



Legislators in the crossfire: Strategic non-voting and the effect of transparency

Héloïse Cloléry

CREST-Ecole polytechnique, IP Paris, 5 Avenue Henry Le Chatelier, 91764 Palaiseau Cedex, France

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ABSTRACT

When committee members care about their reputation with a principal, making their choices transparent affects the outcome. In Parliaments, legislators care about their reputation with several principals, namely their constituents and Party leaders. It is thus unclear in which direction votes will move when they become observable, and moreover legislators may prefer to opt out of voting entirely in order to avoid conflict. This paper first uses French voting data to show that reputational concerns drive the decision to participate in a vote: in order to avoid blame legislators are less likely to vote when there is disagreement between the constituents and the Party. Second, making legislators' votes public increases their incentive to use voting for reputation-building, and, therefore, the distortion in group decision-making. The French transparency reform of 2014 provides a quasi-natural setting for a Difference-in-Differences analysis. Greater transparency led to less participation, as legislators preferred not to take sides.

1. Introduction

The political economy literature often depicts legislators as agents representing the interests of one principal, most often their electorate. But legislators face an additional constraint: their political Parties also want to sway policy making. The legislators should, therefore, satisfy several principals. This paper first verifies that disagreement between the different principals leads to strategic non-voting in Parliament. Second, it shows that the more the principals have monitoring power, the more the legislators have incentives to behave strategically.

The principals' monitoring power depends on how transparent is the agent's behavior. Greater transparency comes from rendering the decisions made by legislators public and more traceable. Increasing transparency is a common phenomenon as the digital age has made it easier to systematically and automatically publish information. Previous theoretical work highlights that, when their behavior comes under scrutiny, decision-makers tend to comply more with the interests of the represented group.¹ That is, greater transparency increases the monitoring power of the principal over the agent. However, there is suggestive evidence that Members

E-mail address: heloise.clolery@polytechnique.edu.

¹ Legislators are career-motivated, and will thus prefer to use voting as a tool to build their reputations when their decisions are made public. Transparency can however have undesirable effects, in particular in terms of which private information will be revealed during the deliberations or the voting processes. See Levy (2007), Gersbach and Hahn (2008), Mattozzi and Nakaguma (2016), and Name-Correa and Yildirim (2019) for theoretical explanations, and Meade and Stasavage (2008) and Hansen et al. (2018) for an empirical analysis of the 1993 decision to release the transcripts of Federal Open Market Committee meetings.

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of Parliament (MPs) represent not only their constituents but also the Party to which they are affiliated. These two groups will hold opposing positions on some issues, so MPs cannot align with both. Casting any vote will then potentially harm their relationship with one of the groups, and it is not obvious in which direction votes will move when they become observable. Two contributions have estimated the effect of transparency policies on legislative voting in Switzerland. Stadelmann et al. (2014) shows that increasing the visibility of legislators' votes in the Swiss Parliament did not improve the quality of public representation, and in Benesch et al. (2018) it increased Party alignment at the expense of the constituents. But these studies overlook another possibility: MPs might prefer to opt out. Existing work has explained abstention and non-participation in part by conflict within the constituency (Cohen and Noll, 1991), between the National Party and the European Party group (Mühlböck and Yordanova, 2017), and between the constituents and the Party (Longley, 2003; Willumsen and Öhberg, 2013). This literature suggests that not taking any position is an outside option for the MPs that prevents them from being blamed by any of the represented groups. The objective of this paper is to test the *Crossfire Hypothesis*: when their constituents and their Party disagree, legislators strategically choose not to vote. Then, to test to what extent a transparency shock on the principals' monitoring power can affect this strategic non-voting behavior.

While Party positions are observable from voting behavior in Parliament, the electorate's preferences are more difficult to infer. The literature adopted different approaches, which often cannot generalize to other votes or other Parliaments. Cohen and Noll (1991) considers only one subset of votes using the electoral support for the Presidential party as a proxy for voters' preferences. Longley (2003) analyzes Canadian legislative voting over the Canada-US Free Trade Agreement, using constituency union density as a measure of voters' preferences over this issue. Several papers relied on referendums on which both the legislators and the constituents voted (Hersch and McDougall (1988) on the "Sin" issues in Kansas, Garrett (1999) on lottery adoption in West Virginia, Stadelmann et al. (2013) on a series of referendums in Switzerland). Referendums are not a common feature of the French political system² and, therefore, cannot be used in the context of this paper to measure congruence with the constituents. Other papers use survey data, examples include Blais and Bodet (2006), Golder and Stramski (2010), and Willumsen and Öhberg (2013). But no systematic surveys investigate the constituents' preferences on all issues voted in Parliament. Hence, I propose a novel approach to estimating constituents' preferences, using their characteristics and the MPs' recorded votes, on each topic.

A second challenge is to estimate the causal impact of transparency on participation. The fourteenth French legislature³ provides a quasi-natural framework in which to identify the effects of voting transparency. France is one of the countries (others are Switzerland, the UK, and Australia) that have recently taken advantage of electronic votes to increase the visibility of Parliamentary decision-making. In 2013 and 2014, French politics went through a series of reforms aimed at increasing the transparency of public life for citizens, including a change in the method used to record votes in Parliament.⁴ To improve representative democracy, the President of the French Lower House of Parliament claimed that citizens should be able to find out how their MPs vote in the Assembly.⁵ This reform was implemented at the end of February 2014, almost two years after the opening of the fourteenth legislative term. All of the other aspects of Parliamentary political life were identical pre-and post-reform during this legislature. This French reform is of interest, as transparency rose for votes on one of the two kinds of votes⁶ (those called "ordinary") but not on the other ("important"), producing a natural difference-in-differences setting with the latter serving as the control group. The novelty of the present work is to use this transparency reform to unveil distortions in participation, which allows us to see that both principals matter for legislative voting.

My results are twofold. I first use roll-call data to measure the extent to which conflict between Party leaders and constituents affects participation. I use the constituents' characteristics to estimate their preferences. Hence, I can tell how likely each MP is to be "caught in the crossfire" on each vote. I find that an increase in the probability of conflict significantly raises the probability of non-voting. The results are robust to using the electoral support of constituents.

Second, I use the increased availability of information to identify which principal matters the most in the voting decision. I use the quasi-natural setting of the fourteenth French legislature to carry out a difference-in-differences analysis on participation and alignment rates. Transparency reduces participation by 8 to 12 percentage points and does not significantly affect the alignment rate. As their behavior becomes more-easily observable to both constituents and Party leaders, MPs strategically prefer not to take sides. This lower participation concerns not only unaligned MPs but also some previously-aligned MPs. I conclude that the legislators care about both their constituents' interest and their Party line.

These conclusions are robust to a battery of checks: in particular, heterogeneous effects across Parties, the salience that citizens put on the different topics, and the local rooting of MPs do not affect the results. Nevertheless, the votes studied in this paper were recorded upon request and represent only a subset of all the issues voted in Parliament. This subset likely concerns the most conflicting issues. Thus, one should interpret the results as an upper bound of the strategic response to conflicting situations in Parliament.

The remainder of this paper is organized as follows. The Crossfire Hypothesis and its foundations are presented in Section 2, and Section 3 describes the institutional context of the fourteenth French legislature. In Section 4, I show that the decision to participate in a vote is affected by disagreement between the constituents and the Party. I then assess the impact of the reform on MPs' voting behavior in Section 5, and Section 6 discusses the results. Section 7 concludes.

² The last referendum conducted at the national level was in 2005.

³ French legislatures under the 5th Republic, which started in 1958, last for five years — unless they are dissolved by the *Président de la République* which happened for the first, third, sixth, eighth, and tenth legislatures.

⁴ Other innovations included the obligation for public officials to disclose all conflicts of interest, the creation of an institution to control financial transparency in political life (the *Haute Autorité pour la transparence de la vie publique*), and a ceiling on donations to political parties per donor.

⁵ The motivation for this reform was presented in the New Year speech of the President of the *Assemblée Nationale*, at the time Claude Bartolone: <http://presidence-14.assemblee-nationale.fr/le-president/discours/vaeux-de-claude-bartolone-aux-parlementaires-aux-forces-vives-et-aux-corps-constitues>.

⁶ Note that a "vote" can be either on Bills or on Amendments.

2. The Crossfire Hypothesis

Legislators are agents who serve two principals: their electorate and their Party. This is consistent with work in the existing literature. I set out the Crossfire hypothesis as follows: legislators are caught in the crossfire when the opinions of constituents and the Party diverge, and so choose not to participate in the vote.

Constituents want their interests to be represented in the legislative process. In a small French survey, [Rozenberg \(2013\)](#) found that 81% of respondents agreed that all representatives, including MPs, should represent the interests of their constituents. Constituents can punish legislators who do not vote in this way by not re-electing them. [Gavoille \(2018\)](#) provides evidence of this kind of electoral punishment in France, where electors do not vote for legislators whose attendance rate is too low.

Party discipline reflects the ability of political groups to obtain the support of their members. *Parties* wish to send out signals of unity and a cohesive ideological position in order to build a political brand. Political groups use Parliamentary votes to provide informative labels, and Party discipline increases the coherence of the information given to the electorate ([Snyder and Ting, 2002](#)). Party leaders have a variety of means of imposing discipline ([Bailer, 2011](#); [Curto-Grau and Zudenkova, 2018](#)), which can be either explicit or implicit, incentive or coercive. In particular, it is the Party that nominates the candidates who run in general elections. Parties also play a central role in the organization of the daily work in the National Assembly: they determine which MP will write the reports, allocate speaking time, and be nominated to Commissions. Evidence of discipline in the French Parliament has been found in [Sauger \(2009\)](#).

Legislators, or MPs, aim to maximize their policy influence over time. They care about not only their current but also their future impact. As such, MPs are interested in re-election, which is conditional on the approval of both their constituents and the Party leaders. [Costa et al. \(2012\)](#) and [Costa and Poyet \(2016\)](#) analyze how close French MPs are to their constituents. They found that French MPs often play the role of a “local manager”, or “social worker”. Each MP has a *réserve parlementaire* of €130,000 allocated each year that they can use to finance local associations or help municipalities in the form of subsidies. MPs therefore often receive requests from these local actors and serve as intermediaries between them and the government. The constituents themselves also often contact their MPs during their surgery hours or at social events. French MPs are, however, very dependent on their Party, as it is the Party that decides who will stand in elections.

The cost of legislators’ decisions will then depend on the degree of conflict and the principals’ monitoring power. Not participating may be costly for legislators, as the principals can blame them for not performing their duty. When both principals agree, the cost of aligning their votes to the consensual decision will be relatively low compared to not voting. When there is no consensus among them, MPs cannot align with both principals, and the cost of voting might be higher than the cost of non-participation. In particular, we can distinguish between three kinds of opposition to the party, which can be ranked from least to most costly for the party, and hence from least to most subject to discipline. (1) non-voting: it decreases the number of aligned votes for the party without increasing the number of opposing votes,⁷ and the MP’s absence from Parliament can be attributed to other factors than disagreement with the party. (2) voting “abstention”: it decreases the number of aligned votes for the party without increasing the number of opposing votes but can be attributed to disagreement with the party.⁸ (3) openly dissent by voting opposite to the Party line: this decision is attributed to disagreement with the party and not only decreases the number of aligned votes but also increases the number of votes opposing the party line.

I first check that, when the principals have full information about their MPs’ votes, conflict can to some extent explain non-participation. Second, greater voting transparency enhances the monitoring power of both principals. If the Crossfire Hypothesis is true, and if there is as much conflict before and after the reform, a transparency shock should reduce participation.

3. Data and institutional context

3.1. Data

The recorded votes of legislators are publicly available from the French National Assembly website.⁹ The dataset covers the fourteenth legislature, which ran from June 20th 2012 to June 20th 2017, and contains the votes of 643 MPs¹⁰ over 1380 issues. I merged this data with publicly-available information on constituents from the French national institute of statistics *INSEE* website.

⁷ The outcome depends on the majority among the *participating voters* and not among the 577 legislators. Hence, the participation rate does not affect the result unless the outcome is a tie.

⁸ There are two exceptions to the statement that non-voting and abstention do not affect reduce opposing votes. “Motions de censure” and votes on “organic” laws require that at least half of the members of Parliament vote in favor, for the bill or motion to pass. “Motions de censure” are voted when the members of Parliament do not give their confidence in the Government, these votes are not included in the analysis. There were only 5 votes on organic laws during this legislature, they are included in “scrutins solennels” in this analysis.

⁹ <https://data.assemblee-nationale.fr/opendata-archives-xive/scrutins-xive-legislature>. I downloaded the data on January 20th, 2021. The last 26 votes of the legislature are absent from this dataset. Therefore, I completed the data using the publicly available information from this website: [https://www2.assemblee-nationale.fr/scrutins/liste/\(legislature\)/14](https://www2.assemblee-nationale.fr/scrutins/liste/(legislature)/14).

¹⁰ The Assemblée Nationale has 577 members. Resignations, nominations to Government, and death led to a number of MPs being replaced during the legislature, bringing the total to 643 separate MPs.

Groupe socialiste, républicain et citoyen (295 membres)

Pour: 8

Christian **Assaf**
Olivier **Dussopt**
Vincent **Feltesse**
Laurent **Grandguillaume**

Serge **Janquin**
Lucette **Lousteau**
Christophe **Sirugue**
Patrick **Vignal**

Contre: 163

membres du groupe

présents ou ayant délégué leur droit de vote

Abstention: 10

Patrick **Bloche**
Pascale **Boistard**
Sabine **Buis**
Fanélie **Carrey-Conte**
Laurent **Cathala**

Philip **Cordery**
Pascal **Deguilhem**
Florence **Delauay**
Philippe **Noguès**
Daphna **Poznanski-Benhamou**

Fig. 1. Example of dissident counting, vote n°125: Amendment on the Same-Sex Marriage Law. *Notes:* At the time of the vote, 295 MPs were affiliated with the main (SER) political group. A majority (163) of the Party voted against this bill, which defines the Party's position. The names of all MPs who did not vote along the Party line are recorded: the 8 who voted Yes and the 10 who abstained. For the remaining 277 Socialist MPs, the document does not identify the 163 members who voted along Party lines and the 114 members who did not participate in this vote. Note that MPs can delegate their voting rights to other members. Each MP can receive at most one voting delegation from fellow members, and MPs can vote by proxy only under specific circumstances established by Law (*Ordonnance n° 58-1066 du 7 novembre 1958 portant loi organique autorisant exceptionnellement les parlementaires à déléguer leur droit de vote*) and that prevent them from coming to Parliament (such as sickness, the death of a family member, or cases of *force majeure*).
Source: Assemblée Nationale's website.

Table 1
The comparison of ordinary and important votes.

	Ordinary votes	Important votes
Pre-reform (number of votes)	Dissident voters only (710)	Full transparency (74)
Post-reform (number of votes)	Full transparency (525)	Full transparency (71)
Number of votes	1235	145
Percentage of votes passed	24.8%	93.8%
Distribution by day of the week		
Monday	15%	1%
Tuesday	18%	80%
Wednesday	20%	16%
Thursday	27%	3%
Friday	14%	
Saturday	3%	
Sunday	3%	
Av. no. of participants	91	519
Government initiative	85.2%	81.4%
Bills	18%	100%

Note: Over the fourteenth legislature, 15% of ordinary issues were voted on a Monday, while only 1% of important issues were voted on a Monday.

3.2. The transparency reform

The 2014 transparency reform had different effects on the two types of votes in French legislation: ordinary and important votes. A "Scrutin public ordinaire" refers to the typical votes that occur every weekday on a part or the whole of a Bill. These votes were affected by the change in the recording process and represent the treatment group. A "Scrutin public solennel" refers to the more important votes that usually take place on Tuesdays or Wednesdays and are announced in advance to encourage MPs' participation. These votes have always been recorded for all MPs, and therefore make up the control group. Important votes also include "scrutins à la tribune", in which MPs do not vote electronically but have to state their position in front of the Assembly. These votes have also always been recorded for all MPs.

Before February 27th 2014, we thus know how each MP voted on all *important* votes. However, for *ordinary* votes only the *total* number of "Yes", "No" and "Abstention" votes were reported by the Party. For *ordinary* votes, the names of the dissident MPs, *i.e.* those voting against the Party line and those voting "abstention" were listed. But it was not possible to know whether the MPs who were not listed had voted along Party lines or rather did not take part in the vote. [Fig. 1](#) presents an example of the information available to the constituents and the Party leaders under partial recording.

