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Democratizing from within: British elites and the expansion of the franchise

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Democratizing from Within: British Elites and the Expansion of the Franchise

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Abstract

We develop a theory of democratization that integrates both electoral calculations and economic incentives to explain the institutional choices of political actors. Left-leaning (liberal) politicians, who, given their location in the policy space, are more likely to receive the support of newly enfranchised voters, favor a broader franchise than conservative ones. Their preferences are conditional on the distributional effects of the franchise: when inequality is higher, policymakers are more reluctant to expand it because it is harder to reconcile the policy demands of existing and new voters. We evaluate this theory by estimating the franchise preferences of British MPs based on their votes on franchise-related parliamentary divisions between 1830 and 1918, and linking these preferences to their personal and constituency characteristics. Our results, which are consistent with our theory, show that declining inequality and the First World War were crucial factors in the democratization of Britain in this period.

*Chitralekha Basu and Carles Boix are the joint lead authors of this paper. Previous versions of this paper have been presented in panels at EPSA 2018, APSA 2018, EPSA 2019, APSA 2019, as well as seminars at the European University Institute, the Humboldt University of Berlin, King's College London, the University of Konstanz, the University of Maryland, the University of Mannheim, the University of Nottingham, NYU Abu Dhabi, and the University of Zurich. We are grateful for all the comments and suggestions made by their participants. We also thank Júlia Díaz Collado, Daniel Ruiz, Vincent Thorne, and Pau Vall for excellent research assistance, and Michael Rush, Toke Aidt and Peter Jensen for sharing their data with us. This project has received funding from the European Research Council (ERC) under the European Union's Programme of H2020 – the Framework programme for Research and Innovation (2014-2020), Project "The Birth of Party Democracy", Grant Agreement no. 694318. Chitralekha Basu also gratefully acknowledges support from the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) under Germany's Excellence Strategy – EXC 2126/1 – 390838866.

In the last decades, researchers working on democratization have converged around two main strategies of inquiry. On the one hand, they have developed a set of theoretical (mostly formal) models with clear microfoundations – defining key political actors, their preferences (over political regimes), and their environment, and then deriving the conditions under which democracy becomes an equilibrium outcome (for a review, see, Svolik (2019)). On the other hand, they have switched away from case studies and crude cross-sectional analysis (Lipset, 1959; Moore, 1966) to exploit full panel data sets (see, among a vast literature, Przeworski (2009), Boix (2011), Treisman (2015) and Miller (2016)). Overall, there has been cumulative progress in the last decades on the causes of democratic transitions and democratic consolidation (Geddes, 2007; Treisman, 2020). Nevertheless, the democratization literature still faces two important limitations. First, in focusing on the interests and strategies of broadly-defined social actors (such as the wealthy, the poor, softliners, hardliners, radicals, moderates, etc.), it has given short shrift to the (electoral) incentives and behavior of political actors, such as legislators, that have the formal authority to determine the rules of the game. Second, by relying on highly aggregated data, most empirical work has avoided validating the extent to which the preferences and beliefs of political actors regarding the choice of political institutions match the existing theoretical assumptions.

To address these problems, we flesh out a theory of democratization that adds political-electoral microfoundations to standard economic assumptions to model the franchise choices made by policy-makers (legislators in our case). Accordingly, the position of political representatives towards the level of franchise is driven, in the first place, by their direct reelection concerns. Left-wing (in our analysis, which relies on British data, Liberal) parliamentarians, who, given their location in the policy space, are more likely to receive the support of newly enfranchised voters, are more favorable to loosening suffrage requirements than right-wing (Conservative) MPs. In the second place, their electoral

concerns (and therefore their preferences) also respond to the policy and distributional consequences of the size of the franchise. In line with economic models of democratization, representatives of constituencies with a wider (narrower) income distribution, which exacerbate (attenuate) the redistributive costs of democracy, are more (less) reluctant to expand the franchise. Finally, the toleration of MPs for democracy varies with the costs of enforcing the exclusion of a part of society from voting.

We evaluate our theoretical expectations by describing and examining the preferences of the members of the British parliament regarding the size of the franchise during the United Kingdom's long gradual march to democracy. There, the proportion of individuals with the right to vote roughly doubled with every new generation: from 11.8 percent of all adult males to 17.4 percent after the First Electoral Reform of 1832, 33 percent in 1867, around 55 percent in 1884, and universal male suffrage and quasi-universal female suffrage in the Fourth Electoral Reform of 1918.[1] Full universal suffrage came with the final reform of 1928 granting the right to vote to women under 30.[2]

To explain why Britain's elites decided to embrace democracy, we use ideal point estimation methods to measure legislator preferences regarding the male franchise, employing information on how the members of the House of Commons voted on franchise-related divisions between 1830 (two years before the First Electoral Reform) to 1918 (when uni-

[1]We do not study MP preferences on female suffrage in this paper, as our focus is on examining the implications of changing distributive costs for legislator preferences on extending the franchise to poorer men, the issue that dominated the suffrage question for most of our period. We believe that the distributive costs associated with expanding the franchise to some or all women are more complex, and that different factors may have been important in shaping legislator preferences on female suffrage. In our data, we find that (especially Conservative) legislators often voted differently on the questions of male and female suffrage. We leave exploring this angle to future work.

[2]The process of political liberalization was not limited to the expansion of the franchise but also accompanied by equally fundamental reforms to abolish rotten boroughs, suppress the sale of votes, secure the secrecy of the ballot, and so on.

versal male suffrage was passed). Following Bateman, Clinton and Lapinski (2017)'s analysis of legislator preferences on U.S. civil rights, we use actual information on the real or potential franchise effects of reform proposals to improve the accuracy and inter-temporal comparability of ideal point estimates. However, we improve on their approach by also using information on the precise male franchise implied by particular votes (on a 0 to 100 percent scale), in order to produce numerical estimates for the male franchise preferred by each MP, also on a 0 to 100 percent scale. This exercise allows us to map how far, when, and which British elites favored (partial or full) democratization. In doing so, we also contribute to ideal point estimation literature by showing how information about bill content can be used to estimate the specific policy views of each legislator.

We then amalgamate data from various sources to assemble a rich constituency-election level dataset combining information on MPs' franchise preferences with information on legislator and constituency characteristics. We use regression analysis to examine how MPs' (male) franchise preferences varied with their party, parliament, and personal and constituency characteristics. In line with our theoretical expectations, we consistently find, first, that there was a persistent partisan gulf on the franchise question, with Liberal MPs favoring a much larger male franchise than their Conservative contemporaries – the partisan gap was, all else equal, more than 50 percentage points between the 1840s and 1910s. Second, MPs representing constituencies with higher earnings inequality were less supportive of franchise expansion, regardless of party – moving from a highly equal to a highly unequal constituency implied a drop of 10 to 20 percentage points (depending on specification) in MPs' preferred male franchise. Third, the shock of the First World War, which arguably increased the costs of excluding non-enfranchised individuals, seemingly persuaded previously reluctant (mainly Conservative) MPs to embrace universal male suffrage.

Our finding that declining inequality was important for shifting MP attitudes to de-

mocratization in Britain provides legislator-level evidence consistent with previous work linking distributive conflict and democratization (Boix, 2003; Ziblatt, 2008; Dasgupta and Ziblatt, 2021). However, we also extend this literature by specifying the relationship between distributive and electoral concerns in determining elite support for democratization – noting that, consequently, elites may be divided on this issue. By doing so, our study adds to a growing literature on authoritarian-led democratization (Riedl et al., 2020) by clarifying when and *which* incumbent elites will believe they can retain, or win, power in (more) democratic elections.

In addition to directly testing the microfoundations of theories of democratization (particularly authoritarian-led democratization), our analysis builds on and improves a long and vibrant debate on the causes of democratization in Britain. Several of these studies focus on specific electoral reforms (Bronner, 2014; Aidt and Franck, 2015), ignoring previous attempts at reform and the different environments which led to reform – a choice which risks overstating the importance of short-term factors (like riots) for democratization. Our approach, which instead considers the full sequence of successful and failed democratization reforms, allows us to examine how longer-term structural developments (like trends in inequality) may have shaped elite preferences over time.

Our findings also challenge or qualify some earlier conclusions from this literature. First, contrary to the argument that politicians extended the franchise when they thought new voters would be more likely to support them (cf. Bronner (2014) and the literature reviewed there), our evidence implies that politicians only passed suffrage extensions when the costs of including these voters were lower than the costs of excluding them – something constrained by both electoral opportunities and the distributive consequences of reform. Second, in contrast to the claim that franchise reforms responded to demands from sector-based coalitions (Llavador and Oxoby, 2005), we present evidence that ideological conflict over franchise reform instead followed from inequality-based considerations. Finally, we

amend research that sees elites deliberately extending the franchise to guarantee public goods provision (Lizzeri and Persicò, 2004) and/or stable property rights (Ansell and Samuels, 2014). We interpret these outcomes differently: as the consequence (rather than the cause) of extending the franchise to particular social groups with specific policy interests; with their enfranchisement resulting from the electoral and material calculations we model here.

The paper is organized as follows. Section 1 develops our theoretical expectations about the democratic preferences of political agents involved in choosing the franchise. Section 2 discusses the methods employed to estimate the franchise preferences of British MPs, including a comparison with estimation approaches that do not utilise substantive information. Section 3 presents our estimates of MPs' franchise preferences. Section 4 relates MPs' ideal points to personal and constituency characteristics using regression analysis. Section 5 discusses the effects of the First World War on franchise preferences. Section 6 concludes by linking our results to the existing research on democratization.

1 Theory

A recent and growing literature explains democracy as a political equilibrium in which political actors accept fair and competitive elections because the expected policy losses from shifting to (more) democracy and losing control over government with some non-negative probability (Robert Dahl's "costs of toleration") are smaller than the "costs of repression" incurred to maintain a restrictive franchise (Dahl, 1971; Przeworski, 1991; Weingast, 1997; Boix, 2003; Ansell and Samuels, 2014).

We build on this insight as follows. Consider a parliament initially elected by a very narrow electorate (making the legislature tantamount to a "committee of landlords", to use Barrington Moore's expression, plus some urban and commercial interests). Politics is played on a single policy dimension that stretches from right to left – and that is

broadly correlated with social status (and possibly income).[3] Initially, only high-status (or high-income) voters, located to the right of the policy space, are enfranchised. In each district, there are (at most) two competing candidates (see Cox (1997) for a derivation of a Duvergerian equilibrum in single member districts). Those two candidates, who may be labeled as Liberal and Conservative, place themselves to the left and right of the district's median voter (according to a standard partial-convergence model of electoral competition) respectively. They do so constrained by two key concerns. First, they can only move in the policy space slowly due to reputational and campaigning costs. Second, they consider the threat of entry by a third candidate (Shepsle, 1991). Once elected, parliament decides, by majority vote, on the size of the electorate.

When confronted with the choice of expanding the franchise, legislators consider two factors: the electoral incentives (both in terms of the chances of individual reelection and their party's probability of forming government) associated with the size of the franchise; and the (repression) costs that come from excluding part of the electorate.

The electoral incentives refer to the effect that a particular distribution (of the preferences) of enfranchised voters has on candidates' electoral chances, given the latter's position in the electoral space. Those incentives differ across Liberal and Conservative legislators. Since announcing a new electoral platform and moving along the policy space are costly, Conservative legislators oppose franchise expansion: newly enfranchised voters, on the left of the policy space, will be unlikely to vote for them.[4] By contrast, Liberal legislators are more likely to support franchise expansion because they expect support from the new electors, who, again, are on the left of the electoral space. Liberal legislators will be reluctant, however, to democratize elections if expanding the franchise may

[3]The application of ideal-point estimation techniques to all divisions in the House of Commons from 1832 to 1918 typically recovers a unidimensional policy space. See Appendix B.2.

[4]An alternative (also costly) solution for Conservatives is to reframe the electoral space around a new dimension, e.g. trade or religion.

jeopardize their current electoral base (something we discuss shortly) or if it is likely that a third party will enter espousing a policy position closer to the preferences of newly enfranchised voters. It follows that Liberal legislators should favor a gradual expansion of the franchise – unless they can count on a strong mass party organization to absorb a sudden increase in the electorate – to minimize the electoral viability of that third party.

The electoral incentives of both Liberals and Conservatives are also shaped by the redistributive costs of franchise expansion. To see this, let us add, to the spatial set-up laid out so far, a standard political economy model where taxes, determined by the median voter, are a function of the distribution of income, average income and the type of wealth (Meltzer and Richard, 1981; Boix, 2003).

The median voter will be more likely to support higher taxes, the more unequal the income distribution is. Accordingly, Liberal MPs will be less supportive of franchise reform in less equal, more economically polarized constituencies. Although, as discussed previously, Liberals have strong electoral incentives to expand the franchise, they will only support expanding the franchise to the point they can reconcile the policy preferences of existing voters with the more progressive demands of newly enfranchised electors; or, at least, to the point where any loss of old supporters will be compensated by support from new voters. Higher inequality will make Liberals more concerned about a potential trade-off between old and new voters and therefore less prone to extend the franchise to social sectors that, in principle, are to the left of their current party program. Conservative MPs will be also more hostile to franchise expansion when inequality is higher. Otherwise, their voters, who bear (or would bear) the burden of taxation disproportionately, would punish them, abstaining or switching to a potential entrant on the right.

MPs' franchise preferences will be similarly mediated by variation in average income and the type of wealth of their constituencies. Assuming that the marginal utility of additional income decreases with income, rich voters, and the legislators representing

them, will become less opposed to franchise expansion as average income increases, for a given level of inequality. Finally, taxes are likely to be higher when wealth is fixed or immobile: the latter (mainly, land) is easier to measure and hence to tax than non-fixed assets (mostly financial capital but also some forms of human capital). Hence, we should expect landholding legislators and legislators representing landed interests will oppose granting the vote to poorer individuals more strongly than MPs elected by urban, trading and financial interests.

The costs of exclusion depend, in turn, on both the (technological) capacity of elites to exclude citizens from voting and the organizational capacity of non-enfranchised individuals. Holding electoral and economic calculations constant, an increase in repression costs makes MPs more amenable to franchise expansion. We discuss these costs in more detail in Section 5, where we leverage the shock of the First World War to identify their impact on franchise reform.

2 Mapping Legislator Ideal Points

To explain why certain members of the British elite acquiesced to franchise expansion at particular moments, we use parliamentary votes on franchise reform and rely on ideal point estimation to determine each British legislator's latent preferences over the percentage of adult men to be enfranchised.[5]

A great number of studies have used ideal point techniques, which presuppose a spatial voting logic, with single-peaked symmetric preferences and proximity voters, to

[5]Earlier studies (Rosenthal and Voeten, 2004; Spirling and McLean, 2007) have raised concerns about the validity and interpretation of ideal point estimates in parliamentary, especially Westminster, systems. In page 16 below and in Appendix B.1, we discuss evidence indicating that our estimated ideal points do measure meaningful differences in legislators' franchise preferences, and also suggest why these concerns may have been less significant in our case.

make inferences about long-run trends in elite preferences and behavior (e.g. McCarty et al. 2016 on polarization in America). To do so, they generally assume that the cardinal interpretation of these ideal point estimates does not change over time (i.e. a legislator with an ideal point of 1 in the year 2000 is twice as extreme as a legislator with an ideal point of 0.5 in 1950). Yet, ideal point estimates from different eras may not be directly comparable under two circumstances: when legislator behavior is influenced by partisanship and the extent of policy disagreement between parties on an issue changes over time; and when the content of the legislative agenda changes substantially over time.

Since neither of these concerns is entirely resolved by standard fixes for improving the overtime comparability of ideal point estimates, such as allowing for a linear trend in legislator ideal points (as in DW-NOMINATE), we build upon the procedure proposed by Bateman, Clinton and Lapinski (2017), who suggest two additional steps to improve the intertemporal comparability of ideal point estimates: first, restricting attention to roll call votes in a specific policy domain, and second, using information on the policy content of a subset of key votes to infer the behavior of legislators on votes that occurred when they were not serving. This second step effectively increases the number of bridging legislators substantially, improving the accuracy with which policy spaces in different eras are bridged, and so our ability to compare legislators who do not serve in the same, or neighboring, parliaments.[6]

To apply this procedure to our case, we restrict attention to votes on bills and motions between 1830 and 1918 that dealt with franchise reform. Building on the data set compiled by Eggers and Spirling (2014), we identify 300 such votes in this period.[7]

[6]In Model (2) in Table C.4 in Appendix C.4, we demonstrate that imputation does not affect the relative ranking of legislators who served in the same parliament, as once we include parliament fixed effects, we observe a similar relationship between legislators' franchise preferences and other covariates regardless of whether these preferences are estimated with imputation.

[7]Roll call votes are, in British legislative parlance, parliamentary divisions. The Eggers and Spirling database includes divisions between 1836 and 1910. We extended its coverage to the period 1830-1836

From these votes, we select 34 votes for the imputation procedure. These are votes where the choices of MPs were plausibly non-strategic (e.g. final or take-or-leave-it votes), and where the franchise implied by a successful vote was relatively straightforward to calculate. To calculate the approximate percentage of men that would be enfranchised if a particular vote was successful, we combine historical census data, information from relevant parliamentary debates in Hansard and historical commentary on the implications of each vote (Seymour, 1915; Saunders, 2011).[8]

Consistent with a spatial voting logic, we assume that legislators have Euclidean preferences over differing franchises and that their voting decisions on these votes reflect their underlying preferences on the issue.[9] For each vote, we assume that the cutpoint dividing Yea and Nay votes is located at the midpoint between the proposal (i.e. proportion of individuals enfranchised by the vote) and the status quo (current franchise). That is, legislators voting Yea prefer some franchise above the cutpoint, and legislators voting Nay prefer some franchise below the cutpoint. For instance, consider the parliamentary vote on a Chartist petition to introduce universal male suffrage on 12 July 1839, on which 46 legislators voted Yea and 235 legislators Nay. By our calculations, the male franchise

and 1910-1918 by identifying and adding relevant divisions from Hansard.

[8]We were also able to corroborate our calculations regarding the proportion enfranchised by each successful vote against information on the proportion of adult men registered to vote in England and Wales after that vote, as recorded in parliamentary papers and by Southall and Aucott (2009) in the Vision of Britain database. For more information on our calculations, see Appendix A.2.

[9]As argued by McCarty (2016), this does not amount to assuming that legislators vote entirely based on sincerely held ideological views. Rather, the ideal points that we recover are best interpreted as legislators' average revealed preferences over franchise expansion over their entire career, and may partly reflect strategic considerations faced by the legislators during their careers – for instance, based on their party or constituency characteristics. We only require that legislators are proximity voters who, throughout their career, vote 'as if' there is some franchise they consistently prefer. As discussed in footnote 14, we find that, in key votes, almost all legislators voted in a way consistent with this logic.

at that time was 19.4%.[10] Assuming that a preference for universal male suffrage implied a preferred franchise of 99%, we infer that the cutpoint dividing Yeas and Nays on this vote was 59.2%.[11] Therefore, those supporting this motion ideally preferred a franchise greater than 59.2%, whereas those opposing it ideally preferred a franchise of less than 59.2%. We then apply these assumptions to reconstruct the hypothetical voting behavior of those legislators (for whom we have information about their behavior in 1839) in other parliamentary divisions taking place in legislatures in which they were not present.

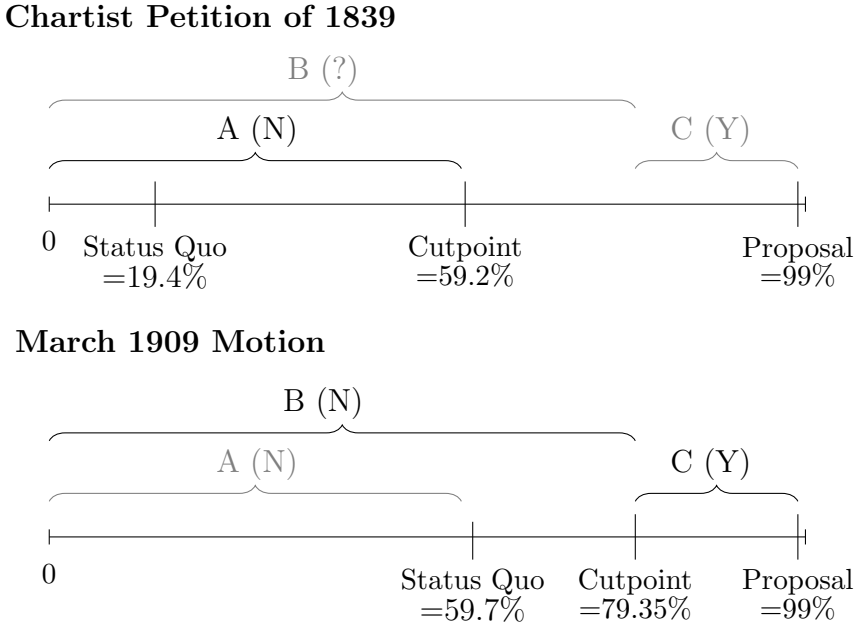
The logic of this procedure is illustrated in Figure 1, which plots the status quo, proposal and cutpoint for votes on two proposals to introduce universal male suffrage: the Chartist petition of 1839 and the Second Reading of the Representation of the People Bill in March 1909. The upper plot displays the status quo (following electoral reform in 1832) and the implied franchise had the Chartist petition of 1839 prospered. Assuming symmetrically distributed preferences, the cutpoint dividing Yea and Nay votes would be 59.2 percent. The lower plot presents the status quo (following the third electoral reform of 1884) and the franchise implied by the motion in 1909. In this case, the cutpoint dividing the chamber would have been 79.35 percent. Figure 1 also plots the approximate ideal points (unknown to us) of three legislators A, B and C in the policy space. Legislator A voted against the petition of 1839. In turn, legislator B and C voted against and in favor of the 1909 motion respectively. A's ideal point is to the left of the 1839 cutpoint and, therefore, to the left of the 1909 cutpoint as well: we can then assume

[10]This is slightly higher than the approximate legal franchise following the 1832 Reform Act, which, by our calculations, enfranchised about 17.4% of adult men. This increase reflects differential population growth and wage trends between classes, both of which affected the reach of the 1832 reform relative to the population as a whole. For more information on how we calculate the prevailing status quo franchise, see Appendix A.2.

