of its members. This is directly contrary to what we would expect if these groups were unable to exercise negative agenda control. In the absence of agenda control, it is the parties closest to the political centre that are likely to be *most* divided by increasing party polarisation. That centrist groups are more resilient to party polarisation than non-centrist groups suggests that agenda control plays an important role in European Parliament politics.

CONCLUSION

In 2011, MEPs debated a proposal from the Committee on Constitutional Affairs which concerned the electoral procedure by which MEPs are elected. Amongst other suggestions, the proposal recommended the introduction of 25 new MEPs who would be elected in a pan-European constituency from lists drawn up by the EPGs. The proposal was highly controversial, dividing the parliament largely along pro-integration vs anti-integration lines. The proposal had been blocked by the Conference of Presidents on four separate occasions before it was finally discussed in parliament, only for Andrew Duff MEP – the rapporteur responsible – to withdraw the proposal from consideration and to refer it back to committee for “further informed and expedient consideration”. (Duff, 2011) While there was disagreement *between* European Party Groups over the content of the proposal, disagreement *within* the main agenda-setting EPGs was a significant factor behind the extensive delay in the conference. As one MEP put it, “I would like to suggest to Mr Duff that the reason the vote on his report has been postponed is that his group [is] hopelessly split.” (Fox, 2011) The argument in this paper is that such intra-party divisions may often lead to significant restrictions on the issues considered by the legislature.

Party leaders who are faced with ideologically heterogeneous parties can normally whip their members to follow a common group line. However, when ‘carrot and stick’ disciplinary mechanisms are unavailable, leaders may also manipulate the agenda-setting process in order to avoid potentially divisive votes. In the context of a simple spatial model, I argued that cohesion-motivated party leaders must take account of the preferences of non-median party members when deciding whether to pursue legislation. These party members therefore represent veto players in the intra-party decision-making process. When the preferences of these veto players diverge, and a party leader can control the agenda, the degree of gridlock is likely to increase. Consequently, while polarisation of a party’s members is likely to have pernicious effects on voting cohesion, negative agenda-setting powers allow party leaders to mitigate these effects, and thereby help to maintain high levels of cohesion in the face of ideologically heterogeneous legislators.

I evaluated these predictions in the context of the European Parliament, where traditional forms of discipline are held by national parties, but agenda-setting powers are controlled by the leaders of the transnational EPGs. The structure of parliamentary resources in the EP therefore made it possible to isolate the effects of agenda-control – something that has proved difficult in most national settings. Empirical analysis of both roll-call and blocking data provided support for the expectation that when the unity of a political party declines, party leaders block legislation that threatens to divide their members, and that this has consequent effects for the relationship between intra-party polarisation and voting cohesion for agenda-setting parties.

These findings contribute to our understanding of the practice of party politics in the EP. Contrary to previous findings (Hix, Noury and Roland, 2007, 105-131), the analysis revealed that the possession of negative agenda powers helps EPGs to overcome internal divisions between their constituent national parties. This suggests that, when equipped with the legislative tools to do so, EPG leaders are able to control the voting behaviour of their MEPs even in the face of disagreement between their national parties and the consequent declining efficacy of traditional disciplining mechanisms. This has implications

for the way in which we think about representation in the European Parliament, and puts the EPGs in a more central role than has previously been acknowledged.

In addition, the paper contributes to a literature which seeks to understand the pace of decision-making in the legislative process in the EU as a whole. Existing work suggests that *inter-institutional* divisions over policy between the Parliament, the Council, and the Commission can contribute significantly to the time it takes for a policy proposal to be concluded (Klüver and Sagarzazu, 2013; Toshkov and Rasmussen, 2012). The findings in this paper, by contrast, suggest that the pace of the legislative process in the EU is also, at least in part, determined by the degree of preference homogeneity of agenda-setting parties in the Parliament.

More generally, the model I describe provides insights into the relationship between internal party dynamics and legislative gridlock. The central insight of canonical studies of gridlock is that polarisation *between* partisan actors decreases the range of status quo points that are amenable to change (Tsebelis, 2002; Krehbiel, 2010). By contrast, the analysis here emphasises that when party leaders are concerned with maintaining party cohesion, it is polarisation *within* the party that influences the scope of legislative action. In addition to providing theoretical foundations for recent empirical findings (Bevan, John and Jennings, 2011; Haber, 2015), the model may also be useful for understanding the lack of legislative action in other settings.