From 2014 onwards, the votes of all types were recorded in the same way: it was known, for both important and ordinary votes, whether each MP had voted “Yes”, “No” or “Abstention”, or if they did not participate. If they voted “abstention”, the MPs’ position was not taken into account for the outcome of the vote. This change in recording renders the voting record of each MP in the Assembly fully observable by both the electorate and Party leaders. While full vote recording has now become possible for ordinary votes, it is not automatic. Votes are recorded upon request (before the vote takes place) from the Chairman of the Assembly, the Government, the Committee responsible for the topic, or Party leaders. If there is no such request, the ordinary votes are by a show of hands and identities are neither recorded nor published. There continued to be full automatic recording for important votes.

90% of the votes covered ordinary issues and 10% important issues (Table 1). These proportions are the same pre-and post-2014. Bills and Amendments are passed more often when the vote is important. Important votes are typically held on Tuesdays, and sometimes on Wednesdays, while ordinary votes are more spread over weekdays (and more rarely weekends). Important issues attract more voters than do ordinary issues, on average 519 participants, as against 91 for ordinary votes. Issues can be put forward for vote by the Government – called projects- or by MPs – called propositions. The proportion of projects at the initiative of the Government is the same for both types of votes. None of the important votes are on Amendments but always on entire Bills. On the contrary, 82% of ordinary votes are on Amendments. The distributions of the two types of votes across topics are depicted in Fig. A.1. I use the classification on the National Assembly website to sort votes into eight different topics that correspond to the Standing Committees in Parliament. The eight committees deal with issues on: Budget, Culture, Defence, Economic issues, Foreign Affairs, Law, Social issues, and Sustainable Development. Topics like Foreign Affairs, Defense, and Culture are always the least numerous, while Law, Budget, Economy, and Social Issues are always the most common.

3.3. Legislators’ behavior

This legislature was composed of seven political groups, ranked from Left to Right as follows: the Democratic and Republican Left (GDR), the Green Party (ECOLO),¹¹ the Socialist Party (SER), the Radical Left (RRDP), the Centrists (UDI), the Republicans (UMP-LR), and the Republican Rally (R-UMP).¹² The descriptive statistics of individual behavior voting appear in Fig. A.2; these refer to the votes with full nominative records only. Legislators participated in less than 30% of these votes on average. Sometimes MPs are present in the Assembly but leave the room at the time of the vote to avoid taking a position. By looking at whether the MP voted on other issues during the same day, we can calculate the extent of this behavior. Over all the votes, 11.15% of MPs could have voted (as they were present in the *Assemblée Nationale* that day) but did not. The attendance rate is the number of days in the legislature during which the MP cast at least one vote. MPs were present on average half of the time during this legislature. The geographical distance to Parliament does not explain this low attendance rate, as shown in Fig. A.3 and the regression results presented in Section 4.3.

Another possible explanation for MPs’ low attendance is the small probability that their vote be pivotal. On average during the fourteenth legislature, 24 legislators would have had to switch vote in order to change the outcome; put another way, 48 more legislators (with the opposing opinion) would have had to attend to change the outcome.

For the issues with full recording, MPs aligned their votes on average 91% of the time when they participated, dissented 3% of the time, and abstained in 5% of cases.

Voting unity within a Party is commonly measured using the Rice Index:

$$Rice\ Index = \frac{|\#Yes\ in\ Party - \#No\ in\ Party|}{\#Yes\ in\ Party + \#No\ in\ Party}$$

There is almost perfect cohesion for each Party (see Table A.1). A high degree of voting unity can reflect either the ideological proximity of the group members or strict Party discipline. One of the challenges of this paper is to establish the extent to which this voting pattern comes from Party pressure or ideological proximity.

4. Non-participation as a strategy to avoid conflict under Party discipline

The previous Section underscored that non-participation is widespread in the French Parliament; the current Section investigates whether it is controversy between the constituents and the Parties that lies behind this low participation figure. I use the votes recorded under full transparency to construct two different measures of conflict, and then assess their impact on participation.

4.1. Measuring conflict

The position of the Party is given by the majority of the members’ votes on each issue. To measure conflict, we also need to infer the position of the constituents, for which I use two different approaches. The first relies on constituency characteristics and the actual votes of the MPs, and the second on constituents’ electoral choices.

¹¹ This group merged with the SER group in 2016.

¹² A group of MPs who left the Republican group for a period of three months.

4.1.1. Conflict using the actual votes in Parliament

When voting, legislators take into account their constituents' interests but are also subject to Party discipline: it is, therefore, difficult to use their actual votes in Parliament to untangle constituents' and Party preferences. This problem was first noted in Krehbiel (2000), and has led some authors to use Politician interview data instead (Bailer, 2011; Willumsen and Öhberg, 2012). However, in addition to being costly and time-consuming, interview data are declarative and might be biased towards less discipline, as Party leaders may not want to fully reveal the extent to which they monitor their members.

Were their decisions to be based only on the interests of their electorate, *i.e.* in the absence of Party discipline, two MPs from different Parties but with similar constituencies should vote similarly. I hence estimate the effect of constituency characteristics on legislators' voting decisions. I look at the positions of MPs not at the level of votes, but at the more aggregated level of topics. MPs' votes likely also reflect discipline, which is omitted because it is unknown. Party discipline may differ across Parties and therefore be correlated with constituent characteristics (see Table B.1). The role played by constituency characteristics in voting decisions will be identified if the degree of discipline varies across votes within each topic. Although only a small number of issues were voted on the topics of Culture and Foreign Affairs, Table B.2 shows the same kind of alignment rates as for other topics. I therefore expect enough variation in discipline across votes for each topic. Moreover, the participation rate can be quite low for some votes. However, Fig. B.1 shows that, for each topic, there are always some votes with high participation rates. I also check that the decision to align is not correlated with the participation rate. Fig. B.1 shows no such correlation for any topic. Thus, low participation rates for some votes should not affect the estimation of conflict.

I estimate a logistic regression on the decision to hold Leftist or Rightist positions for each Bill, for each topic s , with constituency characteristics as the explanatory variables:

$$Left_{iv}^s = \alpha^s + \beta^s X_i + \eta_i^s + \xi_r^s + \epsilon_{iv}^s \tag{1}$$

The proponent of each issue put to vote reveals whether an issue is more Leftist or Rightist. If issue v was suggested by an MP from the Left (Right), it is said to be Leftist (Rightist). Any MP i who voted in favor of such an issue is considered to hold Left- (Right) wing positions, and the dependent variable $Left_{iv}$ is therefore 1 (0).

This decision to support Left- or Right-Wing issues should depend to an extent on the characteristics of MP i 's electorate: X_i . I obtained electorate information from census data¹³ at the constituency level: the shares of children, women, foreigners, and the young and old; the shares of different occupational categories; the share of the highly-educated; and the constituency's region. I match this electorate information with variables at the Département level:¹⁴ median income, the poverty rate and the inequality ratio.¹⁵ The variable $LeftNeighbors$ is the proportion of the other MPs in the same Département who took Leftist positions in this vote, revealing Département electorate preferences. I also control for two individual MP characteristics that could affect their preferences: their gender and age. Last, I added year (η_i^s) and region¹⁶ (ξ_r^s) fixed effects. I cluster the standard errors at the year and Département levels.

The number of MPs by Département ranges from 1 to 21. Hence, the calculated share of Leftist neighbors can quickly jump from 0 to 1 for each vote. I trim this variable by dropping the top and bottom 1% of the distribution.

The identification strategy used here relies on the assumption that most votes divide political opinions on the Left-Right dimension. During the legislature under consideration, the main Leftist Party (SER) voted opposite to the main Rightist Party (UMP) in 75% of the votes. Most votes therefore seem to produce a Left-Right cleavage. Using the W-Nominate procedure,¹⁷ we can also see in Fig. 2 that Left- and Right-wing MPs clearly differ. Note that this approach relies on MPs' actual votes, *i.e.* the votes that are subject to Party discipline, and does not show how MPs would have liked to vote were they to follow their constituents' interests.

The results appear in Table B.3 and are used to predict, for each topic, whether an MP is more likely to hold Leftist or Rightist positions depending on their constituency characteristics. I calculate an index of *conflict* between MP i and their Party regarding topic s :

$$Conflict_{i,s} = \begin{cases} \mathbb{P}(\text{holding a Leftist position}) & \text{if } i \in \text{Rightist Party} \\ \mathbb{P}(\text{holding a Rightist position}) & \text{if } i \in \text{Leftist Party} \end{cases}$$

These estimates of conflict vary substantially within each MP, with an average standard deviation of .25. The MPs are often predicted to experience conflict on some topics but not all. An illustrative example is a bill to ease the life of the elderly. The main opposing party (UMP) suggested revising the project. My estimates predict the vote on this revision (vote 899) to be one of the most conflicting votes for the UMP party. If we consider the UMP members with partial conflict, we can see on Fig. B.2 that their probability of conflict on this vote is positively correlated with the share of elderly in their constituency, and less correlated with other constituents' characteristics such as the poverty rate, the level of inequalities, or the share of educated people in the constituency.

Given my estimates of conflict, 335 of all the members of a Leftist Party are predicted to hold leftist positions more often than rightist positions. The 50 other leftist MPs are predicted to hold rightist positions most often. The model performs similarly on MPs

¹³ 2013 census data: <https://www.insee.fr/statistiques/2542357#consulter>, downloaded on November 2nd 2020.

¹⁴ In France, *Départements* are the administrative level just above the constituencies (*circonscriptions*). Each *Département* includes between 2 and 18 *circonscriptions*.

¹⁵ Data downloaded from the website for the National Statistics website on April 8th 2021: <https://www.insee.fr/statistiques/1895078>.

¹⁶ Each *Département* is included in only one *Région*.

¹⁷ Carroll et al. (2011). This method plots MPs' political positions based on roll-call data.

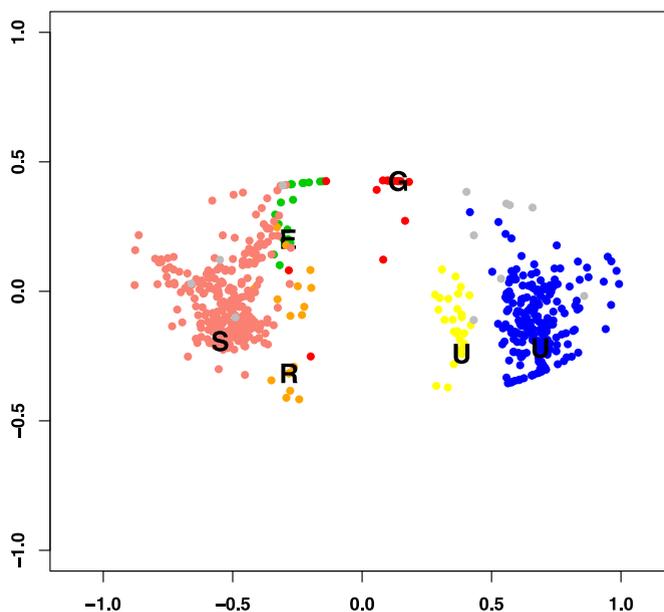


Fig. 2. The distribution of MPs' positions on a two-dimensional political spectrum. Notes: The X-axis captures the left-right divide. The Y-axis is the second dimension that captures all other divides that matter for voting decisions, and does not have a clear identifiable interpretation. The black letters represent the position of the parties themselves. Each colored dot represents an MP's position: Pink for SER (S), Blue for UMP (U), Yellow for UDI (U), Green for ECOLO (E), Red for GDR (G), Orange for RRDP (R), and Gray for non-affiliated MPs. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

from the main Party on the Right, with 154 MPs predicted to vote most often on the Right, and 54 predicted to vote most often on the Left. Among the centrist Party, 17 are predicted to hold more rightist positions, 15 to hold more leftist positions.¹⁸ This model is, therefore, able to identify situations of conflict while predicting the affiliations of MPs on the Left-Right spectrum better than random.

To test the robustness of the estimation of conflict, I withdraw the most disciplined votes. Party discipline is expected to be stronger when the votes are pivotal. However, some conscience votes might be pivotal because dividing each Party, while not being subject to discipline. I therefore consider two variables to identify the most disciplined votes. Total alignment in Parliament is the percentage of MPs in Parliament following their Party line. 20% of all votes had a 100% of MPs who aligned with their Party position. Among these votes, I selected the most pivotal ones: those for which less than 7 changes in voting behavior would have led to a different outcome. These votes represent 9.4% of the votes.¹⁹ I calculate another measure of conflict by excluding the most disciplined votes. This produces new coefficients on constituency characteristics (Table B.4) and a new indicator of conflict. The impact on participation is also robust using this measure as shown in Table 3.

4.1.2. Conflict using electoral results

The second measure of conflict comes from two sets of electoral results that produce a proxy for constituents' preferences. I choose the first round of the 2012 Presidential election as a proxy for constituents' preferences at the beginning of the legislature, and the first round of the 2015 Département elections as a proxy for constituents' preferences after April 2015. The choice of these elections is based on the similarities in terms of the candidates' Party affiliations (see Tables B.5 and B.6). This new measure of conflict is the share of votes for Parties other than the MP's affiliation: $1 - \text{share of votes for the same Party}$. The more votes there were for different parties, the more conflict the legislator faces.

4.2. The role of conflict on participation

I can now estimate a logistic regression for the decision of MP i to participate in vote v :

$$NP_{iv} = \alpha_0 + \alpha_1 \text{Conflict}_{iv} + \alpha_2 \text{Geographical distance} + \alpha_3 X_{iv} + \epsilon_{ij} \quad (2)$$

where NP_{iv} stands for "Not Participating", and takes on the value 1 whenever MP i did not participate in a vote v and 0 otherwise.

¹⁸ There were 18 MPs not affiliated to any Party, which brings the total to 643 MPs.

¹⁹ Excluding the 20% of votes with a 100% alignment or excluding only these 9.4% does not change the results presented in Section 4.3.

Rational legislators should participate in a vote whenever the benefit outweighs the cost. The coefficient α_1 will be positive if conflict between the interests of the constituents and the Party raises the cost of voting and thus reduces participation, as in the Crossfire Hypothesis.

The decision to participate likely also depends on other costs and benefits from voting. I control for these by adding the following variables.

Legislators might find it more costly to participate the further they are from Parliament (Rothenberg and Sanders, 1999; Brown and Goodliffe, 2017). *Geographical distance* is measured as the logarithm of the distance in meters from the Palais Bourbon to the centroid of the constituency.

Legislators may also benefit more from voting on issues on which they have more information. The variable *worked on topic* is a measure of MPs' expertise. It takes on a value of 1 when the MP is a member of the Commission working on the topic that is being voted, and zero otherwise.

MPs may be more likely to vote on more-salient issues. Projects proposed by the government might seem more important than propositions made by MPs themselves, and Amendments might seem less significant than entire Bills. The variable *Project* takes the value 1 whenever the Bill was proposed by the government itself, and zero when it was proposed by a Member of Parliament. I add a dummy variable *Amendment* for the issue put to vote being only an Amendment, which is therefore zero when the vote concerns an entire Bill.

MPs may vote more as their chance of being a pivotal voter rises, i.e. when the vote's outcome is more uncertain. *Vote closeness* is a measure of the division in Parliament over a given vote:

$$Vote\ closeness_i = 1 - \left| \frac{(\#Yes\ Parliament - D_{y_i}) - (\#No\ Parliament - D_{n_i})}{(\#Yes\ Parliament - D_{y_i}) + (\#No\ Parliament - D_{n_i})} \right|$$

D_{y_i} (D_{n_i}) takes on value 1 whenever the MP voted "Yes" ("No") on the issue, and 0 otherwise. The use of the dummy variables D_{y_i} and D_{n_i} allows us to include only the *other* legislators and not the MP himself or herself. In a very divided Parliament, roughly the same number of MPs will vote "Yes" and "No": the indicator of vote closeness is thus close to 1 and each MP is more likely to cast a decisive vote.

The same variable is calculated at the Party level to measure conflict within each Party p :

$$Vote\ closeness\ Party_{ip} = 1 - \left| \frac{(\#Yes\ Party_p - D_{y_i}) - (\#No\ Party_p - D_{n_i})}{(\#Yes\ Party_p - D_{y_i}) + (\#No\ Party_p - D_{n_i})} \right|$$

I also excluded the individual MP from the total number of Yes and No votes in the Party.

I use the variable *Vote Share 1* as a proxy for the degree of conflict inside the constituency. This variable is the share of votes that the MP received during the first round of the 2012 election. The smaller is this share, the less consensus there is among the electorate regarding this candidate, suggesting a more divided constituency.

I also expect the extent of Party discipline to depend on which Party called for the vote. *Party initiative_p* is a dummy variable for the vote being requested by a member of the MP's own Party. When the vote was proposed by the Government, Party initiative takes on the value 1 if the MP belongs to the governing Party (the Socialist Party, SER).