[11]We assume these votes implied a male franchise of 99% to accommodate any remaining plural vote based on either property and/or residence. Results are identical if we assume an implied franchise of 100% instead.

that, had A been present in 1909, he would have voted against it too. C's ideal point lies to the right of the 1909 cutpoint and, therefore, to the right of the 1839 cutpoint: had he been present in 1839, he would have voted in favor. Thus, we can deploy this logic to extrapolate the behavior of MPs in different legislatures – and making the latter comparable within the same policy frame. Notice that, by contrast, we cannot infer B's vote in 1839: although his Nay vote places him to the left of the 1909 cutpoint, we do not know whether he voted against as a moderate (with an ideal point between the two cutpoints) or as a reactionary with preferences similar to A.

Figure 1: Illustrative Example



We extend this logic to all the proposals we examine. For each key vote, we calculate the cutpoint dividing Yeas and Nays that is jointly implied by the proposal and the prevailing status quo. For votes which proposed franchise expansion, we infer that legislators who voted Yea to these votes would support all votes with cutpoints below the cutpoint of the vote under consideration. Meanwhile, legislators voting Nay would also oppose all measures with cutpoints above that of the vote under consideration. For votes

on proposals to maintain or *reduce* the franchise, we infer that legislators voting Yea (to reduce) would oppose franchise expansion measures with higher cutpoints, and support franchise reduction measures with higher cutpoints.[12] However, legislators voting Nay (on reducing the franchise) would support franchise expansion and oppose franchise reduction measures with lower cutpoints. In Appendix A.1, we list the 34 votes selected for the imputation procedure for the male franchise, the relevant status quo, the franchise(s) that would result if the vote was successful, and the inferred cutpoint.[13]

Following Bateman et al. (2017), legislator ideal points are assumed to be fixed over time, with changes in the distribution of preferences driven by replacement rather than changes in individual preferences. Likewise, we use a Bayesian item response theory (IRT) model to estimate legislator ideal points. Finally, we do not impute votes (i) for the small number of legislators whose voting behavior on key votes for that franchise was clearly inconsistent with the logic outlined above, (ii) legislators who were present for only one key vote, or (iii) for key votes taking place in a parliament in which a legislator actually served but did not vote (because he may have chosen to abstain deliberately). However, in all cases, we do still estimate their ideal points on the basis of their actual votes.[14]

Our procedure improves on the one introduced by Bateman, Clinton and Lapinski (2017) in two respects. First, acknowledging that they "have no information about the actual distances" between the status quo and the proposals being voted and employed to

[12]Of the 34 votes we use for imputation, only one implied a reduction in the agreed franchise – specifically, a June 1917 vote to incorporate an ownership vote into the 1918 Representation of the People Act.

[13]Figure 1 in Appendix A.1 also illustrates that our key votes are diverse in terms of the change in franchise they imply, helping us pin down legislator preferences across the entire period of interest.

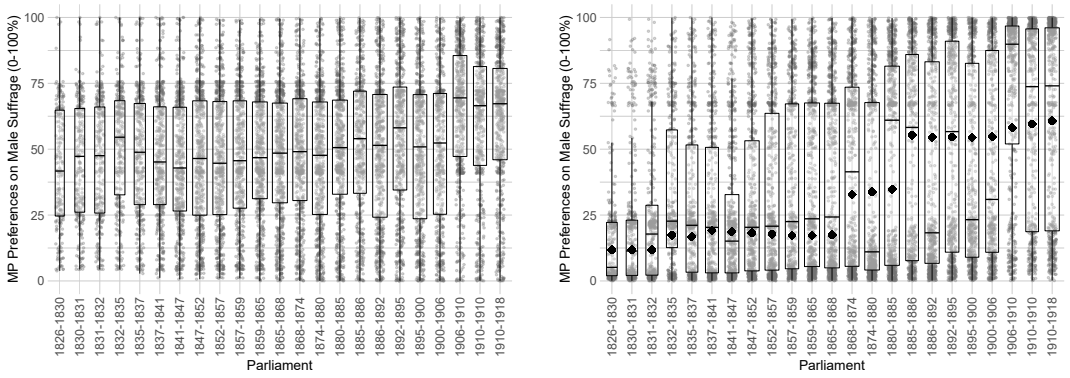
[14]Of the 4,077 legislators whose decisions we analyze, only 217 legislators – 5.3% of the total – voted inconsistently on at least one of these key votes. We do not impute the behavior of these legislators on votes where they were not present in order to avoid contrary imputations, but also because these are legislators for whom the proximity voting assumption is arguably inappropriate.

assess the policy location of legislators, Bateman, Clinton and Lapinski (2017) rely on the "conventional understanding of the content being voted upon" as described by existing research in political science and history. By contrast, we reconstruct the distribution of ideal votes by establishing the size of the electorate under each proposal we study. That gives us a non-arbitrary and relatively precise method to locate ideal points in a policy space that could range from complete disenfranchisement to universal suffrage. Second, we argue that two legislators with the same preferred franchise but serving in different eras may not support the same proposal if advanced at different times – specifically, before and after a shift in the status quo franchise. This is because a moderate legislator may support a radical franchise proposal under a very conservative status quo, but the same legislator may prefer a moderate status quo to that radical franchise proposal.

Our ideal point estimator produces an estimated midpoint for each division and an estimated ideal point for each legislator, both on a scale with mean 0 and standard deviation 1. To aid interpretation, we generate predicted values of the franchise preferred by each legislator (on a 0–100% scale) given their estimated ideal point and the relationship between division locations (midpoints) and cutpoints implied by the estimates. For each division, the estimated midpoint is the location of a hypothetical legislator who would be indifferent between voting Yea and Nay, and so corresponds to the theoretical cutpoints (on a scale from 0–100% men enfranchised) dividing Yea and Nay votes that we have calculated for each division (based on our knowledge of the status quo and the proposed franchise). Therefore, by using a generalized additive model (GAM) to regress the cutpoint of each key vote on its estimated midpoint, we can generate a mapping from legislators' estimated ideal points to their franchise preferences.[15] Using this mapping, we thus generate predicted values for each MP's preferred male franchise (on a 0–100% scale) given their estimated ideal points (on a different scale).

[15]We use a GAM to estimate this relationship, as the relationship between the estimated midpoints and the assumed cutpoints appears nonlinear.

Figure 2: Estimating MP Preferences on Male Suffrage



(a) Estimated Without Imputation

(b) Estimated With Imputation

To illustrate the impact of imputation on legislators' ideal point estimates, Figures 2a and 2b display the ideal male franchise preferred by members of the British House of Commons between 1830 and 1918 with and without imputation, respectively.[16] Both figures indicate the revealed preference of the parliamentarian at the median (dark line) and first and the third quartiles (tips of box) as well as the location of the most extreme MPs (tip of dashed lines). Figure 2b adds, depicted as a diamond, the status quo franchise in each parliament, based on the proportion of adult men registered to vote at the time.[17]

A comparison of these two figures lends considerable credibility to the estimation procedure with imputation for characterising long-term trends in legislator franchise preferences. Figure 2a reveals an arguably implausibly small change in the distribution of MP franchise preferences over the course of three franchise extensions and almost a century. By contrast, Figure 2b reveals three main facts. First, we observe a leftward drift in the overall distribution of legislators as well as in the parliamentary median over time –

[16]In order to study legislator preferences on this issue alone, we construct both figures using only votes relating to franchise reform and not those on other issues. The data for the period before 1832 relies on divisions on franchise reform that took place in 1830 and 1831 (and before the elections that led to the reform approved in 1832).

[17]On these calculations, see Appendix A.2.

as we would expect to see in an era which began with only 11.8% of adult men eligible to vote and ended with universal male suffrage. Second, variance remained quite high throughout: after 1832, except during the 1841-1847 parliament, the franchise preferred by MPs at the 25th and 75th percentiles differed by at least 40 percentage points until the early twentieth century. Last but not least, the franchise preferred by the median parliamentarian roughly tracked the legal status quo. It did so imperfectly at times, with the former jumping around the latter as a function of the party in power. The median parliamentarian was more favorable to franchise expansion under the Liberal majorities in the 1830s, late 1850s and 1860s. By contrast, he became less progressive once Conservatives secured strong majorities in the last decades of the nineteenth century.

Previous studies have raised concerns regarding the validity and interpretation of ideal point estimates in parliamentary settings, and especially in Westminster systems, noting that ideal point estimation techniques frequently do not recover 'correct' legislator positions when applied to such systems – often locating rebellious members of the governing party nearer the main opposition than the bulk of their co-partisans (e.g. Spirling and McLean (2007)). These results have led to the suggestion that, due to higher levels of party discipline in parliamentary systems (Rosenthal and Voeten, 2004) as well as the prevalence of government-versus-opposition voting in Westminster systems (Dewan and Spirling, 2011), ideal point estimates are better interpreted as measures of party loyalty than ideology. However, in Appendix B.1, we report five types of evidence that indicate that our estimated ideal points are a reliable and meaningful measure of legislators' franchise preferences, and that the latter are not just explained by party affiliation or loyalty.

These five pieces of evidence are: (i) we systematically observe considerable intra-party heterogeneity in legislators' estimated ideal points; (ii) our estimated ideal points remain strong predictors of legislators' decisions on key votes even after we control for

party affiliation and propensity to rebel, including in the early twentieth century; (iii) we estimate party leaders as being moderate rather than extreme within their parties, and estimate known advocates of universal suffrage as preferring a male franchise close to 100%; (iv) inspecting MP decisions on key franchise votes, we find that most legislator behavior was consistent with proximity voting and an individual ideal point which is stable over time; (v) the estimates we recover are correlated with constituency and personal characteristics in a predictable way.

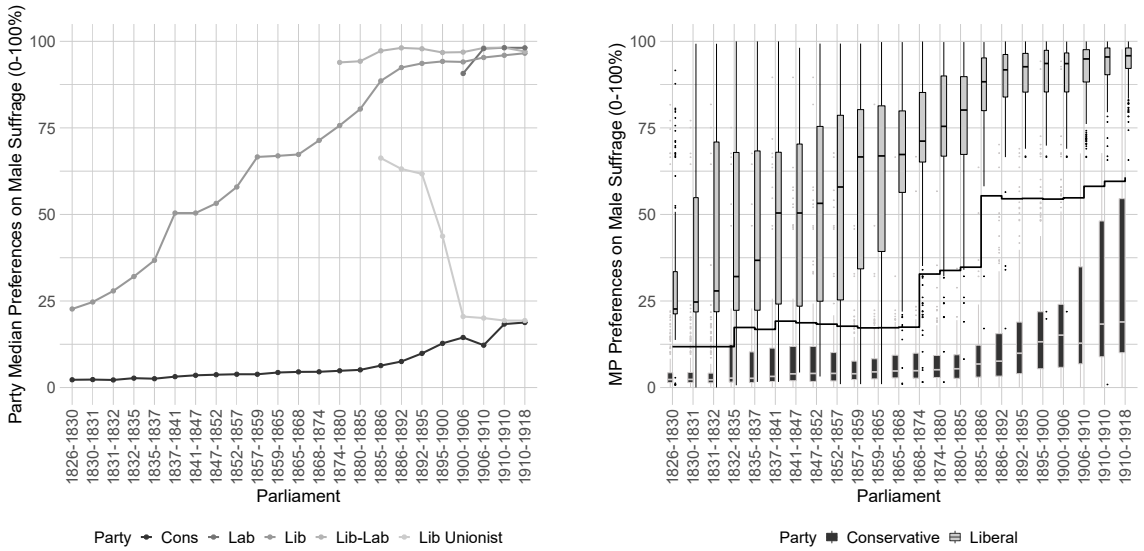
In Appendix B.1, we also discuss three possible reasons why the aforementioned concerns regarding ideal point estimation in parliamentary systems have proved less significant in our case. First, although party cohesion in the nineteenth century House of Commons was undoubtedly high, both parties faced sizeable rebellions from legislators throughout, especially on votes dealing with franchise reform, and even on key votes. Second, on many franchise-related divisions, we find that rebels voted against the leadership of *both* major parties, rather than with the leadership of the opposing party. Finally, our consideration of votes from parliaments spanning over a century, as well as our imputation procedure, may have mitigated the impact of party strategic considerations on our estimates.

3 Parties and Franchise Preferences

We start exploring the distribution of franchise preferences and its determinants by plotting the estimated ideal franchise of the median parliamentarian for the main partisan groups in the House of Commons in Figure 3a.[18] Conservatives, in line with our theoretical expectations, maintained very restrictive views on the franchise systematically. Liberals defended more progressive positions even in the 1830s, with their median po-

[18]We obtained data on MPs' party affiliations from the dataset compiled by Eggers and Spirling (2014), and, for MPs serving in parliaments before 1832, from Aidt and Jensen (2014).

Figure 3: Major Party Preferences on Male Suffrage, 1826–1918



(a) All Party Medians

(b) Major Parties Only

sition trending upwards throughout. After the Liberal Unionists split away from the Liberals over Irish Home Rule, the Liberal median's preferred franchise crossed 90 percent. By 1900, Liberal Unionists had aligned themselves with Conservative positions – a result of either ideological similarities or strict party discipline. Figure 3a also shows that, predictably, Lib-Lab and Labour MPs were the most favorable towards universal suffrage. As a result of both the Liberals' growing progressivism and the emergence of radical parliamentarians to their left, overall polarization rose over time. For Liberals and Conservatives, the difference between party medians widened from about 50 percentage points in the late 1840s to more than 80 percentage points in the 1890s. Change only occurred under World War One — something we explore in more detail later on.

Figure 3b zooms in on the preferences of the two main parties. It plots the median (plus 25th and 75th percentiles and outliers) of Liberal and Conservative MPs separately. The width of bars are proportional to the number of seats controlled by each party following each election. The Liberal median favored a franchise at least twice as large as

the one passed in 1832 throughout the following two decades. Having shifted to over 60 percent in the 1850s and, gradually moving to the left afterwards, it reached 80 percent by the time of the third reform of 1884. By 1906, the Liberal median was close to universal male suffrage. The Liberal Party also became more cohesive on this issue over course of the century. Around the second electoral reform of 1867, the positions of its core (those parliamentarians between the 25th and 75th percentile in the distribution of ideal points) ranged from about 40 percent of men enfranchised to above 80 percent. By 1890, intraparty differences had narrowed to a 10 percent range. In contrast to the Liberals, the Tories hardly changed during most of the nineteenth century, only becoming more progressive in the final parliaments preceding the fourth electoral reform. During this same period, the Conservative Party apparently became more diverse: it was only after 1906 that the position of the Conservative MP in the 75th percentile of the party distribution crossed the legal status quo of 1867 – although we qualify this finding in Section 5.

4 Why Did Some MPs Like Democracy?

We examine the personal, partisan, social and economic covariates of the preferences of British MPs regarding democracy as well as their transformation over the course of a century using the following model, which we estimate by OLS:

$$\begin{aligned} Y_{i,t} =& \alpha + \beta_1 L_{i,t} + \beta_2 C_{i,t} + \beta_3 R_{i,t} + \beta_4 X_{i,t} + \beta_5 X_{i,t} L_{i,t} + \beta_6 X_{i,t} C_{i,t} \\ &+ \beta_7 X_{i,t} R_{i,t} + \beta_8 Z_{i,t} + \delta_t + \epsilon_{i,t} \end{aligned}$$

The dependent variable $Y_{i,t}$ is the average preferred franchise of the MPs who were elected to represent constituency i at time t, as calculated in Section 2.

The independent variables $L_{i,t}$, $C_{i,t}$ and $R_{i,t}$ denote the proportion of MPs representing

constituency i at time t who are Liberal, Conservative or Radical respectively.[19] The term $X_{i,t}$ denotes a battery of social or economic covariates of interest for constituency i at time t. $Z_{i,t}$ represents a vector of control variables, mainly personal attributes of the members of parliament in each constituency. We discuss all these variables shortly. The parameter δ_t is a parliament fixed effect capturing common shocks affecting all legislators across the country during parliament t. In the baseline model, we include constituency random effects and, in all models, we cluster errors $\epsilon_{i,t}$ by constituency.[20]

Per our discussion in Section 1 on legislators' incentives, Liberal (or Radical) MPs should prefer a broader franchise than Conservatives, as they will expect to receive more support from newly enfranchised voters. Following the same discussion, the economic structure of MPs' constituencies should also affect legislators' franchise preferences, with legislators from both parties preferring a narrower franchise when the redistributive costs of franchise expansion are higher. All else equal, we expect the redistributive costs of franchise expansion will be higher when average earnings are lower, when earnings are more unequally distributed, and when landed interests and wealth are more dominant within the constituency. In our analyses, we capture these considerations using three variables (measured at the first year of the parliamentary term): average earnings (logged);

[19]We classify MPs running as Liberal or independent Liberals as "Liberal", Lib/Labs, Labour and Chartist MPs as "Radical", and Conservative and Liberal Unionist MPs as "Conservative".

[20]We do not include constituency fixed effects in our baseline specification, as our data likely exhibits time-varying (and not highly autocorrelated) measurement error in both the independent and dependent variables. This is because our estimates assume that MPs' franchise preferences are time-invariant and because our intra-censal observations of constituency characteristics are interpolated from decadal census observations. At the same time, the true (unobserved) values of the independent and dependent variables are likely highly serially correlated. Under these circumstances, estimates with group fixed effects may exhibit severe downward bias (Angrist and Pischke 2008, 225-226). However, Model (3) in Table C.1 includes county fixed effects instead of constituency random effects, allowing us to partly control for unobserved and time-invariant local factors that may be correlated with our regressors. We obtain very similar results to our baseline specification.

earnings inequality; and the proportion of adult males employed in agriculture. We interact all three variables with party, as we expect that the redistributive costs of franchise expansion for a legislator's existing voters will vary by party.

We measure average earnings, as well as the dispersion or inequality of earnings, using information on the annual occupational earnings of all employed men. We construct our data on occupational membership by aggregating and matching individual-level census data from 1851, 1861, 1881, 1891, 1901 and 1911 for England and Wales to the corresponding electoral district for that census-year.[21] The aggregation is done by identifying the HISCO code corresponding to each worker's occupation (as recorded in the census), and classifying individuals into nine categories based on their HISCO codes:[22] high non-manual occupations (HISCLASS categories 1 and 2, that is, higher managers and higher professionals); middle non-manual occupations (HISCLASS categories 3 and 4, i.e., lower managers and lower professionals); lower clerical and sales personnel (HISCLASS 5); in the industrial and service sectors, medium-skilled manual (HISCLASS categories 6 and 7, i.e. foremen, medium-skilled workers), low-skilled manual workers (HISCLASS 9), and unskilled workers (HISCLASS 11); and, within the agricultural sector, skilled agricultural occupations (HISCLASS 8, i.e. farmers, fishermen), lower-skilled farm workers (HISCLASS 10), and (unskilled) agricultural laborers (HISCLASS 12).

The annual earnings for each occupational category are taken from the time series data reported in Williamson (1982), who includes information for eighteen occupations (for the period of our study) for the years 1827, 1835, 1851, 1861, 1871, 1881, 1891, 1901 and 1911. Those occupations cover all our occupational categories with the exception of HISCLASS 8, 10 and 11.[23] To calculate the earnings of (medium skilled) farmers

[21]Individual-level census data was obtained from the Integrated Census Microdata (ICeM) project, and parish and constituency boundaries from the Vision of Britain database compiled by Southall and Aucott (2009). We discuss our matching of census and electoral data in Appendix A.3.

[22]We employ Van Leeuwen and Maas (2011) and their HISCLASS classification in what follows.

[23]Appendix A.4 maps out the correspondence between Williamson's general occupational categories

(HISCLASS 8), we use the rental value of land as determined by Clark (2002) weighted by the average size of farms reported in Shaw-Taylor (2005). We estimate the annual earnings of low-skilled farm workers (HISCLASS 10) by multiplying farmers' earnings by the ratio of low-skilled to medium-skilled earnings in non-agrarian occupations.[24] The earnings for unskilled non-agrarian workers (HISCLASS 11) correspond to the wages of domestic servants published in Williamson (1980). After calculating real earnings using the cost of living series reported by Crafts and Mills (1994), we construct a yearly earnings series by interpolation. Finally, we measure earnings dispersion or inequality through the standard deviation of (logged) annual occupational earnings of all employed men. Because data on within-occupational earnings dispersion is extremely limited, our earnings data consists of average earnings for each occupational group. Nonetheless, our dispersion measure arguably tracks well the evolution of earnings inequality throughout the nineteenth century. According to estimations by Williamson (1980), the convergence in pay among occupations accounted for three fourths of the overall trend in the earnings distribution from 1827 and 1851 and for "all of the leveling in both economy-wide and non-agricultural earnings in inequality" [underlined in the original] after 1851 (p. 471).[25]

As indicated earlier, we capture the effect of wealth type and, more specifically, the presence of landed interests, through the proportion of adult men working in agriculture

and our HISCLASS classification, lists the specific occupations Williamson employed to calculate the earnings in each of his general categories, and discusses the procedure to weight each specific occupations' wages to construct the earnings of each HISCLASS group.