For example, successive UK governments have blocked or delayed various proposals to reform the House of Lords. The traditional view of policy-making in majoritarian systems such as the House of Commons is that the government is able to efficiently implement its stated policies, with little or no obstruction from other parties. However, my argument suggests that opposition from *within* the governing party's own ranks may contribute to the pace of policy change. This view is supported by qualitative accounts of Lords reform (Russell, 2009).³⁷ While voting cohesion in Westminster systems is high, this does not

³⁷For example, when describing the Wilson government's failure to implement reform, Russell argues that "Too radical for some, and too cautious for others, the bill generated so much backbench dissent that it was ultimately abandoned." (Russell, 2009, 124)

necessarily imply that government parties are unrestricted in terms of policy change, as cohesion may be the outcome of strategic agenda control. In general, future work should therefore consider the role of intra-party dynamics for understanding the pace of the legislative process, and the outcomes it produces.

While the structure of politics in the European Parliament is useful for isolating the effects of agenda control from those of traditional party discipline, this potentially comes at a cost in terms of generalisability. In particular, the findings in this paper pertain to a legislature in which party group leaders have relatively weak disciplinary powers with which they can cajole legislators into following a common group line. However, the European Parliament is not the only legislature in which party leaders have weak disciplinary powers. In particular, in many presidential systems the key disciplinary mechanisms are not possessed by the legislative party leadership (Carey, 2007). However, in many of these systems party leaders are able to restrict the legislative agenda in a manner similar to that described here. Accordingly, when the preferences of party members in presidential parties diverge, we might also expect to see a concomitant increase in the degree of legislative gridlock. In sum, when cohesion is valuable to party leaders, and when it is not possible to pressure legislators to vote together, it may be better to forego the passage of legislation rather than face damaging divisions on the issues at hand.

APPENDIX

S1. ROLL-RATE OF THE UK CONSERVATIVE PARTY

In this section I analyse the ‘roll-rate’ of the UK Conservative Party in the period before the party left the EPP group to form the new ECR group. I use the concept of a ‘roll’ as defined in Cox and McCubbins (2005), which is measured as any vote on which a majority of a party votes to reject a given bill, but the bill nevertheless passes on the house floor. I analyse 6199 votes from the 6th EP, and compare the roll-rate of the Conservative Party to the roll-rate of other national parties. Table S1 presents the results of a linear probability model, in which the dependent variable measures 1 if a given party was rolled on a given vote, and 0 otherwise. The independent variable is an indicator for the UK Conservative Party. Model 1 in table S1 compares the roll probability of the Conservatives to that of all other parties in the parliament. Model 2 compares the roll probability of the Conservatives to other national parties within the EPP group.

Table S1: Roll rates – UK Conservative party vs other parties

	Rolled	
	All parties (1)	EPP parties (2)
Conservatives	0.062*** (0.003)	0.170*** (0.005)
Constant	0.277*** (0.0004)	0.169*** (0.001)
Observations	1,200,058	289,882
R ²	0.0003	0.004
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	

The results clearly demonstrate that the Conservatives were rolled much more frequently than other parties during the 6th European Parliament. Focussing first on model 1, while the average roll-rate for all national parties in the parliament was approximately 28%, the Conservative party’s roll-rate was over 20% higher. In model 2, the Conservative roll-rate

is more than *twice* as a high as other national parties within the EPP.

S2. A SPATIAL MODEL OF VOTING COHESION WITHOUT AGENDA-CONTROL

The analysis in the main body of the text suggests that while intra-party polarisation will reduce the cohesion of European Party Groups, this relationship will be weaker when an EPG holds the *median* position in the Conference of Presidents, as when this is the case the leader of the EPG will be able to block potentially divisive proposals from reaching the parliamentary floor. As agenda-setting power in the EP is a function of the *position* of the EPG in the policy space, it is necessary to clarify expectations regarding the level of cohesion of median and non-median parties in the absence of negative agenda control. That is, if in the absence of agenda control we would also expect median parties to be more cohesive than non-median parties, empirical tests of hypothesis 2 may not identify the effects of purposive agenda control by party leaders in the Parliament.