Last, participation may also depend on the MP's individual characteristics. The variable *Experience* is a dummy for the MP having already been elected in the previous (thirteenth) legislature, and *Candidate 2017 same Party* a dummy for MPs who stood for election in the following fifteenth legislature (for which the elections took place in 2017) with the same party affiliation as they had in the fourteenth legislature.

As I analyze data on individual MPs, I only retain information on the votes for which I have a full record. This produces a sample of 670 issues on which I have the votes of 643 MPs.

4.3. Results

The results in Table 2 show that the probability of non-participation rises significantly with conflict irrespective of the conflict measure. If all MPs face a 1% rise in the probability of conflict, then the probability of not participating increases on average by 0.10 to 0.14 percentage points. This provides support for the Crossfire Hypothesis. Reputational concerns and blame avoidance then play a role in the decision to participate in a vote. However, conflict is not the most-important determinant of participation, with a smaller marginal effect than that of the vote being over an Amendment or a Bill. This is consistent with Battaglini et al. (2020), who find that conflict has less impact than the vote being over a key issue.

Table C.3 also shows that greater conflict consistently reduces the probability of voting along Party lines, and Table C.2 that it raises the probability of abstention. The three measures of conflict then play a central role in determining MPs' voting behavior.

I obtain mixed evidence for the effects of conflict within the party (*Vote Closeness In Party*) and among constituents (*Vote Share 1*) on participation. Tables C.2 and C.3 show that Party and constituent conflict both increase the probability of voting abstention and reduce the probability of alignment. These effects are very significant for Party conflict.

As some of the constituency characteristics can be correlated with Party affiliation (Table B.1), I also add a Party fixed effect u_p^s in Eq. (1). The results in Table C.1 are robust to these Party fixed effects. This table also displays robustness checks on the effect of conflict using the non-trimmed distribution of the share of neighboring Leftist MPs. Another robustness check concerns the variable *LeftNeighbors*. As noted above, there may only be a few MPs per Département. As such, there are a substantial number of missing observations for the share of Left votes among near neighbors when none of the other MPs in the Département voted over this

Table 2
Conflict reduces participation.

	Not participating (1)	Not participating (2)
Conflict	0.141*** (0.00393)	0.105*** (0.0135)
Vote Closeness In Party	0.00318 (0.00488)	0.0290*** (0.00358)
Vote Share 1	0.00841 (0.0571)	-0.0254 (0.0442)
Geographical distance	-0.0123*** (0.00280)	-0.000904 (0.00218)
Worked on Topic	-0.0942*** (0.00295)	-0.0867*** (0.00209)
Vote Closeness	-0.219*** (0.00348)	-0.194*** (0.00274)
Amendment	0.428*** (0.00116)	0.392*** (0.00180)
Party Initiative	-0.00447* (0.00226)	0.00583*** (0.00163)
Experience	0.0490*** (0.00878)	0.0497*** (0.00678)
Candidate 2017 same Party	-0.00571 (0.00769)	-0.00104 (0.00590)
Project	-0.152*** (0.00248)	-0.138*** (0.00186)
<i>N</i>	173 540	280 770

Notes: These are average marginal effects from the logit estimates. Standard errors appear in parentheses. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The dependent variable is 1 if the MP did not participate in a vote, and 0 otherwise. Columns (1) and (2) refer respectively to conflict estimated from constituency characteristics and electoral results.

Amendment/Bill. I thus calculate a second measure of the share of Leftist neighbors based on their votes over all issues for a given topic during the legislature. This produces new coefficients on constituency characteristics and a new indicator of *conflict* using a larger set of observations.

Two final robustness checks are displayed in Table 3. First, including MP fixed effects in model (2) does not affect the results. Second, I conducted a leave-one-out measure of conflict. For each MP i , I estimated the probability of conflict by evaluating model (1) on all the other MPs. The results are also robust to this new measure of conflict.

Conflict between the Party and the constituents appears to be a significant determinant of MPs' decision to participate in a vote. Were legislators not to fear any reprisals from their Party leaders, they would vote in the interests of their electorate. Party discipline affects legislative outcomes by increasing alignment and changing the composition of MPs who participate in the vote. The main takeaway is that the decision to participate in a vote should be taken into account when analyzing Party discipline. As such, I include the voting participation rate in the remainder of the analysis below.

In the following section, I use the change in information from the recording-method reform to estimate the effect of Party pressure on voting decisions.

5. The effect of transparency on legislative voting

5.1. Identification strategy

The change in recording votes took place in roughly the middle of the fourteenth French legislature and only affected "ordinary" votes. This quasi-natural experimental setting allows me to use important votes as the control group, and estimate the causal effect of transparency on voting outcomes via a difference-in-differences model for each issue put to vote v and for each Party p :

$$Y_{vp} = \beta_0 + \beta_1 * Ordinary_v + \beta_2 * Post_v + \beta_3 * (Ordinary * Post)_v + \beta_4 * X_{vp} + \epsilon_{vp} \quad (3)$$

The variable *Ordinary* takes on the value of 1 when the issue is an ordinary vote and 0 when it is an important vote. This picks up any systematic differences between the two types of votes. *Post* is a dummy variable for dates after the change in vote recording (after February 27th 2014).

The identification of the effect of transparency relies on the common-trend assumption: this will be tested using an event study in Section 5.3.

Table 3

Robustness of the effects of the first measure of conflict on the probability not to participate, abstain, and align with the Party position.

	Not Participating			Abstain			Align		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Conflict	0.969*** (0.0687)	0.954*** (0.0269)	0.851*** (0.0667)	1.279*** (0.201)	1.236*** (0.109)	1.076*** (0.177)	-1.154*** (0.151)	-1.121*** (0.0790)	-0.992*** (0.139)
Vote Closeness In Party	0.0199 (0.0598)	0.0159 (0.0330)	0.0567 (0.0599)	1.849*** (0.161)	1.862*** (0.109)	1.914*** (0.152)	-4.852*** (0.142)	-4.746*** (0.0762)	-4.780*** (0.134)
Worked on Topic	-0.637*** (0.0471)	-0.636*** (0.0200)	-0.635*** (0.0467)	0.250** (0.0958)	0.219** (0.0682)	0.220* (0.0952)	-0.116 (0.0872)	-0.102 (0.0537)	-0.101 (0.0854)
Vote Closeness	-1.487*** (0.0313)	-1.486*** (0.0242)	-1.482*** (0.0310)	-0.493*** (0.121)	-0.490*** (0.0937)	-0.482*** (0.120)	0.797*** (0.109)	0.800*** (0.0706)	0.797*** (0.108)
Amendment	2.895*** (0.0326)	2.893*** (0.0145)	2.899*** (0.0323)	0.00790 (0.151)	-0.00509 (0.113)	-0.00779 (0.146)	-0.183* (0.0831)	-0.170* (0.0728)	-0.174* (0.0798)
Party Initiative	-0.0279 (0.0258)	-0.0368* (0.0152)	-0.0363 (0.0249)	-0.258* (0.109)	-0.285*** (0.0685)	-0.298** (0.0939)	0.269*** (0.0721)	0.282*** (0.0503)	0.293*** (0.0666)
Project	-1.025*** (0.0256)	-1.054*** (0.0171)	-1.024*** (0.0253)	-0.413*** (0.0789)	-0.402*** (0.0655)	-0.399*** (0.0775)	0.292*** (0.0786)	0.288*** (0.0526)	0.286*** (0.0773)
Vote Share 1		0.0786 (0.386)	0.0282 (0.410)		-0.786 (0.758)	-0.818 (0.737)		1.263 (0.815)	1.278 (0.823)
Geographical distance		-0.0846*** (0.0190)	-0.0834*** (0.0205)						
Experience		0.326*** (0.0594)	0.333*** (0.0587)		-0.0755 (0.117)	-0.0760 (0.116)		0.00269 (0.126)	0.00273 (0.125)
Candidate 2017 same Party		-0.0386 (0.0520)	-0.0386 (0.0591)		0.0213 (0.101)	0.0216 (0.106)		-0.0642 (0.108)	-0.0650 (0.114)
Voters				0.00174*** (0.000300)	0.00170*** (0.000253)	0.00164*** (0.000293)	-0.000393 (0.000216)	-0.000378* (0.000166)	-0.000336 (0.000211)
Constant	0.536*** (0.0282)	1.218*** (0.283)	1.208*** (0.290)	-4.431*** (0.192)	-4.409*** (0.319)	-4.325*** (0.355)	3.503*** (0.135)	3.359*** (0.323)	3.300*** (0.358)
N	173 435	174 010	173 540	63 520	79 641	79 613	73 433	79 641	79 613

Notes: Standard errors appear in parentheses. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. These are Logistic regressions showing the impact of conflict on the decisions. Columns (1), (4), and (7) show the results when adding MP fixed effects. The coefficients in columns (2), (5), and (8) were computed by withdrawing the most disciplined votes. Columns (3), (6), and (9) show the results for the leave-one-out measure of conflict.

Were there to be no conflict between a legislator's constituency and their Party, the legislator would have no interest in deviating from the Party line. We would then always observe alignment, and the reasons behind non-participation would be other than conflict. However, as noted above, voting participation does depend on conflict, and we also see vote deviations via abstention and dissent. These different voting outcomes reflect how MPs balance their votes between satisfying their Party and pleasing their constituents. Post-reform, both Party leaders and the electorate have more information about legislator behavior.

Increasing transparency can harm legislators' reputations by making their voting decisions more visible. In particular, the reform reveals which MPs do not participate and which MPs align with the Party. Imagine that one MP is facing a conflicting situation. Consider first the point of view of the constituents. Pre-reform, the legislator could align with the Party and her constituents could not blame her for doing so, as they do not know whether she aligned or did not participate. The constituents might also blame her for not participating, as they can perceive it as a lack of effort. But not participating is less harmful to the constituents than aligning with the Party as it is less likely to impact the outcome of the vote in the Assembly. Given the low participation rate, the likelihood that the MP aligned is small. Hence, the constituents might prefer not to blame. Post-reform, it becomes clear that the MP aligned, which is the worst action for the constituents who can now blame her. She might now prefer not to participate. Consider now the Party leader's point of view. Pre-reform, the Party could see who was in Parliament but not who cast a vote and, therefore, could not distinguish the MPs aligning from the ones not participating. If the MP wishes to satisfy her constituents, she can opt for the less harmful option which is not to participate, without fearing blame from the Party. But post-reform, not participating can lead to disciplinary sanctions from the Party. The MP might better switch from non-participation to alignment. Note, however, that the worst outcome for the Party would be an openly dissenting MP. A non-voting legislator might still incur less discipline than a dissenting one.

In theory, it is hard to untangle which effect dominates. My empirical analysis will evaluate the following sub-hypotheses.

Hypothesis 1a (H1a). Knowing that their behavior is more-easily observable, MPs prefer not to take sides and participate less often: $\beta_3^{participation} < 0$.

Hypothesis 1b (H1b). Knowing that their behavior is more-easily observable by one of the principals, the MPs participate more often in order to comply: $\beta_3^{participation} > 0$.

Table 4
Transparency reduces participation, does not affect abstention nor alignment.

	Participation Rate			Abstention Rate			Alignment Rate		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Ord. * Post(β_3)	-0.109*** (0.0116)	-0.118*** (0.0158)	-0.0775*** (0.0208)	-0.0133 (0.0171)	0.00223 (0.0232)	-0.00531 (0.0360)	-0.0128 (0.00853)	-0.0190 (0.0123)	-0.0219 (0.0164)
N	6917	1803	944	6917	1803	944	6516	1680	858
Tuesdays only		✓	✓		✓	✓		✓	✓
Bills only			✓			✓			✓

Notes: Standard errors appear in parentheses. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. These are OLS estimates. The dependent variables are the rates of participation, abstention, and alignment for each Party on each Bill. These coefficients show the effect of the transparency reform (i.e. post-2014) on voting on ordinary issues (the treatment group) as compared to the control group of important votes. The basic specification in columns (1), (4), and (7) includes votes on both Amendments and Bills on any day of the week; in columns (2), (5), and (8) we consider votes on Tuesday only (important issues are very often voted on Tuesdays), and in columns (3), (6), and (9) we include only entire Bills that were voted on a Tuesday.

In the previous section, I looked at the period for which there was full transparency and showed the presence of conflict. If we assume here that such conflicting situations were also present before the transparency reform, testing [Hypothesis H1a](#) is equivalent to testing the Crossfire Hypothesis.

Voting abstention is very similar to non-participation, in the sense that it does not affect the outcome. It is, however, different in that it was always observable (both pre- and post-reform) for both kinds of votes. The voting reform should not then have any impact on abstention:

Hypothesis 2 (H2). $\beta_3^{abstention} = 0$

Whether MPs participate more or less, it is of interest to identify the principal who benefits more. I do so by evaluating the impact of the reform on the alignment rate.

Hypothesis 3a (H3a). Additional information benefits Party leaders more than constituents, there is more alignment: $\beta_3^{alignment} > 0$.

Hypothesis 3b (H3b). Additional information benefits constituents more than the Party leaders, there is less alignment: $\beta_3^{alignment} < 0$.

To test these three hypotheses, I consider the effect of the reform on three outcome variables.

The *Participation Rate* is the total number of Party MPs participating in a vote, i.e. who vote either “Yes”, “No”, or “Abstention” on an issue, over the total number of members in the Party at the time.

The *Abstention Rate* is the total number of Party MPs who voted “Abstention” on an issue, over the total number of participants in their Party.

The *Alignment rate* is the total number of Party MPs who voted “Yes” (respectively “No”) when the position of their Party was “Yes” (respectively “No”), over the total number of participants in their Party.

The X variables in Eq. (3) are those that may also affect the decision to participate, abstain and align in a vote, and were described in the previous Section: *Amendment*, *Project*, and *Party Initiative*. *Voters* is the total number of MPs participating in a vote.

5.2. Main results

Column (1) of [Table 4](#) shows that transparency significantly reduces the participation rate by 11 percentage points. This finding supports [Hypothesis H1a](#): as the voting behavior of MPs becomes more observable, they are less willing to take sides and prefer not to participate. If there was as much conflict between the constituents and the Parties, this result supports the Crossfire Hypothesis.

There is no effect of transparency on the abstention rate (column (4)), thus confirming [Hypothesis H2](#). As the reform did not affect the visibility of abstention, it did not affect the abstention decision.

The first result revealed less participation but did not identify who stops participating as transparency rises. Two mechanisms may be at play here. First, some MPs who followed the Party line might stop participating as they are subject to pressure from their electorate. Second, some MPs who used to vote in the constituents’ interests now prefer not to participate, which allows them to avoid blame from both principals. The initial alignment rate for issues voted pre-reform was 98% on average. Hence, if 11 percentage points of legislators stop participating, at least some of them must have previously been aligned with the Party but stopped voting after the reform: these MPs care about their reputation with their constituents. Column (7) shows a negative treatment effect on the alignment rate, but non-significant. As such, I do not find strong support of either [Hypothesis H3a](#) or [H3b](#). It is therefore hard to tell whether the legislators care more about their reputation with one principal.

Important and ordinary votes differ in many ways, which could potentially affect the validity of the control group. In particular, [Table 1](#) shows that important issues are almost always voted on Tuesdays, and systematically concern entire Bills. I check the results by first changing the sample and including only votes that took place on Tuesdays for both kinds of votes (columns (2), (5), and (8)), and then dropping votes on Amendments (columns (3), (6), and (9)). The results are robust: the impact on the participation rate is reduced when simultaneously dropping Amendments and days other than Tuesdays, but remains negative and significant.

Moreover, [Table D.2](#) shows robust transparency effects to controlling for topic-specific and party-specific time trends.

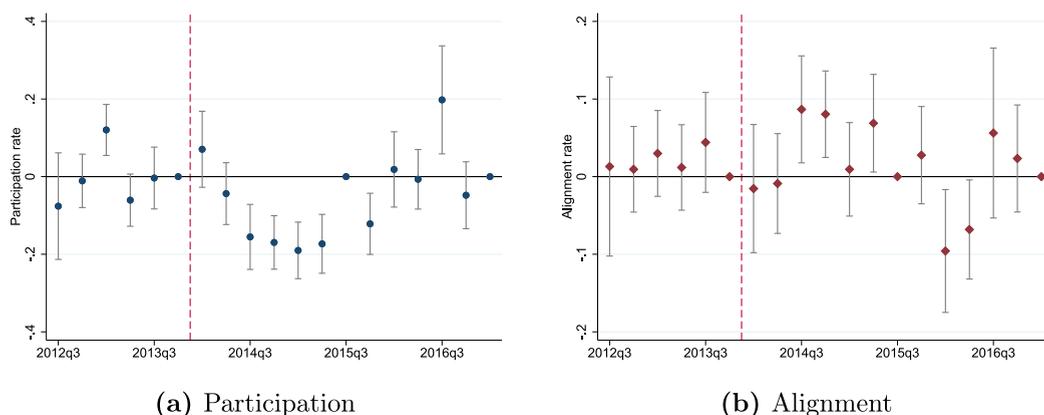


Fig. 3. The effect of transparency over time. *Notes:* These are OLS regressions, showing the treatment effect on the gap in voting behavior between ordinary and important votes for each quarter of the legislature. The baseline is the last quarter of 2013. The dots represent the coefficient estimates with their 95% confidence intervals. The insignificant coefficients before the reform (the red dashed line) support the common-trend assumption. The significant coefficients after the reform (from 2014 onwards) indicate the treatment effects over time. There were no solemn votes on any Tuesdays of the third quarter of 2015 or the first quarter of 2017, hence the lack of coefficients for these two periods.