[24]This calculation assumes that the percentage earnings differential between low and medium skilled workers is the same in agrarian and non-agrarian occupations.

[25]Figure A.2 in Appendix A.4 plots the median and quartile values for the standard deviation of logged real male earnings across constituencies for each parliamentary period. In line with existing research (Kuznets, 1955; Williamson, 1985), we find that, in the median constituency, earnings inequality peaked in the mid-nineteenth century and then gradually diminished until World War One. Despite that decline, differences in earnings inequality continued to be high across constituencies.

(measured as the sum of the occupational categories HISCLASS 8, 10 and 12). In addition, we include three personal attributes of parliamentarians: the proportion of MPs who held office at the time of the election, the fraction who were eligible for a peerage, and the fraction who were landowners.[26] We expect that MPs who were office-holders, landowners, or eligible for a peerage would be less supportive of franchise expansion. Finally, we control for log population density, the number of non-Anglican pastors per 1000 individuals in each constituency, whether an election was a by-election, and the number of seats in the constituency.

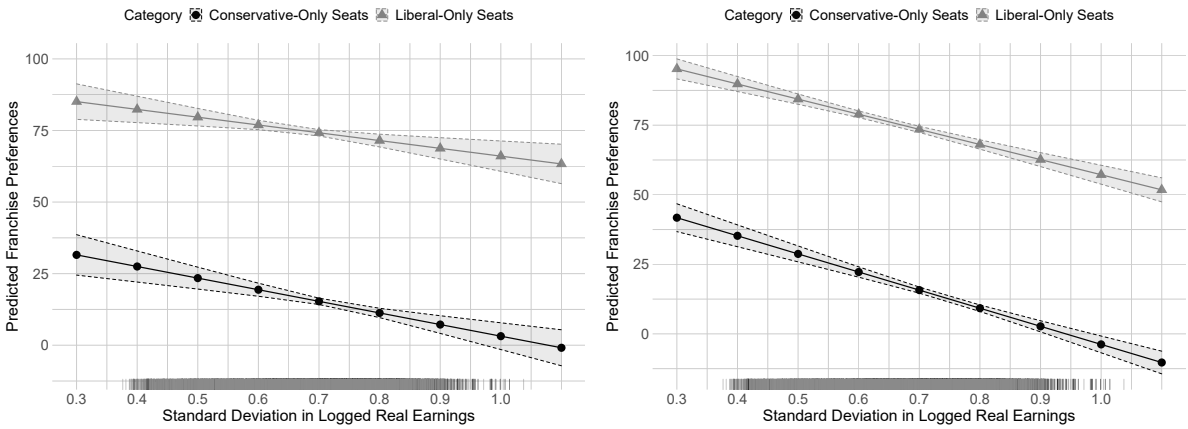
In the first instance, we estimate four separate specifications – fully reported in Appendix C.1. Model (1) estimates the baseline model with constituency random effects and parliament fixed effects. Model (2) introduces party-specific parliament fixed effects, to control for the possibility that time-varying factors (e.g. changes in party leadership) may lead parties to have different time trends in franchise preferences. Model (3) includes administrative county fixed effects instead of constituency random effects, allowing us to partly control for unobserved and time-invariant local factors that may be correlated with our regressors – for instance, characteristics of local party organizations or elites. Finally, Model (4) re-estimates the baseline model without parliament fixed effects, mainly to explore the effects of long-term structural trends – like declining earnings inequality from the mid-nineteenth century onwards – on legislators' franchise preferences.

To illustrate the magnitude of the estimated effects of our key variables, Figures 4a and 4b plot MPs' predicted franchise preferences while varying the level of earnings in-

[26]Information on whether an MP was a landowner or eligible for a peerage was obtained from the Parliamentary Archive of MPs compiled by Michael Rush (Rush, 2013). As now, MPs could not simultaneously sit in the House of Commons and the House of Lords. MPs who acquired a peerage had to either decline the peerage or resign their seats. Thus, the individuals we code as peers were not hereditary peers at the time of their election, but became so at some point in their careers. Information on offices held by MPs comes from Eggers and Spirling (2014).

equality and party and holding all other variables constant at their means, based on our estimates for Model (1) and Model (4) in Table C.1 respectively. The figures illustrate that, in line with our theoretical expectations, there was a systematic gap in franchise preferences between parties: Liberals favored a significantly larger franchise than Conservatives regardless of the dispersion of earnings in their constituency. However, for legislators from both parties, the level of inequality mattered as well. Based on our baseline estimates, moving from a relatively equal constituency (at the 90th percentile in our data) to a highly unequal one (at the 10th percentile) was associated with a drop of 9.0 percentage points in the Liberal preferred franchise and of 13.3 percentage points in the Conservative position (ref. Figure 4a). When we omit parliament fixed effects in Model (4), mainly to examine the impact of decreasing earnings inequality from the mid nineteenth century onwards, the effect of earnings inequality on franchise preferences is about twice as large as in Model (1) for legislators from both parties (ref. Figure 4b). A similarly large decrease in earnings inequality is associated with a decrease of 17.9 percentage points in the Liberal preferred franchise and a drop of 21.4 percentage points in the Conservative position.

Figure 4: Predicted Franchise Preferences Conditional on Party and Earnings Inequality



(a) Baseline Specification (Model 1)

(b) Exc. Parliament Fixed Effects (Model 4)

In supplementary analyses reported in Appendix C.2, we re-estimate Model (1) from Table C.1 separately for each of the three electoral regimes. As before, Liberals favored a much larger franchise than Conservatives. The impact of earnings inequality varied by reform period – it was strong for Liberals until 1886 and for Conservatives after 1868. In Appendix C.3, we consider whether and how the effect of earnings inequality on franchise preferences might be driven by the changing class composition of constituencies over the course of the nineteenth century. As such, we re-estimate the models reported in Table C.1 after substituting several measures of class composition for earnings inequality and the proportion employed in agriculture. Our results suggest that the displacement of unskilled agricultural workers by increasing proportions of skilled agricultural workers (for instance, propertied farmers), medium-skilled non-farm workers (principally, craftsmen and foremen) and low-skilled non-farm workers (mainly, the traditional industrial working class) were critical in eroding legislators' opposition to a more inclusive franchise.

In Appendix C.1, we also plot the marginal effects for regressors of interest in Models (1)-(4), conditional on party control. Our estimated marginal effects demonstrate that the large negative effect of earnings inequality on legislators' preferred male franchise reported above is statistically significant and robust across specifications. On the other hand, we do not consistently find that legislators were more opposed to franchise expansion in more agrarian constituencies (where landed interests and wealth were likely more dominant), or in constituencies with lower average earnings. These results suggest that, among these three considerations, declining earnings inequality from the mid-nineteenth century onward was the most important channel through which changes in the redistributive costs of a wider male suffrage eased opposition to franchise expansion among legislators.

The results reported in Appendix C.1 reveal that the personal attributes of MPs mattered too. Consistent with our expectations, MPs who were landowners, officeholders or eligible for a peerage were slightly less supportive of franchise expansion. In each case,

legislators' preferred franchise was about 3 percentage points smaller than otherwise. MPs representing more urban constituencies (with higher population density) favored a slightly larger franchise.

Appendix C.4 evaluates and demonstrates the robustness of our key findings to a range of alternative specifications. These include models controlling for whether a constituency was a borough or county seat and for the proportion of adult men registered to vote in a constituency; models with raw ideal points as the dependent variable; models using ideal points estimated *without* imputation; and models estimated at the legislator, rather than constituency-election, level. Finally, in analyses reported in Appendix D, we link the evolution of legislator preferences to the timing of actual reforms, by illustrating how the preferences of the Liberal leadership, in particular, lagged behind the bulk of Liberal parliamentarians – delaying further franchise expansion through their role in setting in the parliamentary agenda even when the majority of legislators were in favor.

5 The Effect of World War One on MP Preferences

As discussed in Section 1, when choosing the size of the franchise, political elites are likely to take into account the costs of excluding part of the electorate. Measuring and identifying those costs is difficult because they depend on variables – the (technological) capacity of elites to exclude citizens from the ballot box and the organizational capacity of non-enfranchised voters – that are often endogenous to the forces of economic development that affect directly the distribution and nature of wealth and therefore legislators' electoral incentives. For example, low-income individuals generally have fewer organizational resources than middle-class individuals. Well-functioning states have the bureaucratic capacity to both maintain order and protect property rights conducive to growth. Here, we employ World War One, plausibly exogenous to economic development, to measure an (upward) shift in the costs of exclusion. By raising the political demands

and organizational capacity of non-enfranchised individuals, the war pushed traditional adversaries of universal suffrage to drop their opposition to democracy. Otherwise, they would have risked considerable unrest at home and defeat abroad.

During the first two years of war, Britain relied on voluntary conscription. Although there was an initial recruitment boom, military manpower soon fell below the numbers needed at the front. Moreover, the level of military mobilization was unequal across social strata – lower among individuals (such as casual agricultural labor or very unskilled industrial workers) that were less likely to be enfranchised (Winter, 1985). A new coalition government presided over by Asquith eventually approved the compulsory conscription of unmarried men between the ages of 18 and 41 in January 1916 – extending it to married men in May 1916 – with opposition of the Irish nationalists and a fraction of the Liberal party and the support of trade unions and Labour conditional on receiving assurances that it would not affect men employed in industries deemed essential to the war effort (Levi 1997: 51-58, 111-115). Shortly after, in October 1916, the government convened a parliamentary conference that eventually issued a report supporting male universal suffrage in January 1917 that would be turned into law through a series of votes starting in March. The Conservative MPs who opposed its recommendations did so only over female universal suffrage; on male suffrage, they lobbied, at most, for maintaining the ownership vote (Morris, 1921). That change of heart happened against significant discontent among British unions, which resulted in several strikes in the spring of 1917, the background of Russian Revolution of February 1917, and a wave of German workers' strikes that led the Kaiser to promise democratic elections in Prussia after the war.[27]

[27]Our account, which emphasizes the role of exclusion costs, is compatible with Scheve and Stasavage (2016), who interpret the introduction of a more progressive taxation system after 1918 as a strategy to compensate for the sacrifices imposed by World War One. However, our explanation does not rely on assuming away time inconsistency problems, which arise in their explanation, where compensation happened after the end of the war.

Figure 5: Trend in Explanatory Power of MP Ideal Points

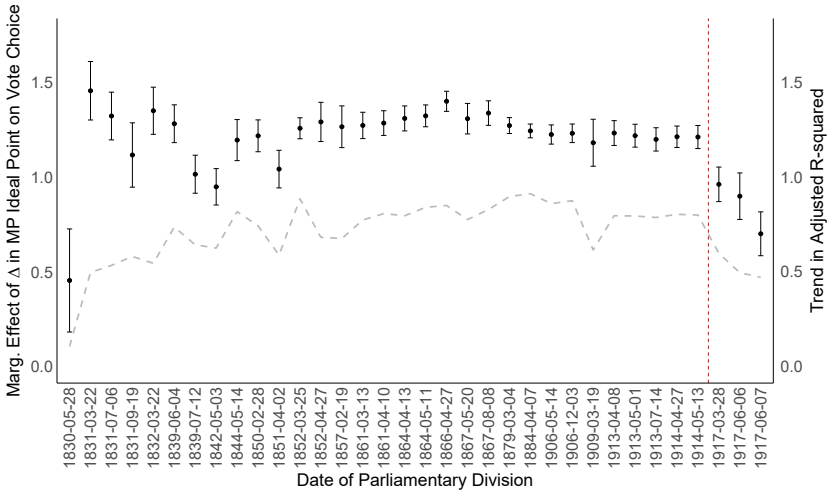


Figure 3b showed that the range of opinions on male suffrage within the Conservative party became more diverse and, on average, more favorable to universal suffrage from 1906 onward, arguably as the result of the election of a sizeable and growing number of Conservative MPs before the war. Notice, however, that it is also possible that their prewar voting records were no more progressive than earlier intakes of Conservative MPs for two reasons. First, our estimation procedure only produces a single ideal point estimate for every MP based on their average voting record on this issue. Second, the newly elected MPs to the parliaments of 1906 and 1910, who also served during World War One, could have become more supportive of a wider male franchise only after the war broke out.

To explore whether newly elected Conservatives were already more progressive before 1914 or whether they changed their position in response to the war experience, we plot two trends in Figure 5. We graph, in black, the marginal effect of MPs estimated ideal points, including 95% confidence intervals, on their vote in favor of franchise extension for all key votes from 1832 onward. We display, in a dashed gray line, the adjusted R-squared from each of these (univariate) regressions. The dashed vertical line separates

key votes that occurred before and after the outbreak of World War One, with the last prewar key vote occurring in June 1914, less than two months before the start of the war. Both trends tell a similar story. MPs' estimated ideal points are a much better predictor of their actual votes on key franchise divisions before August 1914 than they are after. Likewise, the proportion of the variance in MPs' decisions that is explained by their ideal points declines sharply from almost 0.8 in June 1914 to 0.6 in March 1917, and 0.5 in June 1917. This suggests that, when compared with the bulk of their voting records on the franchise issue, MPs' votes on these three 1917 divisions were atypical.[28] In short, our interpretation is that wartime developments nudged a significant chunk of (Conservative) MPs towards embracing a wider male franchise, and as such, helped tip the 1918 Representation of the People Act over the finish line.

6 Conclusion

In this paper we flesh out a theoretical explanation of democratic transitions that combines both electoral incentives and policy motivations of policy-makers to investigate their attitudes and choices toward democracy. We then probe our account by investigating the franchise preferences of British parliamentarians during the United Kingdom's long march to full democracy in the nineteenth century and early twentieth century. To

[28] Appendix C.5 reports two additional analyses supporting the view that wartime opinion change among existing MPs, rather than the election of a more progressive cohort of Conservatives, was critical. First, we re-estimate MPs' franchise preferences excluding post-1914 votes, and find that when we restrict attention to pre-war votes, the Conservative MPs elected in 1906 and 1910 resemble MPs from earlier intakes in their franchise preferences. Second, we examine how the voting decisions of individual legislators on the question of universal male suffrage changed between 1909 and 1917, and find that, among English and Welsh Conservative MPs who did not support the electoral reform bill of 1909, the (often vast) majority supported motions demanding (near-) universal male suffrage in 1917 – and at similar levels to Conservative MPs first elected after 1910.

that end, we use (and improve) recent models developed to estimate legislators' ideal points that rely on roll-call behavior as well as actual information about the content of the votes. We then examine the relationship between those preferences and key partisan, economic and social covariates, showing that the attitudes of British parliamentarians responded to both electoral and policy (ideological) concerns.

Liberal politicians, normally located to the left of Conservative lawmakers and therefore more likely to receive the support of previously unenfranchised electors, adopted more pro-democratic platforms than Tory MPs. Nevertheless, their electorally-driven support for a broader franchise was tempered by the policy consequences of expanding the franchise. Liberal MPs were less prone to support progressive franchise reforms if they could not maintain their traditional electorate while adding new voters. This depended on the level of heterogeneity of economic interests. As income inequality increased, Liberals faced a sharpening trade-off under quasi or full universal suffrage: moving to the left meant leaving many middle-class voters to Conservative candidates; staying put risked the entry of a more radical candidate to their left.

In turn, a majority of Conservatives opposed a broad franchise. Still, the late-nineteenth-century trend toward economic and social equalization had a democratizing effect on their attitudes. Although the average Conservative MP maintained a clear reactionary position toward the extension of the franchise, a reduction in economic inequality, arguably related to the growth of a broader urban middle and affluent working class, pushed a fraction of the Conservative party to embrace more liberal attitudes.

Besides the electoral and policy motivations of political actors, the choice of democracy depends too on the costs born by authoritarian elites to resist the participation of non-enfranchised individuals. Here, we employ World War One as a plausibly exogenous shock (to the forces of economic development that normally affect exclusion costs) that, by raising those costs, probably pushed all MPs to support universal male suffrage.

Overall, our paper starts to bridge two research agendas that have remained mostly unconnected from each other so far: formal models exploring the impact of of economic and social variables on democratization; and a literature emphasizing the electoral incentives of politicians to broaden the franchise. As a result, it arguably provides a firmer ground to investigate several key topics in the democratic transitions literature: the impact of (agenda-setting) institutions on how attitudes became legislation; and how MPs bundled franchise expansion with other electoral rules.

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Appendices

A Data

A.1 MP Preferences over the Male Franchise

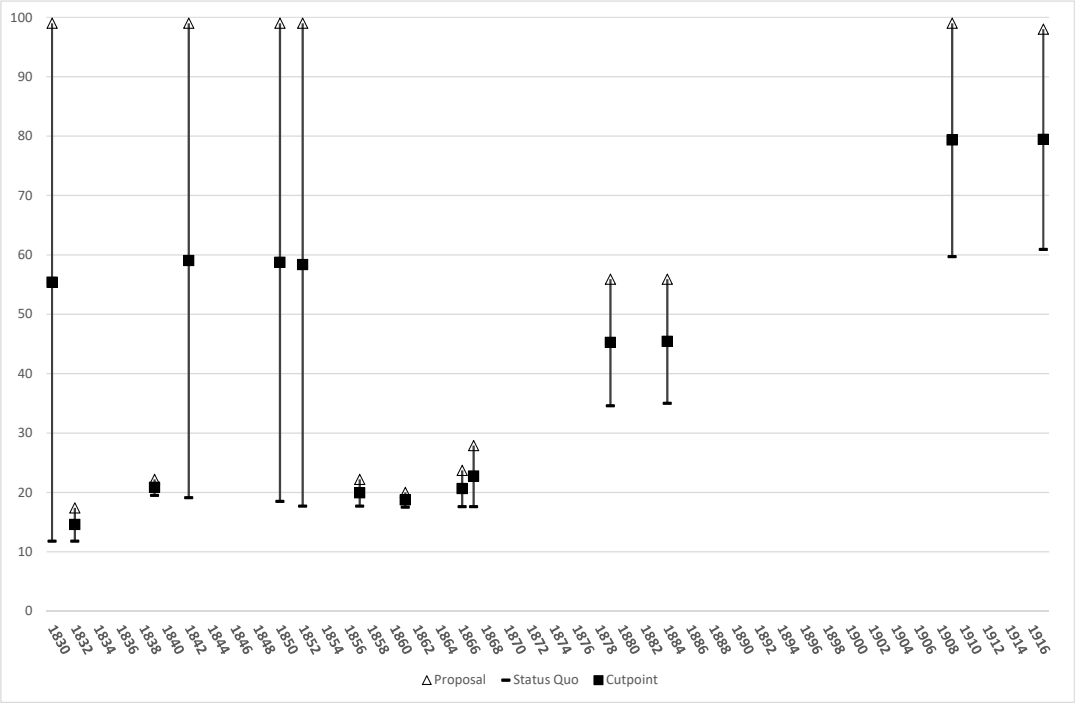
Table A.1: Key Votes on Male Suffrage

Date of Vote	Estimated Roll Call Location	Proposed Male Franchise	Status Quo	Cutpoint
1. 28 May 1830	0.267	99	11.8	55.4
2. 22 March 1831	−0.533	15.7	11.8	13.75
3. 6 July 1831	−0.532	15.7	11.8	13.75
4. 19 September 1831	−0.471	17.7	11.8	14.6
5. 22 March 1832	-0.472	17.4	11.8	14.6
6. 4 June 1839	0.052	22.2	19.4	20.8
7. 12 July 1839	0.350	99	19.4	59.2
8. 3 May 1842	0.348	99	19.1	59.05
9. 14 May 1844	0.286	99	19	59.0
10. 28 February 1850	0.276	99	18.5	58.75
11. 2 April 1851	0.105	22.2	18	20.1
12. 25 March 1852	0.200	99	17.7	58.35
13. 27 April 1852	−0.154	22.2	17.7	19.95
14. 19 February 1857	−0.116	22.2	17.7	19.95
15. 13 March 1861	−0.284	20.0	17.5	18.75
16. 10 April 1861	−0.201	22.1	17.5	19.8
17. 13 April 1864	−0.246	20.0	17.5	18.75
18. 11 May 1864	−0.189	22.1	17.8	19.95
19. 27 April 1866	0.010	23.7	17.6	20.65
20. 20 May 1867	-0.054	27.9	17.6	22.75
21. 8 August 1867	-0.026	33.0	32.0	32.5
22. 4 March 1879	0.060	55.9	34.6	45.25
23. 7 April 1884	0.057	55.9	35.0	45.45
24. 14 May 1906	0.415	62.7	58.1	60.4
25. 3 December 1906	0.415	62.7	58.1	60.4
26. 19 March 1909	0.712	99	59.6	79.3
27. 8 April 1913	0.604	65.5	60.7	63.1
28. 1 May 1913	0.606	65.5	60.7	63.1
29. 14 July 1913	0.618	65.6	60.7	63.15
30. 27 April 1914	0.610	65.6	60.9	63.25
31. 13 May 1914	0.599	65.6	60.9	63.25
32. 28 March 1917	0.422	99.0	60.9	79.95
33. 6 June 1917	0.461	96.0	99	97.5
34. 7 June 1917	0.450	98.0	60.9	79.95

Table A.2: Information on Key Votes on Male Suffrage

Date of Vote	Notes	Implied Male Franchise (%)
1. 28 May 1830	Motion demanding universal male suffrage proposed by MP Daniel O' Connell.	99
2. 22 March 1831	Second reading of first iteration of the Reform Bill.	15.7
3. 6 July 1831	Second reading of second iteration of the Reform Bill.	15.7
4. 19 September 1831	Third reading of the Reform Bill.	17.7
5. 22 March 1832	Third reading of the Reform Bill, after incorporating Lords' amendments.	17.4
6. 4 June 1839	Motion proposing to expand the county franchise.	22.2
7. 12 July 1839	Chartist petition demanding universal male suffrage.	99
8. 3 May 1842	Chartist petition demanding universal male suffrage.	99
9. 14 May 1844	Chartist petition demanding universal male suffrage.	99
10. 28 February 1850	Motion demanding universal male suffrage proposed by MP Joseph Hume.	99
11. 2 April 1851	Second reading of County Franchise Bill.	22.2
12. 25 March 1852	Motion demanding universal male suffrage proposed by MP Joseph Hume.	99
13. 27 April 1852	Motion requesting leave to introduce bill to expand the county franchise.	22.2
14. 19 February 1857	Motion requesting leave to introduce bill to expand the county franchise.	22.2
15. 13 March 1861	Second reading of County Franchise Bill.	20
16. 10 April 1861	Second reading of Borough Franchise Bill.	22.1
17. 13 April 1864	Second reading of County Franchise Bill.	20
18. 11 May 1864	Second reading of Borough Franchise Bill.	22.1
19. 27 April 1866	Second reading of the Representation of the People Bill.	23.7
20. 20 May 1867	Liberal amendment to reduce copyhold franchise to £5. Committee vote.	27.9
21. 8 August 1867	Commons vote on Lords' amendment to retain £10 copyhold franchise.	33
22. 4 March 1879	Motion to extend borough franchise to counties.	55.9
23. 7 April 1884	Vote supporting continued debate on the Representation of the People Bill.	55.9
24. 14 May 1906	Second reading of Plural Voting Bill.	62.7
25. 3 December 1906	Second reading of Plural Voting Bill.	62.7
26. 19 March 1909	Second reading of the Representation of the People Bill.	99
27. 8 April 1913	Second reading of the Plural Voting Bill.	65.5
28. 1 May 1913	Second reading of the Plural Voting Bill.	65.5
29. 14 July 1913	Second reading of the Plural Voting Bill.	65.6
30. 27 April 1914	Second reading of Plural Voting Bill	65.6
31. 13 May 1914	Second reading of the Plural Voting Bill	65.6
32. 28 March 1917	Asquith motion demanding universal male suffrage with residence qualifications.	99
33. 6 June 1917	Proposal to reintroduce the ownership vote.	96
34. 7 June 1917	Vote on Clause 1. of the Representation of the People Bill.	98

Figure A.1: Expected Cutpoint Locations for Selected Male Franchise Reform Proposals



Note: This figure plots some of the votes employed to impute the votes of legislators: the horizontal axis indicates the year in which the vote took place; the vertical axis displays the franchise. For each proposal we draw the status quo in place, the intended franchise of the proposal, and the cutpoint. This figure illustrates that our proposals are diverse in terms of the vote range they represent, allowing us to map the distribution of legislators with a relatively high level of detail.

