The Political Elite and the Welfare State

Bas Machielsen August 6, 2020

Preliminary version

Abstract

This study attempts to explain the transition from extractive to inclusive economic and political institutions in the Netherlands, which happened from about 1860 to 1920, by focusing on the behavior of the national political elite. I analyze national politicians' voting behavior on several laws involving suffrage extension, the establishment of social programs and sharp increases in taxes and redistribution, and use newly-gathered probate inventories to focus on the role of financial interests of politicians in this process of democratization. I hypothesize that the drift towards inclusive institutions happened because politicians prioritized ideological and religious motives over their financial interests when it came to extending suffrage, which in turn allowed a more diverse pool of politicians to enter the political arena. On the other hand, I argue that these and other politicians financial interests played a large role in their preferences over redistribution and social programs.

1 Introduction

By the early 20th century, most Western European countries had adopted universal suffrage (?), and witnessed large increases in government spending and fiscal redistribution (?) tightly linked to the emergence of the welfare state. By contrast, some 70 years earlier, in the mid 19th century, most countries were in an equilibrium in which both active and passive suffrage were restricted to the richest (male) section of the population, both income and wealth inequality were rampant (??), and redistribution effectuated by the state was practically nonexistent. Clearly, a major role in this development was played by politicians. It was politicians who chose to democratize the political arena, and it was politicians who approved policies that lead to large increases in government spending and redistribution. While previous theoretical (???) and empirical (???) researchers have hypothesized and shed light on several mechanisms at work in this development, the role of politicians, their constituencies, and the backgrounds in the continuity, or change, of an electoral system

and fiscal policy remains unclear. In particular, the role of self-interest of politicians in bringing about reforms needs enunciation.

This study attempts to understand the development from an oligarchic, closed political system, to a democracy with high levels of redistribution by taking a closer look at one European countries that underwent this development: the Netherlands. Starting off in the 19th century as a country in which the King held most power and parliament was mostly powerless, it settled on a Constitution granting parliament more power in 1848, and developed gradually towards a democracy, which is marked by the 1918 introduction of universal suffrage. Furthermore, the introduction of universal suffrage in 1918 was accompanied by a sharp increase in government spending. This was subsequently financed by and large by taxes, given we observe a simultaneous sharp increase in tax burden. We also see a sharp increase in a number measures of fiscal redistribution (?). This leaves us with a number of questions: first, why did politicians, in control of a fairly closed, elitist political system, chose to embark on this path, rather than retaining the rent-seeking society they were in control of? Second, why did we see a gradual movement towards universal suffrage, as opposed to alternative trajectories? And lastly, why does the large, and sustainable increase in government spending happen simultaneously with the introduction of universal suffrage?

To investigate these questions, we focus on the incentives and demographics of politicians and the voting outcomes of several key voting outcomes in both the lower- and upper house. We also investigate politicians in various lower-level functions and, most importantly, executives with explicit law-making authority, i.e., Ministers. Ministers are also most often the authors of concept laws. The incentives we focus on vary from electoral discipline, to the change in electoral discipline over time, to the threat of revolution and social unrest (??), which the contemporary literature often stresses as a major incentive for politicians to support reform. However, most importantly, we attempt to discover the influence of personal financial interest on the decisions of politicians. There are ample reasons we suspect personal wealth is a major determinant of policy. In a principal-agent setting (??), politicians, as the agents, are only expected to carry out their tasks in accordance with the principals' interests to a limited extent under imperfect monitoring. Politicians might want to use the slack they have to engage in rent-seeking, or give priority to their own ideology over the interests of voters (?).

To answer this question, this study features a hand-collected sample of 736 Memories van Successie, probate inventories of Dutch politicians, and attempts to investigate the extent to which wealth and financial interests of politicians influenced their behavior in the political arena. Doing this, it also becomes clear to which the political elite was also an economic elite. In a framework such as that of ?, personal wealth of politicians can have large implications for the (stability of the) equilibrium of the political system. Second, I attempt to analyze politicians' voting behavior and its determinants in the context of roll call votes in three areas. I focus on several key modifications expanding suffrage (1887, 1896 and 1917), on social spending, which

happened in the short period of rapid increase of government spending and redistribution (roughly 1910-1920), and on how the increase in government spending was financed, by looking at contemporaneous laws, but also at several key fiscal changes before and after 1910-1920. In sum, I analyze politicians' voting behavior on a host of important laws that are recognized by political historians as fundamental to the establishment of the welfare state. I also focus on the financing of these laws, and on initiatives that ended up being rejected by parliament.

Empirically, the principal challenge I face consists of finding a good measure for a politician's wealth at the time of voting. The main threat to identification of the true effect of wealth on voting behavior is reverse causation: politicians that exhibit certain patterns of voting behavior might have reaped (financial) rewards, and the obtained estimate of the effect of wealth is biased upwards. In so far as politicians' portfolio composition is correlated with voting behavior, secular differential asset returns might also overstate or understate the effect of wealth on voting behavior in a similar way. I employ various strategies to alleviate these concerns.

First, I rely on exogenous variation in the timing of politcians' deaths. Assuming that politicians' deaths are randomly distributed, and limiting my analysis to politicians who died shortly after having voted on a particular law, it becomes less likely that politicians have incurred a reward for their services to interest groups, and the resulting bias approaches zero. Secondly, I use publicly available data from ? on differential asset returns to estimate politicians' net worth at time of voting, holding portfolio assumption constant. Thirdly, I use an internal model of politicians' wealth. To the extent that politicians are not average investors and are able to realize superior (or different) asset returns, this should become apparent by exploiting the internal variation of wealth among politicians. In robustness analyses, I also use the original proxy, that is, wealth at the age of a politician's death.

In all of the aforementioned strategies, I control for a large number of other plausible determinants of politicians voting behavior suggested by the literature [refs]. In particular, I control for constituent interests by including district-specific demographic and economic characteristics, and I control for electoral incentives by including measures of a politician's popularity, electoral competition and time horizon. Crucially, I also control for political affiliation: given that two politicians have similar affiliation and ideology, and generally exhibit the same *patterns*² of voting behavior, is a politician's wealth still indicative of their voting behavior on a *particular* law? Finally, I control for demographic variables, including a politician's age at the time of voting, and their religious and socio-economic background.

The results show that in many laws, politicians' personal wealth does seem to be correlated with, and have influenced their voting behavior. In a number of laws which laid the foundation for the welfare state, the relationship between a politi-

¹A plausible assumption, for this and this reason.

²The effect of wealth on voting behavior is hereby isolated from potential rewards: if two politicians have the same pattern of voting behavior, and are thus eligible for the same financial reward, if it exists, political affiliation should capture this.

cian's personal wealth and their propensity to vote in favor of redistribution, electoral expansion or increased taxes was negatively correlated, even after controlling for a host of other factors, and after using estimates of wealth which narrowed down wealth differences due to difference in the time of measurement. Furthermore, the results also show that politicians tended to anticipate on the effects of the particular law on their own wealth: for example, politicians with equity-heavy portfolios were less likely to vote in favor of laws taxing equity. This generalizes to a certain extent to other laws and asset classes. Finally, we also shed light on the mechanisms underlying electoral expansion and its motives: whereas it is difficult to analytically link electoral expansion and self-interest, we find that politicians who are elected after an electoral reform are disproportionally responsible for further relaxations in electoral requirements.

This study helps to understand the overlap between the political and economic elite, the influence of franchise extensions on the pool of politicians, and the links between franchise extension, the composition of the political class, and the behavior of politicians individually and as a whole, by shedding light on the seeming paradox of a relatively closed political elite voluntarily giving itself up and enacting policies that are against its own interest.

2 The Political Elite

The Dutch political elite underwent various changes in its composition starting from the mid 19th century. At the inception, the political elite started out as a very narrow section composed of the traditional, intellectual and governing elite of the country: many politicians were either aristocrats, former army officers, or intellectual leaders such as lawyers, theologians, and professors (most often in law) (?). Throughout the 19th century, the political elite underwent several minor changes, as I lay-out below.

In panel A in figure 1 I show the average wealth of each parliament starting from 1860 to 1922. Given the history of suffrage expansions, liberalization, and increase in government intervention, the figure immediately poses a puzzle: politicians remained about as wealthy throughout the entire period of reforms, that is, from 1860 until about 1913. That in itself is a striking fact: the average wealth at time of death of politicians elected by a much more diverse electorate than before was not statistically different from that of their largely aristocratic predecessors. Only after the 1913 elections, the average wealth of lower house members becomes statistically distinguishable from their predecessors in around 1880. Following those and subsequent elections, average wealth begins to rapidly decline towards levels more representative levels. Furthermore, the diversity in wealth also seems to decline. In earlier times, the average politician was likely extremely rich, but there was also a large diversity: standard errors of the mean were close to 100,000 deflated guilders in the 1884-1887 parliament, for example. After 1917, which marked the most radical electoral reforms, the electorate increased from roughly 50% of all males to 100% of all

males (?). On first sight, it seems that the increased accessibility of parliamentary institutions actually had an effect on the parliamentary composition.