5.3. Identifying assumptions: parallel trends

One potential problem for the common-trend assumption would be the electoral calendar affecting voting on important and ordinary votes differently.

The event study presented in Fig. 3 can serve as a check of the parallel-trend assumption. The change in voting records occurred in the first quarter of 2014, so there should be no change in the gap between ordinary and important votes in the preceding quarters. In Fig. 3 the gap between ordinary and important votes is normalized to be zero in the last quarter of 2013; the estimated 2012 and 2013 coefficients reveal no pre-trend in the gap between ordinary and important votes in terms of the participation and alignment rates.

The second assumption in the baseline regression is that the treatment effect is constant over time. The estimated effect on participation is always negative, except in the second quarter of 2016. This is less true for the alignment effect, which is positive between the third quarter of 2014 and the third quarter of 2015. The effect becomes negative in later quarters, but without any significant effect in the last two periods. These results may reflect two phenomena: either the effect is positive but only short-lived, with constituents taking advantage of the reform later than do Party leaders, or it is longer-term, but MPs care more about their constituents when new elections are approaching. The alignment rate would therefore be subject to the electoral cycle. This result is consistent with the Swiss analysis in Benesch et al. (2018), where the increase in alignment was only short-term.

6. Discussion and robustness checks

In this section, I consider eight potential threats to the presented identification.

6.1. Heterogeneity across Parties

Not all Parties may react in the same way to increased transparency, and heterogeneous effects across Parties are presented in Fig. 4. The three Parties with the largest drop in participation were the Socialist Party (SER), the Democratic Left (GDR), and the main Rightist Party (the UMP), while the two Centrist parties (RRDP and UDI) experienced the smallest fall in participation. As they hold more moderate positions, the latter may experience less conflict between their constituents and their Party, and so be less affected by blame avoidance. The two largest groups (SER and UMP) are amongst the Parties with the largest participation drops. This is consistent with Snowberg (2008) and Bailer (2011), where discipline increases with Party size. Moreover, larger Parties could have benefited more from the reform than smaller Parties as their cost of monitoring might have been larger before the change. Under partial recording, leaders in small Parties may have been able to infer their members' behavior by checking attendance at the moment of the vote. The same strategy would have been costlier for larger Parties with hundreds of MPs to check. Greater transparency then seems more beneficial to the leaders of larger Parties.

The negative impact of transparency on the alignment rate observed in Table 4 is driven by the Socialist Party (SER). This result should be interpreted with care as the Socialist Party experienced substantial divisions among its members during the same

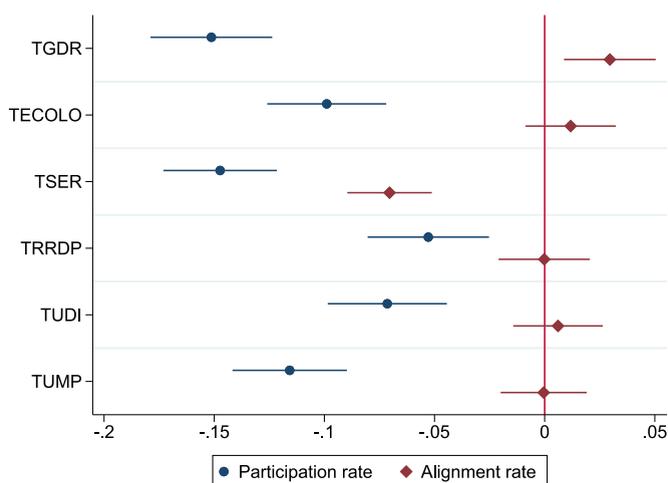


Fig. 4. The heterogeneous effect of increased transparency across Parties. Notes: These are difference-in-difference regressions with an interaction term for each Party. The dots represent the coefficient estimates with their 95% confidence intervals. The Parties are ranked from Right to Left: the Republicans (UMP-LR), the Centrists (UDI), the Radical Left (RRDP), the Socialist Party (SER), the Green Party (ECOLO), and the Democratic and Republican Left (GDR).

period.²⁰ All other Parties seem to experience a positive effect on the alignment rate, though it is significant at the 5% level only for the Democratic Left (GDR).

6.2. The costs and benefits of voting

There is disagreement in the literature regarding whether legislators will more likely take sides as the outcome of the vote becomes tighter. Riker and Ordeshook (1968) argue that when the outcome is uncertain, voters are more likely to be pivotal and should thus participate more often. Noury (2004) finds empirical support for this rational choice theory in the European Parliament. However, in Rothenberg and Sanders (2000) the expected closeness of the vote does not matter for participation. And Brown and Goodliffe (2017) even found that, as MPs care more about re-election than policy influence, vote closeness reduces participation. In Tables C.1 and C.2, tighter votes in Parliament increase MPs' participation and reduces abstention. This is consistent with the rational theory of voting, in which MPs have a greater incentive to make their voice count if they are more likely to be pivotal. However, when there is less consensus at the Party-level, as represented by vote closeness within the Party, MPs tend to abstain more and align less. Overall, greater Parliamentary conflict leads MPs to care about being influential and taking sides, but greater Party conflict leads them to be careful and avoid taking sides.

I moreover expect legislators to participate more if their expertise on the issue is stronger, e.g. if they belong to a Committee working on the topic. I also expect them to benefit more if the issue put to a vote is more important, so that voting on an entire Bill might seem more worthwhile than voting on an Amendment. These intuitions are supported by the results in Tables 2 and D.1. Similarly, voting might be more valuable if their own Party is at the origin of the Bill. Table D.1 shows that if their Party is at the initiative of the vote, MPs are more likely to participate, less likely to abstain and more likely to align. We thus infer stronger discipline on the issues that were put to vote by the Party itself.

6.3. Potential spillovers from increased transparency

Greater transparency in Parliamentary votes is likely to have changed the incentives of the different players regarding behavior other than voting. In particular, Party leaders might want to ask for more records of the votes now that these records are more informative. We do indeed see a significant rise in the number of votes recorded in Parliament across legislatures in Fig. E.1.

Considering that Party leaders benefited from more information, it seems that they took advantage of this by requesting more vote records, thus further increasing the discipline of their members.

However, legislators may also have reacted to this increased discipline by changing their behavior, in ways other than voting. MPs can fall back on alternative tools to affect the legislative process, for instance by depositing more Amendments or proposing more Bills themselves. French MPs use Amendments to communicate their behavior to their constituents (Boelaert et al., 2017), via local newspapers and their personal websites or Twitter accounts. And we do indeed see a significant increase in Amendments post-reform in the fourteenth legislature (Table E.1).

²⁰ The so-called "frondeurs" represented a more-or-less stable group of about 30 MPs that considered the government position as leaning too much on the right.

6.4. Information to the electorate

How likely is it that the electorate cares about and notices this additional information? Information on MPs' votes is available from the *Assemblée Nationale* website, which is visited 0.9 million times per month on average.²¹ This information is passed on by NGOs such as *RegardsCitoyens* and *Datan*, but also by the media that regularly reports MPs' votes over key issues. One recent example illustrates constituents' interest in Parliamentary voting. In May 2018, a draft Bill to ban glyphosate use was proposed, with many MPs abstaining or voting against it. Most of these reported that they subsequently received many e-mails from their constituents asking them to justify their position. This came about only because their votes were made public.

Whether constituents care equally about all votes is difficult to establish. But any disparity in the salience of votes will likely affect whether transparency benefits Party leaders or constituents more. Using results from the *INSEE Enquête Cadre de Vie et Sécurité*,²² I can infer the major concerns of adults in mainland France over time. I apply the same DiD strategy as before but with public salience as an additional control. The results are very similar (Table F.1) to those above. Salience reduces participation and increases abstention, which could be explained by MPs avoiding blame from the electorate, but does not significantly affect the decision to align. However, including citizens' salience as a control increases the effect of transparency on the participation rate, and leads to a positive effect on abstention. Even though insignificant, the effect of transparency stays negative for the alignment rate. These changes come about as the sample is limited to the issues covered by the survey (see Appendix F for the list of issues). If these are indeed the issues about which the electorate cares the most, then MPs prefer to abstain and to dissent more often as they wish to avoid blame from their constituents on these issues.

6.5. Information to Party leaders

Party leaders are themselves present in Parliament during votes, and can likely directly see which members are present. However, the 2014 change in records may still affect the information available to the Party leaders for two reasons. First, political groups can be quite large (Table A.1), and it is unlikely that the SER (UMP) Party leaders can easily check the names of their almost 300 (200) members. These Parties may benefit more from the reform, and are among those with the largest fall in participation (Fig. 4). Second, the reform allows leaders to distinguish between non-participants and aligned MPs. Non-participants are of two different types: those who do not attend Parliament and those who are present on the day of the vote but do not vote. This second category covers 11.15% of behaviors. MPs can be in Parliament but not in the Chamber, or in the Chamber at the moment of the vote but without voting. In the latter case, Party leaders cannot observe MPs' behavior even if they know how many were present at the moment of the vote. Party leaders again benefit from the transparency reform.

6.6. The decision to record votes

Vote information comes from roll-call data, which is often based on a sample of votes. There may therefore be selection bias, especially when it is Party leaders who decide which vote records to request. Carrubba et al. (2006, 2008) argue that there is more discipline in recorded than non-recorded votes. How likely is selection bias in the recorded votes for the French Parliament? The decision to record the votes is made, on the spot, by the session Chairman, the Government, the Committee concerned, or a Party leader. Records are mostly used when there is doubt about counting the show of hands. But they may also be used by Party leaders as a filibuster to slow down the legislative process. Recorded votes could, therefore, reflect the most conflictual votes in Parliament. Data limitations impede any further analysis of this issue. However, if the recorded votes are indeed those with more discipline, then the votes we analyze are those for which Party leaders expect the most conflict. That is why we should interpret the observed strategic response to conflict as an upper bound.

6.7. Multiple mandates

The decision to participate in a vote might also be driven by whether MPs hold multiple offices. Until 2017, French MPs were allowed to hold multiple mandates at the same time. Costa and Poyet (2016) explain that holding multiple mandates can be beneficial to MPs and improve their personal visibility and reputation. This is especially true for the positions of Mayor, and President of the *Département* or *Région*. In practice, the vast majority of these multiple mandates concerned Mayorship positions (see Appendix G). Other local mandates do not provide as much publicity and fewer resources. On the contrary, Mayors and Presidents of Departments and Regions have access to local networks and staff which facilitate communication with their constituents.

I hence added a variable *Local* in Eq. (2) to measure the impact of having a local presence on vote participation and voting decisions. The results are presented in Table G.2. Having a local mandate increases participation, reduces abstention, and increases alignment when using my first estimate of conflict. One explanation is that MPs with local mandates have access to more resources at the local level, and have more tools with which to build up their reputation and communicate with their electorate than do other MPs. MPs with local mandates then care less about their reputation with their constituents and fear less blame *when voting in Parliament*. MPs with local mandates will also reduce participation in case of conflict between their constituents and their Party.

Moreover, the interaction term between holding a local mandate and the share of votes at the time of election tells us that MPs with local mandates who face a more consensual electorate tend to participate more in Parliamentary voting. This may show that

²¹ This is the 2021 figure, available on the *Assemblée Nationale* website.

²² Source: Insee-ONDRP-SSMSI, enquêtes Cadre de Vie et Sécurité 2007 à 2019.

MPs with local mandates have better information about their constituents' preferences, and so know better when there is consensus in the constituency and participate more.

6.8. Other potential agents: interest groups and MPs' own preferences

This paper assumes that the legislators care about only two agents: their constituents and their Party. However, MPs might also have conflicting issues with interest groups and with their own preferences.²³

These two other agents are likely to play a smaller role in the legislative process than constituents and Party leaders for different reasons. As stressed in [Grossman and Saurugger \(2004\)](#), French interest groups are interested in taking action at the European rather than the national level. French MPs may therefore not be lobbyists' main targets. [Costa and Poyet \(2016\)](#) followed 50 MPs in their constituency work, and found that they spend only 3% of their time meeting interest groups, with most being spent during office hours and at social events to meet their constituents.

Regarding the legislators' own preferences, the evidence of an impact on voting behavior is only on specific moral issues. [Washington \(2008\)](#) find that female children affect the US legislators' votes on reproductive rights issues. [McGuirk et al. \(2017\)](#) find that US legislators during the 20th century wars were less likely to support pro-conscription bills if they had draft-age sons. [Van Effenterre \(2020\)](#) finds that French and US legislators' support for abortion law depends on whether they have a daughter. Though the impact is non-negligible, MPs' characteristics and own preferences are likely to affect ethical issues as there is typically no party discipline on these questions. Nevertheless, the impact of their own characteristics on other issues is less likely. My data contains only 13 ethical votes: two on abortion regulations, five on termination of life, and six on medically assisted procreation, that is, less than 1% of all the issues. Moreover, individuals' characteristics are partly taken into account in the estimation of conflict as I control for age and gender of the MPs. These characteristics prove rarely significant in determining left-leaning positions ([Tables B.3 and B.4](#)).

7. Conclusion

This paper has provided evidence in favor of the Crossfire Hypothesis that conflict between Party leaders and constituents reduces MPs' vote participation. This decision reflects legislators' reputational concerns for their two principals: MPs prefer not to take sides in order to avoid blame. The effect is robust to whether MPs hold local mandates. Conditional on having similar levels of conflict before and after the reform, a transparency shock provides additional evidence of the Crossfire Hypothesis. The French transparency reform provided greater observability of MPs' voting for the electorate and Party leaders. This increased visibility led to greater incentives for legislators to use voting as a tool with which to build their reputations. Transparency translates into lower participation and greater, though non-significant, alignment for the non-government Parties. The effects are amplified when citizens put more salience on the topic considered.

Intuitively, Party leaders can put pressure on their members across the whole legislature period; on the contrary, pressure from the electorate on their representatives is more likely when new elections are impending. [Ash et al. \(2015\)](#) find that Congressmen spend more time on divisive issues as elections are approaching to signal their positions to the electorate. Alternatively, MPs may participate less when there is conflict among their voters; and there might be more conflict between constituents than within Parties. Understanding the role played by the different sources of conflict depending on the electoral calendar is an open question for future research.

Given these results, one might wonder whether public voting information is good or bad from a welfare perspective. In a representative democracy, whether constituents will be better- or worse- off when their legislator does not participate anymore – holding the Parliament decision constant – depends on whether they value more their local representation (as in [Gavoille \(2018\)](#)) or the Parliament's final decisions. Therefore, if one wants to evaluate the welfare implication of changes in Parliamentary votes, one should consider both the alignment rates and the constituents' utility from being represented in Parliament through their legislators' participation.

More generally, other organizations might be tempted to foster transparency, for instance, other Parliaments, NGOs, central banks, or other public agencies. Independently on whether displaying information affects the verdict, the results in this paper call for caution because transparency might deter participation in public decisions.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

²³ In which case the principal is also an agent to themselves.

Data availability

The datasets used in this article are available open access on the following websites:

1. **Assemblée Nationale**. 2018. “Scrutins XIVe législature”. <https://data.assemblee-nationale.fr/opendata-archives-xive/scrutins-xive-legislature>.
2. **Assemblée Nationale**. 2017. “Table des scrutins publics XIVe législature”. [https://www2.assemblee-nationale.fr/scrutins/liste/\(legislature\)/14](https://www2.assemblee-nationale.fr/scrutins/liste/(legislature)/14).
3. **Insee**. 2017. “Indicateurs statistiques 2013 sur les circonscriptions législatives”. Census data. <https://www.insee.fr/fr/statistiques/2542357#consulter>.
4. **Insee**. 2015. “Revenus et pauvretés des ménages en 2012”. Data on poverty rates. <https://www.insee.fr/fr/statistiques/1895078>.
5. **Insee**. 2021. “Population des 16 ans ou plus selon le niveau de diplôme, le sexe et l’âge de 1968 à 2018 (1990 à 2018 pour les DOM)”. Data on education levels. <https://www.insee.fr/fr/statistiques/1893149#consulter>.