A.2 Sources and Methods Employed to Calculate Proportion of Enfranchised Individuals

To apply the procedure developed by Bateman, Clinton and Lapinski (2017), we restrict attention to votes on bills and motions between 1830 and 1918 that dealt with male franchise reform. Relying on the dataset compiled by Eggers and Spirling (2014*a*), we identify 300 such votes in this period. From these votes, we select 34 votes for the imputation procedure. These are votes where the choices of MPs were plausibly non-strategic (e.g. final or take-or-leave-it votes), and where the franchise implied by a successful vote was relatively straightforward to calculate. For each vote, we have identified the percentage of men that would have been enfranchised had that particular vote been successful.

To that effect, we have employed data from the population censuses conducted every ten years and starting in 1831 to calculate the number of individuals men older than 20. For those years where the census was not conducted, we determine the number of adult men by log-linear interpolation.

To determine the number of individuals that would have been (or were eventually) enfranchised in the proposals and votes we examine, we have employed the following sources:

- For those pre-WWI proposals to introduce (male) universal suffrage (May 1830, July 1839 to February 1850, March 1852, March 1909), we estimate the male franchise to reach 99 percent (to accommodate the possibility of some remaining plural vote based on either property and/or residence).

- For the votes of 1831 and 1832, we employ the estimates reported by Seymour (1915).

- For the proposals and votes of April 1851, April 1852 and February 1857, we use the estimates of Newmarch (1857).

- For the proposals from 1861 through 1884 we use the estimates of Seymour (1915). To clarify the exact definition of the amendments to the 1867 reform, we also employ Saunders (2011).

- For the votes of 1906, 1913 and 1914 on the abolition of plural voting, we exclude the number of plural voters (which are thought of as a negative quantity, that is, as "subtracting" from the total number of enfranchised individuals) from the overall number of individuals with the right to vote. The number of plural voters comes from Parliamentary Papers (1907-007504, 1914-016950).

- For the reforms of 1917–18, we rely on the estimates of Morris (1921) as well as the figures provided by British MPs in parliamentary debates, as reported in Hansard (5th series, vol. 94)

To illustrate how we reconstructed the potential and final franchise, we report the key provisions related to the electoral reform of 1867 in Table A.3, including a brief description of the proposed bill or amendment alongside the date the provision was voted or passed by the House of Commons. For each alternative, organized by rows, we indicate the effects it had (or would have had) on the franchise as estimated by (Seymour, 1915). The rows give the information for counties and boroughs – by separate items (such as number of plural voters or number of voters enfranchised through the so called lodger franchise) and then as net change. The table goes on to give the overall net change, the total number of enfranchised after the amendment and, on the basis of census data, the proportion of adult men that would have had the right to vote. Notice that, among the proposals we show, the first column (18 March) corresponds to the bill as proposed by Disraeli, which was not voted on by MPs. The other two proposals are included as key votes in our analysis of MP preferences over the male franchise.

To calculate the prevailing status quo at the time of a vote, we use information on the number of adults registered to vote at the time (as recorded in parliamentary papers),

Table A.3: Calculating the Proposed Male Franchise Under Different 1867 Proposals

	18 March Disraeli Bill	**20 May** Copyhold Franchise Lowered to £5	**8 August** Commons Rejects Changes Introduced by Lords
COUNTIES			
Lower Thresholds	158,283	158,283	158,283
Copyhold Franchise Lowed to £5		56,000	56,000
Reduction from £15 to £12			35,000
BOROUGHS			
Qualification	245,000		
Idem + Compoundings Abolished		684,144	684,114
Lodger Franchise		5,000	5,000
Plural Voting	−250,000	−250,000	
NET CHANGES IN FRANCHISE			
Net Change in Counties' Franchise	158,283	214,283	249,283
Net Change in Borough' Franchise	-5,000	439,144	689,144
Net Change in Total Franchise	153,283	653,427	938,427
ESTIMATED FRANCHISE			
Total Number Enfranchised Under Proposals	1,100,446	1,563,080	1,845,455
Total Men Older than 20	5,599,304	5,599,304	5,599,304
% Men Enfranchised By Proposal	**19.7**	**27.9**	**33.0**
% Men Enfranchised Before Proposal	**17.6**	**17.6**	**17.6**

divided by the number of adult men above 20 (as recorded in the census) – interpolating values for intracensal years and adjusting for plural voting. For votes at committee stage or on amendments, the prevailing status quo is taken to be the franchise agreed in previous votes on the same bill. Thus, for instance, the relevant status quo for the 8 August 1867 vote opposing one of the Lords amendments to the Representation of the People Act suggested is 32% (the franchise if the amendment was upheld) rather than 17.5% (the approximate legal male franchise following the 1832 reform).

A.3 Matching Census and Electoral Data

In order to match the census and electoral data, we first aggregate the individual-level census data to the parish level, and match each parish to one or more constituencies. To accommodate those instances where a parish was subdivided between multiple constituencies, we apply standard areal interpolation techniques, using information on the proportion of the area of each parish that falls within each constituency and assuming that individuals are uniformly distributed within each parish in order to aggregate the census data from the parish-level to the constituency-level. Finally, we use log-linear interpolation to generate constituency-election specific values for each variable from 1851 to 1918, assuming a constant exponential rate of growth for each variable between census years. Individual-level census data is not available for the period before 1851, but parish-level population data for 1831, 1841 and 1851 is available from the Vision of Britain database. Therefore, for the period 1831 to 1851, we generate constituency-election level values by log-linear *extrapolation* at the parish-level, assuming that the proportion of individuals in each occupation at the *parish*-level was constant between 1831 and 1851, before aggregating to the constituency-level. This amounts to the assumption that within-constituency changes in occupational composition between 1831 and 1851 were driven by differential population trends across parishes within the same constituency – for instance, driven by

rural-urban migration.

A.4 Calculation of Earnings and Earnings Dispersion

To calculate the level and dispersion of earnings, we employ the information on the nominal annual earnings of males in England and Wales by occupational categories provided in Williamson (1980, 1982). Williamson's occupational categories are listed in Column 2 in Table A.4. (Williamson, 1982) calculates earnings for each general category using information on wages and salaries for the specific occupations listed in Column 3 in Table A.4.

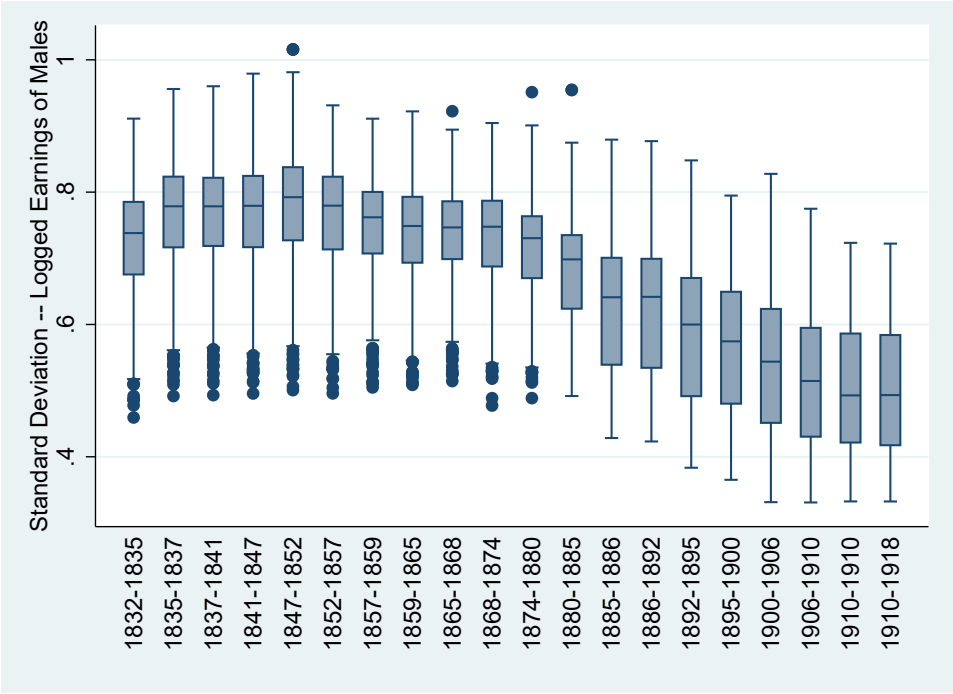
We match Williamson's general occupations with our HISCLASS groups as reported in Column 1 in Table A.4: for example, Williamson's categories 8H, 10H and 12H correspond to the sum of higher managers and higher professional (H01 and H02). We calculate the earnings of each of our occupational groups (for example, H01+H02) using the size of each occupational group (in the example, 8H, 10H and 12H) as reported by Williamson. Appendix C in Williamson (1982) reports the size of each occupational group (in thousands of males older than 20) in 1821-41. Appendix D in Williamson (1982) reports the size of each occupational group (in thousands of males older than 10) from 1851 to 1911.

As discussed in the paper, we calculate the earnings of (medium skilled) farmers (HISCLASS 8) using use the rental value of land as determined by Clark (2002) weighted by the average size of farms reported in Shaw-Taylor (2005). We estimate the annual earnings of low-skilled farm workers (HISCLASS 10) by multiplying farmers' earnings by the ratio of low-skilled to medium-skilled earnings in non-agrarian occupations.

Table A.4: Correspondence between Williamson Occupations and HISCLASS categories

HISCLASS Categories	**General Occupations According to Williamson**	**Specific Occupations According to Williamson**
H01 (Higher Managers) and H02 (Higher Professionals)	8H (Solicitors and Barristers)	Solicitors and Barristers
	10H (Surgeon-Medical Officer)	Physician, surgeon, general practitioner
		Dentist, veterinary surgeon
	12H (Engineer-Surveyor)	Civil and mining engineer
		Land, house, ship surveyor
H03 (Lower Managers) and H04 (Lower Professionals)	1H (Government High-Wage Civil Service)	Civil service (officers and clerks)
	7H (Clergy)	Clergyman (Established Church), priests, etc.
	9H (Clerks, Private Sector)	Bank clerks, accountants, etc.
	11H (Teachers)	Schoolmaster, teacher, professor, lecturer
H05 (Lower Clerical and Sales Personnel)	4L (Government Low-Wage Civil Employment)	Civil service (messengers, etc.)
	5L (Police, Guards, Watchmen)	Police, railway guards, prison officers, etc.
H06 (Foremen) and H07 (Medium-skilled Workers)	2H (Skilled in Shipbuilding)	Shipwrights
	3H (Skilled in Engineering)	Fitters, ironmolders, and turners
	4H (Skilled in Building Trades)	Bricklayers, masons, carpenters
	6H (Skilled in Printing Trades)	Compositors
H09 (Low-skilled Workers)	5H (Skilled in Textiles)	Spinners in cotton trades
	2L (General Nonagricultural Laborers)	Urban common laborers
	6L (Miners)	Coal miners
H11 (Unskilled Workers)	Domestic Servants	
H12 (Agricultural Laborers)	1L (Agricultural Laborers)	Farm laborers

Figure A.2: Box Plot of Earnings Dispersion by Parliamentary Term



Note: This figure plots the median and quartile values for the standard deviation of logged real male earnings across constituencies for each parliamentary period. In line with existing research (Kuznets, 1955; Williamson, 1985), the graph shows that, in the median constituency, earnings inequality peaked in the middle of nineteenth century (to the equivalent of a standard deviation of £160) and then gradually diminished until World War One (to about £100). Despite that decline, differences in the level of earnings inequality, as marked by the entire vertical line, continued to be high across electoral constituencies.

B Estimating Legislator Preferences over Franchise Reform

B.1 Validity and Interpretation of Ideal Point Estimates

In this section, we address several concerns that have been raised in previous research regarding the viability and interpretation of classical ideal point estimation techniques when applied to parliamentary, and especially Westminster, systems.

In terms of interpretation, our analyses suggest that legislators systematically vary in their propensity to vote for legislation implying a higher or lower male franchise. Furthermore, legislators vary in this propensity both within and between parties, for reasons which are correlated with their personal and constituency characteristics. We have argued that the ideal point estimates we present in this paper are measuring this latent variation in legislators' preferences.[29]

However, previous studies have cast doubt on such an interpretation in the context of parliamentary systems. In particular, it has frequently been observed that both parametric and non-parametric ideal point estimation techniques do not seem to recover 'correct' legislator positions when applied to parliamentary, and especially Westminster, systems – typically locating rebellious members of the governing party nearer to the main opposition party than to the bulk of their co-partisans (e.g. Spirling and McLean (2007)). This tendency has been attributed to higher levels of party discipline in parliamentary systems (Rosenthal and Voeten, 2004), as well as the prevalence of government-versus-opposition directed voting, especially in Westminster systems (Dewan and Spirling, 2011; Hix and Noury, 2016). Based on these concerns, it has often been often argued that, at least in

[29] As we also note in footnote 9 in Section 2 of the paper, and as also argued by McCarty (2016), our approach does not assume that legislators vote entirely based on sincerely held ideological views. Rather, the ideal points that we recover are best interpreted as a legislator's average revealed preferences over franchise expansion over their entire career, and may partly reflect strategic considerations faced by the legislator during their career – for instance, based on their party or constituency characteristics.

parliamentary systems, ideal point estimates are better interpreted as measures of party loyalty than as measures of ideology.

To address such concerns, we present five pieces of evidence that indicate that, first, our estimated ideal points do measure meaningful differences in legislators' propensity to vote for a higher or lower male franchise, and, second, that these differences are not just explained by party affiliation or loyalty. These five pieces of evidence suggest, therefore, that our analysis does seem to be recovering broadly "correct" ideal points, contra previous concerns. After presenting this evidence, we suggest several reasons why these concerns may have been less relevant in our case.

The first piece of evidence is that we observe considerable intra-party heterogeneity in legislators' franchise preferences throughout all parliaments under consideration, even when we inspect the raw ideal point estimates (i.e before these are mapped to predicted franchise preferences, following the procedure described on p. 14 of the paper). This is evident from Figure B.1, which plots the raw ideal point estimates for Liberal and Conservative legislators by parliament.

Second, we find that our estimated ideal points remain strong predictors of legislators' choices on key votes even after controlling for legislators' party affiliation and propensity to rebel – and this remains true throughout the period, even in votes taking place in the early twentieth century (e.g. the Asquith motion in March 1909 and the wartime votes). This is demonstrated in Figure B.2, which presents the marginal effect of MPs' estimated (raw) ideal points, including 95% confidence intervals, on their decisions on key franchise votes between 1830 and 1917, based on results from a legislator-level linear regression including legislators' party affiliation and propensity to rebel as controls. Here, we measure a legislator's propensity to rebel as the proportion of times a legislator voted with the minority in their party on a franchise-related division (both key and non-key votes).[30]

[30]Results are virtually identical if we substitute MPs' predicted franchise preferences as the dependent

Figure B.1: Major Party Preferences on Male Suffrage (Raw Ideal Points)

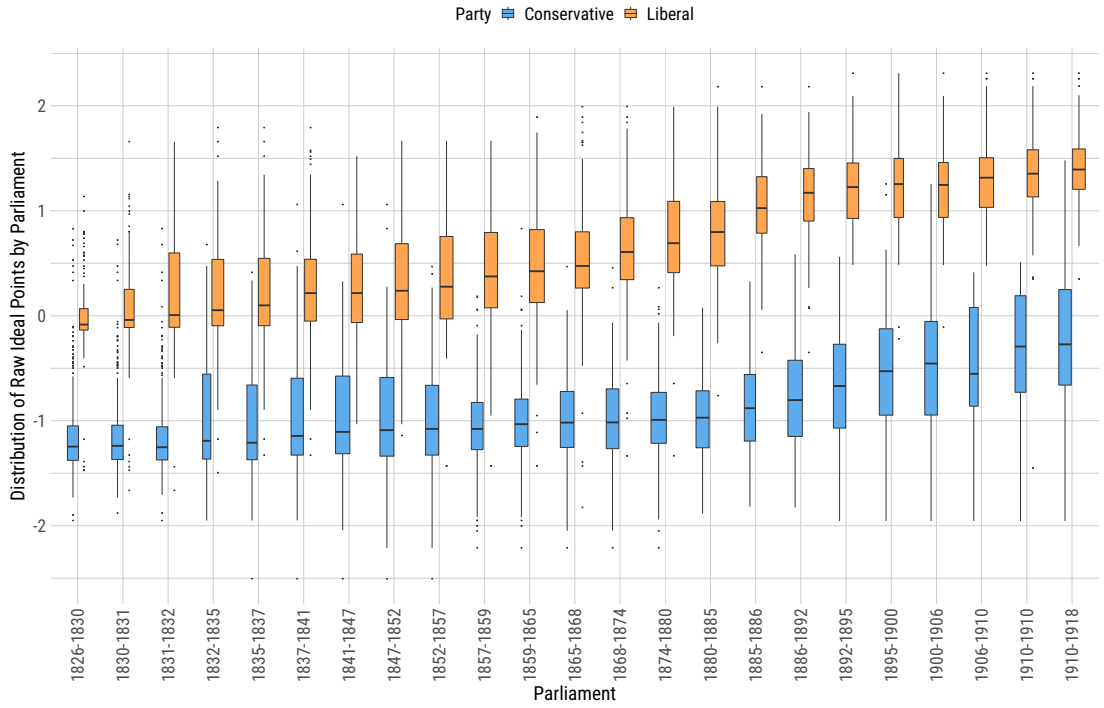


Figure B.2: Explanatory Power of Ideal Points beyond Party

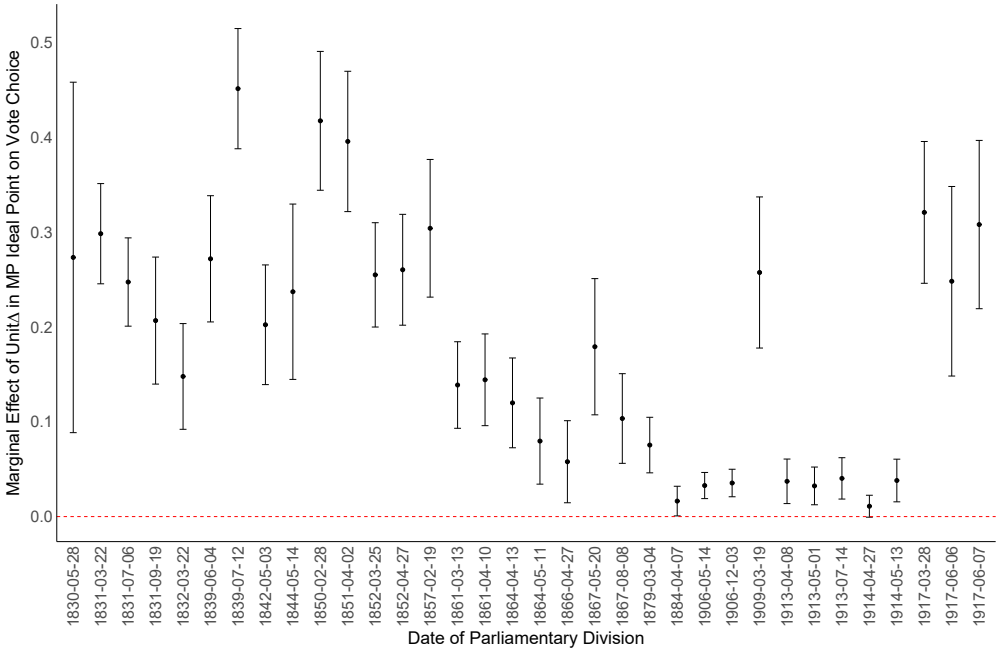
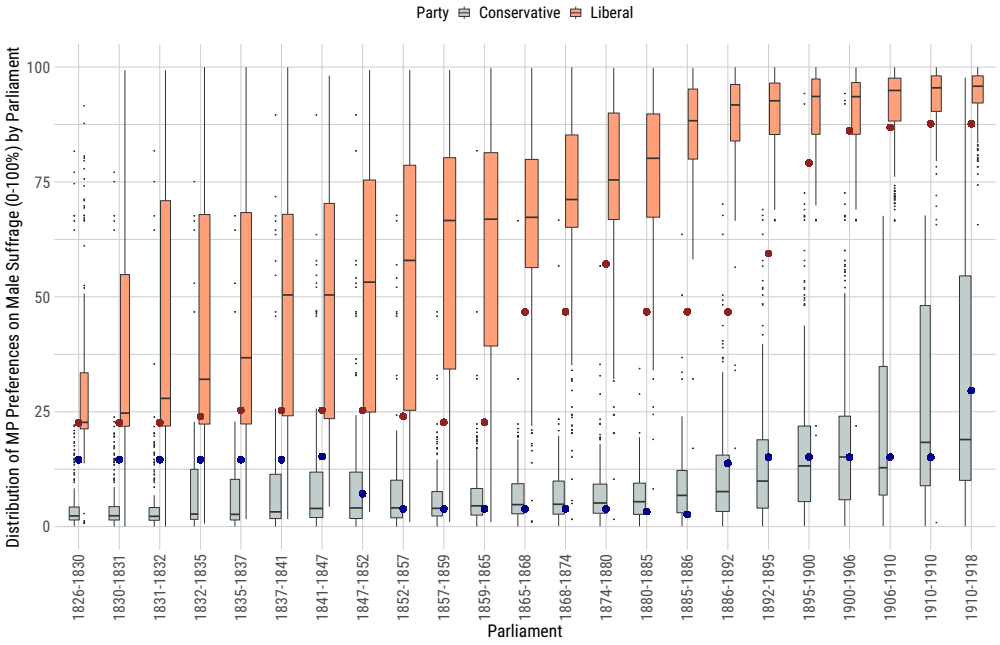