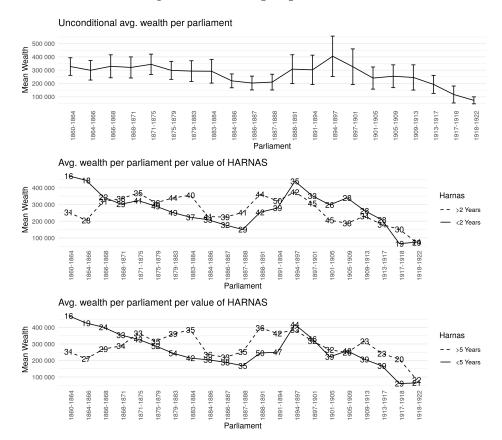


Figure 1: Wealth per parliament

The above panel of the figure shows mean wealth of sampled members of parliament per parliamentary sitting. The error bars mark the 95% confidence intervals. The second and third figures show average wealth decomposed by whether a politician died recently (2 or 5 years, respectively) after leaving office. The numbers show the number of observations in both subcategories.

These figures could be inflated, because it might not only reflect the origin or career activity of politicians before they became politically active. It might also reflect the wealth amassed by politicians after their political career. Indeed, there is a rich literature suggesting that politicians use their connections to the political arena for private gain (see e.g. ???).

Panel B and C of figure 1 attempt to mitigate this concern by decomposing the sample, making use of the variation of date of decease of politicians. A significant share of politicians died fairly recently after leaving office, leaving them little time to profiteer of their political connections, or to otherwise start new career paths that allow them to accumulate wealth. As can be observed, their is no marked difference between both groups of politicians, indicating that politicians that the wealth of politicians is either due to their careers preceding their entry into politics, or, alter-

natively, due to their entry into politics, but not to their activities after their (national) political career.

In other aspects, the Dutch political elite also remained fairly homogeneous: apart from the gradual disappearance of aristocrats from the lower house, the political elite remained by and large characterized by professional bureaucrats, industrialists, theologians, lawyers. The first self-avowed socialist MP, former religious minister F. Domela Nieuwenhuis, was elected in 1888, and the first female MP, Suze Groeneweg, was elected in 1918 (by an all-male electorate).

[To do: Graphic visualization of parliaments according to career, social origin, and political allegiance, and list of 'key' politicians]

This same political elite effectuated the transition from a closed, oligarchical system to a modern-day democracy. From about 1860 to 1920 the Netherlands marked a transition typical of Western European countries from extractive economic and political institutions to inclusive economic institutions underpinned by inclusive political institutions, using the terms of ?. Given the relative homogeneity of the political elite, what made them do this? Why did politicians chose to embark on this trajectory? To answer this question, we focus on several explanations, provided by historians, economists and political scientists alike. Many authors emphasize either the self-interest of politicians (??), the threat of revolution (???), electoral incentives and party discipline (???) or their ideology after all these incentives have been taken into account (????).

This paper focuses primarily on the role of self-interest in the form of politicians' wealth, but not in a traditional way. More specifically, I argue that political overture was caused by a situation specific to the Netherlands, pillarization. The reality of pillarization caused politicians to set aside desires to keep the rent-seeking system in place, and forced political parties and their predecessors, politically-oriented newspapers to prioritize religious or ideological appartenance over wealth and desire to keep the system in place. Thus, I argue that it is not wealth, but electoral incentives based on religious and ideological appartenance that motivated politicians to vote for or against relaxation of suffrage and eligibility requirements.

In addition, I argue that it was these new politicians, who were poorer than the traditional political elite, and did not belong to the traditional political and societal milieu, that forced the overhaul towards more open political and economic institutions, and did so mainly out of self-interest. In this sense, I hypothesize that politicians' wealth and wealth composition played a major role in their voting behavior regarding (i) laws instigating social spending & public goods, and (ii) laws increasing redistribution via taxes or otherwise.

To put these conjectures to the test, I investigate several key voting outcomes in parliament of (i) law projects proposing electoral reforms, (ii) the most important law projects implying hikes in social spending and government intervention, and (iii) laws involving tax hikes or other increases in redistribution. In particular, I focus not only on accepted laws, but also on law projects that did not see the daylight.

In the next section, I attempt to identify the most important laws in each of the three aforementioned categories by an examination of the historical and political science literature, and proceed to analyze the voting in parliament on these laws, as well as several amendments that arguably changed the spirit and effect of the law. In the analysis, I am making use of various strategies to render the proxy for a politicians' wealth at the time of voting reliable: I use historical return data from ? to estimate politicians' wealth if they had been an average investor, keeping asset classes constant. Second, I use supposedly exogenous variation in timing of death and the formation of the inheritance. Third, I make use of the variation of intrapolitician wealth patterns conditional on their age of death and career characteristics.

3 The Welfare State

[Three aspects of the welfare state: what happened and why?, Also: details of all the laws and circumstances]

3.1 Suffrage Extension

3.2 Social Spending and Government Intervention

3.3 Taxes & Redistribution

As mentioned, most of the laws regarding taxes & redistribution, which laid the groundwork for the welfare state, and more crucially, its financing, were enacted in a relatively short subsection of the period under investigation: the liberal Van Der Linden-government 1913-1917

3.4 Overview

[SUMMARIZE ALL LAWS PER CATEGORY (TABLE)]

The routine of accepting a draft law is such that it is first subject to scrutiny and amendments in the lower house, after which it is passed to the upper house. Naturally, the laws that ended up to be rejected by the lower house are only analyzed in the lower house, as those projects never made it to the upper house. The projects that have been rejected in the upper house, but accepted in the lower house are analyzed in both houses.

Table 1: Analyzed Laws

Panel A: Electoral Reforms

Name	Year	Author	Status
Reforms of 1872	1872	Geertsema	Rejected
Reforms of 1887	1887	Heemskerk	Accepted
Reforms of 1892	1892	Tak	Rejected
Reforms of 1896	1896	Van Houten	Accepted
Universal male suffrage	1917	Coalition	Accepted
Universal suffrage	1919	Marchant	Accepted
Panel B: Social Redis	stributi	on & Intervention	-
Name	Year	Author	Status
Poor Laws	1850	??	Accepted
Kinderwetje	1874	Van Houten	Accepted
Arbeidswet	1889	Ruijs de Beerenbrouck	Accepted
Leerplichtwet	1900	Goeman Borgesisus	Accepted
Ongevallenwet	1901	C. Lely	Accepted
Woningwet	1901	Goeman Borgesius	Accepted
Anti-striking Laws	1903	Kuyper	Accepted
Higher Education Laws	1904	Kuyper	Accepted
Wet op de arbeidsovereenkomst	1906	Drucker	Accepted
Beperking kinder- en vrouwenarbeid	1911	Schaper	Accepted
Ziektewet	1913	Talma	Accepted
Ouderdom- en Invaliditeitswet	1913	Talma	Accepted
Staatspensioen	1917	Treub	Rejected
Arbeidswet	1919	Aalberse	Accepted
Panel C: Fi	scal Le	gislation	
Name	Year	Author	Status
Successiebelasting	1878		
Inkomstenbelasting	1893	Pierson	Accepted
Successiebelasting	1911	Kolkman	Accepted
Inkomstenbelasting	1914	Treub	Accepted
Staatsschuldwet	1914		
War Profit Tax	1916		
Successiebelasting	1916		Rejected
Wet dividend- en tantième belasting	1918		
Successiebelasting Increased Tariffs	1921		

The author of a law is the politician or minister that initially proposed the project. Hence, politicians who end up making significant amendments to the law are not considered authors. The principal sources for the laws are ???????.

4 Data Sources

4.1 Voting Records

The data I use come from a variety of sources. First, I use the official Dutch government source www.statengeneraaldigitaal.nl to look up minutes from the relevant sessions in which head votes on a particular law project of interest, as identified in the previous section, took place. The website contains all minutes from the Lowerand Upper House in digital form from about 1815 to present day. The minutes contain presence lists, an overview of project laws and miscellaneous issues to be discussed, followed by a *verbatim* transcription of debates, and finally, a summary of the head vote in favor of a particular law or amendment for any head vote that takes place during a particular seance.