The final dataset and the replication files used for this paper are available upon request.

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Appendix A. Descriptive statistics

Appendix A provides the descriptive statistics. Fig. A.1 shows the distribution of ordinary and important votes across topics, and Fig. A.2 the basic statistics on legislator behavior during the fourteenth legislature. Table A.1 lists the cohesion index for all political groups during the fourteenth legislature.

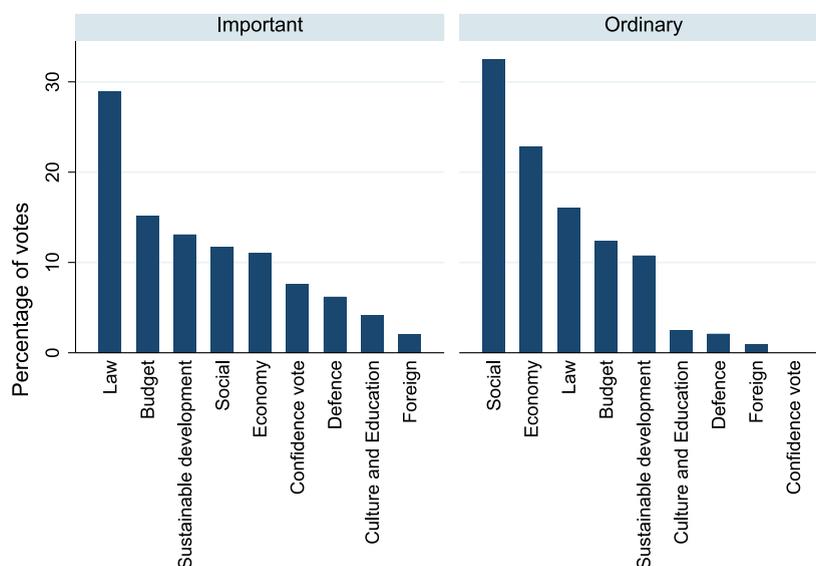


Fig. A.1. The distribution of ordinary and important votes in terms of the topics covered. Note: For both important (left-hand side) and ordinary (right-hand side) votes, Law represents a large share of the topics put to vote: 30% and 16% respectively.

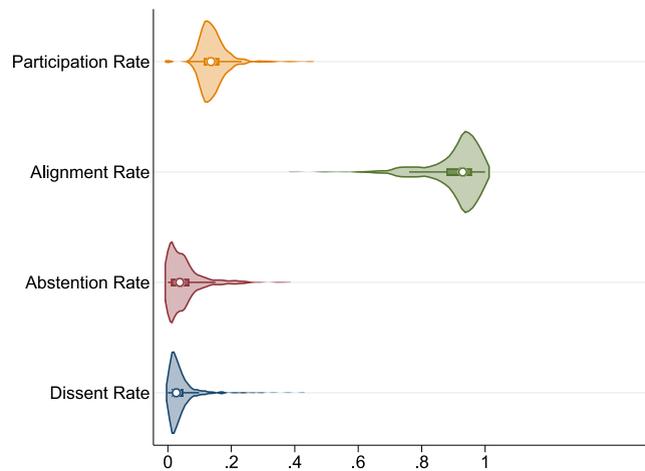


Fig. A.2. The distribution of legislator voting behavior. *Notes:* Combination of box plots of MPs' decisions to participate, align, abstain, or dissent, and a kernel density plot on each side. The box plots identify the medians, spreads and variability of the variables. The density plots exhibit the distribution of the data.

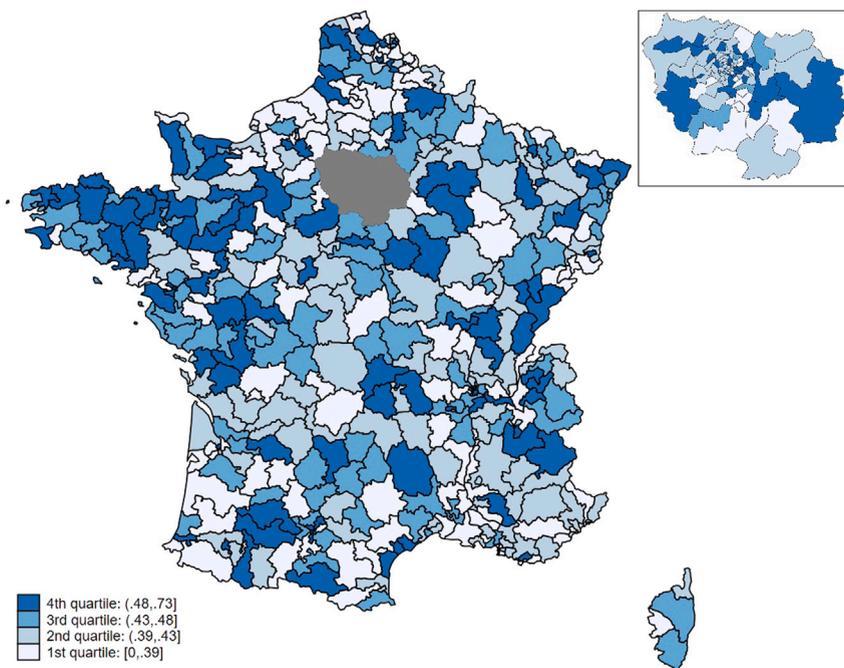


Fig. A.3. Attendance rates by constituency. *Notes:* The attendance rate is calculated as the number of days in which the MP cast at least one vote over the number of days in the legislature. The bottom 25% of MPs in terms of attendance are represented in light blue, and the top 25% MPs in dark blue. The Parisian region is depicted in the top-right box. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

On average, MPs aligned their votes 91% of the time. The MP who aligned their votes the least often did so 39% of the time, and the MP who aligned their votes the most often did so all the time. The position of the Party is defined by that of the majority of the voters in the Party.

The map in Fig. A.3 depicts the attendance rate, calculated as the number of days for which the MP participated in at least one vote divided by the total number of days in the legislature.²⁴ Constituencies are represented by quartiles, ranging from light blue

²⁴ The base-map for constituencies' borders was created by SciencesPo and downloaded from <https://www.data.gouv.fr/fr/datasets/carte-des-circonscriptions-legislatives-2012-et-2017/> on November 2nd 2020. 63 constituencies had more than one MP during the legislature due to resignation, Ministerial nomination, and death. I then took the average attendance rate over the different MPs for a given constituency.

Table A.1
The Rice index by Party during the fourteenth legislature.

Party	Rice index	Size
SER	.94	294
RRDP	.96	15
ECOLO	.96	18
UMP-LR	.96	196
UDI	.96	29
GDR	.97	15
R-UMP	1	68

Notes: On average, across all votes, 94% of SER MPs aligned their votes with the Party position. The Party's size is the number of members affiliated with the Party at the beginning of the legislature (and in November 2012 for the later-created R-UMP group).

for the MPs with the lowest attendance rate to dark blue for MPs with the highest. The darkest regions are not the closest to Paris. The vote-participation decision is not then determined by geographical distance.

Appendix B. Measures of conflict

This Appendix provides the details of the construction of the different conflict measures. [Table B.1](#) shows the result of one-way MANOVA tests to see whether constituency characteristics are stable across Parties. [Table B.2](#) checks that I have sufficient variation in the alignment rate across votes for all topics. [Fig. B.1](#) shows no correlation between participation and alignment rates by topic. [Tables B.3](#) and [B.4](#) display the regression results for the effect of constituency characteristics on MPs' voting decisions, using both my first and second measures of the share of Leftist neighbors.

The third measure of conflict is constructed using two election results. The choice of these elections was based on the similarity in terms of Party affiliations of the candidates with the political groups in the Assembly, as shown in [Tables B.5](#) and [B.6](#).

I use two different elections to measure the electoral distance between constituents and the Party of their MP. The results are available at the constituency level. I chose the 2012 Presidential election and the 2015 Départemental elections, as the candidates were affiliated with the same Parties as those represented in the National Assembly.

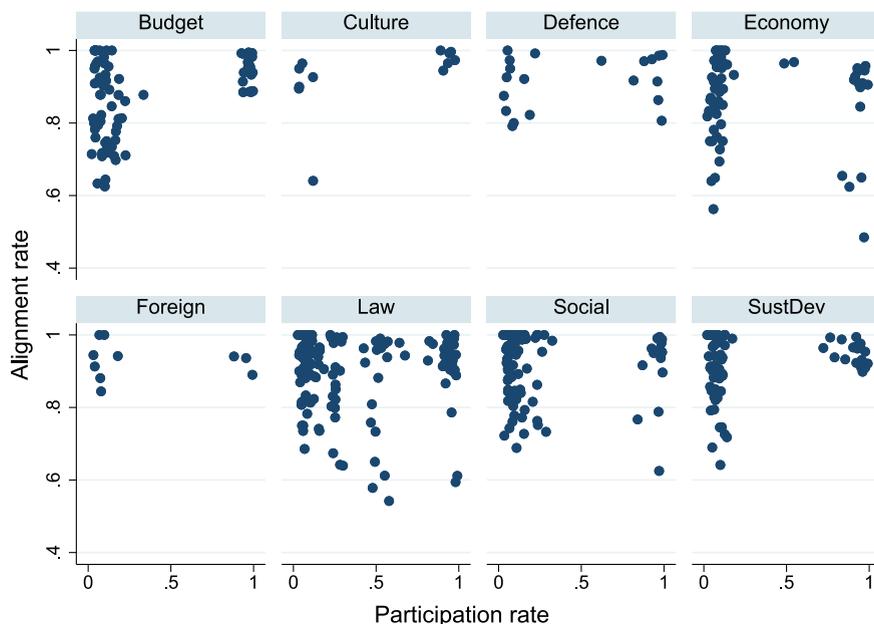


Fig. B.1. Alignment and participation rates do not correlate across votes, whatever the topic.

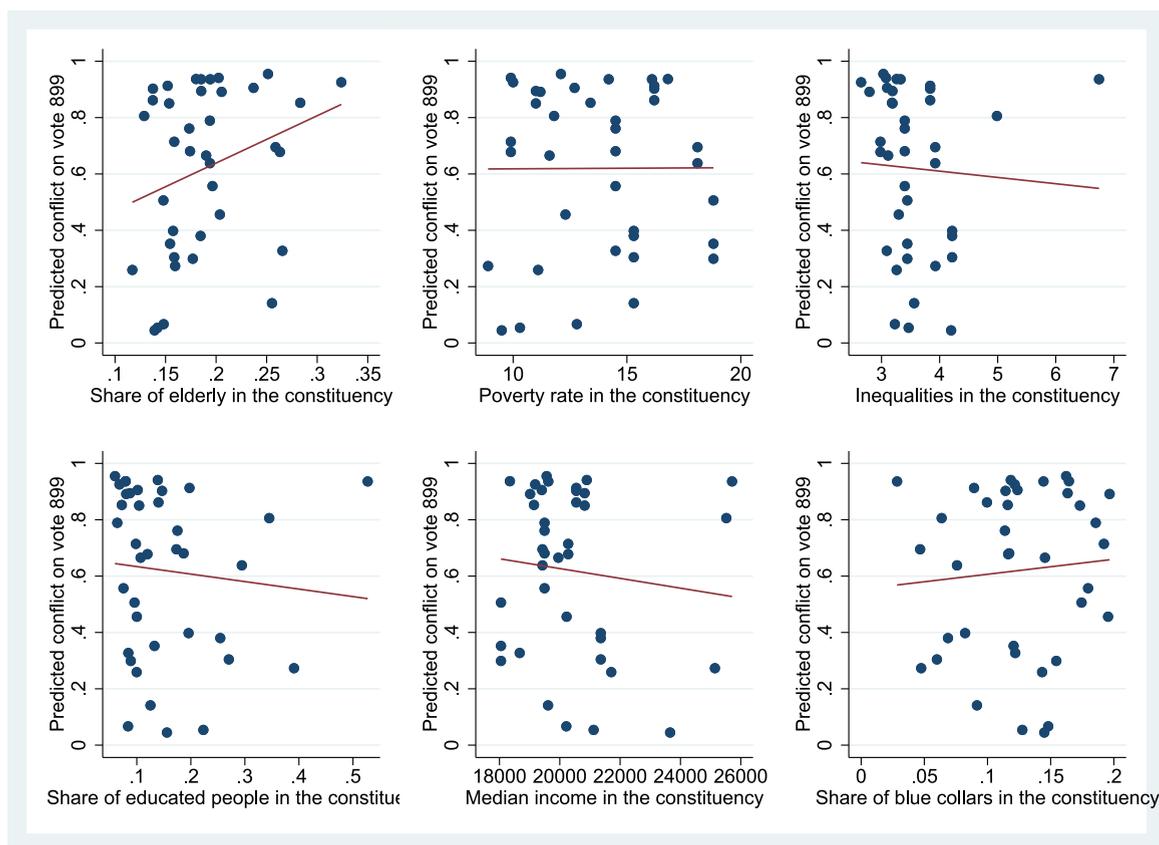


Fig. B.2. Correlations between the predicted conflict on vote 899 for the UMP members with “partial” conflict with their party (i.e. conflict on more than 1 topic but less than 5 topics) and their constituency’s characteristics.

Table B.1

One-way MANOVA tests on constituency characteristics.

Variable	F-statistic	Prob > F
Median income	5.02	0.0002
Poverty rate	5.07	0.0002
Inequality	1.44	0.2088
Unemployment rate	4.56	0.0004
Share of children	4.88	0.0002
Share of women	0.75	0.5868
Share of foreigners	0.88	0.4915
Share working in agriculture	0.73	0.6020
Share of craftsmen	6.91	0.0000
Share of executives	3.24	0.0068
Share of intermediate professions	0.76	0.5792
Share of employees	4.93	0.0002
Share of blue collars	0.49	0.7856
Share of retired	2.16	0.0574
Share below 25 years old	4.99	0.0002
Share above 65 years old	2.50	0.0296
MP: woman	9.79	0.0000
MP: age	2.19	0.0537

Sample: All MPs affiliated with a Party, 553 observations, 6 Parties.

Notes: The F-statistic is for Wilks’ Lambda. A significant p -value indicates that the variable differs significantly across at least two Parties.

Table B.2

Variations in the alignment rate across votes, within each topic.

Topic	No. of votes	Mean alignment rate	SD alignment rate
Budget	103	.87	.11
Culture	16	.92	.11
Defence	25	.91	.09
Economy	87	.88	.11
Foreign	12	.92	.08
Law	181	.91	.10
Social	146	.94	.09
Sustainable Development	89	.92	.08

Notes: Most topics exhibit large variations in alignment rates, with standard deviations of around .10. Even for topics with a small number of votes during the legislature, such as Culture or Foreign Affairs, there remains variation in the alignment rate with standard deviations of .11 and .08 respectively.

Table B.3

The effect of constituency characteristics on the probability of holding a Leftist position, by topic, using all MPs' recorded votes. Left Neighbors is the share of MPs from the same Department that voted Left on the same issue, without trimming the 1% smallest and 1% highest shares.