Figure B.3: Estimated Locations of Party Leaders



Third, unlike in Spirling and McLean's (2007) analysis of ideal point estimation applied to the 1997-2001 House of Commons, we do not estimate party leaders as being on the extremes of their parties, as we might have expected if our ideal points were measuring party loyalty rather than legislators' franchise preferences. This is demonstrated in Figure B.3, which plots, for each parliament, the estimated franchise preferences of Liberal and Conservative party leaders alongside their co-partisans.[31] This figure illustrates that our approach typically estimates party leaders as being moderate figures within their parties. By contrast, we estimate known advocates of universal male suffrage – for example, the Chartist leader Feargus O'Connor or the Radical MP John Bright – as preferring a male franchise close to 100%.

Fourth, although both the Liberal and Conservative party leaderships changed their position on franchise extension over the course of this period – the Liberal party under Gladstone in the 1860s, and eventually, the Conservative party led by Bonar-Law during the First World War – when inspecting MP decisions on key franchise votes, we find that the behavior of most legislators was consistent with proximity voting and an individual ideal point that was stable over time. That is, it appears that most legislators voted as if, throughout their career, there was some franchise that they consistently preferred. In particular, of the 4,077 legislators whose decisions we analyze, we find that only 217 legislators – 5.3% of the total – voted inconsistently on at least one key vote. This is far lower than what we might expect if legislator decisions on these votes were primarily motivated by the party line.

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variable.

[31] As we only recover ideal point estimates for legislators representing seats in England and Wales in the House of Commons, there are two instances where we do not estimate an ideal for the Liberal leader, as the individual concerned only ever represented constituencies in Scotland. In these cases, the figure plots the preferences of another senior cabinet or shadow cabinet member: Herbert Gladstone, in place of Henry Campbell-Bannerman, between 1898 and 1908, and David Lloyd George in place of H. H. Asquith, between 1908 and 1918.

Last but not least, the regression results we report in Section 4 and Appendix C – all of which derive from specifications that control for party – reveal that our estimates of legislators' franchise preferences are correlated with exactly the constituency and personal characteristics that we might expect, given our theory. All of these patterns are significantly more consistent with an interpretation of our estimates as meaningful measures of legislators' franchise preferences than as measures of loyalty to the party line on franchise reform.

We suggest three possible reasons why we have been able to recover meaningful estimates of legislator preferences using ideal point estimation in our case – in contrast to similar approaches applied to the contemporary House of Commons, which have produced ideal point estimates with more troubling characteristics.

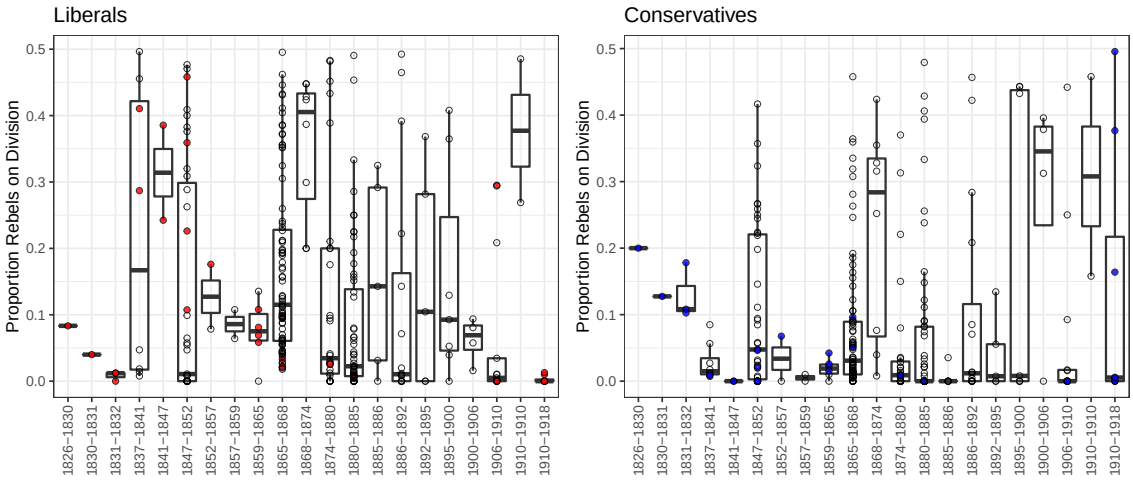
In the first place, although party cohesion in the nineteenth century House of Commons was undoubtedly (already) high (Cox, 1987; Schonhardt-Bailey, 2003; Eggers and Spirling, 2014*b*), it is nevertheless the case that both parties – though especially the Liberals – faced sizeable rebellions from legislators throughout, and that such rebellions were slightly more likely on votes dealing with franchise reform than on other votes. This is evident from Figures B.4a and B.4b, which plot the proportion of major party rebels on each franchise and non-franchise division, respectively. In each figure, the size of the rebellion is given by the proportion of legislators (Liberal or Conservative) who voted against the majority of their party (measured before imputation). In Figure B.4a, key votes are highlighted in red (for the Liberals) and blue (for the Conservatives).

Even if most MPs typically voted alongside their party in this period (Eggers and Spirling, 2014*b*), we find that, on average, 12.5% of Liberal MPs and 7.6% of Conservative MPs rebelled across all votes, and 13.3% of Liberals and 8.4% of Conservatives rebelled on franchise votes.[32] Moreover, in both cases, the distribution of rebellions is right-skewed;

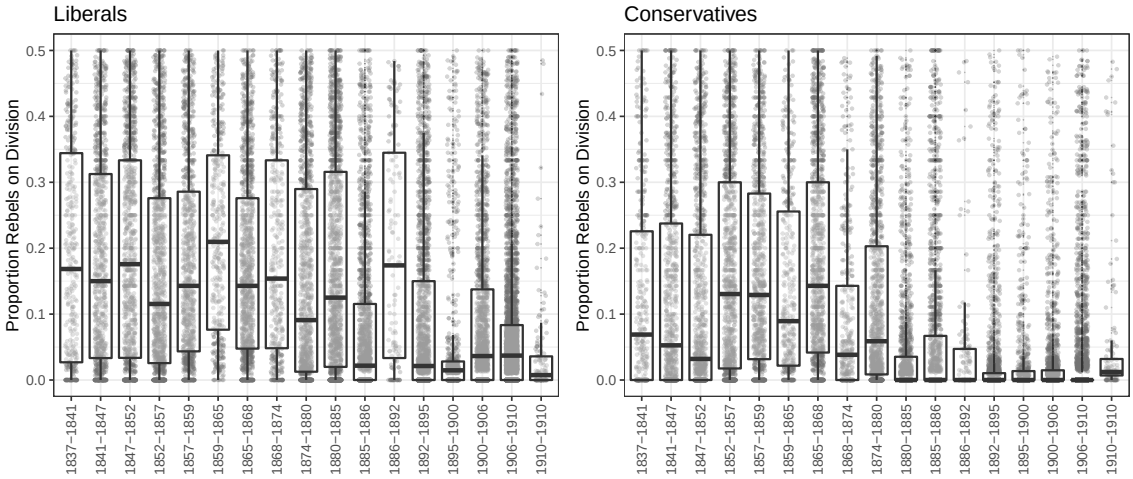
[32]Note that our analysis is restricted to MPs representing constituencies in England and Wales.

Figure B.4: Prevalence of Rebellions, 1830-1918

(a) Franchise Votes, 1830–1918



(b) All Votes, 1836–1910



although the majority of votes – on franchise reform and otherwise – were (almost) party-line votes, more than a fifth of Liberal parliamentarians rebelled on 26.4% of divisions (26.7% of franchise votes), and more than a third rebelled on 14.3% of divisions (15.7% of franchise votes).[33] This pattern is not just driven by votes of little significance, as we observe significant rebellions even on key franchise votes, and – at least in the case of franchise votes – such rebellions remained a regular occurrence even in the late nineteenth and early twentieth centuries. Even if we consider only divisions on franchise reform that took place after 1859 – after which, according to Eggers and Spirling (2014*b*), a rebellious 'left tail' faded away – we find that, on average, 13.2% of Liberals and 8.2% of Conservatives continued to rebel on these votes. Prominent examples are given by the vote on the Second Reading of the Representation of the People Bill on 19 March 1909, when 29.5% of the Liberal MPs present rebelled to vote *against* near-universal suffrage for men (and some women), as well as the wartime votes on universal suffrage, where as many as 49.5% of the Conservatives present continued to vote against (on 28 March 1917).

In short, there was sufficient intra-party heterogeneity even in the later period (in the issue at hand) to allow us to identify and compare legislator preferences using ideal point estimation techniques. Once we impute behavior for legislators on divisions where they were not actually present, the degree of intra-party heterogeneity is greater still, aiding comparison of legislators from the same party who served in very different time periods.

In the second hand, we find that rebels voted against the leadership of *both* major parties on many divisions on franchise reform. This was true on all franchise votes taking place in the 1840s and 1850s – most of which took place in response to petitions and private members' bills, not government legislation – and again in 1917, when a substantial minority of Conservative MPs voted against near-universal male suffrage, with both the

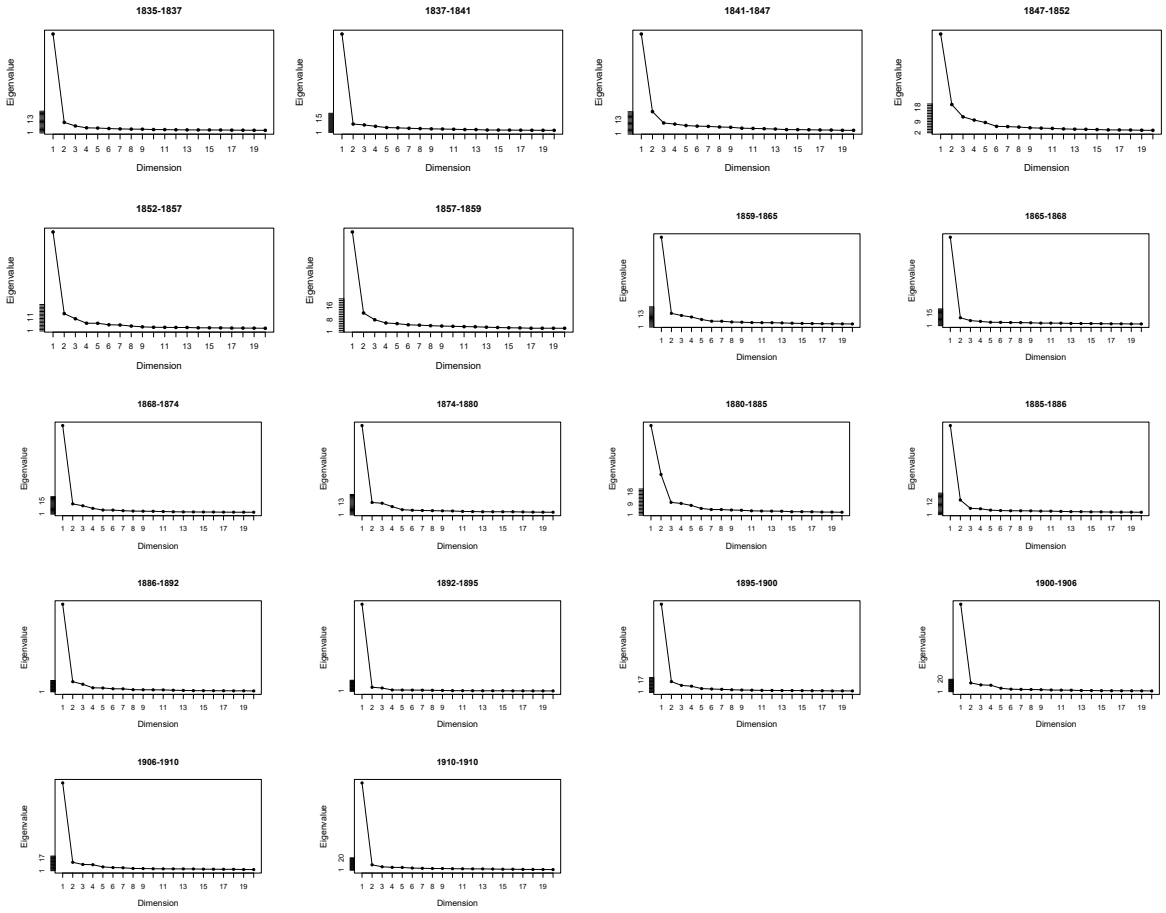
[33]In comparison, more than a fifth of Conservative parliamentarians rebelled on 16.0% of divisions (16.7% of franchise votes) and more than a third rebelled on 8.8% of divisions (8.3% of franchise votes).

Conservative and Liberal leaderships voting in favor. Thus, legislators did not necessarily vote along government-versus-opposition lines on franchise votes.

Finally, our consideration of votes from parliaments spanning a large number of decades, as well as our imputation procedure – which increases the weight placed by the estimator on our selected (plausibly non-strategic) key votes – may have mitigated the impact of party strategic considerations on our ideal point estimates.

B.2 Unidimensionality of the Issue Space

Figure B.5: Scree Plots by Parliament, All Divisions 1836–1910



Note: This figure presents the scree plots based on the optimal classification scores we estimate for each parliament when considering all parliamentary divisions voted on in the House of Commons between 1836 and 1910. Each plot shows the proportion of the total variance in legislative voting behavior explained by each additional dimension in a parliament. For computational reasons, we are only able to estimate optimal classification scores based on all divisions by parliament. These plots demonstrate that, generally speaking, across parliaments, most of the variance in legislator behavior is explained by a single dimension. The only (brief) exceptions correspond to periods of party realignment: in the 1840s, after Robert Peel and his followers broke away the Conservative party after the repeal of the Corn Laws, and again in the 1880s, after Liberal Unionist MPs abandoned the Liberal party over the issue of Home Rule for Ireland.

B.3 Ideal Point Estimates and Text-based Scaling Techniques

We finish this section by briefly discussing some advantages of using ideal point estimation rather than text-based scaling techniques in our setting. As there is typically greater intra-party diversity expressed in legislative speech than in roll call votes, many researchers have instead favored text-based approaches for estimating legislator ideology in parliamentary systems – including for the British House of Commons (e.g. Herzog and Benoit (2015), Slapin et al. (2018)). However, in our case, a text-based approach is far from ideal for three reasons. First, we cannot feasibly impute the *speech* of legislators in debates where they were not present – and as discussed in Section 2, this step allows us to significantly improve the intertemporal comparability of our ideal point estimates. Second, the procedure by which we obtain predicted values of the franchise preferred by each legislator requires that we locate key votes on a 0-100% scale, in order to be able to map legislator locations onto this same scale. However, it is not clear that this is feasible when applying standard text-based scaling methods, as one would have to assign a precise value on the 0-100% franchise scale to extracts from legislative speech. Third, norms of discourse and the meanings of words may have changed significantly between 1830 and 1918, rendering interpretation of text-based estimates more difficult. Moreover, estimates of legislator ideology derived using standard text-based scaling techniques like Wordfish, Wordshoal or machine learning, are also often confounded by government-opposition dynamics, especially in Westminster systems (Hirst et al., 2014; Lauderdale and Herzog, 2016), suggesting that text-based approaches do not necessarily offer a solution to these problems.

C Results and Discussion

C.1 Main Results

Table C.1: OLS Analysis of the Covariates of MP Franchise Preferences

	(1)	(2)	(3)	(4)
Proportion Liberal	-50.81	69.25	−64.84	−79.68*
	(34.82)	(103.12)	(36.95)	(34.25)
Proportion Conservative	54.44	68.10	31.84	32.09
	(35.53)	(104.50)	(38.30)	(35.13)
Proportion Radical Left	115.04*	130.56	112.05*	131.92**
	(50.93)	(233.20)	(56.59)	(47.51)
Earnings Inequality	−61.33***	−76.77*	−66.45***	−81.57***
	(16.63)	(31.04)	(18.88)	(15.83)
Earnings Ineq. * Prop. Liberal	34.12*	51.24	39.35*	27.24
	(16.29)	(32.67)	(17.14)	(16.28)
Earnings Ineq. * Prop. Conservative	20.77	27.95	36.25*	16.51
	(16.58)	(33.01)	(17.91)	(16.67)
Earnings Ineq. * Prop. Rad. Left	76.61***	69.39	86.84***	73.19***
	(21.12)	(57.19)	(24.71)	(20.15)
Log Mean Earnings	12.92	32.42	8.87	26.14***
	(9.03)	(28.82)	(10.62)	(7.01)
Log Mean Earnings * Prop. Liberal	9.85	−21.69	11.99	17.44*
	(7.52)	(30.32)	(7.97)	(7.41)
Log Mean Earnings * Prop. Conservative	−26.15**	−27.18	−23.97**	−20.12**
	(7.57)	(30.60)	(8.10)	(7.53)
Log Mean Earnings * Prop. Rad. Left	−31.55**	−35.75	−32.81*	−34.38**
	(11.55)	(56.35)	(12.99)	(10.65)
Prop. Agricultural Employm.	−71.02***	−55.44*	−73.17***	−60.10***
	(10.49)	(22.15)	(11.58)	(9.82)
Agricultural Employm. * Prop. Liberal	71.15***	51.46*	76.42***	76.43***
	(10.18)	(23.20)	(10.68)	(9.96)
Agricultural Employm. * Prop. Conservative	72.82***	68.21**	77.74***	75.46***
	(10.53)	(23.32)	(11.35)	(10.49)

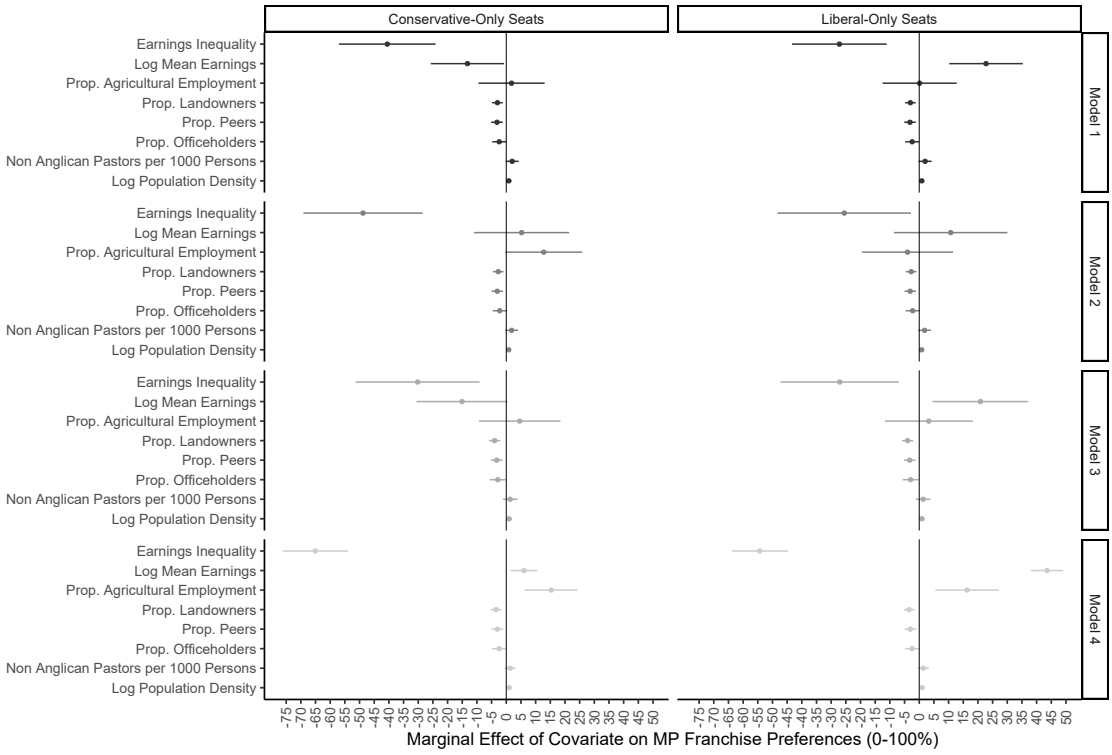
Table C.1: OLS Analysis of the Covariates of MP Franchise Preferences

	(1)	(2)	(3)	(4)
Agricultural Employm. * Prop. Rad. Left	75.78**	75.33	81.64***	77.69***
	(21.84)	(49.17)	(22.12)	(21.18)
Proportion Landowners	−3.01**	−2.74**	−3.97***	−3.46***
	(0.93)	(0.93)	(0.98)	(0.94)
Proportion Peers	−3.15**	−3.08**	−3.26**	−3.06**
	(1.01)	(1.00)	(1.01)	(1.02)
Proportion Officeholders	−2.41*	−2.24	−2.92*	−2.41*
	(1.21)	(1.23)	(1.38)	(1.22)
Non Anglican Pastors per 1000 Persons	2.01	1.82	1.34	1.36
	(1.13)	(1.11)	(1.27)	(0.96)
Log Population Density	0.87**	0.81*	0.92*	0.98**
	(0.32)	(0.32)	(0.40)	(0.32)
By Election	1.31*	1.66*	0.78	1.00
	(0.63)	(0.64)	(0.68)	(0.65)
Number of Seats	−1.14	−0.37	−0.85	−3.36***
	(0.73)	(0.71)	(0.80)	(0.68)
Constituency REs	✓	✓		✓
County FEs			✓	
Parliament FEs	✓		✓	
Party-Parliament FEs		✓		
Observations	8,204	8,204	8,204	8,204
R^2	0.768	0.775	0.774	0.763

*p<0.05; **p<0.01; ***p<0.001

Note: Cell entries present coefficient estimates from OLS models of MPs' preferences over the size of the male franchise. Standard errors clustered by parliamentary constituency are given in parentheses.