Voting in the Dutch houses takes on a distinctive form: in the session that the law is eligible for a vote, first, all amendments to the proposed law, that is, changes to articles, sometimes drastically changing its meaning and effect, are discussed and voted on. Finally, after all amendments have been either rejected or accepted, the law itself is subjected to a final vote. It is on the basis of this data that I classify politicians as having voted either in favor of the 'progressive' position (1), or against (0).³ I use this classification in all further analyses, to facilitate coherence. The 'progressive position' implies being in favor of increased redistribution, social spending, and suffrage extension at all times. ⁴

All laws have been selected based on the relevance for the welfare state according to the historical literature. Dutch politics was very consensus-driven, so project laws that ended up being rejected are relatively rare. For a complete and unbiased overview, I also subjected some high-profile laws that ended up getting rejected to analysis. This way, I can find out whether incentives worked differently for laws that ended up being (and were perhaps expected to be) rejected, and those that were accepted. Socialists were not necessarily consensus driven, but the work of drafting a concept law which had a very low probability of being accepted was a strong enough disincentive for them to decide against it in the majority of cases.

Not all laws listed in table 1 are in fact subject to analysis. Some laws, of which it was clear that they were going to find a majority, were not subjected to head count vote according to the discretion of the chair of the Houses. The reasons for this could be twofold: either it was clear from the start that the law was going to receive a majority (many World War I-legislation falls under this category), or there was a decisive amendment to the law before the final vote. In the latter case, I look for, and

³The definition is worth keeping in mind: for example, I classify as 1 the politicians who voted *against* an amendment effectively nullifying a suffrage amendment in 1892, and as 0 the politicians who voted in favor.

⁴In reality, some politicians commonly regarded as progressive frequently voted against what is considered the progressive position here, because of many reasons. For example, progressive liberals sometimes rejected proposals on the grounds that it would damage economic growth and make the poor worse off (??)

take the decisive and most controversial amendment, as described and observed by political historians. On the other hand, some other laws did in fact receive a (very) large majority, even in the presence of a head count vote. Apparently, the House chair, and perhaps other politicians did not expect that *ex ante*.

4.2 Biographical Data

Second, I obtain data regarding politicians' careers and social origin from the *Politiek Documentatie Centrum*, a private think-tank focused on Dutch national politics. This dataset contains information about all ministers, lower house, upper house members, as well as provincial executives and deputies. These data encompass information about politicians' places, and times of birth and death, and all functions they occupied during their lifetimes (as far as they are known). These data allow me to determine when politicians were first, and last elected, and allow me to construct variables such as electoral horizon, and social class (by determining whether they have an aristocratic background), and allow me to condition on how soon a politician has died after leaving offices (an important source of variation, as will become clear below). These data also include a classification of a politician's ideology as judged by political historians.

4.3 Electoral Data

Next, I obtain detailed data regarding historical elections from historical by webscraping a repository of Lower House elections. I retrieve data on all elections from 1860-1940. This allows me to identify (i) the competitors of each politicians in each election, (ii) the margin with which an elected politician has won, and (iii) newspaper recommendations and/or party affiliation of the politicians. As mentioned before, in the period of investigation, the political landscape underwent a transformation from an individual to part-based political system. Before political parties existed, politicians were often organized (although more loosely) on the basis of political ideology, and newspaper recommendations serve as a good indication of partisanship in this era (?). I use these data to measure the strength of socialists in particular districts, to measure electoral competition, a politician's momentum, etc. The website also contains data about the religious composition of the population in various years, of which I use the nearest year to a particular election to match an election to the religious composition of a particular district.

4.4 Data on the Presence of Strikes

It is often considered that pressure from socialist constituencies might also serve as an incentive to incumbent politicians to pass progressive legislation. In the context of the Netherlands, this is relatively less likely than in other Western European countries. Socialism was relatively late to take a foothold in the Netherlands, and after

the introduction of universal suffrage, socialist parties ended up with less seats than before. Nevertheless, I take data from the IISG, who provide data on strikes in the Netherlands throughout the nineteenth and twentieth centuries, and aggregate them on a municipality-year, and subsequently electoral district-year level. Together with a variable indicating the vote count in the last election for a socialist competitor (if applicable), this should give a good view of the strength of these and similar incentives to politicians.

4.5 District-level Data

Up until 1917, politicians were elected in a district system. Apart from elections, districts were not an administrative units in the Netherlands, and consisted of municipalities, which were an administrative unit. I use the HDNG-database (?)⁵, a database containing information about demographics, religion, political preferences, mobility and economic activity and development assembled from various government sources from about 1850 to about 1950 on the municipality levels. Districts usually consisted of multiple municipalities, but every major municipality was awarded its own district. Therefore, it seems not problematic to take the economic characteristics of the largest municipalities within a district as reflecting the actual economic characteristics of the district. In any case, I also scrape information from the aforementioned repository about which municipalities belonged to which districts over time, which allows me to compute average indicators per district (for example, averaged on the basis of population size).

4.6 Wealth & Assets

Finally, I use hand-collected probate inventories, *Memories van Successie* from various archival sources. Probate inventories were administered by the Dutch tax administration for the purpose of levying inheritance taxes (universal from 1877 onwards). As a rule, the probate inventories had to be filed with the tax administration at the place of death. I use the given place of death of all [NUMBER] politicians to locate the archival source and retrieve the probate inventory. Oftentimes, however, the probate inventory is filed not in the municipality of decease, but at a location with which a politician had a particular bond during his or her lifetime. Therefore, I employed the strategy of looking for a particular probate inventory in two places: the actual place of death, which is objective, and the place of bonding, which is more subjective and open to judgement. Using this strategy, I was able to find [NUMBER] *Memories van Successie* of former Lower house and Upper house members, as well as executives (*Ministers*).

These probate inventories contain some metadata (including the place of death and time of death, with the help of which the inventories were found), and then

⁵To make the data useable, I created an R package here

(usually) contain a complete list of an individuals assets and liabilities. Two special cases deserve attention: first, some politicians died with 0 or negative net wealth. In a subset of these cases, this is written using words, and an exhaustive list of all assets and liabilities is missing. In other cases, however, the list is there, and net wealth is present as usual. Second, some politicians are claimants to inheritances that are yet to be divided among heirs. In this case, oftentimes all assets yet to be divided are listed, as are all (eventual) liabilities. After a calculation of the net value of the inheritance, the corresponding share of the inheritance accruing to the subject of the probate inventory is added. In some cases, however, the value of the assets and liabilities is directly discounted to the share accruing to the subject of the probate inventory. Finally, sometimes, a claim to an inheritance is sometimes listed describing no underlying assets and merely the value of the claim. Since there were no explicit accounting guidelines, this is often left to the discretion of the tax agent assembling the probate inventory. This is important because it leads to consequences when classifying assets.

I categorize all assets in the probate inventories according to the following table:

Table 2: Caption

Category
Real Estate
Dutch Government Bonds
Foreign Government Bonds
Dutch Private Bonds
Foreign Private Bonds
Dutch Stocks
Foreign Stocks
Cash and other liquid assets
Miscellaneous

In some cases, it is also possible to retrieve who were creditors of the probate inventory's subject. These cases, however, were few, and creditors were mostly private individuals, leaving little benefit to categorization. The aforementioned way of incorporating claims on inheritances in probate inventories leads to the fact that some inheritance claims have been categorized according to asset group, whereas some other inheritances had to be classified as bonds (because they represent claims on other assets). As a whole, however, inheritances represent a negligible, and random, share of assets, leading to the suspicion this is not a major concern.

Taxation of the probate inventories took place in various ways, depending on asset class: first, the value of stocks and bonds that were traded on the Amsterdam stock exchange (be it domestic or foreign) was directly taken from the *Prijscourant*, an official publication detailing the price of all securities on a daily basis. Next, taxation of all other assets is arbitrary. In case of private bonds (credit to other individuals), taxation generally amounts to taking the nominal value of a bond. It does not take

into account the (present) value of interest payments, and neither does it take into account the risk to future cash flows. In case of equities that are not listed, such as a share in a private firm, or real estate, the source of taxation is opaque.⁶ It is supposed that this taxation roughly reflects the actual value of the underlying assets.

Access of the probate inventories is limited due to two reasons. First, practically, only probate inventories up until 1927 are publicly available in the archives. Second, legally, Dutch privacy law stipulates a 75-year period before any government-administered documents about individuals can be made public, which would render all inventories from 1950 onward on available. I obtained limited accessibility from the Dutch tax agency to secure as many probate inventories as possible, especially those pertaining to Lower and Upper House members in the period around World War I, when most far-reaching reforms were implemented. Because access was only limited (in terms of time), the share of found inventories is slightly lower than in other periods. In addition, these archives aren't yet as well-organized as the available archives, making it more difficult to find any probate inventory.