	(1) Budget	(2) Culture	(3) Defence	(4) Economy	(5) Foreign	(6) Law	(7) Social	(8) Sustainable
Left								
Left Neighbors	2.358** (0.790)	2.075*** (0.622)	3.373*** (0.804)	2.684*** (0.501)	0.458 (1.208)	2.761*** (0.617)	3.024*** (0.485)	2.536** (0.785)
Median Income	0.000127 (0.000261)	0.000101 (0.000333)	-0.0000819 (0.000155)	0.000182 (0.000148)	0.000200 (0.000330)	0.000141 (0.000138)	0.0000764 (0.000180)	0.000108 (0.000254)
Poverty Rate	-0.0369 (0.154)	-0.000750 (0.211)	-0.182* (0.0748)	0.0212 (0.0942)	0.0504 (0.339)	0.0257 (0.0891)	-0.0460 (0.132)	-0.0771 (0.164)
Inequality	-0.241 (0.541)	-0.177 (0.714)	0.0583 (0.344)	-0.445 (0.299)	-0.368 (0.687)	-0.198 (0.297)	-0.375 (0.401)	-0.159 (0.545)
Unemployment Rate	0.0532 (0.217)	-0.00531 (0.241)	0.239 (0.130)	0.00561 (0.113)	0.107 (0.244)	-0.00252 (0.0987)	0.0631 (0.161)	0.192 (0.230)
Share Children	-53.50*** (10.52)	-74.89*** (10.80)	-14.38 (10.41)	-38.33*** (5.752)	-27.98* (12.74)	-35.47* (15.21)	-52.15*** (9.723)	-60.57*** (12.25)
Share Women	2.598 (19.01)	-16.65 (15.71)	13.46 (13.48)	10.44 (13.85)	-5.811 (22.23)	1.045 (10.39)	6.660 (14.98)	-12.88 (20.90)
Share Foreign	8.025 (6.208)	10.41* (4.213)	15.70** (5.002)	6.427 (3.779)	7.600** (2.689)	3.943 (2.628)	9.578* (4.169)	12.02* (5.239)
Share Agri	-23.26 (20.95)	-46.33** (16.78)	40.05 (27.11)	-4.199 (13.73)	13.84 (37.00)	-18.65 (13.80)	-24.88 (19.48)	-21.14 (18.49)
Share Craft	-108.2*** (22.45)	-150.0*** (23.83)	-69.25*** (20.45)	-78.69*** (16.65)	-90.01 (52.93)	-93.72** (30.47)	-98.34*** (21.67)	-128.8*** (22.37)
Share Executive	-27.85** (9.849)	-40.72*** (9.487)	-0.511 (9.102)	-18.91*** (5.302)	-17.18 (11.03)	-18.90** (7.295)	-26.43** (8.230)	-27.71** (10.25)
Share Intermediate	-35.82** (12.36)	-59.30*** (11.15)	-3.415 (11.07)	-30.49*** (7.187)	-31.95*** (5.953)	-32.92* (14.05)	-39.19*** (11.76)	-41.68*** (12.52)
Share Employee	-22.95 (12.86)	-29.23* (12.31)	-11.06 (9.933)	-20.80** (7.723)	-15.45 (15.03)	-14.20 (8.985)	-23.18* (10.89)	-21.90* (11.14)
Share Blue Collar	-30.98** (10.31)	-49.46*** (10.92)	-4.260 (8.085)	-24.14** (7.586)	-26.17*** (4.411)	-23.97* (10.04)	-35.99*** (8.601)	-35.00** (11.16)
Share Retired	29.68 (17.45)	34.29* (13.82)	37.37* (18.88)	24.72* (9.681)	-0.0854 (10.86)	16.47 (9.531)	28.46* (12.83)	26.68 (15.89)
Share Young	-28.68** (10.31)	-43.29*** (10.31)	0.203 (15.26)	-20.73** (6.363)	-24.06* (11.07)	-21.01* (9.823)	-32.80*** (8.408)	-26.51* (12.03)
Share Old	-98.11*** (25.69)	-134.1*** (25.50)	-55.97*** (16.63)	-78.60*** (13.47)	-41.27*** (3.453)	-63.89* (27.12)	-99.89*** (20.09)	-99.82*** (26.23)

(continued on next page)

Table B.3 (continued).

	(1) Budget	(2) Culture	(3) Defence	(4) Economy	(5) Foreign	(6) Law	(7) Social	(8) Sustainable
Share Educ	-1.158 (3.108)	-2.165 (4.348)	0.666 (3.339)	-2.644 (2.893)	-2.932 (2.284)	-2.238 (2.550)	-2.315 (2.940)	-3.447 (4.577)
Female	0.384* (0.187)	0.547* (0.241)	0.134 (0.227)	0.374 (0.203)	0.380* (0.176)	0.299 (0.234)	0.349 (0.219)	0.524* (0.235)
Age	-0.0130 (0.0112)	-0.0210 (0.0139)	-0.0202* (0.00981)	-0.0106 (0.00836)	-0.00908 (0.0230)	-0.0117 (0.00900)	-0.0174 (0.0106)	-0.0255* (0.0111)
N	8083	1727	1693	4780	964	17 716	6204	6106

Notes: These are Logistic estimates of the decision to hold a Leftist position. Standard errors appear in parentheses. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. There are no Party fixed effects; time and region fixed effects and a constant are included. Standard errors are clustered at the year and Department levels.

Table B.4

The effect of constituency characteristics on the probability of holding a Leftist position, by topic, using all MPs' recorded votes. Left Neighbors is the share of MPs from the same Department that voted Left on the same issues, without trimming the 1% smallest and 1% highest shares. The sample does not include the 9.4% most disciplined votes.

	(1) Budget	(2) Culture	(3) Defence	(4) Economy	(5) Foreign	(6) Law	(7) Social	(8) Sustainable
Left								
Left Neighbors	2.337** (0.794)	2.075*** (0.622)	3.373*** (0.804)	2.684*** (0.496)	0.533 (1.175)	2.761*** (0.618)	2.934*** (0.442)	2.503** (0.793)
Median Income	0.000140 (0.000263)	0.000101 (0.000333)	-0.0000819 (0.000155)	0.000185 (0.000148)	0.000211 (0.000328)	0.000143 (0.000140)	0.0000759 (0.000183)	0.000115 (0.000256)
Poverty Rate	-0.0300 (0.156)	-0.000750 (0.211)	-0.182* (0.0748)	0.0228 (0.0948)	0.0491 (0.334)	0.0262 (0.0901)	-0.0402 (0.135)	-0.0721 (0.165)
Inequality	-0.266 (0.545)	-0.177 (0.714)	0.0583 (0.344)	-0.448 (0.300)	-0.326 (0.667)	-0.200 (0.302)	-0.269 (0.397)	-0.167 (0.549)
Unemployment Rate	0.0507 (0.218)	-0.00531 (0.241)	0.239 (0.130)	-0.000711 (0.114)	0.118 (0.241)	-0.00219 (0.0987)	0.0581 (0.166)	0.191 (0.230)
Share Children	-53.51*** (10.62)	-74.89*** (10.80)	-14.38 (10.41)	-38.20*** (5.719)	-29.63* (13.88)	-35.40* (15.22)	-50.83*** (10.08)	-60.68*** (12.29)
Share Women	2.421 (19.14)	-16.65 (15.71)	13.46 (13.48)	10.94 (13.64)	-6.151 (23.01)	0.988 (10.42)	8.076 (15.49)	-12.41 (20.87)
Share Foreign	7.945 (6.212)	10.41* (4.213)	15.70** (5.002)	6.219 (3.792)	7.651** (2.618)	3.962 (2.629)	9.197* (4.084)	11.95* (5.247)
Share Agri	-23.28 (20.91)	-46.33** (16.78)	40.05 (27.11)	-4.487 (13.83)	19.26 (34.19)	-18.64 (13.80)	-24.19 (19.78)	-21.11 (18.49)
Share Craft	-107.8*** (22.43)	-150.0*** (23.83)	-69.25*** (20.45)	-79.00*** (16.56)	-95.06 (57.15)	-93.65** (30.52)	-102.4*** (20.16)	-128.8*** (22.41)
Share Executive	-27.82** (9.809)	-40.72*** (9.487)	-0.511 (9.102)	-19.07*** (5.378)	-16.03 (10.45)	-18.87** (7.275)	-26.60** (8.227)	-27.47** (10.31)
Share Intermediate	-35.77** (12.41)	-59.30*** (11.15)	-3.415 (11.07)	-30.61*** (7.154)	-31.02*** (5.426)	-32.87* (14.06)	-37.53** (11.68)	-41.53*** (12.50)
Share Employee	-22.89 (12.88)	-29.23* (12.31)	-11.06 (9.933)	-20.99** (7.798)	-12.22 (13.36)	-14.20 (8.971)	-22.66* (11.00)	-21.71 (11.11)
Share Blue Collar	-30.95** (10.34)	-49.46*** (10.92)	-4.260 (8.085)	-24.21** (7.568)	-25.28*** (4.248)	-23.98* (10.04)	-35.57*** (8.672)	-34.58** (11.16)
Share Retired	29.40 (17.43)	34.29* (13.82)	37.37* (18.88)	23.89* (9.488)	1.286 (10.24)	16.54 (9.541)	27.98* (12.58)	27.16 (15.62)
Share Young	-28.55** (10.66)	-43.29*** (10.31)	0.203 (15.26)	-20.85** (6.343)	-21.32* (9.476)	-20.95* (9.811)	-32.33*** (8.780)	-26.07* (12.00)
Share Old	-97.76*** (25.80)	-134.1*** (25.50)	-55.97*** (16.63)	-77.74*** (13.29)	-41.22*** (4.361)	-63.91* (27.14)	-97.44*** (19.81)	-100.2*** (25.95)
Share Educ	-1.207 (3.081)	-2.165 (4.348)	0.666 (3.339)	-2.688 (2.869)	-3.045 (2.462)	-2.256 (2.546)	-2.272 (2.900)	-3.456 (4.610)
Female	0.388* (0.187)	0.547* (0.241)	0.134 (0.227)	0.373 (0.202)	0.447* (0.191)	0.299 (0.235)	0.380 (0.223)	0.532* (0.233)

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Table B.4 (continued).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Budget	Culture	Defence	Economy	Foreign	Law	Social	Sustainable
Age	-0.0129 (0.0115)	-0.0210 (0.0139)	-0.0202* (0.00981)	-0.0109 (0.00863)	-0.00887 (0.0231)	-0.0117 (0.00909)	-0.0181 (0.0106)	-0.0254* (0.0112)
Constant	40.22** (12.33)	72.02*** (13.38)	1.852 (13.31)	25.36* (10.90)	30.27 (19.06)	28.83 (17.01)	39.09** (14.40)	52.30*** (14.40)
N	8061	1727	1693	4760	954	17701	6114	6082

Notes: These are Logistic estimates of the decision to hold a Leftist position. Standard errors appear in parentheses. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. There are no Party fixed effects; time and region fixed effects and a constant are included. Standard errors are clustered at the year and Department levels.

Table B.5

Presidential candidates and the corresponding groups in the National Assembly.

Presidential candidate	Corresponding group in the National Assembly
François Hollande	SER
Nicolas Sarkozy	UMP
Jean-Luc Mélenchon	GDR
François Bayrou	UDI
Eva Joly	ECOLO

Notes: The 2012 Presidential election was held just before the legislative elections, on April the 22nd. The RRD Party supported François Hollande during the Presidential election and therefore does not have any attributed candidate here.

Table B.6

Candidates' affiliations for the 2015 Départemental elections and the corresponding groups in the National Assembly.

Candidate classification in 2015	Corresponding group in the Assembly
COM: Parti communiste français	GDR
FG: Front de gauche	GDR
PG: Parti de gauche	GDR
RDG: Parti radical de gauche	RRDP
SOC: Parti socialiste	SER
UDI: Union des démocrates indépendants	UDI
UMP: Union pour un mouvement populaire	UMP
VEC: Europe Ecologie les Verts	ECOLO

Notes: Departmental elections nominate representatives at the level just above the constituency. I use the results from the first round of the 2015 elections, on March 22nd, to measure electorate preferences between this date and the end of the legislature.

Appendix C. The effects of conflict

The effect of conflict on participation is robust to the different specifications, as shown in Table C.1. This in particular shows the different estimations with and without Party fixed effects, with and without trimming the share of Leftist neighboring MPs, and excluding the most disciplined votes. Table C.2 displays the impact of conflict on the decision to vote "abstention", and Table C.3 that on the decision to align with the Party.

Table C.1

The effect of the different measures of conflict on the probability to participate in a vote.

	Not Participating								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Conflict	1.059*** (0.0306)	1.519*** (0.0256)	0.956*** (0.0269)	1.419*** (0.0237)	1.021*** (0.0263)	1.153*** (0.0197)	1.024*** (0.0262)	1.155*** (0.0197)	0.807*** (0.104)
Vote Closeness In Party	0.0620 (0.0328)	-0.284*** (0.0338)	0.0215 (0.0330)	-0.351*** (0.0341)	0.120*** (0.0248)	-0.0868*** (0.0253)	0.120*** (0.0248)	-0.0870*** (0.0253)	0.223*** (0.0275)
Vote Share 1	0.0941 (0.384)	-0.000644 (0.386)	0.0569 (0.386)	-0.0233 (0.386)	-0.201 (0.330)	-0.394 (0.335)	-0.200 (0.330)	-0.393 (0.335)	-0.195 (0.340)
Geographical distance	-0.0839*** (0.0190)	-0.0817*** (0.0190)	-0.0829*** (0.0191)	-0.0808*** (0.0190)	0.00232 (0.0164)	-0.000334 (0.0167)	0.00209 (0.0164)	-0.000387 (0.0167)	-0.00695 (0.0167)
Worked on Topic	-0.634*** (0.0200)	-0.649*** (0.0202)	-0.637*** (0.0201)	-0.659*** (0.0204)	-0.720*** (0.0146)	-0.730*** (0.0147)	-0.720*** (0.0146)	-0.730*** (0.0147)	-0.666*** (0.0159)
Vote Closeness	-1.553*** (0.0244)	-1.363*** (0.0241)	-1.484*** (0.0243)	-1.273*** (0.0244)	-1.540*** (0.0193)	-1.405*** (0.0194)	-1.538*** (0.0193)	-1.404*** (0.0194)	-1.490*** (0.0207)

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Table C.1 (continued).

	Not Participating								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Amendment	2.881*** (0.0144)	2.851*** (0.0146)	2.896*** (0.0145)	2.857*** (0.0147)	2.800*** (0.0110)	2.795*** (0.0110)	2.800*** (0.0110)	2.796*** (0.0110)	3.008*** (0.0120)
Party Initiative	-0.0278 (0.0152)	0.0507*** (0.0153)	-0.0302* (0.0153)	0.0461** (0.0155)	-0.00340 (0.0117)	0.0568*** (0.0117)	-0.00345 (0.0117)	0.0566*** (0.0117)	0.0448*** (0.0126)
Experience	0.321*** (0.0591)	0.342*** (0.0593)	0.332*** (0.0594)	0.348*** (0.0594)	0.411*** (0.0508)	0.428*** (0.0516)	0.411*** (0.0508)	0.428*** (0.0516)	0.382*** (0.0520)
Candidate 2017 same Party	-0.0417 (0.0517)	-0.0355 (0.0522)	-0.0386 (0.0520)	-0.0407 (0.0523)	-0.0369 (0.0438)	-0.0408 (0.0446)	-0.0367 (0.0438)	-0.0408 (0.0446)	-0.00799 (0.0453)
Project	-1.086*** (0.0170)	-1.124*** (0.0173)	-1.025*** (0.0172)	-1.032*** (0.0177)	-1.167*** (0.0133)	-1.189*** (0.0135)	-1.167*** (0.0133)	-1.188*** (0.0135)	-1.059*** (0.0140)
Constant	1.230*** (0.282)	1.132*** (0.282)	1.166*** (0.283)	1.032*** (0.282)	0.898*** (0.243)	0.973*** (0.246)	0.897*** (0.243)	0.972*** (0.246)	0.490 (0.264)
<i>N</i>	174 706	174 634	173 540	171 994	321 886	321 814	321 886	321 814	280 770
Measure of conflict:									
Neighb. votes (issues)	✓	✓	✓	✓					
Party FE		✓		✓		✓		✓	
Curtailed			✓	✓			✓	✓	
Neighb. votes (topics)					✓	✓	✓	✓	
Electoral results									✓

Notes: Standard errors appear in parentheses. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. These are Logistic regressions showing the impact of conflict on the decision not to participate in a vote. In column (1), conflict is measured using the share of neighboring MPs who voted Left for each issue, without Party fixed effects. In column (2), conflict is measured as in column (1) but adding Party fixed effects to Eq. (1). In column (3), conflict is measured as in column (1) but using the trimmed share of neighboring MPs.

Table C.2

The effect of the different measures of conflict on the probability to vote abstention.