Figure C.1: Marginal Effects of Key Covariates based on Table C.1 Estimates



C.2 Analysis of MP Franchise Preferences by Reform Period

Here we re-estimate Model (1) in Table C.1 separately for each of the three electoral regimes. As before, across all three periods, we find that Liberals favored a much larger franchise than Conservatives for all levels of earnings inequality. However, the importance of earnings inequality for intra-party variation in franchise preferences differed by reform period. We find a significant negative effect of earnings inequality on Liberals' franchise preferences in the first and second periods, but not the third; conversely, we find a significant negative effect of earnings inequality on Conservative preferences in the second and third periods, but not the first. One possible explanation for these patterns – suggested by Figure 3b – is that in the first period, the Conservatives were almost completely united against any franchise expansion, while the Liberals in the third period were almost completely united in favor of (close to) universal suffrage. This would leave little room for inequality to affect Conservative franchise preferences in the first period and Liberal franchise preferences in the third period. We also fail to reject the hypotheses that the effect of earnings inequality on franchise preferences was the same in the first and second periods for the Liberals, and in the second and third periods for the Conservatives – and so we cannot reject the possibility that the magnitude of this effect could be independent of the level of inequality or proportion already enfranchised.[34]

Table C.2: OLS Analysis of MP Franchise Preferences by Reform Period

	(1) 1832-1868	(2) 1868-1886	(3) 1886-1918
Proportion Liberal	41.60	93.69	−176.00
	(49.02)	(130.74)	(323.74)
Proportion Conservative	94.94*	38.74	−182.54
	(47.58)	(130.77)	(322.22)

[34]We test these hypotheses by re-estimating Model (1) in Table C.1 with period-specific coefficients on the interaction between inequality and party and all constituent terms. Results available from the authors.

Table C.2: OLS Analysis of MP Franchise Preferences by Reform Period

	(1) 1832-1868	(2) 1868-1886	(3) 1886-1918
Proportion Radical Left		265.05	−97.26
		(177.71)	(321.43)
Earnings Inequality	−52.10*	−95.68	−122.40**
	(25.59)	(50.86)	(45.10)
Earnings Ineq. * Prop. Liberal	12.53	44.50	120.11**
	(26.42)	(50.53)	(43.57)
Earnings Ineq. * Prop. Conservative	51.47	14.47	65.29
	(26.49)	(52.11)	(44.18)
Earnings Ineq. * Prop. Rad. Left		22.60	137.51**
		(66.99)	(45.41)
Log Mean Earnings	25.57	44.20	−25.39
	(14.31)	(33.66)	(74.38)
Log Mean Earnings * Prop. Liberal	−7.74	−22.55	24.72
	(13.13)	(32.98)	(74.55)
Log Mean Earnings * Prop. Conservative	−40.48**	−21.12	18.84
	(12.31)	(33.25)	(74.17)
Log Mean Earnings * Prop. Rad. Left		−57.97	6.10
		(41.63)	(74.02)
Prop. Agricultural Employm.	−44.55**	−66.08*	−20.71
	(15.62)	(27.71)	(38.30)
Agricultural Employm. * Prop. Liberal	38.54**	63.36*	16.58
	(14.85)	(27.10)	(37.76)
Agricultural Employm. * Prop. Conservative	48.82**	89.78**	28.13
	(14.38)	(27.51)	(36.96)
Agricultural Employm. * Prop. Rad. Left		91.27**	27.08
		(33.42)	(42.55)
Prop. Landowners	1.65	−5.21***	−5.31**
	(1.55)	(1.48)	(1.55)
Prop. Peers	−7.84***	−2.06	0.26
	(1.78)	(1.67)	(1.46)
Prop. Officeholders	−4.49	−3.41	−1.51
	(2.30)	(2.68)	(1.45)

Table C.2: OLS Analysis of MP Franchise Preferences by Reform Period

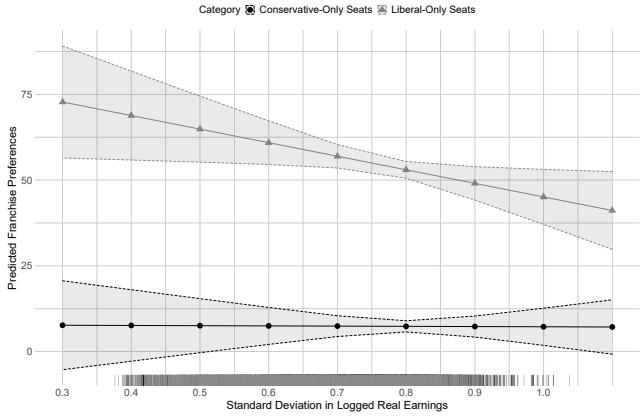
	(1) 1832-1868	(2) 1868-1886	(3) 1886-1918
Non Anglican Pastors per 1000 Persons	−0.55	1.05	4.45*
	(2.25)	(1.51)	(1.77)
Log Population Density	2.42**	−0.06	0.49
	(0.70)	(0.55)	(0.44)
By Election	2.43	0.11	2.19**
	(1.40)	(1.62)	(0.77)
Number Seats	−1.54	−0.51	−2.16
	(1.14)	(0.98)	(1.76)
Constituency REs	✓	✓	✓
Parliament FEs	✓	✓	✓
Observations	3,100	1,619	3,485
R^2	0.596	0.801	0.821

*p<0.05; **p<0.01; ***p<0.001

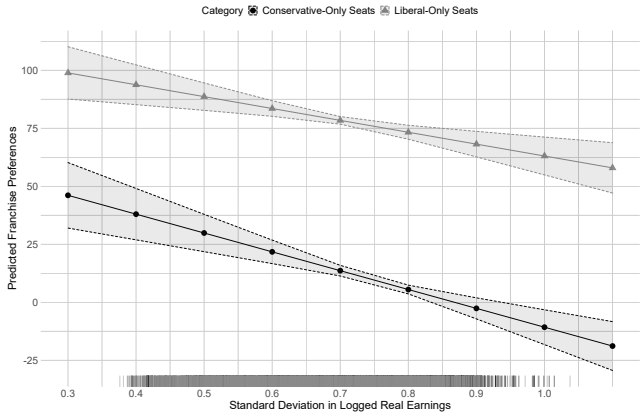
Note: Cell entries present coefficient estimates from OLS models of MPs' preferences over the size of the male franchise. Standard errors clustered by parliamentary constituency are given in parentheses.

Figure C.2: Predicted Franchise Preferences Conditional on Party and Inequality by Period

(a) 1832-1868



(b) 1868-1886



(c) 1886-1918

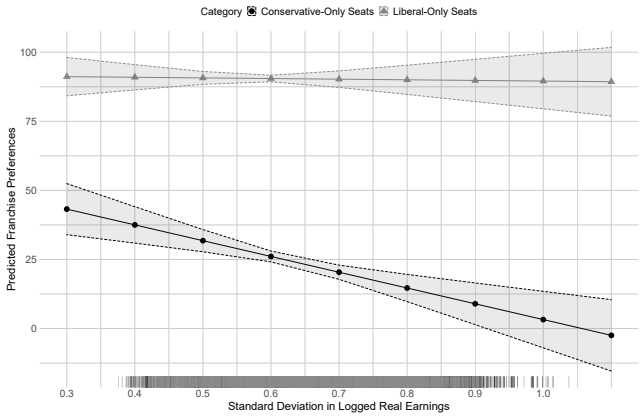
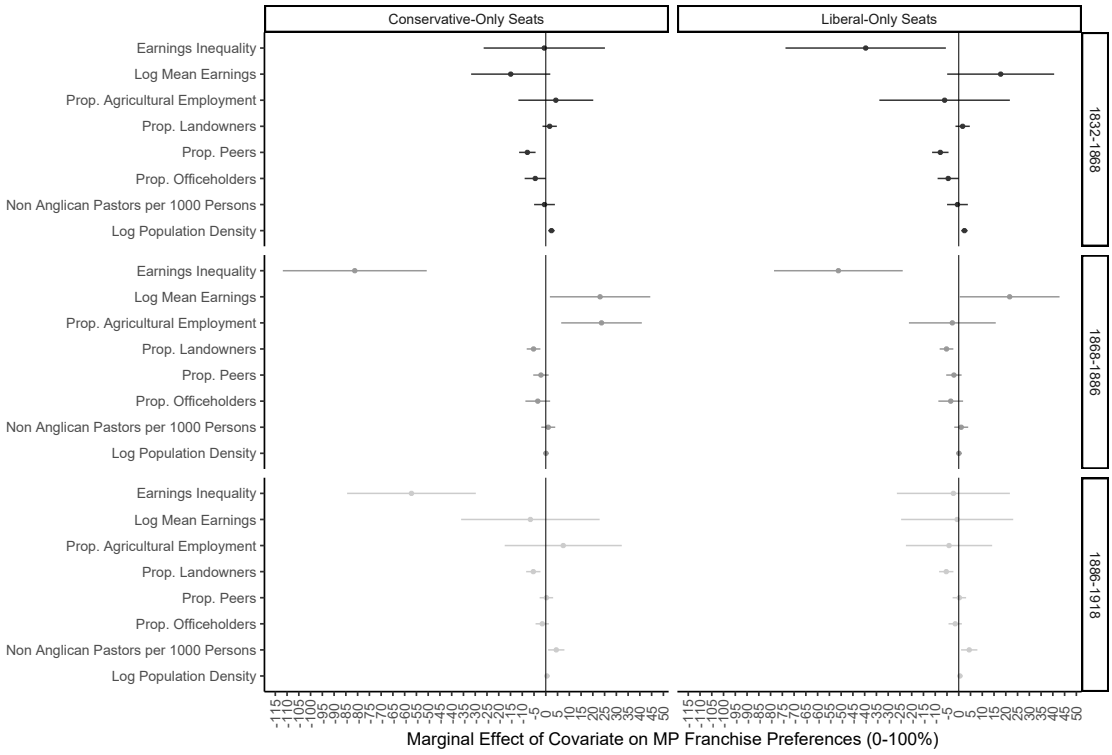


Figure C.3: Marginal Effects of Key Covariates based on Table C.2 Estimates



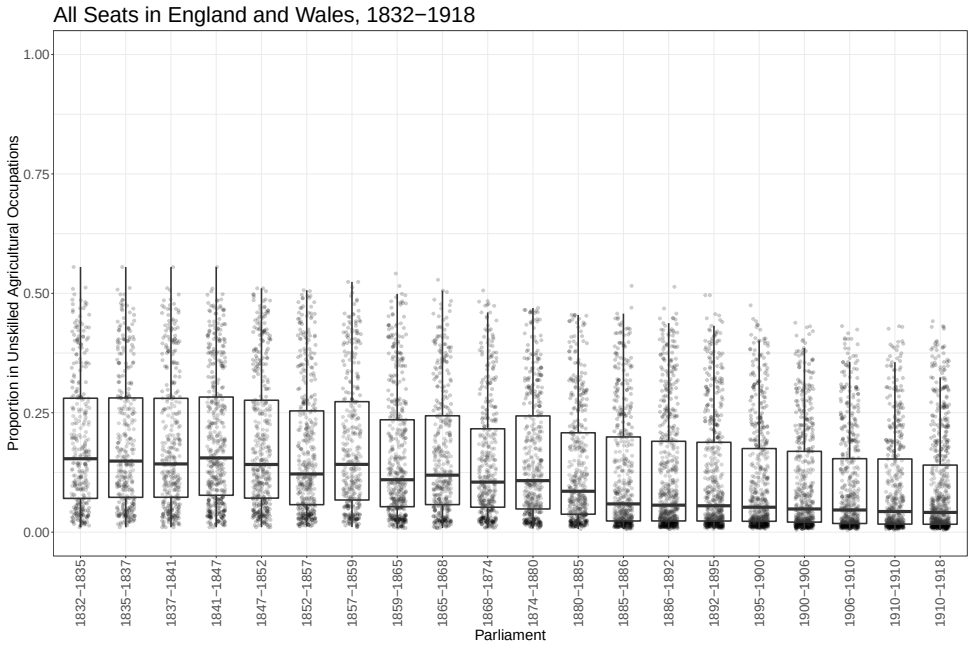
C.3 Effects of Trends in Social Class Composition

In this section, we consider whether and how the effect of earnings inequality on franchise preferences we identify in Section 4 relates to the changing class composition of constituencies in nineteenth and early twentieth-century Britain. To investigate this, for each constituency-election, we calculate the proportion of adult men belonging to each of the following classes: nonmanual occupations (HISCLASS categories 1 through 5); non-agricultural medium-skilled manual workers (HISCLASS 6 and 7); non-agricultural low-skilled manual workers (HISCLASS 9); non-agricultural unskilled manual workers (HISCLASS 11); skilled agricultural occupations (HISCLASS 8 and 10); unskilled agricultural laborers (HISCLASS 12), and other miscellaneous or unknown occupations (HISCLASS 13 and 99).

We find that, over the course of the nineteenth century, two social classes experienced a substantial change in their numbers: unskilled agricultural laborers and low skilled industrial workers. Figures C.4a and C.4b show the changing proportion of these groups across constituencies in the period of analysis. In 1832, unskilled agricultural workers represented 15.4% of total male employment in the median parliamentary district (in the distribution of constituencies as a function of the number of unskilled agricultural workers) and 28.0% in the constituency at the 75th percentile of that distribution. By 1910, those numbers have dropped to 4.3% and 15.3% respectively. Conversely, the number of low-skilled industrial workers grew throughout the century. In 1832, they represented 19.3% of male employment in the median parliamentary seat (again in the distribution of constituencies ordered by the number of low-skilled industrial workers) and 29.0% in the 75th percentile of constituencies. Those figures had climbed to 29.0% and 39.6% respectively by 1910. With the exception of non-manual occupations, which rose from 14.8% to 19.5% in the median constituency over the same period of time, all the remaining classes fluctuated around similar values over our period of analysis.

Figure C.4: Industrialization in Britain, 1832–1918

(a) Proportion of Agricultural Laborers by Constituency and Parliament



(b) Proportion of Industrial Workers by Constituency and Parliament

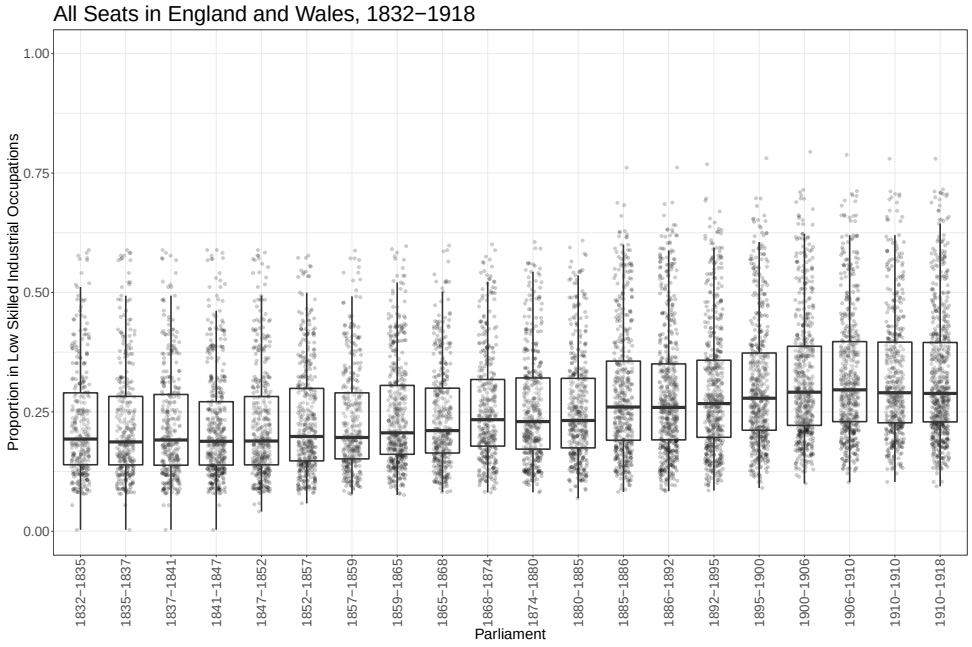


Table C.3: Social Class Composition and MP Franchise Preferences

	(1)	(2)	(3)	(4)
Proportion Liberal	84.58***	84.05***	96.77***	75.34***
	(13.18)	(14.42)	(13.61)	(13.57)
Proportion Conservative	44.06**	60.48***	52.38***	40.10**
	(13.45)	(14.90)	(14.20)	(13.54)
Proportion Radical Left	138.71***	91.35**	168.67***	110.53**
	(35.42)	(32.55)	(29.88)	(39.09)
Proportion Non-Manual	168.58***	145.81***	166.11***	9.92
	(33.73)	(34.77)	(36.17)	(28.60)
Prop. Non-Manual * Prop. Liberal	−54.72	−71.70*	−55.32	−13.29
	(29.74)	(30.68)	(30.70)	(29.59)
Prop. Non-Manual * Prop. Conservative	−153.27***	−132.10***	−154.10***	−114.36***
	(29.10)	(30.27)	(30.51)	(29.09)
Prop. Non-Manual * Prop. Rad. Left	−118.07*	−83.09	−149.96***	−41.59
	(46.54)	(45.17)	(41.73)	(50.40)
Proportion Skilled Agricultural	67.22	61.65	94.08	−39.93
	(49.28)	(48.16)	(53.87)	(49.37)
Prop. Skilled Agr. * Prop. Liberal	34.27	2.73	−5.13	66.22
	(50.71)	(49.09)	(53.03)	(52.32)
Prop. Skilled Agr. * Prop. Conservative	8.64	0.36	−24.54	6.56
	(51.95)	(49.95)	(55.11)	(53.36)
Prop. Skilled Agr. * Prop. Rad. Left	44.78	83.55	−92.72	125.56
	(131.61)	(121.03)	(142.30)	(140.99)
Proportion Unskilled Industrial	−98.87	−81.85	−46.15	−115.85
	(62.77)	(62.37)	(67.69)	(61.64)
Prop. Unskilled Ind. * Prop. Liberal	116.26	102.47	68.74	99.92
	(65.62)	(64.34)	(69.64)	(64.34)
Prop. Unskilled Ind. * Prop. Conservative	115.20	90.43	66.69	90.42
	(65.65)	(65.71)	(70.56)	(64.24)
Prop. Unskilled Ind. * Prop. Rad. Left	37.50	41.68	−52.34	46.08
	(76.12)	(78.00)	(78.79)	(81.86)
Proportion Low Skilled Industrial	134.50***	119.16***	131.98***	91.34***
	(15.62)	(16.26)	(17.26)	(14.99)