5 Methodology

5.1 Endogeneity of Wealth

5.1.1 Ways in which endogeneity can arise

The fundamental identification problem that I face is that wealth is not randomly distributed: voting decisions by politicians might be determined by a host of factors that are correlated in numerous ways with wealth at the end of their lives. For example, richer politicians might have been born in an ideological milieu that is hostile to redistribution, and might thus be inclined to vote against it. The resulting negative coefficient of wealth is consequently not due to an effect of wealth as a treatment, but rather of factors, such as preferences regarding redistribution, that are correlated with wealth. Secondly, we only directly observe a noisy proxy of wealth, whereas ideally, we want to observe wealth at the time of voting.

Hence, the endogeneity can be divided into two aspects: the effect of voting behavior on wealth after an individual has entered politics, and the selection effect of political ideology, or environment, on wealth, or any factors that lead to wealth not being randomly distributed among politicians at the time of voting. The first issue I address by making various reasonable estimations of wealth, including those that rely on exogenous variation, and those that take into account the possible influence of political color on party formation. These ways are described in the subsection below, and a simple model detailing the issue is provided in appendix A. The second

⁶As of present day, the Dutch tax administration still values real estate in an arbitrary way which differs from municipality to municipality (the administrative unit for real estate taxation). The model used by municipalities is not publicly known.

aspect I attempt to address more traditionally, by means of the inclusion of control variables. In other words, I attempt to counter arguments of the type 'Conservative landowners were already rich by comparing voting results of a richer landowner born in a conservative milieu with a *ceteris paribus* poorer landowner born in a conservative milieu.

There might be several other reasons why wealth at time of voting might not be randomly distributed. For example, newly elected politicians might be more progressive on average than veteran politicians (and hence are more likely to vote in favor of progressive legislation), but might be poorer than the incumbent politicians (??). Hence, the 'state' of the electoral system must also be captured.

Furthermore, politicians represent different districts, all of which might have different (aggregated) preferences. It is well known that before the introduction of universal suffrage, districts required different amounts of taxes paid in order to be eligible to vote and make one's preferences count (?). To the extent richer electorates also tend to elect richer politicians, this means that wealth is not randomly distributed without conditioning on district characteristics. An additional problem is logrolling, identified numerous times before in the literature (???): a politician can make a Pareto-improvement by 'trading' votes with another politician to factor in the intensity of preferences over a certain set of votes.

In order to rule out one set of plausible explanations, we come up with various ways in which to estimate the wealth of a politician at the time before voting. Combining those strategies with controlling for the non-random allocation of Wealth at time t, we attempt to come to a robust estimate of the *ceteris paribus* influence of wealth on the propensity to vote in favor of social, electoral and fiscal reforms.

5.1.2 Strategies of isolating the effect of wealth

In order to isolate the effect of wealth, I use [X] different ways to estimate wealth at the time of voting, in order to isolate the endogenous part arising from differential returns on wealth conditional on voting behavior.

Using the ? data on asset returns: First, I use data on asset composition from ? according to asset origin (non-Dutch and Dutch), year of death and asset class (government bond, private debt or equity) to compute hypothetical portfolio returns on an average portfolio, and provide an estimate of a politician's wealth in the year the vote takes place. This procedure assumes that wealth accumulation takes place according to the following recursive relation:

$$\mathbf{W}_{t} = \mathbf{W}_{t-1} \circ \exp\left(\begin{bmatrix} r_{1} \\ r_{2} \\ \vdots \\ r_{m} \end{bmatrix}\right)_{t-1} + \mathbf{e}_{t-1}$$

$$\tag{1}$$

where W represents the wealth of a politician in a certain asset class $1, \ldots, m$ in a given year. The return on assets of a particular class n in a particular year t, and

e is a zero-mean, zero-covariance disturbance term. I use the return on domestic assets directly, and I compute the return on foreign bonds and shares as a weighted average return of all bonds and shares respectively in all other countries.

Notably, this procedure corrects for different portfolio composition among politicians, but it assumes that $r_{t,n}$ is the same for every politician. Hence, the limitation of this procedure is that it does not take into account the possible existence of either general, or differential political rents (??), which implies that wealth at time $t > t_{vote}$ is correlated with politicians' political affiliation. Not factoring in differential returns to politicians' wealth leads to the concern of overestimating the wealth of politicians to whom political rents accrued. If the latter is positively (negatively) correlated with voting behavior on the particular law, an upward (downward) bias of the coefficient on wealth is introduced. In order to alleviate this concern, I make use of plausibly exogenous variation in the time of death of politicians.

Using plausibly exogenous variation in the timing of death: Some politicians died relatively shortly after voting on particular law projects, leaving little time to accumulate possibly arising political rents. I make inference based on two separate kinds of analysis based on the assumed exogeneity of death⁸. First, I analyze each law individually, constraining the sample to politicians who died shortly after having voted on the law. Second, I pool a number of laws together, constraining the sample to politicians who voted on those laws and dying shortly after. Shortly is defined using two definitions: dying within 2 years of having voted, and dying within 5 years of having voted.

Using an internal model of politicians' wealth: One might argue that the 'average investor' returns in ? do not apply to politicians. Politicians, even before being politicians, might have access to different investment opportunities, or their unobservables (drive to go into politics, intelligence, etc.) might be (either positively or negatively) correlated with their skill as investors. Alternatively, politicians might have systematically different consumption patterns than the rest of the population, skewing the wealth accumulation. On the other hand, there might be nothing systematic about politicians: they might be a highly heterogeneous group of agents with different investment strategies and qualities.

Since I observe the asset composition of politicians' portfolio's, and I have access to differential asset class returns, I can compute the estimated wealth of a politician assuming that portfolio composition remains constant over time.

Additionally, For all these reasons, I estimate a model of politicians wealth as a function of their age conditional on demographic factors, and factors relating to the nature and length of their careers, both inside and outside of politics.

 R^2 of about 20%.

⁷If I were to assume this, it would mechanically lead to the existence of an effect of wealth, as made clear in appendix A.

⁸While there might be a suspicion of richer politicians dying later, leading to non-random distribution of wealth conditional on age, practice shows that this is not the case. In any case, we explicitly control for age at time of voting for politicians

World War I Deflating the inventories (1900 guilders)

5.2 Methods & Variables

5.2.1 Empirical Model

I use a simple logit baseline model, where I define the dependent variable as having voted *in favor of* laws instigating social redistribution, an increased tax burden, or suffrage extensions, according to the following specification:

$$P(\text{Vote}_{it} = Yes) = f(\alpha + \beta_1 \cdot \text{WEALTH}_{it} + \beta_2 \cdot \text{POL}_{it} + \beta_3 \cdot \text{DISTR_ECON}_{it} + \beta_4 \cdot \text{DISTR_DEMO}_{it} + \beta_5 \cdot \text{POL_DEMO}_{it} + \epsilon_{it})$$
 (2)

The principal independent variable of interest is WEALTH_{it}, which is a measure of a politician's (estimated) wealth at the time of the roll call vote. In various other specifications, I employ other proxies of a politician's financial interest, including real estate share, equity share, and foreign and domestic asset shares. The four other variables are proxies for the host of independent variables and controls I incorporate. These variables are very much in line with what is used in studies with a similar objective, such as? and?. POL proxies for a host of factors related to electoral and other incentives: it contains political party indicators, the amount of time a politician has been active in (national) politics, defined as tenure, their age of death, the age of their entrance in politics, the age at the time of the roll call vote, and two measures of the electoral horizon: first, a measure of the time until the end of their political career, and secondly, a measure of the time until the next election (which differed from politician to politician, as elections took place in layers, and because politicians sometimes quit in between elections). DISTR_ECON features various control variables proxying for the demand for legislation from the electorate, including industrial activity, commercial activity, agricultural activity, and measures of poverty and education.

In DIST_DEMO, I include various demographic characteristics associated with the electoral district, such as the religious composition (percentage catholics, protestants, and other), taken from the most recently available census, and district size (in terms of inhabitants per district). Finally, in POL_DEMO, I include the number of strikes in a particular district-year, and proxies for the socialist threat: a dummy variable indicating the presence of a socialist candidate in a particular district, and (if applicable), the vote share of the nearest socialist candidate. It has been shown that revolutionary threat has been an important incentive in other Western Euroepan countries (??). I also include other measures that indicate a politician's popularity, or degree of electoral monopoly, such as the electoral turnout, the margin between the politician and the runner-up, and the percentage of the total number of votes in a district.

5.2.2 Overview of variables

I attempt to infer whether and in what settings personal financial interests of politicians influence their voting behavior, and consequently, the k

I start by outlining the basic specifications and relevant control variables. In the next session, I outline challenges surrounding the endogeneity of wealth, how to mitigate it, and alternative interpretations of the findings.