In this section, I therefore focus attention on expectations for party cohesion in a parliamentary setting in which no actor is able to control the plenary agenda. The discussion of this simple model establishes baseline expectations about the relationship between party position, ideological polarisation, and voting cohesion which are then contrasted with expectations derived in the main text.³⁸

Consider a parliamentary agenda constructed from a set of J independent policies, in which each $j \in J$ is unidimensional. Bills are considered under an open-amendment rule on the plenary floor meaning that all policies pass at x_m , the position of the median member of the parliament. Each legislator, i , votes for a bill j when x_i is closer to the position of the median legislator than to the status quo outcome x_q . Thus, i votes yea if and only if:

$$-(x_i - x_m)^2 > -(x_i - x_q)^2 \quad (3)$$

Parties are treated as collections of likeminded individuals, where, for each policy issue j , the positions of party members x_{ij} are iid draws from a normal distribution characterised by a mean parameter μ_{pj} and a variance parameter σ_{pj}^2 . Each legislator from party p on

³⁸This simple model in this section is equivalent to the ‘floor agenda’ model in Cox and McCubbins (2005), and similar to the model presented in Krehbiel (1993). The main difference is that other models focus on the subset of bills that will be considered and passed by the parliament, while here I am specifically interested in voting cohesion.

policy issue j has a policy position given by $x_{i(p)j} = N(\mu_{pj}, \sigma_{pj}^2)$, where μ captures the average placement of members of party p on policy j , and σ^2 captures the idea that parties are more ideologically united on some policy issues than on others. The subscripts on these parameters (p and j) indicate that both party positions and party polarisation can vary across parties within policy issues, and within parties across issues.

We are concerned with the effect that the party parameters μ and σ^2 have on the cohesion of a party's members in plenary votes in the absence of any agenda-setting activity. A party is completely cohesive on a bill when all of its constituent members vote either for or against the bill. By contrast, a party is divided when some members vote to approve the bill, while other members vote in opposition. We can therefore characterise the voting cohesion of party p on bill j by the probability that two randomly selected members, a and b , will vote together on j .³⁹ Denoting this probability as C_{pj} , and the cutpoint separating the yea voters from the nay voters on a given vote as equal to $c = (x_m + x_q)/2$, then probability that a and b are either both less than c or both greater than c (on a given roll-call vote) is given by:

$$\begin{aligned}
C_{pj} &= \Pr[(x_a < c) \cap (x_b < c)] + \Pr[(x_a > c) \cap (x_b > c)] \\
&= \Phi((c - \mu_{pj})/\sigma_{pj})^2 + (1 - \Phi((c - \mu_{pj})/\sigma_{pj})^2) \\
&= 1 - 2\Phi((c - \mu_{pj})/\sigma_{pj}) + 2\Phi((c - \mu_{pj})/\sigma_{pj})^2
\end{aligned} \tag{4}$$

where Φ is the cumulative distribution function for the standard normal distribution. As can easily be seen from this formulation, the cohesion of a party on a given vote is therefore increasing in the distance between c_j and μ_{pj} , and decreasing in σ_{pj}^2 . This implies the intuitive notion that the closer the average member of the party is to the cutpoint, the less cohesive the party will be overall in a roll-call vote. Similarly, on a given vote, when party members are more ideologically dispersed (i.e. when σ^2 is large), the party is more likely to be divided. I assume that status quo positions are uniformly distributed across the policy-space and centred on the position of the floor median, which in turn means that

³⁹A similar characterisation of voting cohesion is used by Desposato (2005). In the empirical analysis, I use this approach to estimate the cohesion of each EPG on each vote in the 6th and 7th European Parliaments.

the cutpoints for each bill (c_j) are also uniformly distributed around x_m . The expected value of C_p across J votes is therefore:

$$E[C_p|\mu, \sigma^2] = \frac{\sum_1^J 1 - 2\Phi((c_j - \mu)/\sigma) + 2\Phi((c_j - \mu)/\sigma)^2}{J} \quad (5)$$