Table C.3: Social Class Composition and MP Franchise Preferences

	(1)	(2)	(3)	(4)
Prop. Low Skilled Ind. * Prop. Liberal	−83.01***	−81.04***	−88.71***	−74.47***
	(15.60)	(16.00)	(16.38)	(15.77)
Prop. Low Skilled Ind. * Prop. Conservative	−104.53***	−88.68***	−111.53***	−99.60***
	(16.57)	(17.09)	(17.80)	(16.45)
Prop. Low Skilled Ind. * Prop. Rad. Left	−132.54***	−102.62**	−155.06***	−112.82**
	(35.87)	(32.57)	(30.20)	(39.53)
Proportion Medium Skilled Industrial	159.54***	143.35***	158.25***	85.43**
	(27.12)	(26.58)	(30.16)	(26.86)
Prop. Medium Skilled Ind. * Prop. Liberal	−107.63***	−103.49***	−120.31***	−112.26***
	(27.58)	(27.13)	(29.44)	(28.44)
Prop. Medium Skilled Ind. * Prop. Conservative	−92.44**	−97.75**	−99.46**	−113.23***
	(29.52)	(29.08)	(31.52)	(29.97)
Prop. Medium Skilled Ind. * Prop. Rad. Left	−139.08**	−121.68**	−153.91***	−127.25*
	(48.98)	(44.58)	(41.99)	(51.97)
Proportion Other	292.28**	198.27*	290.97**	160.25
	(90.27)	(96.77)	(94.60)	(83.45)
Prop. Other * Prop. Liberal	−241.34*	−97.44	−266.09**	−233.25*
	(96.19)	(102.38)	(101.55)	(90.84)
Prop. Other * Prop. Conservative	−166.73	−142.19	−161.31	−99.76
	(94.54)	(101.02)	(99.09)	(87.28)
Prop. Other * Prop. Rad. Left	−438.96*	−244.25	−465.56*	−296.88
	(195.36)	(159.42)	(224.69)	(158.03)
Log Mean Earnings	−49.45***	−34.95***	−48.55***	35.43***
	(9.50)	(9.34)	(11.22)	(2.09)
Proportion Landowners	−2.81**	−2.63**	−3.95***	−4.42***
	(0.96)	(0.93)	(1.01)	(0.99)
Proportion Peers	−2.99**	−2.88**	−3.07**	−2.98**
	(1.04)	(1.00)	(1.04)	(1.08)
Proportion Officeholders	−2.61*	−2.39	−2.85*	−2.62*
	(1.22)	(1.22)	(1.41)	(1.24)
Non Anglican Pastors per 1000 Persons	2.60*	1.69	1.37	−1.19
	(1.19)	(1.13)	(1.34)	(1.03)

Table C.3: Social Class Composition and MP Franchise Preferences

	(1)	(2)	(3)	(4)
Log Population Density	1.22**	1.15**	1.24**	2.03***
	(0.37)	(0.36)	(0.43)	(0.38)
By Election	1.36*	1.71**	0.82	0.85
	(0.65)	(0.64)	(0.70)	(0.68)
Number of Seats	−0.66	−0.39	−0.18	−5.15***
	(0.75)	(0.72)	(0.83)	(0.71)
Constituency REs	✓	✓	✓	✓
Parliament FEs	✓	✓	✓	✓
Observations	8,204	8,204	8,204	8,204
R^2	0.764	0.776	0.770	0.746

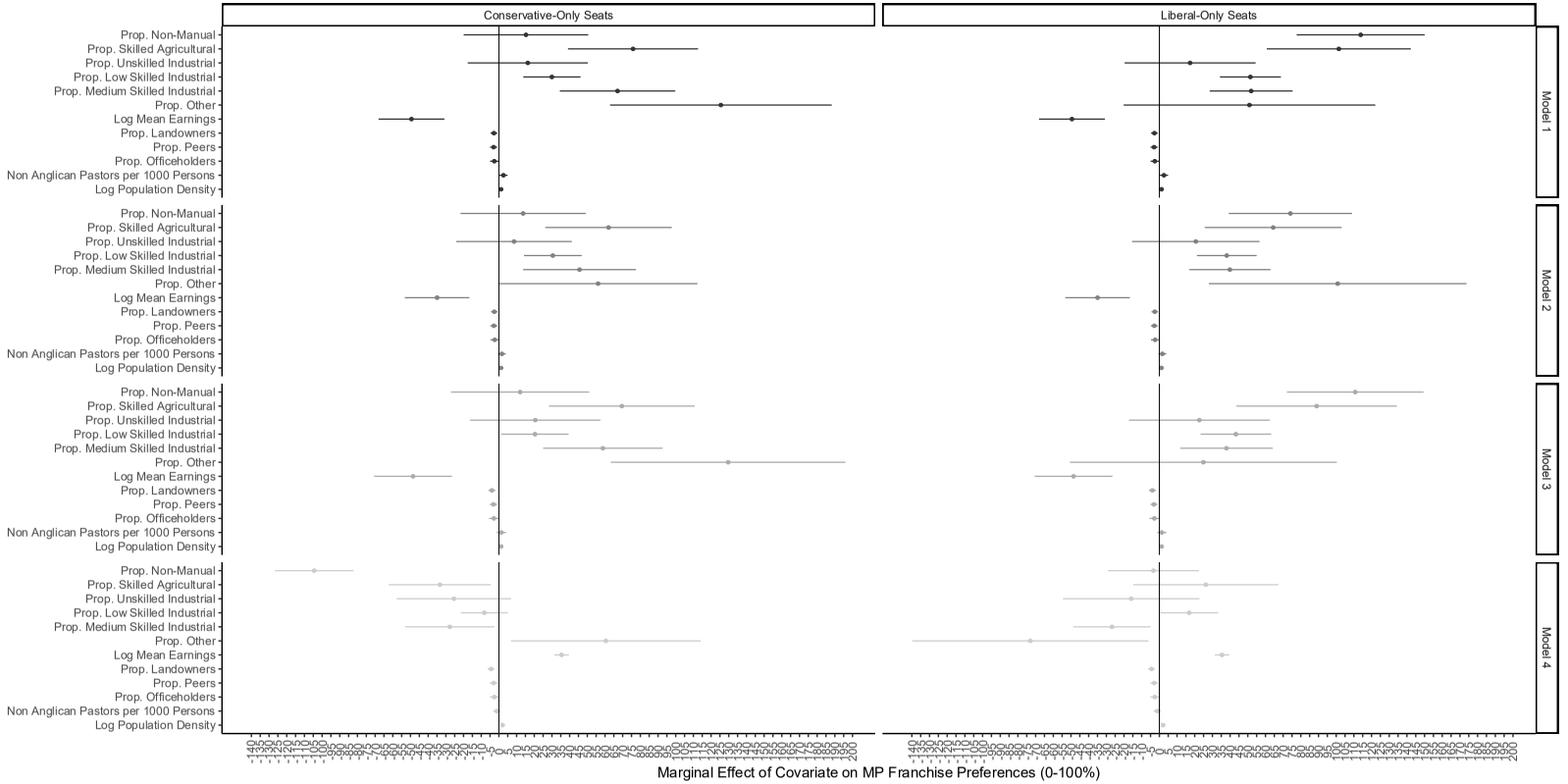
*p<0.05; **p<0.01; ***p<0.001

Note: Cell entries present coefficient estimates from OLS models of MPs' preferences over the size of the male franchise. Standard errors clustered by parliamentary constituency are given in parentheses.

To investigate the implications of the changing class composition of constituencies for legislators' franchise preferences in this period, we re-estimate our baseline specification, Model (1) from Table C.1, after substituting the aforementioned class categories for earnings inequality and the proportion of adults employed in agriculture. The results of our analyses are presented in Table C.3. Figure C.5 plots marginal effects for regressors of interest in Models (1)-(4), conditional on party control. In all analyses, the omitted class category is unskilled agricultural workers, and thus our estimated marginal effects can be interpreted as the effect of displacing unskilled agricultural workers with individuals in another occupation on legislators' franchise preferences, all else equal. Based on our estimates for Model (1) in Table C.3, Figures C.6a–C.6e also plot MPs' predicted franchise preferences while varying party and the proportion of individuals in each class category, holding all other variables constant at their means.

Our results suggest that the falling proportions of unskilled agricultural workers and the corresponding rise in the proportions of skilled agricultural workers (for instance,

Figure C.5: Marginal Effects of Key Covariates based on Table C.3 Estimates

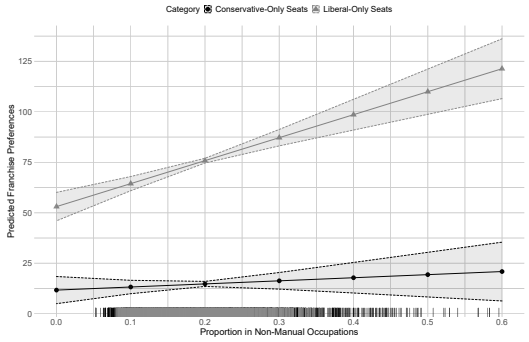


propertied farmers), medium-skilled non-farm workers (principally, craftsmen and foremen) and low-skilled non-farm workers (mainly, the traditional industrial working class) were critical in eroding legislators' opposition to a more inclusive franchise. As attested by the upward slopes in Figures C.6b, C.6c, and C.6e, legislators from both parties were more favorable to franchise expansion when representing constituencies with more skilled farmers, or more medium-skilled and low-skilled non-farm workers (as opposed to unskilled non-farm workers).

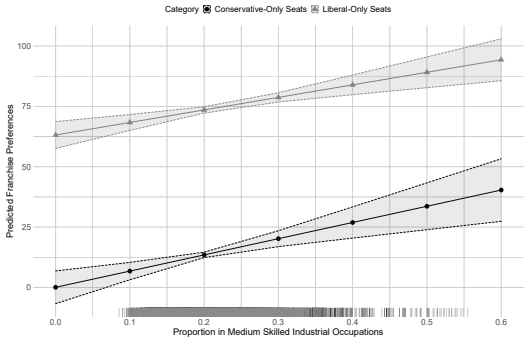
Partisan affiliation mediated the effects of the social structure of each constituency because MPs (particularly those on the left side of the political space) had to arguably reconcile the potential benefits of a broader franchise (receiving the support of the newly enfranchised) with its electoral and distributive costs (a more leftist policy and the correlated loss of votes among its current voting base). The size of the farming community shows a relatively similar (and positive) correlation with both parties' attitudes toward the franchise – with a slightly stronger effect among Liberals. Increasing the proportion of farmers from 0 to 20 percent was associated with a change in the ideal franchise from 69.7 to 90.0 percent among Liberal MPs and from 11.1 to 26.2 percent among Tories (Figure C.6e). Because propertied farmers provided a stronghold again redistributive demands, politicians were likely open toward a more inclusive franchise in those communities. Likewise, a growing proportion of craftsmen and foremen (the main categories within the medium-skilled industrial group) made both parties more amenable to having a broader franchise too (Figure C.6b). Here, its effect appears to have been stronger for Conservative MPs – Tories arguably thought they could attract some of them at the ballot box.

By contrast, the differential effect of social class across parties widened sharply for the traditional industrial working class. All else equal, Liberal MPs representing constituencies with large numbers of low-skilled industrial workers took a clear progressive stance

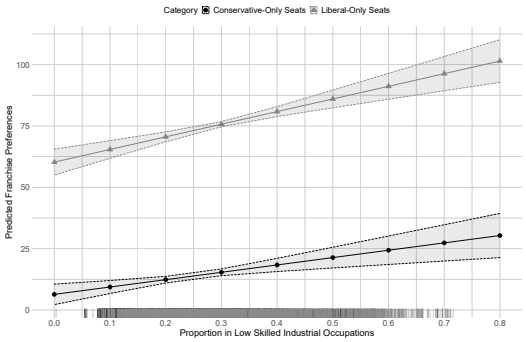
Figure C.6: Pred. Franchise Preferences Conditional on Party and Constituency Composition



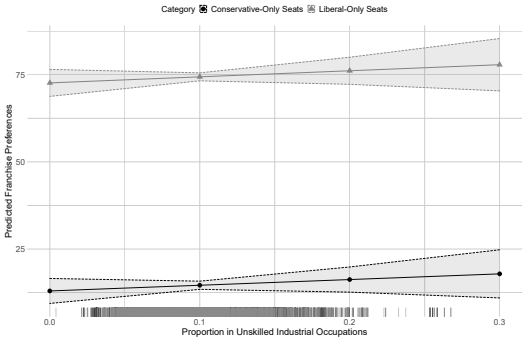
(a) Non-Manual Occupations



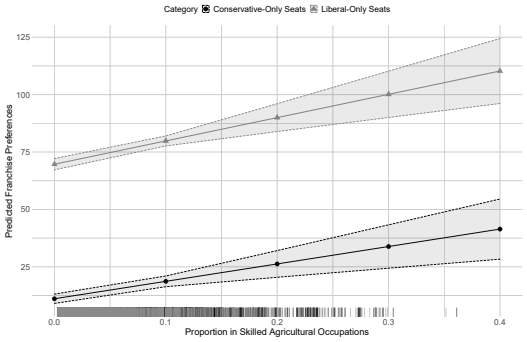
(b) Medium-Skilled Industrial Occupations



(c) Low-Skilled Industrial Occupations



(d) Unskilled Industrial Occupations



(e) Skilled Agricultural Occupations

toward electoral reform. The estimated preferred franchise of a Liberal parliamentarian rose from 60.2 percent in a constituency with no industrial workers to 86.0 percent in a constituency where they represent half of the labor force (Figure C.6c). Meanwhile, Conservatives' antagonistic position was moderately attenuated by the growth of the relatively affluent industrial working class.

The incentives that Liberals may have had to get rid of all income and property suffrage requirements to construct a broader electoral coalition vanished, however, when it came to grant the vote to poor electors. The proportion of unskilled industrial workers is slightly correlated with more progressive positions among both Liberal and Conservative MPs, but in both cases, the marginal effect of an increase in the proportion of constituents employed as unskilled industrial workers on legislators' franchise preferences is not statistically significant at conventional levels (Figures C.5 and C.6d). Our interpretation is that, while enfranchising the most affluent part of the working class made sense for Liberals, the distributive costs of granting the right to vote to poor voters (and losing middle-class supporters) must have outweighed the benefits of going to full universal suffrage.

C.4 Robustness Checks

Table C.4 presents results from a series of robustness checks, and Figure C.7 plots the associated marginal effects for regressors of interest.

Table C.4: Additional Analyses of the Covariates of MP Franchise Preferences

	(1)	(2)	(3)	(4)	(5)
Proportion Liberal	−1.08	−1.25	−45.84	49.54	−49.54
	(0.90)	(1.03)	(35.03)	(107.00)	(56.20)
Proportion Conservative	0.35	−1.03	59.25	45.89	22.42
	(0.92)	(1.04)	(35.68)	(107.70)	(57.36)
Proportion Radical Left	4.65*	2.00	111.12*	80.52	92.06
	(1.81)	(1.95)	(51.88)	(245.54)	(69.73)
Earnings Inequality	−1.53**	−2.04***	−57.60**	−66.02*	−59.82*
	(0.44)	(0.49)	(17.17)	(31.84)	(23.13)
Earnings Ineq. * Prop. Liberal	1.02*	0.99*	31.04	41.08	38.35
	(0.43)	(0.46)	(16.95)	(33.60)	(22.37)
Earnings Ineq. * Prop. Conservative	0.42	0.76	17.99	17.30	25.67
	(0.44)	(0.48)	(17.21)	(33.90)	(22.72)
Earnings Ineq. * Prop. Rad. Left	2.36***	2.03*	77.82***	59.48	74.86**
	(0.66)	(0.83)	(21.13)	(56.65)	(26.96)
Log Mean Earnings	0.16	0.44	11.27	23.28	4.46
	(0.25)	(0.27)	(9.17)	(30.03)	(13.70)
Log Mean Earnings * Prop. Liberal	0.17	0.21	10.69	−13.39	8.83
	(0.20)	(0.23)	(7.70)	(31.77)	(12.39)
Log Mean Earnings * Prop. Conservative	−0.41*	−0.18	−25.36**	−18.02	−20.07
	(0.20)	(0.23)	(7.72)	(31.83)	(12.50)
Log Mean Earnings * Prop. Rad. Left	−1.22**	−0.61	−28.92*	−21.56	−26.56
	(0.41)	(0.45)	(11.86)	(59.31)	(15.35)
Prop. Agricultural Employm.	−1.90***	−2.12***	−58.55***	−50.14*	−64.33***
	(0.28)	(0.30)	(11.85)	(21.94)	(18.00)
Agricultural Employm. * Prop. Liberal	1.94***	2.27***	57.69***	45.96*	68.28***
	(0.26)	(0.29)	(11.80)	(22.94)	(17.54)
Agricultural Employm. * Prop. Conservative	2.01***	2.42***	59.64***	62.09**	66.69***
	(0.28)	(0.30)	(11.97)	(23.23)	(17.97)

Table C.4: Additional Analyses of the Covariates of MP Franchise Preferences

	(1)	(2)	(3)	(4)	(5)
Agricultural Employm. * Prop. Rad. Left	1.92*	2.48**	56.07**	67.22	67.08**
	(0.82)	(0.89)	(21.59)	(46.75)	(24.55)
Borough			9.00*	7.92*	
			(3.90)	(4.01)	
Borough * Prop. Liberal			−8.11*	−6.77	
			(4.10)	(4.21)	
Borough * Prop. Conservative			−7.67	−7.28	
			(4.13)	(4.26)	
Borough * Prop. Rad. Left			−9.79*	−8.58	
			(4.37)	(4.55)	
Proportion Registered					3.01
					(10.52)
Prop. Registered * Prop. Liberal					1.77
					(10.92)
Prop. Registered * Prop. Conservative					2.11
					(10.74)
Prop. Registered * Prop. Rad. Left					3.13
					(13.35)
Proportion Landowners	−0.07**	−0.07*	−3.06**	−2.76**	−3.69***
	(0.03)	(0.03)	(0.93)	(0.93)	(1.05)
Proportion Peers	−0.12***	−0.12***	−3.13**	−3.09**	−2.40*
	(0.03)	(0.03)	(1.01)	(1.00)	(1.10)
Proportion Officeholders	−0.07*	−0.03	−2.40*	−2.24	−3.37**
	(0.03)	(0.04)	(1.21)	(1.23)	(1.24)
Non Anglican Pastors per 1000 Persons	0.04	0.03	1.96	1.78	1.67
	(0.03)	(0.03)	(1.13)	(1.11)	(1.18)
Log Population Density	0.03***	0.03**	0.65	0.63	0.70*
	(0.01)	(0.01)	(0.35)	(0.35)	(0.33)
Prop. Seats Unopposed					27.67***
					(1.71)
By Election	0.03	−0.03	1.30*	1.65*	1.03
	(0.02)	(0.02)	(0.64)	(0.64)	(0.83)

Table C.4: Additional Analyses of the Covariates of MP Franchise Preferences

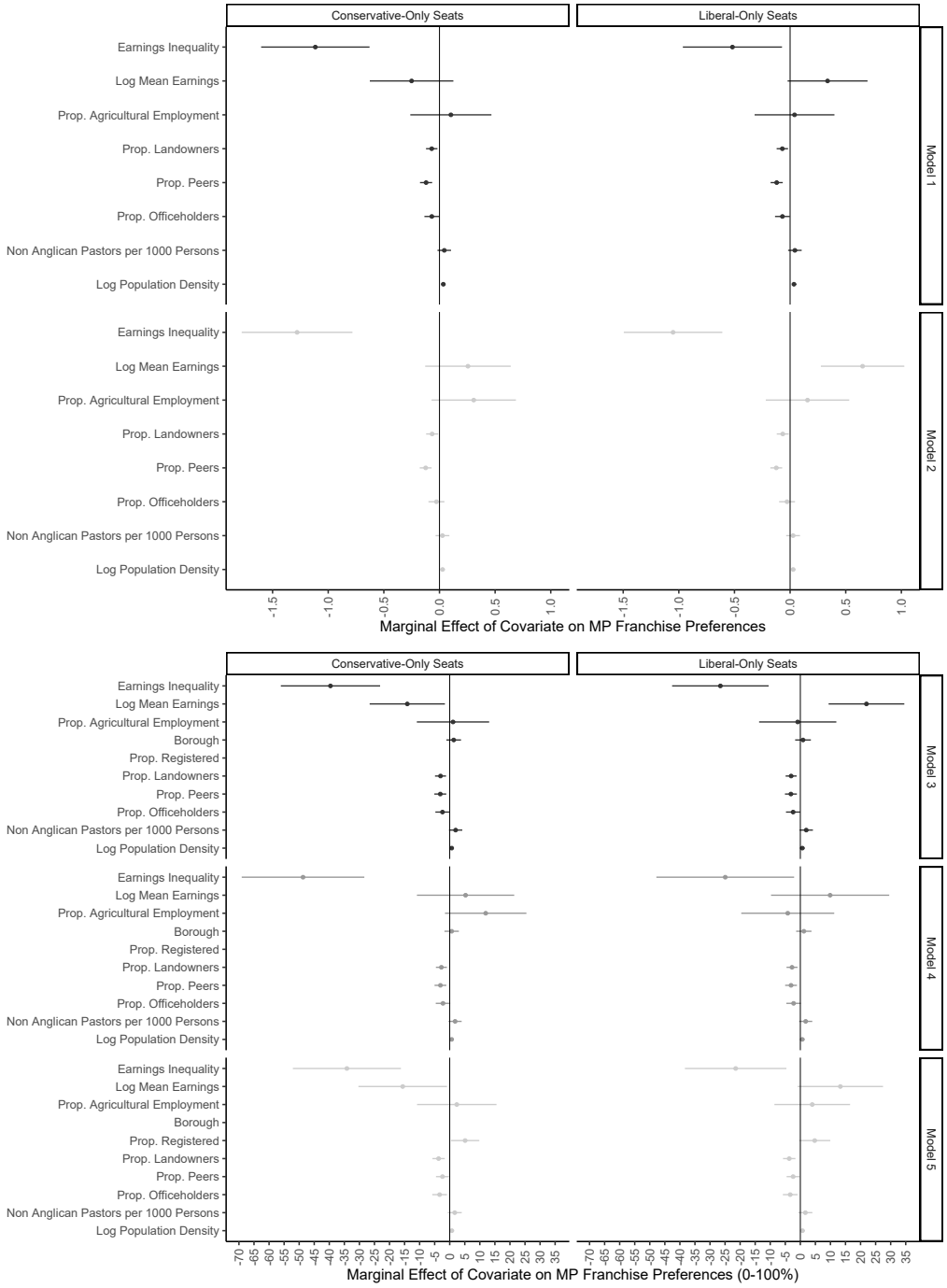
	(1)	(2)	(3)	(4)	(5)
Number of Seats	−0.05*	−0.03	−0.97	−0.24	−1.07
	(0.02)	(0.02)	(0.74)	(0.72)	(0.94)
Constituency REs	✓	✓	✓	✓	✓
Parliament FEs	✓	✓		✓	✓
Party-Parliament FEs			✓		
Observations	8,204	8,071	8,204	8,204	5,573
R^2	0.748	0.740	0.768	0.775	0.779

*p<0.05; **p<0.01; ***p<0.001

Note: Cell entries present coefficient estimates from OLS models of MPs' preferences over the size of the male franchise. Standard errors clustered by parliamentary constituency are given in parentheses.