The basic specifications that I employ are logit regressions, to analyze a binary outcome, that is to say, whether a politician takes the 'progressive' position (1) or not (0) on a head vote of a particular law of interest. In principal agent theory (?), it is generally considered that politicians take into account the interests of the electorate. In a district system, which was in place until 1917, the electorate consists of a particular regional

Table 3: Variables used in the Analysis

Panel A: Dependent variable:

	Turier in Dependent variable.
Vote	Whether a politician has voted in favor (1) or against (0) a law
	Panel B: Wealth variables:
Wealth_VT	Wealth at the time of voting (? estimation)
NW0	Wealth at the time of death
NWE	Wealth at the time of voting (Internal estimation)
TA0	Total (gross) assets at time of death
share_re	Share of real estate (% of total assets
share_bonds	Share of bonds (% total assets)
share_shares	Share of stocks (% total assets)
share_domestic	Share of domestic fin. assets (% total assets)
share_foreign	Share of foreign fin. assets (% total assets)
<u> </u>	Panel C: Economic interest controls
industry_share	Share of labor force in industry
agricul_share	Share of labor force in agriculture
services_share	Share of labor force in services
share_taxes	Share of district in total tax revenues
total_lf	Total labor force in the district
amount_strikes	Amount of strikes in district in the year of voting
	Panel D: Electoral controls
percentage	Number of votes in election preceding the vote
diff	Days elapsed since last election
socialistdum	Dummy whether a socialist was balloteering in the district
socialistpercentage	Percentage of vote garnered by socialist candidates
turnout	Turned out voters over eligible voters
nearestcompetitormargin	Number of votes runner-up - number of votes politician
	Panel E: Demographic controls
polparty	Political affiliation
days_to_next_el	Days to next election
long_elec_horiz	Days until retirement from politics
age_of_vote	Age of politician at the time of voting
age_of_entrance	Age of politician at the time of first entrance in lower house
percentage_geref	Percentage Reformed Protestants in district
percentage_hervorm	Percentage Reformed Protestant in district
percentage_rk	Percentage Roman Catholic in district
percentuge_ik	referrage Roman Cathone in district

6 Analyses

6.1 Main Results

We start out with the following setting: we estimate a model of voting behavior on the estimated wealth at time of voting calculated according to the ? data, appended

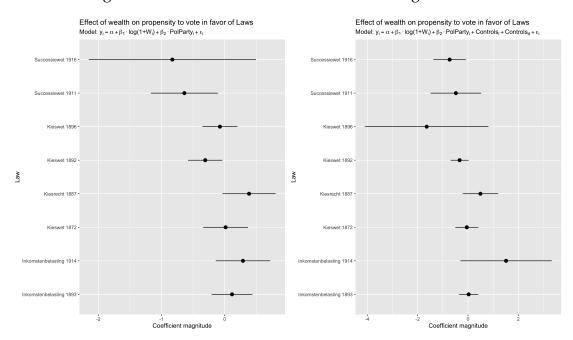


Figure 2: The correlations of wealth and voting behavior

by the political orientation (confessional, liberal, or socialist). This simple model should give some idea of the correlations between wealth and voting behavior, while still taking into account the average differences in wealth between politicians of different political affiliations. We observe in figure 2 that half of the coefficients show the hypothesized sign, and two of them are significantly different from zero with a 90% level, whereas two others are close. In particular, the results from the Inheritance Tax (1911) and the rejected electoral law reforms in 1892 show a strong influence of wealth.

We also observe that the effect of wealth on the voting behavior on the extension of inheritance taxes was also likely negative, although the type I-error is higher than 10% in the left panel. The correlation of wealth with the propensitiy to vote in favor of a law is estimated to be positive in four other cases, namely the Electoral reforms in 1887, the rejected reforms in 1872, and surprisingly, two income tax reforms in 1893 and 1914.

In the right panel of figure 2, we include a host of control variables on the right-hand side of the models. This allows us to control for several important factors, for example, the religious and economic orientation of the district a politician is representing (measured by the amount of adherents to a certain religious denomination, and the share of workers active in industry, services and agriculture respectively). Crucially, we also control for the age of the politician, at the moment of voting, and the time of entrance in the lower house. We take into account the electoral horizon by incorporating the number of days until the next election in the district, and we attempt to control for the (perceived) threat of socialism by including a measurement

of the popularity of socialist candidates in the last election in a given district.

The conclusions based on the left panel still generally hold after controlling for a wide range of control variables: in half of the cases, the influence of wealth on the propensity to vote in favor of a progressive reformist law is negative, and (almost) significantly different from zero at a 10% level. More specifically, we observe that the influence of wealth on the two inheritance taxes is negative, and the estimated variance of the propensity is much smaller after controlling for other factors in both cases, although the point estimate for the Inheritance Tax law in 1911 is closer to zero. Still, with a fairly high degree of confidence, the influence is negative, as was the case in the less strict model.

Furthermore, the conclusions regarding the rejected electoral reforms of 1892 are corroborated after controlling for a wide range of factors: the influence of wealth is negative, and almost significantly different from zero at a 10% level. The point estimate for the Electoral reforms in 1896, which were accepted, is larger in absolute value, but the variance is large, preventing us to conclude that it is different from zero at conventional levels. There are also a few estimates which are close to zero: there is no discernable effect of wealth in the (rejected) electoral reforms of 1872, and neither does wealth appear to play a large role in the voting behavior on the Income tax in 1893.

Paradoxically, the estimate for the income tax in 1914 is positive, implying that the wealthier the politician, the more likely he [or she whatever] is the vote for an income tax, which is counter to the theoretical arguments proposed. However, the variance of the estimate is also large, preventing us to conclude that it is different from zero. These initial results bring forth an important question: the positive effects might still be explained relatively well by a theory predicting that politicians follow their own self-interest by focusing on the composition of the wealth. In an extreme case, suppose that the income tax of 1914 taxed dividends heavily, while leaving real estate wealth largely untaxed. If that is the case, and all rich politicians (who voted in favor) also had large real estate portfolios, the effect of the real estate share on the propensity to vote in favor of the law should be sharply positive, and the effect of the share of politicians' portfolio in stocks should be sharply negative. We will test these conjectures in the remainder of the analysis.

In figure 3, I plot the point estimates and confidence intervals for both real estate share and stock share of the portfolio. Both the left and right panel feature a general model, with similar control variables as the ones that featured in figure 2. Unlike a politicians' total wealth at the time of voting, the share is assumed to remain constant over time, hence it is not subject to an estimation procedure. The first thing to notice is the large variance of the estimate in the case of the 1911 Inheritance law, which wasn't the case in figure 2. Apparently, politicians with similar portfolios showed divergent voting behavior in this law. Similar to coefficient estimates in many other laws, it cannot be ruled out that the effect of real estate share on the propensity to vote in favor of any of these laws is different from zero.

A similar conclusion holds true for the models that estimatee the influence of

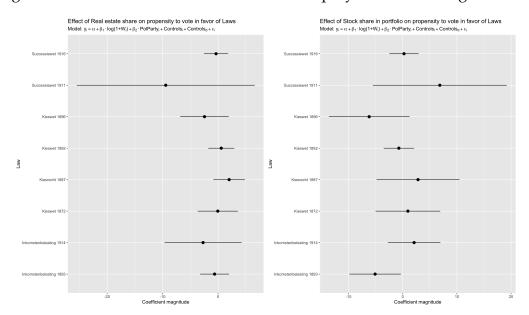


Figure 3: The effect of Real estate share and Equity share on voting behavior

the share of stocks in a portfolio on the propensity to vote in favor of a given law, with one notable exception: the effect of the equity share of the portfolio on the propensity to vote in favor of the income tax of 1893 law is almost certainly negative. It is significantly different from zero at $\alpha=10\%$, implying that politicians who held a lot of equity (in terms of value) were less inclined to vote in favor of the income tax law, which is unsurprising, given that this law stipulated that income from financial assets be subjected to tax liability.

The 1893 income tax also encompassed real estate taxes, so it makes sense that this coefficient is smaller than zero, which is consistent with the point estimate. However, due to the large variance, we cannot rule out that it is in fact larger than zero.

Another important question concerns the generalizability of these results to the upper house. The upper house had a reputation to be more conservative than the lower house, and there were explicit restrictions with respect to taxes paid (hence, wealth) on candidature for the (indirect) elections that made one eligible to be an upper house member. At times, the upper house disapproved of a law accepted by the lower house and saw itself being disbanded by the prime-minister [REF].

[TODO: Analyze real estate share to confirm successiewetten negative coef] [TODO:] What about more conservative upper house?