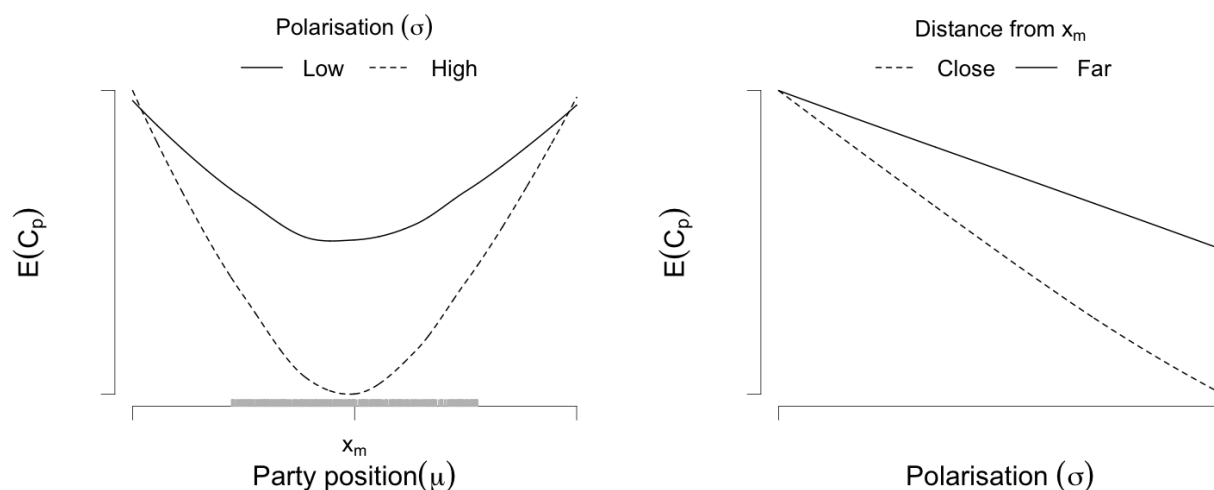
We are concerned with the *interaction* between the parameters μ and σ , and the effect that this interaction has on the expected level of voting cohesion. As there is no closed-form expression for equation 5, I proceed by using computer simulations to investigate the relationship between μ_{pj} , σ_{pj} , and $E[C_p]$. Each simulation represents a policy j , where the status quo is drawn randomly from a uniform distribution. For each status quo, I calculate the cohesion score (equation 4) over a range of μ and σ values, and then take the average score for each combination of μ and σ across all simulations (as per equation 5).⁴⁰ The righthand panel of figure S1 presents the (smoothed) average level of cohesion for a party as it traverses the policy space for low and high values of σ . The lefthand panel gives the average cohesion level across the range of σ for two hypothetical parties: one close to the median, and one further away.

The lefthand figure demonstrates that as μ approaches x_m the voting cohesion of the party will decline, but that this decline is more pronounced for the more polarised (high σ) party. More importantly, the righthand panel of figure S1 shows that while increasing σ leads to a monotonic decrease in voting cohesion, the strength of this relationship is stronger the *closer* the party is to the position of the floor median. This implies that – in the absence of agenda control – it is when a party is close to the centre of the policy space that the party’s cohesion level is *most* affected by the level of intra-party polarisation: the opposite prediction of a model in which the party can control the legislative agenda (hypothesis 2 in the main text).

The intuition here is straightforward. In the absence of agenda-control, we should expect centrist parties to be on average more divided on roll-call votes than extremist parties, as their members find themselves on opposite sides of the (centrally distributed) cutting-lines

⁴⁰In particular, I draw 1000 values for x_q from a uniform distribution on the range [-10,10]. I vary μ_{pj} from -9 to 9, and σ_{pj} from 0.01 to 3.

Figure S1: Voting cohesion as a function of party position and polarisation in the absence of agenda control (simulation)



NOTE: The plot on the left shows the relationship between party position and voting cohesion across a set of simulated parliamentary votes. Status quo points are uniformly distributed on the range $[-10,10]$, meaning that cutpoints are also uniformly distributed around the position of the median legislator (cutpoints are depicted as grey tick marks at the bottom of the figure). When the party is located closer to the centre of the policy space, the voting cohesion of the party declines, as the party will find itself divided more often. The righthand plot depicts the relationship between polarisation (σ^2) and cohesion. While increases in ideological polarisation lead to decreases in voting cohesion regardless of party position, the figure also demonstrates that, in the absence of agenda control, parties close to x_m are particularly sensitive to polarisation.

more often. More importantly, the voting cohesion of centrist parties is greatly reduced by increased ideological polarisation, while for extremist parties the effects of polarisation on cohesion are less pronounced. When a party is central, increases in the ideological diversity of its members will result in more instances when members of the party find themselves on opposite sides of an issue. When a party is positioned at an extreme position in the policy space, polarisation is less consequential, as even relatively high levels of ideological difference between members may not translate into disunity in voting: the members of extremist parties are sufficiently far from the point separating ‘yeas’ from ‘nays’ that they will vote together despite their relative ideological differences.

This simple model, in which no agenda-setter is able to prevent some subset of J from being considered, leads to the following expectations:

HYPOTHESIS 3: As parties approach the median floor position of a given policy dimension, the voting cohesion of the party will decline

HYPOTHESIS 4: As the legislators of a party become ideologically more polarised on a given policy dimension, the voting cohesion of the party will decline.

HYPOTHESIS 5: The effect of ideological polarisation on voting cohesion will be stronger the closer a party is to the median position of a given policy dimension.