Model (1) re-estimates the baseline specification from Table C.1, but with a legislator's raw ideal point, on the original ideal point scale (with mean 0 and standard deviation 1) as the dependent variable, instead of his predicted franchise preference on the 0-100% scale. The resulting estimates demonstrate that our results are not spuriously driven by the transformation from ideal point to franchise preferences. Model (2) re-estimates the same specification from Table C.1, also with the dependent variable as a legislator's raw ideal point (on the scale with mean 0 and standard deviation 1), but with the ideal point estimated *without* imputing votes for a legislator in divisions where he was not present. The results show that the imputation procedure we implement is not driving our results either. This may be surprising, because the raw ideal points without imputation show a remarkably different (and implausible) time trend from the estimates with imputation, as shown in Figures 2a and 2b. However, this does not significantly affect the results of our regressions, because the baseline specification includes parliament fixed effects and so produces estimates primarily based on within-parliament, between-constituency variation in legislator preferences. Since imputation chiefly improves our ability to compare legislators that do *not* serve in the same, or neighboring, parliaments, as discussed on p. 9 of the main paper, it is intuitive that, once we include parliament

Figure C.7: Marginal Effects of Key Covariates based on Table C.4 Estimates



fixed effects, we observe a similar relationship between legislators' preferences and their constituency and personal characteristics when these preferences are estimated with and without imputation.

Model (3) replicates the baseline specification from Table C.1, with legislators' predicted franchise preferences on the 0-100% scale as the dependent variable, but adding a dummy variable for whether an observation is a borough or a county seat, interacted with party. This takes into account the possibility that legislators representing boroughs and counties may have disagreed over franchise expansion, as borough and county seats were subject to different franchise restrictions for much of the period. Model (4) further adds party-specific parliament fixed effects to this specification. Finally, Model (5) adds controls for the proportion of uncontested seats and the proportion of adult men registered to vote in a constituency (interacted with party). We find that our key findings are robust to these three additional specifications as well. Across all our robustness checks, we find that lower earnings inequality, but not average income or proportion employed in agriculture, is consistently associated with more progressive franchise preferences for legislators from both parties; We also continue to find that legislators who were landowners, officeholders, or eligible for a peerage were slightly less supportive of franchise expansion than otherwise.

Next, Table C.5 reports results from several regressions estimated at the legislator, rather than constituency-election level. The baseline model in the legislator-level analysis is the following:

$$Y_i = \alpha + \beta_1 L_i + \beta_2 C_i + \beta_3 R_i + \beta_4 X_i + \beta_5 X_i L_i + \beta_6 X_i C_i + \beta_7 X_i R_i + \beta_8 P_i + \delta_i + \epsilon_i$$

The dependent variable Y_i is now the preferred franchise of legislator i, as calculated in Section 2. The independent variables L_i, C_i and R_i denote legislator i's final party affiliation during his career. X_i denotes a battery of social or economic covariates capturing the average characteristics of constituencies represented by legislator i (for instance, the average earnings inequality in constituencies represented by i).P_i represents the personal attributes of legislator i, while δ_i denotes the median parliament in which legislator i served. Additionally, we control for the number of parliaments in which legislator i served. For all models, we report heteroskedasticity-robust standard errors.

Model (1) in Table C.5 presents results for the baseline specification, estimated using OLS. Model (2) omits the control for the median parliament in which a legislator served. Model (3) substitutes raw ideal points for legislators' predicted franchise preferences as the dependent variable. Figure C.8 plots the associated marginal effects for regressors of interests for all four models. Again, we find that our key findings remain robust to these alternative specifications.

Table C.5: Legislator-Level Analysis of MP Franchise Preferences

	(1)	(2)	(3)
Liberal	-573.78^{***}	-489.73^{***}	-16.97^{***}
	(91.79)	(63.24)	(2.93)
Conservative	-474.28^{***}	-400.48^{***}	-16.31^{***}
	(90.25)	(61.51)	(2.92)
Radical Left	-420.74^{***}	-262.62^{**}	-12.96^{**}
	(110.97)	(88.08)	(4.10)

Table C.5: Legislator-Level Analysis of MP Franchise Preferences

	(1)	(2)	(3)
Earnings Inequality	−142.76***	−116.07***	−4.10***
	(37.69)	(26.67)	(1.16)
Earnings Ineq. * Liberal	103.16**	49.72	3.07**
	(38.52)	(27.18)	(1.18)
Earnings Ineq. * Conservative	114.02**	60.08*	3.11**
	(38.32)	(27.17)	(1.18)
Earnings Ineq. * Rad. Left	163.63***	118.81***	4.83**
	(41.43)	(30.59)	(1.44)
Log Mean Earnings	−88.55***	−53.39***	−2.93***
	(20.04)	(12.65)	(0.63)
Log Mean Earnings * Liberal	116.89***	104.59***	3.47***
	(19.52)	(13.14)	(0.62)
Log Mean Earnings * Conservative	78.54***	68.81***	2.96***
	(19.22)	(12.81)	(0.61)
Log Mean Earnings * Rad. Left	75.67**	46.15*	2.38**
	(24.33)	(19.46)	(0.91)
Prop. Agricultural Employm.	−11.10	−2.65	−0.27
	(61.11)	(47.26)	(1.88)
Agricultural Employm. * Liberal	12.69	20.55	0.47
	(60.81)	(47.00)	(1.87)
Agricultural Employm. * Conservative	9.73	18.13	0.44
	(60.91)	(47.02)	(1.87
Agricultural Employm. * Rad. Left	15.53	14.88	0.42
	(62.67)	(48.90)	(2.03)
Landowner	−1.83*	−2.05*	−0.04
	(0.87)	(0.86)	(0.07)
Peer	−2.34*	−2.32*	−0.09**
	(1.05)	(1.09)	(0.03)
Officeholder	−2.18	−1.96	−0.03
	(1.19)	(1.20)	(0.03)
Non Anglican Pastors per 1000 Persons	2.14	2.51*	0.05
	(1.28)	(1.21)	(0.03)

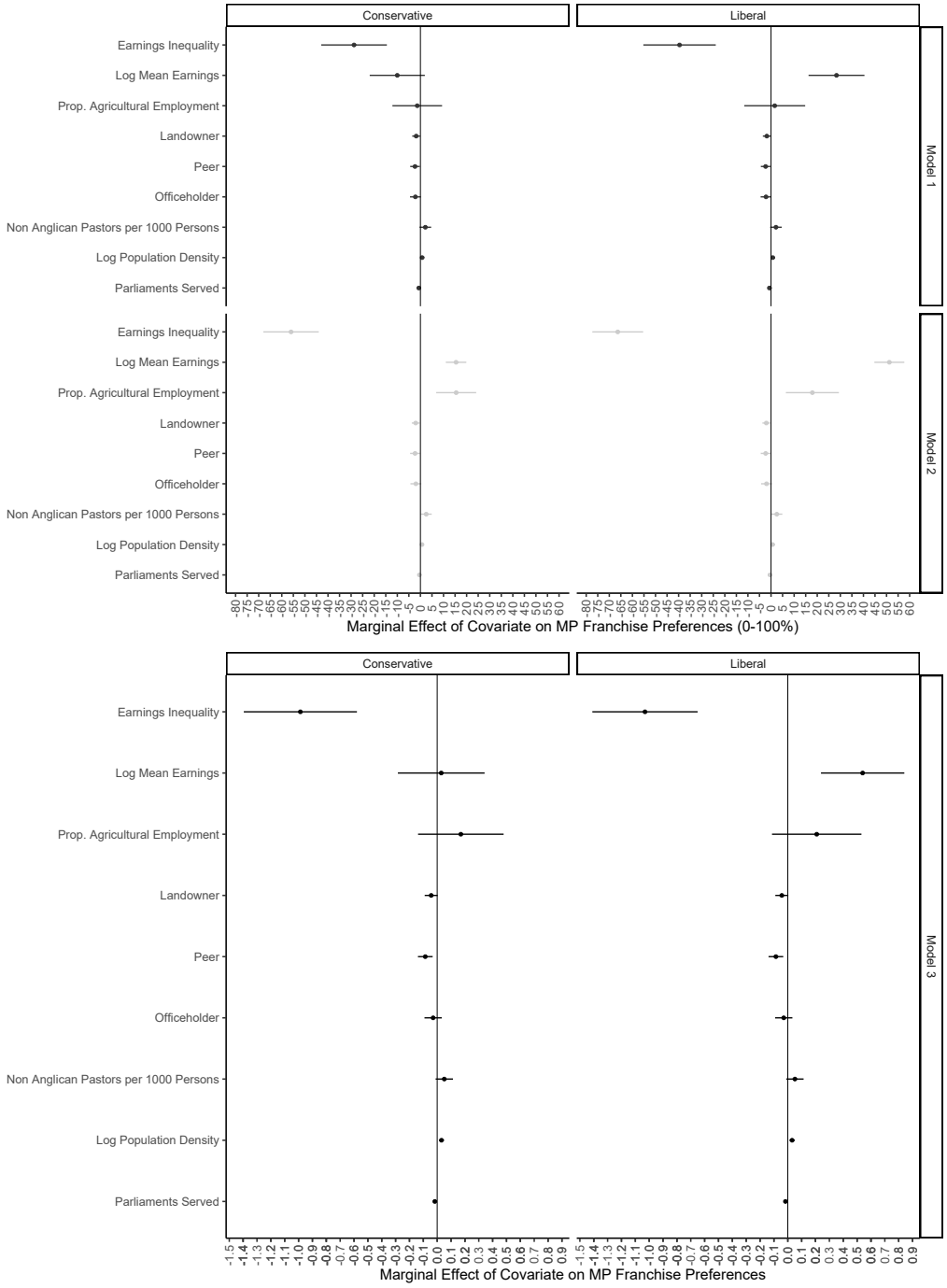
Table C.5: Legislator-Level Analysis of MP Franchise Preferences

	(1)	(2)	(3)
Log Population Density	0.75*	0.66	0.03**
	(0.35)	(0.35)	(0.01)
Parliaments Served	− 0.70***	−0.44*	−0.02***
	(0.19)	(0.18)	(0.005)
Observations	2,978	2,978	2,978
R^2	0.777	0.769	0.774

*p<0.05; **p<0.01; ***p<0.001

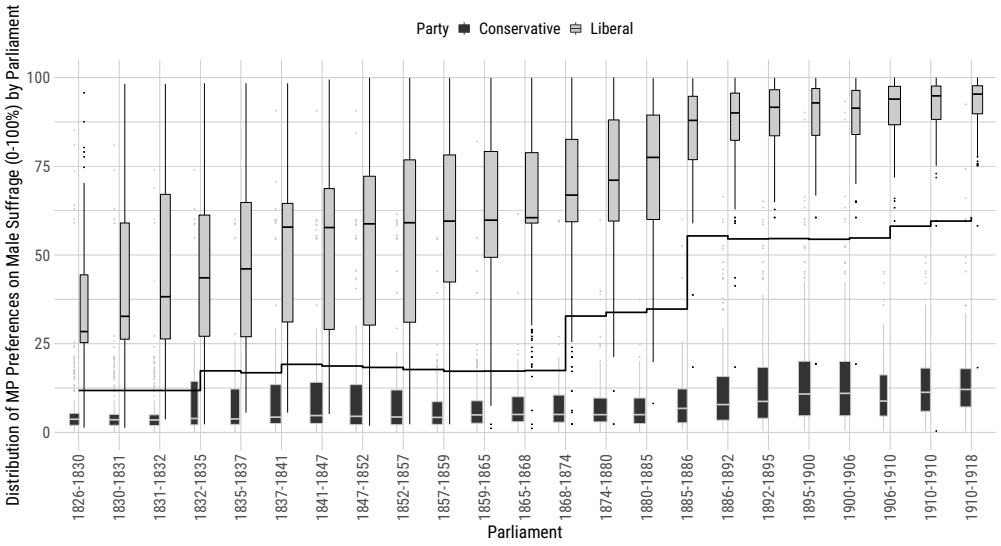
Note: Cell entries present coefficient estimates from OLS models of MPs' preferences over the size of the male franchise. All models include dummies for the median parliament in which an MP served. Heteroskedasticity robust standard errors are given in parentheses.

Figure C.8: Marginal Effects of Key Covariates based on Table C.5 Estimates



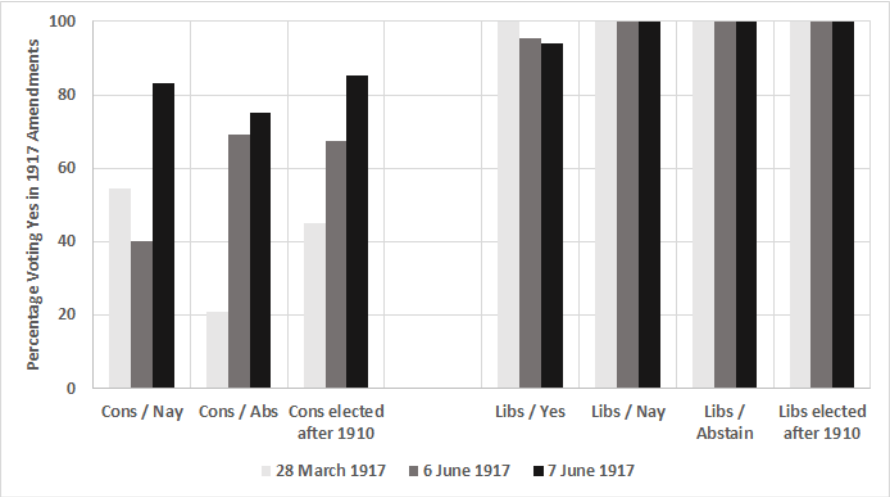
C.5 Change in MP Franchise Votes during WW1

Figure C.9: Major Party Preferences on Male Suffrage, exc. WW1 Divisions



Note: This figure plots legislators' predicted franchise preferences estimated after restricting attention to pre-1914 votes.

Figure C.10: Franchise Votes Before and After WW1 by Party



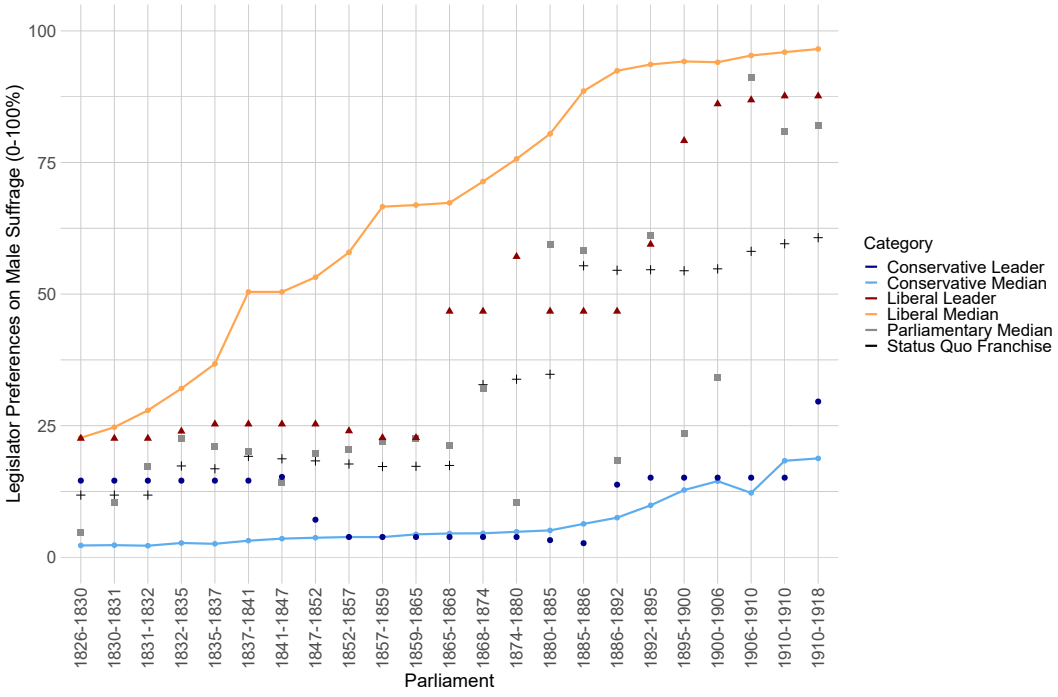
Note: This figure plots the proportion of Conservative and Liberal MPs voting in favor of (near) universal male suffrage in the wartime votes of 1917, conditional on their votes on the 1909 electoral reform bill, which proposed universal male suffrage. We restrict attention to English and Welsh MPs who served in the 1906–1910 parliament.

D Explaining the Timing of Franchise Reform

Legislation responded to changes in the positions taken by MPs in the House of Commons, as expressed over a multitude of parliamentary divisions on electoral matters. However, it did conditional on the preferences of those able to determine the parliamentary agenda. Figure D.1 depicts the prevailing status quo franchise, the ideal points of the parliamentary median, the Liberal and Conservative medians, as well as the Liberal and Conservative party leaders. Notice that, except under Peel, the Conservative leadership coincides with the very restrictive views of the Conservative median. By contrast, the Whig/Liberal leaders (Russell, Palmerston, Gladstone, Cavendish, again Gladstone after 1874) were located below the Liberal median – with positions similar to Liberals in the bottom quartile of the Liberal distribution.

The prevailing status quo in suffrage was correlated with the position of the median parliamentarian throughout the first half of the nineteenth century. The 1826 and 1830

Figure D.1: Party Median vs. Leader Preferences on Male Suffrage



parliaments resisted any reform. The elections of 1831 triggered a Whig victory and the first electoral reform. With the exception of the 1832 and 1835 parliaments – where the median parliamentarian's position was moderately more progressive than the status quo – up until the 1857 parliament, the preferences of the median parliamentarian roughly coincided with the status quo franchise. After 1857 and until the Conservative victory of 1874, the median parliamentarian shifted to the left of the status quo. The Liberal victory of 1857 created a majority in favor of a broader franchise. The median parliamentarian now preferred a franchise including 21.9 percent of all men and the Liberal party median favored a franchise more than three times larger.

Still, it took three legislatures and a conservative leadership to pass the second reform of 1867, due to the distribution of preferences within parties (and, in particular, within the Liberal party) and the role played by governing party leaders in setting the parliamentary agenda. Palmerston, the Liberal party leader in the mid 1850s, had an estimated ideal male franchise of 22.7 percent – an ideal point closer to the Whig faction than the median of his party. Unwilling to open Pandora's box and the door to mass democracy, his 1859 proposal only proposed marginal changes to the post-1832 status quo – a franchise expansion of 2 to 3 percentage points according to our estimations. Russell and the majority of the Liberal party defeated the proposition, leading to new elections. In the following parliament, new proposals, which would have expanded the franchise by 5 to 6 percentage points of the electorate, still failed to pass due to the defection of more moderate Liberal parliamentarians.

Under the stewardship of Derby and Disraeli, the Conservative minority government passed a reform (backed by most Liberals, either through tactical votes or abstention) that shifted the status quo franchise to include about 30 percent of all men. Disraeli's reform derived from the strategic calculations of the Tory leader. Even though the male franchise that, according to our estimations, Disraeli preferred was much lower than the

one that resulted from the reform approved in 1867, the Conservative prime minister calculated that allowing Liberals to take the lead would have resulted in a worse electoral reform for Tory interests over time. With the Liberal party gravitating to the left on the issue, galvanized by the rising political figure of Gladstone and the entry of new, increasingly progressive MPs, the expansion of the franchise was unavoidable. By passing a slightly amplified version of Russell's reform, Disraeli could prevent an even wider reform and, more crucially, attenuate the potential negative impact of a wider electorate on growth of the electorate through three institutional reforms: the net reduction in the number of boroughs, which traditionally leaned toward Liberal candidates, to the benefit of county representation; a process of redistricting that packed urban voters, who naturally supported Liberal candidates, in boroughs, while adding new suburban voters to counties without jeopardizing the Conservative majority in the latter; and the introduction of a so-called minority provision in three-member districts by limiting to two the number of ballots given to each elector – a solution that was strongly resented by Radicals and that tended to favor the entry of Tory representation in urban settings (Seymour, 1915; Smith, 1966).

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