6.2 Suffrage Extension

Whereas it is easy to link personal interests to taxes and social redistribution, it is less clear why politicians' personal interests would play a role in electoral reforms. The possibility to extract political rents? could serve as a barrier to political reforms,

for politicians would suffer the most from increased competition and an increased likelihood to be voted out of office. In a similar fashion, electoral prospects might also serve as an important driver for supporting reforms: ? find that politicians with an expected gain in constituents are more likely to vote for a reform of the House of Lords in the United Kingdom in the early 19th century. In the Netherlands, such drivers are likely to play a smaller role: politicians' affinity, and own agency with respect to picking a district is doubtful: even before the formation of political parties, politicians often united in so-called *Kiesvereenigingen* to deliberate about the best strategies to pursue to increase electability of their pillar. As soon as political parties were established, these were accorded a large role in determining which candidates were supported. A priori, it seems, that politicians' own interests play a much smaller role, and other factors, such as ideological affiliation play a much larger role. The fact that they did pursue electoral reforms might lead to a suspicion that other factors rather than pure self-interest play a role. Additionally, political historians (??) claim that politicians who entered the lower house after electoral reforms were younger, and more positively inclined towards electoral reforms and universal suffrage than incumbent politicians. The relaxations of several restrictions, particular with respect to active eligibility brought a different population in the lower house. As is depicted in figure 1, median and average wealth in the lower house was dropping towards a level closer to the population average (but still far higher) towards the fin-de-siècle.

We test these conjectures, while controlling for a large number of other factors, in the following figure. The regressions depicted in table focus on the influence of age and date of first election on the propensity to vote in favor of electoral reforms in 1872, 1887, 1892 and 1896 respectively.

As can be seen in figure 4, none of these conjectures is consistent with the data. The effect sizes estimated are so small that the practical effect size is equal to zero: younger politicians were not more likely to vote in favor of electoral reform, and neither were old politicians. On the other hand, it seems that [report or not?] the religious composition of a district was a highly significant predictor of whether a politician would vote against or in favor of an electoral reform, but the sign of the coefficient is not consistent across elections: in the vote on several electoral reforms, politicians representing districts with a higher Roman Catholic share were more likely to vote in favor of the reforms, in other electoral reforms the opposite was true. The Roman Catholic share is almost perfectly inversely correlated with the sum of the two major Protestant denominations, so this could be an indicator that electoral incentives and religious bonds played a role in determining the position of politicians regarding suffrage extension.

6.3 Social Spending

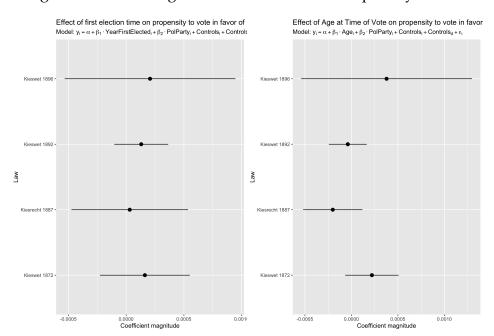


Figure 4: Effect of Age and First Election on Propensity to Vote

6.4 Taxes & Redistribution

[TODO: Income Tax: What is being taxed? Could that be the reason]

6.5 Alternative interpretations

6.6 Robustness Checks

[TODO: Include different proxies of wealth, including raw (deflated) wealth, and internal model-estimated wealth]

7 Conclusions

A Short Model

The dichotomous case: The model consists of two periods, t and t+1, and a random fraction of politicians dies prematurely between t and t+1. Suppose the parliament has a roll call vote coming up at time t, and the parliament is divided into two groups with two wealth levels, $W_{1,t}$ and $W_{2,t}$, W_1 being the rich politicians and W_2 being the poor politicians and a politician belonging to either one of the groups, that is either $i \in W_1$ or $i \in W_2$. Politicians are randomly distributed to W_1 and W_2 conditional on various (observable) characteristics, \mathbf{X} , such as social origin and political affiliation.

Then, the voting by politician i is determined by a Bernoulli distribution with parameter p that is a function of W:

$$V_i(W) = \begin{cases} 1 & \text{with } p \\ 0 & \text{with } 1 - p \end{cases}$$

where

$$p = \begin{cases} p_L & \text{if } i \subseteq W_1 \\ p_H & \text{if } i \subseteq W_2 \end{cases}$$

with a hypothesized $p_H > p_L$. In other words, richer politicians are less likely to vote in favor of the law than poorer politicians, keeping all other factors constant. We are interested in the *ceteris paribus* effect of wealth at time t on the propensity to vote in favor of the law:

$$\mathbf{E}[V|W = w_{1,t}, X] - \mathbf{E}[V|W = w_{2,t}, X]$$
(3)

If we had measured the wealth of politician i at time t, this effect would be identified by the estimate of the coefficient $\hat{\beta}_1$ of an indicator of wealth in the regression $V_i = \beta_0 + \beta_1 \cdot W_i + \beta_2 \cdot X$. An identification problem arises when we assume that wealth at time of measurement, W_{t+1} is correlated with the voting behavior on the law in question. In practice, this could happen because politicians that show certain voting behavior patterns are rewarded by interest groups for doing so, leading to political rents (?). To make it concrete, suppose that a certain unobservable fraction π of politicians in group W_2 at time t gets rewarded for voting against the law at time t by interest groups, leading to them having W_1 (i.e. more wealth) at time t+1. In that case, the regression estimate of the wealth dummy equals:

$$\mathbf{E}[V|W = w_{1,t+1}, X] - \mathbf{E}[V|W = w_{2,t+1}, X] =$$

$$\mathbf{E}[V|W = w_{1,t}, X] + \pi \cdot \mathbf{E}[V|W = w_{2,t}, V = 0, X] -$$

$$(1 - \pi) \cdot \mathbf{E}[V|W = w_{2,t}, V = 0, X] - \mathbf{E}[V|W = w_{2,t}, V = 1, X]$$

$$(4)$$

which makes $\hat{\beta}_1$ in the regression $V_i = \beta_0 + \beta_1 \cdot W_{i,t+1} + \beta_2 \cdot X$ a biased estimate for equation 3 if $\pi > 0$. In order to eliminate this bias, we restrict the analysis to the observations of politicians who have died (presumably exogenously) between t and t+1, leaving no time to be rewarded for their voting behavior. Mathematically, this is represented by the term π approaching zero, meaning fewer and fewer politicians live long enough to be rewarded for their political behavior.

In the preceding discussion, we have assumed that a fraction π of politicians were rewarded for their voting behavior, and a fraction $1 - \pi$ was not. If we could observe π , we could derive an unbiased estimate of equation 3. Suppose now that, other than political rents, there is another variable that is correlated with voting behavior and influences W_{t+1} . For example, some politicians might be offered lucrative

careers in business for prolonged or short periods (??) whereas some others might not (?), or politicians' asset portfolios, and consequently their asset returns, could be correlated with their voting behavior on a roll call vote. Both cases are covered in the methodology produced in section 5.2, because (i) contrary to rewards to voting behavior and the parameter π , politicians' asset portfolios are observed, assuming constant asset composition, and (ii) careers in business can be explicitly captured by the internal model of political wealth incorporating the influence of career trajectories on wealth. A procedure involving an estimation of wealth at time t from wealth at time t 1 explicitly incorporating these variables should therefore lead to an unbiased estimate of W_t (given the usual assumptions, and $\pi \to 0$).

The continuous case: The conclusions from the above model generalize easily to a continuous setting (where politicians can have a $W_{i,t} \subset [-\infty, +\infty]$). In that case, a politician's voting is still determined by a Bernoulli trial, where $p = f(W_{i,t})$ with a hypothesized $\frac{\partial p}{\partial W_{i,t}} < 0$, so that richer politicians are less likely to vote in favor of the law. In this case, we are interested in the derivative of the expected value $\frac{\partial \mathbb{E}[V|W_{i,t},X]}{\partial W_{i,t}}$, which would be identified if we could observe $W_{i,t}$, and we found all relevant confounder variables X.