Hypothesis 5 reveals that if EPG leaders hold the median position in the Conference of Presidents *but this position does not afford them agenda-control powers* then they will be *more* affected by increases in intra-party heterogeneity than when they hold non-centrist positions. This contrasts directly with hypothesis 2 in the main text, which suggests that when EPGs hold median positions, they will be able to block proposals that threaten to divide them, and therefore it is when they hold these positions that they will be *less* affected by increases in intra-party disagreement. In sum, this analysis reveals that hypothesis 2 therefore does indeed identify the effects of agenda control on voting cohesion in the European Parliament.

Table S2: Median party group by expert survey policy dimension, EP6 & EP7

Dimension	EP6	EP7
Collective Security	SOC	SOC
Decentralisation/Subsidiarity	EPP-ED	EPP-ED
Deregulation	EPP-ED	EPP-ED
Economic (Spending v. Taxes)	EPP-ED	EPP-ED
Environment	ALDE	ALDE
EU: Authority	EPP-ED	EPP-ED
Social	SOC	SOC

TITLE: Prudential requirements for credit institutions and investment firms

PURPOSE: to strengthen prudential requirements for credit institutions and investment firms that relate strictly to the functioning of banking and financial services markets and are meant to ensure the financial stability of the operators on these markets as well as a high level of protection of investors and depositors.

PROPOSED ACT: Regulation of the European Parliament and of the Council. BACKGROUND: the extent of the financial crisis has exposed unacceptable risks pertaining to the current regulation of financial institutions. According to IMF estimates, crisis-related losses incurred by European credit institutions between 2007 and 2010 are close to 1 trillion or 8% of the EU GDP. In order to restore stability in the banking sector and ensure that credit continues to flow to the real economy, both the EU and its Member States adopted a broad range of unprecedented measures with the taxpayer ultimately footing the related bill. In this context, by October 2010 the Commission has approved 4.6 trillion of state aid measures to financial institutions of which more than 2 trillion were effectively used in 2008 and 2009. The level of fiscal support provided to credit institutions needs to be matched with a robust reform addressing the regulatory shortcomings exposed during the crisis. Priorities and challenges: it should be noted that one of the priorities of the Commission in the reform of EU financial services regulation has been to ensure that the banking sector is able to fulfil its fundamental purpose, namely lending to the real economy and providing services to citizens and businesses in Europe. The proposal is designed to tackle regulatory shortcomings in the following areas:

Management of liquidity risk: existing liquidity risk management practices were shown by the crisis to be inadequate in fully grasping risks linked to originate-to-distribute securitization, use of complex financial instruments and reliance on wholesale funding with short term maturity instruments. Definition of capital: institutions entered the crisis with capital of insufficient quantity and quality. Given the risks they faced, many institutions did not possess sufficient amounts of the highest quality capital instruments that can absorb losses effectively as they arise and help to preserve an institution as a going concern.

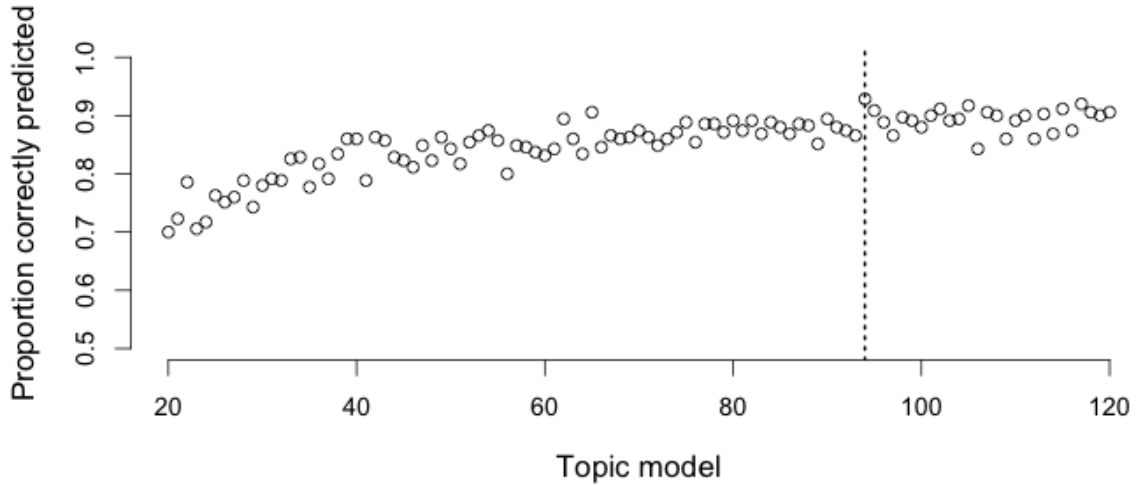
Counterparty credit risk: the crisis revealed a number of shortcomings in the current regulatory treatment of counterparty credit risk arising from derivatives, repo and securities financing activities. It showed that the existing provisions did not ensure appropriate management and adequate capitalisation for this type of risk.