	Abstention								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Conflict	1.537*** (0.125)	1.166*** (0.118)	1.237*** (0.109)	0.892*** (0.110)	1.381*** (0.130)	0.850*** (0.113)	1.396*** (0.130)	0.852*** (0.113)	0.409 (0.437)
Vote Closeness In Party	1.833*** (0.110)	1.687*** (0.116)	1.861*** (0.109)	1.741*** (0.116)	1.703*** (0.100)	1.621*** (0.104)	1.703*** (0.100)	1.621*** (0.104)	1.991*** (0.112)
Vote Share 1	-0.698 (0.760)	-1.102 (0.755)	-0.785 (0.758)	-1.149 (0.756)	-1.162 (0.731)	-1.464* (0.730)	-1.158 (0.730)	-1.464* (0.730)	-1.074 (0.802)
Worked on Topic	0.219** (0.0684)	0.222** (0.0685)	0.220** (0.0682)	0.223** (0.0686)	0.214** (0.0631)	0.212** (0.0631)	0.213** (0.0631)	0.212** (0.0631)	0.155* (0.0676)
Voters	0.00176*** (0.000252)	0.00197*** (0.000256)	0.00169*** (0.000253)	0.00190*** (0.000259)	0.00168*** (0.000212)	0.00174*** (0.000216)	0.00168*** (0.000212)	0.00174*** (0.000216)	0.00152*** (0.000237)
Vote Closeness	-0.588*** (0.0957)	-0.277** (0.0919)	-0.490*** (0.0938)	-0.221* (0.0921)	-0.468*** (0.0867)	-0.301*** (0.0868)	-0.467*** (0.0867)	-0.301*** (0.0868)	-0.273** (0.0915)
Amendment	-0.00187 (0.112)	-0.00760 (0.112)	-0.00783 (0.113)	0.00690 (0.113)	-0.0257 (0.0983)	-0.0208 (0.0986)	-0.0255 (0.0983)	-0.0208 (0.0986)	-0.0369 (0.113)
Party Initiative	-0.274*** (0.0687)	-0.250*** (0.0692)	-0.285*** (0.0685)	-0.262*** (0.0694)	-0.206*** (0.0625)	-0.208*** (0.0632)	-0.206*** (0.0625)	-0.208*** (0.0631)	-0.162* (0.0660)
Experience	-0.0794 (0.118)	-0.0559 (0.118)	-0.0752 (0.118)	-0.0521 (0.118)	-0.0321 (0.113)	-0.0120 (0.114)	-0.0317 (0.113)	-0.0119 (0.114)	-0.0135 (0.123)
Candidate 2017 same Party	0.0196 (0.102)	0.0364 (0.101)	0.0214 (0.101)	0.0350 (0.101)	0.0393 (0.0976)	0.0498 (0.0980)	0.0396 (0.0976)	0.0498 (0.0980)	0.0782 (0.107)
Project	-0.402*** (0.0654)	-0.448*** (0.0655)	-0.404*** (0.0654)	-0.443*** (0.0658)	-0.352*** (0.0622)	-0.373*** (0.0624)	-0.352*** (0.0622)	-0.373*** (0.0624)	-0.233*** (0.0656)
Constant	-4.531*** (0.321)	-4.369*** (0.319)	-4.403*** (0.319)	-4.276*** (0.319)	-4.471*** (0.305)	-4.167*** (0.303)	-4.482*** (0.305)	-4.168*** (0.303)	-4.536*** (0.511)

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Table C.2 (continued).

	Abstention								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>N</i>	79 712	79 646	79 613	78 589	91 091	91 025	91 091	91 025	84 660
Measure of conflict:									
Neighb. votes (issues)	✓	✓	✓	✓					
Party FE		✓		✓		✓		✓	
Curtailed			✓	✓			✓	✓	
Neighb. votes (topics)					✓	✓	✓	✓	
Electoral results									✓

Notes: Standard errors appear in parentheses. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. These are Logistic regressions showing the impact of conflict on the decision to vote abstention. In column (1), conflict is measured using the share of neighboring MPs who voted Left for each issue, without Party fixed effects. In column (2), conflict is measured as in column (1) but adding Party fixed effects to Eq. (1). In column (3), conflict is measured as in column (1) but using the trimmed share of neighboring MPs.

Table C.3

The effect of the different measures of conflict on the probability to align with the Party position.

	Alignment								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Conflict	-1.436*** (0.0912)	-1.182*** (0.0821)	-1.121*** (0.0790)	-0.924*** (0.0753)	-0.951*** (0.0890)	-0.769*** (0.0738)	-0.952*** (0.0889)	-0.769*** (0.0739)	-0.545 (0.329)
Vote Closeness In Party	-4.721*** (0.0761)	-4.529*** (0.0793)	-4.746*** (0.0762)	-4.575*** (0.0795)	-4.469*** (0.0649)	-4.352*** (0.0672)	-4.470*** (0.0648)	-4.352*** (0.0672)	-4.710*** (0.0733)
Vote Share 1	1.182 (0.818)	1.528 (0.815)	1.260 (0.816)	1.533 (0.815)	1.630* (0.749)	1.802* (0.750)	1.630* (0.749)	1.802* (0.750)	1.344 (0.815)
Worked on Topic	-0.102 (0.0538)	-0.105 (0.0539)	-0.103 (0.0538)	-0.103 (0.0540)	-0.0579 (0.0462)	-0.0605 (0.0462)	-0.0571 (0.0462)	-0.0604 (0.0462)	-0.0415 (0.0498)
Voters	-0.000431** (0.000166)	-0.000574*** (0.000166)	-0.000367* (0.000167)	-0.000510** (0.000167)	-0.000305* (0.000138)	-0.000367** (0.000138)	-0.000305* (0.000138)	-0.000367** (0.000138)	-0.000267 (0.000153)
Vote Closeness	0.889*** (0.0719)	0.606*** (0.0694)	0.801*** (0.0706)	0.558*** (0.0695)	0.688*** (0.0633)	0.561*** (0.0637)	0.687*** (0.0633)	0.561*** (0.0637)	0.593*** (0.0671)
Amendment	-0.171* (0.0724)	-0.139 (0.0721)	-0.167* (0.0728)	-0.148* (0.0726)	-0.204*** (0.0615)	-0.185** (0.0616)	-0.205*** (0.0615)	-0.185** (0.0616)	-0.278*** (0.0701)
Party Initiative	0.273*** (0.0504)	0.223*** (0.0509)	0.283*** (0.0503)	0.240*** (0.0509)	0.224*** (0.0422)	0.197*** (0.0427)	0.224*** (0.0422)	0.198*** (0.0427)	0.182*** (0.0449)
Experience	0.0107 (0.126)	-0.0248 (0.126)	0.00285 (0.126)	-0.0248 (0.126)	-0.0321 (0.116)	-0.0518 (0.116)	-0.0323 (0.116)	-0.0519 (0.116)	-0.0116 (0.125)
Candidate 2017 same Party	-0.0621 (0.108)	-0.0781 (0.108)	-0.0644 (0.108)	-0.0751 (0.108)	-0.0786 (0.0980)	-0.0829 (0.0984)	-0.0788 (0.0980)	-0.0829 (0.0984)	-0.0751 (0.108)
Project	0.287*** (0.0525)	0.341*** (0.0524)	0.290*** (0.0526)	0.335*** (0.0527)	0.221*** (0.0476)	0.242*** (0.0476)	0.221*** (0.0476)	0.242*** (0.0476)	0.129* (0.0504)
Constant	3.481*** (0.324)	3.335*** (0.323)	3.351*** (0.323)	3.253*** (0.323)	3.268*** (0.296)	3.142*** (0.295)	3.270*** (0.296)	3.142*** (0.295)	3.623*** (0.435)
<i>N</i>	79 712	79 646	79 613	78 589	91 091	91 025	91 091	91 025	84 660
Measure of conflict:									
Neighb. votes (issues)	✓	✓	✓	✓					
Party FE		✓		✓		✓		✓	
Curtailed			✓	✓			✓	✓	
Neighb. votes (topics)					✓	✓	✓	✓	
Electoral results									✓

Notes: Standard errors appear in parentheses. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. These are Logistic regressions showing the impact of conflict on the decision to align the votes. In column (1), conflict is measured using the share of neighboring MPs who voted Left for each issue, without Party fixed effects. In column (2), conflict is measured as in column (1) but adding Party fixed effects to Eq. (1). In column (3), conflict is measured as in column (1) but using the trimmed share of neighboring MPs.

Appendix D. DiD. The effect of transparency on legislative voting

This Appendix shows the regression results of the Difference-in-Difference analysis, with the estimates on the covariates.

Table D.1
Increasing transparency reduces participation, but does not affect abstention nor alignment.

	Participation Rate			Abstention Rate			Alignment Rate		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Post	0.0253* (0.0109)	0.0247 (0.0126)	0.0246* (0.0118)	0.00839 (0.0160)	0.0177 (0.0180)	0.0160 (0.0202)	-0.0340*** (0.00802)	-0.0432*** (0.00969)	-0.0424*** (0.00949)
Ordinary	-0.661*** (0.00876)	-0.604*** (0.0137)	-0.625*** (0.0151)	-0.182*** (0.0189)	-0.122*** (0.0297)	-0.0622 (0.0499)	0.0102 (0.00923)	-0.0191 (0.0154)	-0.0352 (0.0225)
Ordinary * Post	-0.109*** (0.0116)	-0.118*** (0.0158)	-0.0775*** (0.0208)	-0.0133 (0.0171)	0.00223 (0.0232)	-0.00531 (0.0360)	-0.0128 (0.00853)	-0.0190 (0.0123)	-0.0219 (0.0164)
Amendment	-0.0323*** (0.00499)	-0.0450*** (0.0107)		-0.0209** (0.00737)	-0.00152 (0.0155)		0.00191 (0.00358)	-0.00232 (0.00795)	
Project	0.0288*** (0.00544)	0.0649*** (0.0123)	0.0626*** (0.0131)	0.0348*** (0.00812)	0.0190 (0.0178)	-0.00290 (0.0231)	-0.0135*** (0.00394)	-0.00375 (0.00933)	0.00702 (0.0107)
Party Initiative	0.0776*** (0.00461)	0.0627*** (0.00980)	0.0464*** (0.0129)	-0.0725*** (0.00675)	-0.0803*** (0.0140)	-0.108*** (0.0221)	0.000258 (0.00321)	0.00628 (0.00713)	0.0330*** (0.00985)
Voters				-0.000301*** (0.0000359)	-0.0000941 (0.0000688)	0.0000551 (0.000124)	-0.0000630*** (0.0000173)	-0.000144*** (0.0000354)	-0.000190*** (0.0000555)
Constant	0.857*** (0.00885)	0.844*** (0.0139)	0.849*** (0.0142)	0.274** (0.0218)	0.175*** (0.0397)	0.118 (0.0662)	0.989*** (0.0107)	1.034*** (0.0206)	1.045*** (0.0298)
N	6917	1803	944	6917	1803	944	6516	1680	858
Tuesdays only		✓	✓		✓	✓		✓	✓
Bills only			✓			✓			✓

Notes: These are OLS estimates of the participation, abstention and alignment rates for each Party on each Bill. Standard errors appear in parentheses. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The sample is Tuesdays only in columns (2), (5) and (8), and entire Bills on Tuesdays only in columns (3), (6) and (9).

Table D.2
The effects of transparency are robust to topic-specific or party-specific time trends.

	Participation Rate		Abstention Rate		Alignment Rate	
	(1)	(2)	(3)	(4)	(5)	(6)
Post	0.0182 (0.0145)	0.0726*** (0.0131)	0.0350 (0.0218)	0.00540 (0.0200)	-0.0227* (0.0107)	-0.0145 (0.0100)
Ordinary	-0.676*** (0.00882)	-0.663*** (0.00830)	-0.131*** (0.0219)	-0.183*** (0.0187)	0.00150 (0.0107)	0.0104 (0.00914)
Ordinary * Post	-0.0923*** (0.0116)	-0.106*** (0.0110)	0.000107 (0.0176)	-0.0126 (0.0170)	-0.00877 (0.00875)	-0.0114 (0.00846)
Amendment	-0.0399*** (0.00500)	-0.0350*** (0.00473)	-0.0224** (0.00762)	-0.0210** (0.00732)	0.000940 (0.00370)	0.00221 (0.00355)
Project	0.0239*** (0.00553)	0.0260*** (0.00516)	0.0247** (0.00848)	0.0339*** (0.00807)	-0.00941* (0.00412)	-0.0148*** (0.00390)
Party Initiative	0.0777*** (0.00448)	0.0853*** (0.00479)	-0.0722*** (0.00671)	-0.0556*** (0.00735)	-0.0000482 (0.00319)	0.00926** (0.00348)
Post * Budget	0.0378** (0.0144)		-0.00939 (0.0216)		-0.0208* (0.0105)	
Post * Culture	-0.0222 (0.0252)		0.0643 (0.0378)		0.0190 (0.0185)	
Post * Defence	0.0259 (0.0244)		-0.0441 (0.0366)		-0.0444* (0.0179)	
Post * Economy	0.0167 (0.0139)		-0.0624** (0.0208)		-0.00173 (0.0102)	
Post * Foreign	-0.0436 (0.0438)		0.0327 (0.0657)		0.0281 (0.0313)	
Post * Law	0.0599*** (0.0137)		-0.0338 (0.0206)		-0.0274** (0.00999)	
Post * Social	-0.0854*** (0.0128)		-0.0301 (0.0195)		-0.000191 (0.00944)	
Post * ECOLO		-0.0416*** (0.0124)		-0.0387* (0.0190)		-0.00974 (0.00935)

(continued on next page)

Table D.2 (continued).

	Participation Rate		Abstention Rate		Alignment Rate	
	(1)	(2)	(3)	(4)	(5)	(6)
Post * GDR		-0.0948*** (0.0127)		0.0284 (0.0195)		-0.00255 (0.00955)
Post * RRD		0.00996 (0.0128)		0.0109 (0.0196)		-0.0205* (0.00957)
Post * SER		-0.0973*** (0.0119)		0.0207 (0.0182)		-0.0700*** (0.00876)
Post * UMP		-0.0389** (0.0120)		-0.00160 (0.0184)		-0.00397 (0.00893)
Voters			-0.000166*** (0.0000433)	-0.000304*** (0.0000357)	-0.0000708*** (0.0000209)	-0.0000617*** (0.0000172)
Constant	0.876*** (0.0151)	0.731*** (0.0486)	0.137* (0.0616)	0.189* (0.0764)	0.971*** (0.0291)	1.010*** (0.0360)
N	6917	6917	6917	6917	6516	6516

Notes: These are OLS estimates of the participation, abstention and alignment rates including topic/party-specific time trends and topic/party fixed effects. Standard errors appear in parentheses. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The model uses the baseline specification, column (1) in Table D.1.

Appendix E. Potential spillover effects of the reform on MPs' behavior

See Fig. E.1 and Table E.1.

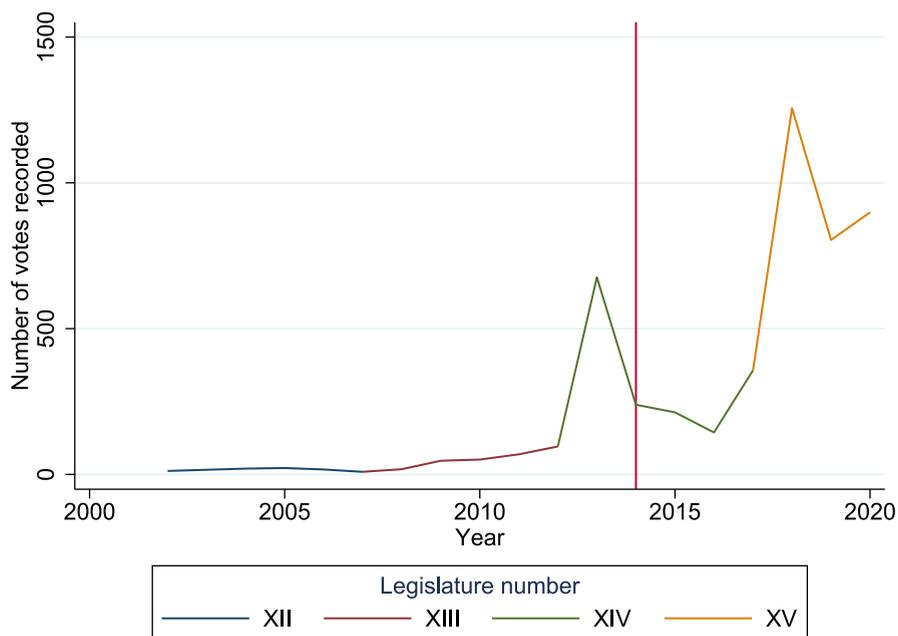


Fig. E.1. The number of votes that are recorded has increased over recent years. Notes: This figure shows the number of votes recorded every year from the XIIth to the XVth legislature. The red line indicates 2014. The two peaks correspond to debates over controversial issues: labor-market flexibility and same-sex marriage (2013), and immigration (2018). (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

Table E.1

Potential spillover effects of the reform.

	Mean Pre-reform	Mean Post-reform	Diff.	t	Pr(T > t)
Amendments/Bills	3.75	4.39	.64	4.18	0.0000
Propositions/Projects	.15	.40	.25	7.85	0.0000

Notes: This table displays the monthly ratios of Amendments to Bills, and Propositions to Projects, for ordinary votes. The pre-post difference is positive and significant for both, with a rise in the share of Amendments and Propositions. Pre-reform, there were an average of 3.86 times as many Amendments as Bills each month; post-reform, this figure rose to 4.51.

Appendix F. Salience for the electorate differs across issues

The *INSEE Enquête Cadre de Vie et Sécurité*.²⁵ provides annual data on which of eight items respondents considered to be critical: Terrorism; Unemployment; Poverty; Health; Crime; Racism and discrimination; Environment; Road safety. These eight items do not cover all of the subjects that were addressed during the legislature. Conversely, the classification of issues into topics sometimes includes multiple items from the survey. In particular, Terrorism, Crime, and Road safety all appear in the same subject area “Police” Poverty is part of the subject “Economy” which includes other less-related questions such as international trade. Other issues such as education, justice, or agriculture, which are not in this list of items, are not included in the following analysis. The evolution of the salience of each item during the fourteenth legislature appears in Fig. F.1.