Suppose now similarly to the discrete case, that at time t + 1, politicians who voted against the law at time t are rewarded and have a net worth of $W_{i,t} \cdot (1 + r)$ at time t + 1:

$$W_{i,t+1} = \begin{cases} W_{i,t} & \text{if } V_i = 1\\ W_{i,t} \cdot (1+r) & \text{if } V_i = 0 \end{cases}$$

Then, the effect of wealth at time t on the propensity to vote in favor of the law is equal to:

$$\frac{\partial \mathbb{E}[V|W_{i,t},X]}{\partial W_{i,t}} = \frac{\partial \mathbb{E}[V|W_{i,t},X]}{\partial W_{i,t+1}} \cdot \frac{\partial W_{i,t+1}}{\partial W_{i,t}}$$
(5)

where the first term is the IV estimate of V through W_{t+1} and the second term is the unknown relationship between W_t and W_{t+1} . This makes the estimate $\hat{\beta}_1$ in the regression $V_i = \beta_0 + \beta_1 \cdot W_{i,t+1} + \beta_2 \cdot X$ biased for $\mathbb{E}[V|W_{i,t},X]$ if r>0. This makes clear that if we assume r to be a particular value, it is endogenous to the effect of interest. Given r>0, the bias is such that it underestimates the true effect. The conclusions parallel the conclusions from the dichotomous case: in order estimate the effect with the smallest amount of bias, we need $r\to 0$, which is to be achieved by restricting the analyses to those politicians who died shortly after having voted (so that they don't have time to accumulate their reward), and we must observe any remaining correlates of V which influence $W_{i,t+1}$ to retain an unbiased estimate.

B Data

B.1 Introduction

In this section, I describe how to proceed from raw voting data, that is to say, from a dataset with two variables, votes and politician names, to a set of control variables as described in section 4. This serves two purposes. First, reproducibility: all analyses becomes instantaneously reproducible. The reader has only to fork the Github repository for this paper ([EDIT] or download the replication package), and execute the R code provided in the online data appendix. All functions have been programmed such as to incorporate a large set of parameters, with the default set of parameters that give the results as reported in this paper. Second, generalizability: provided one has data on voting records for a completely different set of laws, e.g. regarding foreign policy or religious organization, this code can be used to perform similar analyses to the ones performed in this paper.

Since the datasets used in the empirical analysis come from various sources and are available on various levels, at various frequencies, and at various points in time, this appendix serves as an overview of the steps taken from every separate analysis of a roll call vote. The rest of this appendix is structured as a guide, indicating which functions present in the code should be executed at what moment to arrive at a data set suitable for a specific model roll call.

B.2 Primary Data

For an analysis of each and every law, I propose the reader start off with a dataset, which I call dataset, with the following three variables: vote, an indicator variable defined as 1 if a politician voted for the law, 0 otherwise, name, the politician's last name as mentioned in the primary data available on www.statengeneraaldigitaal.nl, and finally, date, the date of the roll call vote.

B.3 Find Politician ID

The first step is to find the politician's ID that contains the information necessary to map the politician to a district, and their demographic characteristics, the two ingredients essential to finding all variables below for the vector of politicians.

To do this, we used find_politician_id, which consists of (i) filtering the list of all available politicians to the politicians which could have been active on the day of the roll call vote (based on political career starting and ending points), and (ii) of using the stringdist package to match these politicians names to their ids. In this step, it might occur that politicians have identical surnames. In the primary data, those politicians are usually distinguished by district they are representing. The only way to solve this is either by finding out which politician belongs to which district, and coding the data more refined, by e.g. adding initials, or by manually replacing the matched id's of politicians with identical surnames.

Note that this and the following step are the only steps which have to be checked manually, and with explicit input from the user (depending on the accuracy of name-id match). After executing the function and manually checking, the user should have a list of all politicians and their id's.

B.4 Find District

After having obtained politician id's, we match politicians to their district at the point in time of the roll call vote by feeding both the politician id and the date of the vote to the function find_district. This is done by merging the politician's id with a dataframe containing information about politicians' districts over time. This step may require manual editing, because the raw data sometimes contains two pieces of information in 1 line. For example, a query to find_district of two politicians at a given date might result in the following (fictional) return:

```
polid | district
00001 | 1870-1880 Rotterdam, 1890-1892 Amsterdam
00002 | Utrecht
```

This leaves the first entry, corresponding to polid 00001 to be edited manually, to either Rotterdam or Amsterdam, depending on the actual date. The reason I leave the user to manually edit this is that the descriptions of the districts are too heterogeneous to write rules for: some descriptions are very extensive, and a simple code chunk instructing to extract only the city and not the years does not result in accurate coding. Following this step, however, no further manual input is required.

B.5 Find Strikes

We proceed by extracting various control variables based on the polid-district-time data that we have. These and the following four functions can be executed in random order, as they make use of two, or all of the keys that we have already acquired. find_strikes looks up the number of strikes in a district in a given year. To do so, it makes use of the IISG strikes database, which provides information about strikes on a municipality-year level. I use information on the Huygens-ING Lower House repository to match the municipalities to districts (these change over time), and then aggregate municipality-level strikes to district-level strikes. The actual function find_strikes uses this information and the districts to merge these with the polid-date-district dataframe.

B.6 Find Religious Composition

The function find_religion uses district-year information to find the *nearest* year in which census data about religious composition per district is available. The raw

data is again taken from the Hugyens-ING Lower House repository, and is not balanced: information from various districts is missing at some points in time, but available at others. The function has a parameter that specifies how far from the specified date on should look for a census relative to a given year: by default, the function looks for census as far back (or in the future) as possible until it finds an entry. The census data contains absolute as well as relative measures of the religious composition, consisting of Catholics, Protestants, and others (i.e. unaffiliated and Jewish individuals).

B.7 Find Politician Demographics

To use this function, one should execute the function find_district, and combine it with a column containing the date of the vote roll call. That data.frame contains the columns polid, toelichting (meaning district), and date. This data.frame should then serve as an input to the function find_demographics, which returns a data.frame with an array of demographic variables: polid, names, gender, start of political career, end of political career, date of death, tenure, age of death, age of entrance in politics, age at the time of the vote, time until end of political career, district, and time until the next election, and political affiliation.

More precisely, the function is taking the district and the date, and uses the elections database to find out when the next election in that district will take place, on the basis of which the time until the next election is compute. Next, the function uses the polid and date to find demographic variables from the PDC dataset, containing among others tenure, start and end period, and full names. Finally, I use the PDC data and a key for political affiliation to construct a political affiliation variable, relating about 100 different political parties to three main ideological currents, i.e. confessional parties, liberal parties and socialist parties. All the dataframes are then merged, and the function outputs the merged dataframe.

B.8 Find Electoral Data

Next, we use the database about election candidates and results to retrieve various characteristics of the latest election in which the politician took part, based on the districts and the date of the roll call vote. In particular, we find the latest election before the roll call vote, and we find the amount of people eligible to vote, and find the turnout. Afterwards, we use the candidates database to retrieve the names of all contenders, and retrieve the margin of the winning candidate to the runner-up, the number of days since the last district election, the percentage of votes received by the winning politician, an indicator whether a socialist was running (using the electoral recommendations by the largest socialist organ, the SDAP), and the amount and percentage of socialist votes in a particular district, as measured by the amount and percentage of votes for the candidates that were the object of those recommendations).

B.9 Find Economic Data

We use the function find_econcontrols to merge the data with a selected section of controls deemed to proxy for the economic characteristics of the district politician i is representing. We use the HDNG dataset to compute and extract two sets of variables: first, the decomposition of employment into various sectors, and second, a measure of relative wealth of the municipality. The first measure, a decomposition, is calculated by using the available data from surveys the Dutch government took at three available times. The surveys have featured slight modifications over time, so they are not intertemporally comparable [ref Peeters 2020], but they are cross-sectionally comparable. The survey features count variables of around 50 professions on a municipality level. We aggregate these professions into three categories: agriculture, industry, and services, and then compute the share of the active labor force in these sectors. Second, we use a measure of municipal wealth. We extract from the dataset a variable on the municipality level containing the share of taxes from residents of a municipality in total taxes in a given year. Of course, in the analysis, the survey closest to the date of voting are used.

B.10 Find Wealth

As mentioned, I use the "Rate of Return on Everyting" (?) dataset to compute average returns on asset classes. The dataset features 16 countries in total: Australia, Belgium, Canada, Denmark, Finland, France, Germany, Italy, Japan, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the UK and the United States. In general, the overlap with the actual origin of assets is large. Because my portfolio decomposition only makes a distinction between Dutch and non-Dutch assets, I employ weights, according to which I estimate foreign portfolio's shares return. In the default setting, and in line with anecdotal and more systematic evidence (REF to Gelderblom, Jonker, de Vicq, Peeters), I accord weights of 20% to German returns, 20% to French returns, 10% to Belgian returns, 10% to US returns, 10% to British returns, 10% to Italian returns and 20% equal-weighted to all other countries, which amounts to 2% per country. In general, the results are not sensitive to deviations in the weights employed.

I employ the following correspondence between the present portfolio decomposition and the portfolio decomposition of the RoROE dataset: Government bonds \rightarrow bond_rate, Real estate \rightarrow housing_rent_rtn, Private bonds \rightarrow ltrate, Shares \rightarrow eq_tr, Cash & Misc \rightarrow No rate. In other words, I assume that cash and miscellaneous assets, e.g. jewelry (in general, small parts of the portfolio) yield no returns. I interpolate missing values by means of the average return on safe assets in that year for each country.