Options, discretions and harmonisation (entire Regulation): in 2000, seven banking directives were replaced by a single Directive. This directive was recast in 2006

...

Figure S2: Example legislative text summary

Figure S3: Proportion of test set correctly predicted, by topic count

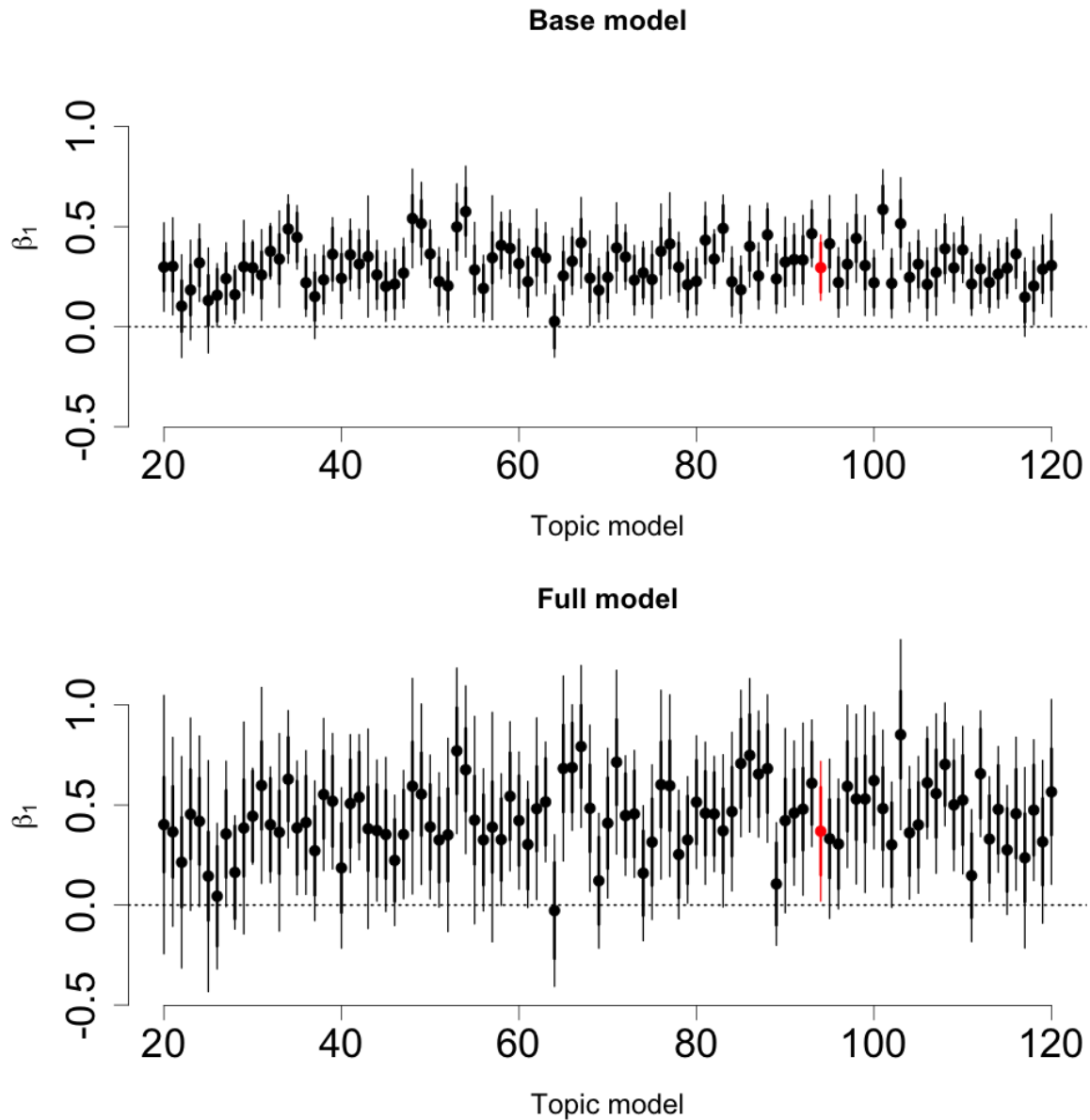


NOTE: The figure shows the proportion of the test set of legislative summaries that are correctly predicted by the multinomial model.