Table F.1

DiD analysis including information on the electorate’s salience of different topics.

	(1) Participation Rate	(2) Abstention Rate	(3) Alignment Rate
Post	0.0436* (0.0185)	-0.0265 (0.0360)	-0.00975 (0.0149)
Ordinary	-0.676*** (0.0152)	-0.296*** (0.0586)	0.0176 (0.0238)
Ordinary * Post	-0.143*** (0.0193)	0.0208 (0.0377)	-0.0271 (0.0156)
Amendment	-0.0242** (0.00763)	-0.0268 (0.0152)	-0.00745 (0.00616)
Project	0.0106 (0.00892)	0.0131 (0.0174)	-0.00178 (0.00694)
Party Initiative	0.129*** (0.00642)	-0.101*** (0.0124)	-0.00483 (0.00484)
Citizens’ salience	-0.000542** (0.000174)	0.00130*** (0.000344)	-0.0000708 (0.000137)
Voters		-0.000481*** (0.000120)	-0.0000811 (0.0000481)
Constant	0.874*** (0.0157)	0.413*** (0.0700)	0.981*** (0.0284)
N	2650	2650	2436

Standard errors in parentheses.

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. This table displays the effect of transparency on the participation rate (column 1), the abstention rate (column 2), and the alignment rate (column 3), adding the salience that the electorate assigned to each topic in the year of the vote.

²⁵ Source: Insee-ONDRP-SSMSI, enquêtes Cadre de Vie et Sécurité 2007 à 2019.

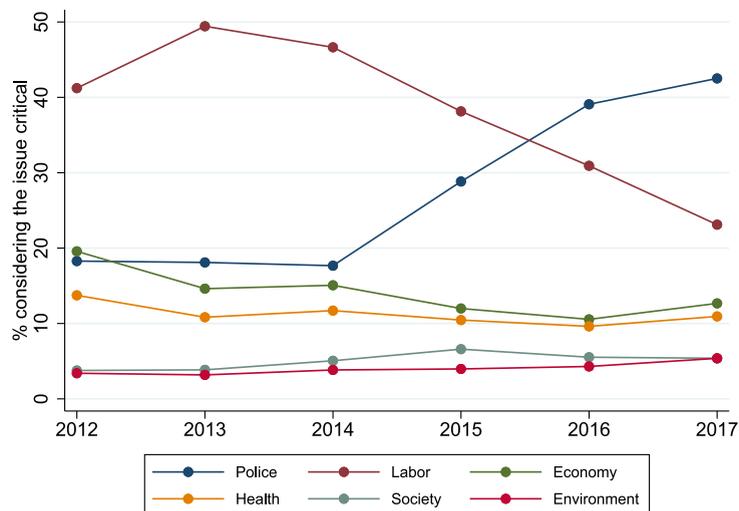


Fig. F.1. The evolution of the percentage of the French electorate that considered given issues as critical during the fourteenth legislature. *Notes:* This graph represents the percentage of respondents saying that the issue is critical each year. The items on Terrorism, Crime and Road safety were matched to the topic *Police*; unemployment to *Labor*; poverty to *Economy*; health to *Health*; racism and discrimination to *Society*; and Environment to *Environment*. The number of respondents is around 15,000 per year.

Appendix G. Multiple mandates

Following [Costa and Poyet \(2016\)](#), I focus only on Mayors, and Presidents of the “Région” and “Département”.

222 of the 643 MPs analyzed in this legislature held at least one local mandate during the legislature. 205 were Mayors of a French municipality, 11 were Presidents of a Department and 4 were Presidents of a Region. One was both Mayor and President of a Department, and one was both Mayor and President of a Region. The descriptive statistics by local mandate are presented in [Table G.1](#), which show no difference between the two groups of MPs.

Table G.1
Descriptive statistics of MPs with and without local mandates.

	Local mandate	No local mandate
Female	.11	.36
Age	58	55
Median income	19,904	20,089
Poverty rate	14	14
Inequality	3.45	3.53
Unemployment rate	9.45	9.28
Share children	21	21
Share women	51	52
Share foreigners	6	6
Share agriculture	1	1
Share craftsmen	4	3
Share executive	8	10
Share intermediate	14	16
Share employees	16	16
Share blue collars	13	15
Share retired	27	26
Share below 25 y.o.	8	9
Share above 65 y.o.	19	19

Table G.2

The effect of the different measures of conflict on the probability to participate in a vote, to vote abstention, and to align.

	Non-Participation		Abstention		Alignment	
	(1)	(2)	(3)	(4)	(5)	(6)
Conflict	0.760*** (0.0314)	0.503*** (0.125)	1.102*** (0.122)	0.990 (0.506)	-0.978*** (0.0882)	-0.896* (0.387)
Local	-0.371*** (0.0385)	-0.896*** (0.167)	-0.492*** (0.125)	1.251 (0.701)	0.561*** (0.108)	-0.545 (0.534)
Conflict * Local	0.675*** (0.0569)	0.930*** (0.212)	0.552* (0.223)	-1.987* (0.886)	-0.623*** (0.174)	1.169 (0.671)
Vote Closeness In Party	0.0298 (0.0331)	0.219*** (0.0275)	1.862*** (0.109)	1.989*** (0.112)	-4.744*** (0.0762)	-4.707*** (0.0734)
Vote Share 1	0.108 (0.392)	-0.207 (0.352)	-0.687 (0.761)	-1.010 (0.803)	1.179 (0.820)	1.302 (0.819)
Geographical distance	-0.0833*** (0.0194)	-0.00657 (0.0173)				
Worked on Topic	-0.636*** (0.0201)	-0.666*** (0.0159)	0.221** (0.0683)	0.154* (0.0676)	-0.103 (0.0538)	-0.0402 (0.0498)
Vote Closeness	-1.485*** (0.0243)	-1.490*** (0.0207)	-0.495*** (0.0938)	-0.274** (0.0916)	0.807*** (0.0707)	0.596*** (0.0671)
Amendment	2.902*** (0.0145)	3.005*** (0.0120)	-0.00401 (0.113)	-0.0405 (0.113)	-0.175* (0.0729)	-0.275*** (0.0701)
Party Initiative	-0.0263 (0.0153)	0.0467*** (0.0126)	-0.296*** (0.0687)	-0.167* (0.0661)	0.285*** (0.0504)	0.183*** (0.0450)
Experience	0.352*** (0.0606)	0.403*** (0.0541)	-0.0442 (0.118)	0.0369 (0.124)	-0.0384 (0.127)	-0.0715 (0.126)
Candidate 2017 same Party	-0.0491 (0.0528)	-0.0160 (0.0469)	0.00679 (0.102)	0.0701 (0.107)	-0.0486 (0.108)	-0.0609 (0.109)
Project	-1.024*** (0.0172)	-1.058*** (0.0140)	-0.402*** (0.0655)	-0.235*** (0.0656)	0.291*** (0.0526)	0.131** (0.0504)
Voters			0.00173*** (0.000254)	0.00154*** (0.000237)	-0.000408* (0.000167)	-0.000288 (0.000153)
Constant	1.251*** (0.288)	0.776** (0.277)	-4.320*** (0.321)	-4.946*** (0.551)	3.253*** (0.325)	3.826*** (0.466)
N	173 540	280 770	79 613	84 660	79 613	84 660

Notes: Standard errors appear in parentheses. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. These are Logistic regressions showing the impact of conflict on the decision not to participate in a vote. The three columns represent the impact of my two different measures of conflict.

References

- Ash, E., Morelli, M., Van Weelden, R., 2015. Elections and Divisiveness: Theory and Evidence. Working Paper No. 21422, National Bureau of Economic Research, <http://dx.doi.org/10.3386/w21422>.
- Bailer, S., 2011. Parliamentary Party Group Discipline in Comparison. 1st Annual General Conference of the European Political Science Association, Dublin.
- Battaglioni, M., Sciolozza, V.L., Patachini, E., 2020. Abstentions and Social Networks in Congress. Working Paper No. 27822, National Bureau of Economic Research, <http://dx.doi.org/10.3386/w27822>.
- Benesch, C., Büttler, M., Hofer, K.E., 2018. Transparency in parliamentary voting. *J. Public Econ.* 163, 60–76. <http://dx.doi.org/10.1016/j.jpubeco.2018.04.005>.
- Blais, A., Bodet, M.A., 2006. Does proportional representation foster closer congruence between citizens and policy makers? *Comp. Political Stud.* 39 (10), 1243–1262. <http://dx.doi.org/10.1177/0010414005284374>.
- Boelaert, J., Michon, S., Ollion, E., 2017. Métier: Député. Enquête sur la Professionnalisation de la Politique En France. Raisons d'agir.
- Brown, A., Goodliffe, J., 2017. Why do legislators skip votes? Position taking versus policy influence.. *Political Behav.* 39 (39), 425–455. <http://dx.doi.org/10.1007/s11109-016-9362-8>.
- Carroll, R., Lo, J., Lewis, J., Poole, K., 2011. Scaling roll call votes with wnominate in R. *J. Stat. Softw.* 42, 1–21. <http://dx.doi.org/10.18637/jss.v042.i14>.
- Carrubba, C., Gabel, M., Hug, S., 2008. Legislative voting behavior, seen and unseen: A theory of roll-call vote selection. *Legislative Stud. Q.* 33, 543–572. <http://dx.doi.org/10.3162/036298008786403079>.
- Carrubba, C., Gabel, M., Murrain, L., Clough, R., Montgomery, E., Schambach, R., 2006. Off the record: Unrecorded legislative votes, selection bias and roll-call vote analysis. *Br. J. Political Sci.* 36 (4), 691–704. <http://dx.doi.org/10.1017/S0007123406000366>.
- Cohen, L.R., Noll, R.G., 1991. How to vote, whether to vote: Strategies for voting and abstaining on congressional roll calls. *Political Behav.* 13 (2), 97–127. <http://dx.doi.org/10.1007/BF00992292>.
- Costa, O., Lefébure, P., Rozenberg, O., Schnatterer, T., Kerrouche, É., 2012. Far away, so close: Parliament and citizens in France. *J. Legislative Stud.* 18 (3–4), 294–313. <http://dx.doi.org/10.1080/13572334.2012.706046>.
- Costa, O., Poyet, C., 2016. Back to their roots: French MPs in their district. *Fr. Politics* 14, 406–438. <http://dx.doi.org/10.1057/s41253-016-0014-5>.
- Curto-Grau, M., Zudenkova, G., 2018. Party discipline and government spending: Theory and evidence. *J. Public Econ.* 164, 139–152. <http://dx.doi.org/10.1016/j.jpubeco.2018.05.008>.
- Garrett, T.A., 1999. A test of shirking under legislative and citizen vote: The case of state lottery adoption. *J. Law Econ.* 42 (1), 189–208, Retrieved July 12, 2022, from <http://www.jstor.org/stable/10.1086/467422>.

- Gavoille, N., 2018. Who are the 'ghost' MPs? Evidence from the french parliament. *Eur. J. Political Econ.* 53, 134–148. <http://dx.doi.org/10.1016/j.ejpeco.2017.07.007>.
- Gersbach, H., Hahn, V., 2008. Should the individual voting records of central bankers be published? *Soc. Choice Welf.* 30, 655–683. <http://dx.doi.org/10.1007/s00355-007-0259-7>.
- Golder, M., Stramski, J., 2010. Ideological congruence and electoral institutions. *Am. J. Political Sci.* 54 (1), 90–106, Retrieved July 12, 2022, from <http://www.jstor.org/stable/20647973>.
- Grossman, E., Saurugger, S., 2004. Challenging french interest groups: The state, europe and the international political system. *Fr. Politics* 2, 203–220. <http://dx.doi.org/10.1057/palgrave.fp.8200053>.
- Hansen, S., McMahon, M., Prat, A., 2018. Transparency and deliberation within the FOMC: A computational linguistics approach. *Q. J. Econ.* 133, 801–870. <http://dx.doi.org/10.1093/qje/qjx045>.
- Hersch, P.L., McDougall, G.S., 1988. Voting for 'sin' in kansas. *Public Choice* 57 (2), 127–139, Retrieved July 12, 2022, from <http://www.jstor.org/stable/30024889>.
- Krehbiel, K., 2000. Party discipline and measures of partisanship. *Am. J. Political Sci.* 44, 212–227.
- Levy, G., 2007. Decision making in committees: Transparency, reputation, and voting rules. *Amer. Econ. Rev.* 97 (1), 150–168. <http://dx.doi.org/10.1257/aer.97.1.150>.
- Longley, N., 2003. Modeling the legislator as an agent for the party: The effects of strict party discipline on legislator voting behavior. *Contemp. Econ. Policy* 21 (4), 490–499. <http://dx.doi.org/10.1093/cep/byg027>.
- Mattozzi, A., Nakaguma, M., 2016. Public versus Secret Voting in Committees. Working Paper, EUI.
- McGuirk, E., Hilger, N., Miller, N., 2017. No Kin in the Game: Moral Hazard and War in the U.S. Congress. Working Paper No. 23904, National Bureau of Economic Research, <http://dx.doi.org/10.3386/w23904>.
- Meade, E., Stasavage, D., 2008. Publicity of debate and the incentive to dissent: Evidence from the US federal reserve. *Econom. J.* 118, 695–717. <http://dx.doi.org/10.1111/j.1468-0297.2008.02138.x>.
- Mühlböck, M., Yordanova, N., 2017. When legislators choose not to decide: Abstentions in the European parliament. *Eur. Union Politics* 18 (2), 323–336. <http://dx.doi.org/10.1177/1465116517694369>.
- Name-Correa, A.J., Yildirim, H., 2019. Social pressure, transparency, and voting in committees. *J. Econom. Theory* 184, 104943. <http://dx.doi.org/10.1016/j.jet.2019.104943>.
- Noury, A.G., 2004. Abstention in daylight: Strategic calculus of voting in the European parliament. *Public Choice* 121 (1/2), 179–211.
- Riker, W.H., Ordeshook, P.C., 1968. A theory of the calculus of voting. *Am. Political Sci. Rev.* 62 (1), 25–42. <http://dx.doi.org/10.2307/1953324>.
- Rothenberg, L.S., Sanders, M., 1999. Rational abstention and the congressional vote choice. *Econ. Politics* 11 (3), 311–340. <http://dx.doi.org/10.1111/1468-0343.00064>.
- Rothenberg, L., Sanders, M., 2000. Legislator turnout and the calculus of voting: the determinants of abstention in the u.s. congress. *Public Choice* 103 (3/4), 259–270. <http://dx.doi.org/10.1023/A:1005073328944>.
- Rozenberg, O., 2013. Wisdom or indifference? The principles of representative government in the eyes of the French voters. *J. Legislative Stud.* 19 (2), 196–218. <http://dx.doi.org/10.1080/13572334.2013.787198>.
- Sauger, N., 2009. Party discipline and coalition management in the French parliament. *West Eur. Polit.* 32, 310–326. <http://dx.doi.org/10.1080/01402380802670602>.
- Snowberg, E., 2008. Carrots and Sticks: Punishment and Party Power in Congress. Working Paper, California Institute of Technology.
- Snyder, J.M., Ting, M.M., 2002. An informational rationale for political parties. *Am. J. Political Sci.* 46 (1), 90–110. <http://dx.doi.org/10.2307/3088416>.
- Stadelmann, D., Portmann, M., Eichenberger, R., 2013. Quantifying parliamentary representation of constituents' preferences with quasi-experimental data. *J. Comp. Econ.* 41 (1), 170–180. <http://dx.doi.org/10.1016/j.jce.2012.05.005>, Symposium in Honor of Thrainn Eggertson.
- Stadelmann, D., Portmann, M., Eichenberger, R., 2014. Full transparency of politicians' actions does not increase the quality of political representation. *J. Exp. Political Sci.* 1, 16–23. <http://dx.doi.org/10.1017/xps.2014.1>.
- Van Effenterre, C., 2020. Papa does preach: Daughters and polarization of attitudes toward abortion. *J. Econ. Behav. Organ.* 179, 188–201. <http://dx.doi.org/10.1016/j.jebo.2020.08.049>.
- Washington, E.L., 2008. Female socialization: How daughters affect their legislator fathers. *Amer. Econ. Rev.* 98 (1), 311–332. <http://dx.doi.org/10.1257/aer.98.1.311>.
- Willumsen, D., Öhberg, P., 2012. Explaining legislative dissent in a parliamentary party democracy: Sweden 2002 to 2011. In: APSA 2012 Annual Meeting Paper.
- Willumsen, D., Öhberg, P., 2013. Strategic abstention in parliamentary voting. In: EPSA 2013 Annual General Conference Paper.