S3. DISCRETE CLASSIFICATION METHOD

In this section I replicate the main ‘blocking’ results using a similar method of classification, with the nuance that here I assign proposals to the (single) policy dimension on which they have the highest probability from the penalised multinomial logistic model. Figure S4 gives the results for all K topic models, and table S5 gives the results from the 94-topic model.

Figure S4: β_1 estimates by topic model – discrete classification



NOTE: The plot shows the estimated β_1 coefficient – which represents the effect of median EPG polarisation on the probability that a proposal will be blocked by the Conference of Presidents – for each of the K topic models. The top panel gives the results of the baseline (covariate-free) models, and the bottom panel gives the estimated coefficients from the full models with fixed effects and covariates (model 4 in the regression tables). The cross-validation preferred model coefficient (corresponding to the results presented in table S5) is presented in red.

Deregulation	Economic	Environment	Immigration	Social	EU Authority	Security
deregulation regulation state control barriers internal market market	economic business industry state ownership taxes public services spending partnership agreement employment jobs growth trade tax	environment agriculture farm climate global warming greenhouse global temperature kyoto marine vehicle	immigration asylum seeker immigrant migrant schengen migration external borders asylum	gender culture education homosexuality euthanasia social abortion	eu authority integration supranational sovereignty national parliament internal regulations devolution centralization administration subsidiarity proportionality constitution enlargement Lisbon law court legal procedure budget instrument	collective security terrorism nuclear non-proliferation weapons of mass destruction external action service ceas ceas military terrorist common security and defence european security strategy human rights foreign affairs

Table S3: Key words for text classification training data

Table S4: Highest probability proposals, by expert survey dimension

	Deregulation	Economic
1	Aromatised wines, aromatised wine-based drinks and aromatised wine-product cocktails: definition, description and presentation (repeal. Regulation (EEC) No 1601/91, adaptation to the regulatory procedure with scrutiny). Recast	Trade in raw materials and commodities
2	FLEGT licensing scheme for imports of timber into the EU: aligning the Regulation with the TFEU (Commission delegated and implementing powers)	Long-term sustainability of public finances for a recovering economy
3	Community control system for ensuring compliance with the rules of the Common Fisheries Policy: aligning the Regulation with the TFEU (Commission delegated and implementing powers)	Economic governance: implementation of the excessive deficit procedure. 'Six pack'
4	Aligning a number of legal acts with the TFEU: Commission delegated and implementing powers	2006 annual report on the euro area
5	Denominations and technical specifications of euro coins intended for circulation. Recast	Trade and economic relations with the countries of South East Asia (ASEAN)
6	Glucose and lactose: customs treatment (repeal. Regulation (EEC) No 2730/75). Codified version	Economic governance: strengthening of surveillance of budgetary positions and surveillance and coordination of economic policies. 'Six pack'
	Environment	EU Authority
1	Fuels and energy from renewable sources: transition to biofuels to deliver greenhouse gas savings	Request for the defence of parliamentary immunity of Umberto Bossi
2	Energy end-use efficiency and energy services	EP Rules of Procedure, Rules 166 and 195(3): final vote and voting in committee
3	Promotion of the use of energy from renewable sources. "Renewable Energy Directive"	EP Rules of Procedure, Rule 121: proceedings before the Court of Justice
4	Roadmap for moving to a competitive low carbon economy in 2050	Request for waiver of the immunity of Antonio Di Pietro
5	Specification of petrol, diesel and gas-oil: mechanism to monitor and reduce greenhouse gas emissions from fuels. "Fuel Quality Directive"	Request for defence of parliamentary immunity of Renato Brunetta
6	Emission performance standards for new light commercial vehicles	Car industry: location and identification of hand controls, tell-tales and indicators, UN/ECE Regulation
	Immigration	Security
1	Schengen Borders Code: use of the Visa Information System (VIS) at the external borders	New strategy for Afghanistan
2	External borders: recognition by new Member States and Schengen States of residence permits issued by Switzerland and Liechtenstein as equivalent to their national visas for the purpose of transit (Regulation (EC) No 539/2001)	Space and security
3	EC/Seychelles agreement: short-stay visa waiver	European Security Strategy
4	EC/Saint Kitts and Nevis agreement: short-stay visa waiver	Anti-missile shield for Europe and its political and strategic implications
5	EC/Ukraine agreement: facilitation of the issuance of visas	Implementation of the European Security Strategy and the Common Security and Defence Policy
6	EC/Mauritius agreement: short-stay visa waiver	EU comprehensive approach and its implications for the coherence of EU external action
	Social	
1	Impact of the crisis on access to care for vulnerable groups	
2	Gender aspects of the European framework of national Roma inclusion strategies	
3	How marketing and advertising affect equality between women and men	
4	Equality between women and men- 2008	
5	Early years learning in the European Union	
6	Equality between women and men in the European Union 2009	

Table S5: Agenda-setter polarisation and legislative blocking – discrete classification

	<i>Blocked</i>			
	(1)	(2)	(3)	(4)
Agenda-Setter Polarisation	0.295*** (0.084)	0.244* (0.137)	0.357** (0.169)	0.420** (0.199)
Agenda-Setter Distance		0.018 (0.073)	0.041 (0.079)	0.030 (0.083)
Parliament Polarisation		-0.060 (0.191)	-0.043 (0.203)	0.216 (0.200)
Salience		-0.085 (0.096)	-0.383 (0.235)	-0.310 (0.288)
Distance from recess		0.001 (0.001)	0.001 (0.001)	0.001 (0.001)
# proposals		-0.003 (0.007)	-0.003 (0.007)	-0.004 (0.007)
Constant	-2.167*** (0.219)	-0.755 (1.509)	2.165 (2.957)	0.005 (3.809)
Median Group FEs	×	×	✓	✓
Committee FEs	×	×	×	✓
Observations	4,300	4,300	4,300	4,300
Akaike Inf. Crit.	4,058.429	3,976.077	3,964.982	3,929.701

NOTE: Logistic regressions with cluster robust standard errors (clustered by draft agenda) shown in parentheses. *p<0.1; **p<0.05; ***p<0.01

Table S6: Median party group polarisation and legislative blocking

	<i>Blocked</i>			
	(1)	(2)	(3)	(4)
Agenda-Setter Polarisation	0.527*** (0.123)	0.579*** (0.200)	0.766*** (0.238)	0.716** (0.281)
Agenda-Setter Distance		0.379* (0.195)	0.462** (0.202)	0.381* (0.214)
Parliament Polarisation		-1.260** (0.606)	-1.771** (0.704)	-0.975 (0.768)
Salience		0.202 (0.149)	0.079 (0.232)	0.072 (0.278)
Distance from recess		0.001 (0.001)	0.001 (0.001)	0.001 (0.001)
# proposals		-0.002 (0.007)	-0.002 (0.007)	-0.003 (0.007)
Constant	-2.699*** (0.282)	-1.588 (1.923)	0.736 (2.396)	-1.767 (3.184)
Median Group FEs	×	×	✓	✓
Committee FEs	×	×	×	✓
Observations	4,300	4,300	4,300	4,300
Akaike Inf. Crit.	4,042.809	3,946.850	3,933.339	3,915.512

NOTE: Logistic regressions with cluster robust standard errors (clustered by policy area) shown in parentheses. *p<0.1; **p<0.05; ***p<0.01

Table S7: Agenda-setting party groups, polarisation, and cohesion – Hix et al. (2007) agreement score

	<i>Party group cohesion</i>			
	(1)	(2)	(3)	(4)
Agenda-Setting	-0.015 (0.010)	0.023** (0.010)	-0.034*** (0.010)	0.051*** (0.013)
Polarization	-0.115*** (0.001)	-0.094*** (0.001)	-0.097*** (0.001)	-0.107*** (0.001)
Interaction	0.090*** (0.004)	0.081*** (0.004)	0.106*** (0.004)	0.041*** (0.006)
Constant	1.040*** (0.003)	0.755*** (0.010)	0.694*** (0.012)	0.848*** (0.011)
Covariates	×	✓	✓	✓
Dimension FEs	×	×	✓	✓
EPG FEs	×	×	×	✓
Observations	95,643	88,973	88,973	88,973
R ²	0.152	0.144	0.152	0.276

NOTE: The table shows the estimates of equation 2 when using the Hix, Noury and Roland (2007) measure of party cohesion, rather than the measure presented in Desposato (2005) which is used in the main analysis. As is clear from the table, results are not sensitive to this choice. OLS regressions with cluster robust standard errors (clustered by legislative proposal) shown in parentheses. *p<0.1; **p<0.05; ***p<0.01

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