For each particular roll call vote then, find_wealth finds the years between the politician's death and the vote, and computes the continuously compounded return on the politician's portfolio weighted by asset class in the portfolio. Hence, this

should be a good approximation of wealth at the time of voting if the politician is an average investor.

The dataset also features a variable that measures the average return on capital. In further robustness analyses, I employ this measure, but it has very little effects on coefficient magnitudes in the main analysis.

B.11 Conclusion

All these data together can then be combined in a model roll call such as:

```
dataset %>%
   glm(wealth ~ x1 + x2 + x3 + x4,
        family = binomial(link = "logit")
)
```

C Results in Tables

C.1 Lower House - Before 1918

C.1.1 Taxes

Table 4: Analysis of Fiscal Legislation

	IB 1893	IB1914	Depender SW1878	nt variable: SW1911	SW1916	GD 1914
$\log(1 + \text{wealth_timevote})$	(1) 0.026 (0.229)	(2) 0.815 (0.558)	(3) -0.635 (0.514)	(4) -0.483 (0.609)	(5) -0.828 (0.802)	(6) -2.543* (1.401)
agricul_share	-4.074 (4.377)	-5.562 (8.182)	-74.615 (48.591)	-3.970 (6.166)		3.431 (14.561)
share_aandeel	-23.729 (37.810)		335.389 (301.163)			
amount_strikes	0.759 (1.574)		8.067 (3,854.094)			0.330 (0.473)
Percentage	0.009 (0.036)		-0.035 (0.035)			
Turnout	-1.040 (2.994)	16.792 (12.167)	-30.171** (13.665)	3.015 (13.955)		22.707 (27.164)
days_to_next_el			-0.010 (0.013)	-0.086 (74.186)		
age_of_vote	-0.00001 (0.0002)		0.0001 (0.0004)			
RK_pct	-0.052** (0.025)	0.018 (0.038)	-0.090** (0.044)	0.077 (0.058)		0.022 (0.065)
socialistpercentage				0.060 (0.268)		
polpartyliberal	2.458** (0.987)	19.149 (4,548.042)	16.352 (10.448)	20.158 (4,217.096)	25.536 (6,717.166)	4.716 (3.928)
polpartysocialist		21.910 (6,122.563)		20.312 (6,175.211)	23.818 (10,162.430)	8.951* (4.824)
Constant	1.399 (4.791)	-20.805 (14.612)	32.331** (14.819)	73.316 (61,574.090)	6.138 (7.973)	-2.781 (18.000)
Observations Log Likelihood Akaike Inf. Crit.	59 -21.143 62.287	31 -6.020 26.039	53 -8.397 38.795	42 -7.557 33.113	36 -2.927 13.854	35 -5.512 27.025

Note:

*p<0.1; **p<0.05; ***p<0.01

IB = Inkomstenbelasting, SW = Successiewet, GD = Staatsschuld

Table 5: Analysis of Fiscal Legislation

		E	Dependent varial	ble:	
	(1)	(2)	(3)	(4)	(5)
log(1 + wealth_timevote)	-0.143* (0.083)	-0.169* (0.089)	-0.160 (0.142)	-0.238** (0.100)	-0.249** (0.103)
agricul_share			-5.094** (2.576)		
share_aandeel			-10.393 (11.313)		
services_share					0.400 (0.840)
nearestcompetitormargin					0.007 (0.009)
amount_strikes			0.365 (0.338)		-0.051 (0.065)
Percentage				0.005 (0.008)	-0.001 (0.013)
Turnout				-0.800 (1.033)	-0.737 (1.077)
days_to_next_el			0.001 (0.001)	0.0002 (0.001)	0.0001 (0.001)
age_of_vote			-0.0001 (0.0001)	-0.0001 (0.00004)	-0.0001 (0.00005)
RK_pct		-0.015** (0.006)	-0.022** (0.009)	-0.023*** (0.007)	-0.023*** (0.008)
polpartyliberal	2.354*** (0.305)	2.061*** (0.366)	2.863*** (0.692)	2.090*** (0.386)	2.174*** (0.443)
polpartysocialist	3.195*** (0.756)	2.493*** (0.793)	15.564 (1,321.912)	2.387*** (0.816)	2.620*** (0.890)
Constant	0.951 (0.901)	1.937* (1.066)	2.885 (2.310)	4.446*** (1.677)	4.365** (1.838)
Observations Log Likelihood Akaike Inf. Crit.	301 -153.342 314.684	269 -135.214 280.428	138 -55.048 130.097	247 -118.597 255.194	237 -112.646 249.293

Note:

Table 6: Splitting up the effects of Models (4) and (5)

	Depend	ent variable:
	(1)	(2)
services_share		1.551
		(1.109)
nearestcompetitormargin		0.002
7		(0.012)
amount strikes	0.021	0.071
amount_strikes	(0.103)	(0.117)
_	, ,	
Percentage	0.005	0.009
	(0.010)	(0.016)
Turnout	1.006	0.896
	(1.374)	(1.464)
days_to_next_el	-0.002	-0.002
aays_to_itext_ei	(0.002)	(0.002)
	, ,	, ,
age_of_vote	-0.00004	-0.0001
	(0.0001)	(0.0001)
RK_pct	-0.021**	-0.026***
<u>-1</u>	(0.009)	(0.010)
polpartyliberal	3.611***	3.298***
polpartyliberal	(0.634)	(0.639)
	` ′	, ,
polpartysocialist	5.351***	5.179***
	(1.409)	(1.504)
log(1 + wealth_timevote):lawInkomstenbelasting 1893	-0.408***	-0.422***
	(0.141)	(0.148)
/1	0.072	0.024
log(1 + wealth_timevote):lawInkomstenbelasting 1914	-0.073 (0.146)	-0.024 (0.159)
	(0.110)	(0.10)
log(1 + wealth_timevote):lawStaatsschuldwet 1914	-0.707***	-0.745***
	(0.164)	(0.174)
log(1 + wealth_timevote):lawSuccessiewet 1911	-0.167	-0.221
	(0.135)	(0.146)
og(1 ryoglib timegrate)	0.440***	0.440***
log(1 + wealth_timevote):lawSuccessiewet 1916	-0.440^{***} (0.153)	-0.442*** (0.163)
	(0.100)	
log(1 + wealth_timevote):lawSuccessiewet1878	-0.334**	-0.354**
	(0.137)	(0.144)
Constant	4.502*	4.214
	(2.443)	(2.711)
Observations	247	237
Log Likelihood Akaike Inf. Crit.	-82.173 194.346	-75.790 185.580
manc na. Cit.	174.040	100.000

Note:

C.1.2 Social Redistribution

Table 7: Analysis of Social Redistribution

		Depender	ıt variable:	
	AS1903	ACW1907	HOW1904	KW1874
	(1)	(2)	(3)	(4)
log(1 + wealth_timevote)	-0.077 (0.488)	0.069 (0.278)	-0.417 (0.840)	-0.122 (0.622)
polpartyliberal	0.056 (15,588.090)		93.863 (31,994.790)	20.181 (6,506.190)
polpartysocialist	-24.766 (8,791.647)		214.737 (71,166.250)	
services_share		0.708 (1.788)		4.187 (5.439)
nearestcompetitormargin				-0.042 (0.035)
amount_strikes		0.237 (0.207)	-17.199 (6,020.009)	18.833 (5,007.253)
Turnout		-3.310 (5.087)		
RK_pct		-0.060** (0.025)		-0.012 (0.026)
age_of_vote			-0.0003 (0.0005)	0.0001 (0.0002)
Constant	23.402 (8,791.648)	2.353 (5.554)	6.948 (12.731)	-0.606 (9.551)
Observations Log Likelihood	53 -3.127	34 -15.608	52 -3.410	43 -8.764
Akaike Inf. Crit.	14.253	43.217	18.819	33.528

Note:

Table 8: Analysis of Social Redistribution

		E	Dependent varia	ble:	
	OGW1901	SP1916	WOI1913	WW1901	ZW1913
	(1)	(2)	(3)	(4)	(5)
log(1 + wealth_timevote)	-0.646 (0.518)	-0.237 (0.350)	-2.761 (3.467)	0.379 (1.245)	-0.949 (0.610)
nearestcompetitormargin	0.010 (0.024)		-0.041 (0.094)	-0.015 (0.068)	
Turnout	17.651** (7.675)				-2.213 (9.822)
amount_strikes		0.533** (0.223)	-0.401 (0.770)	9.301 (4,764.681)	-0.025 (0.181)
days_to_next_el	-0.135 (36.293)	-0.00001 (0.007)			
age_of_vote	-0.0001 (0.0002)	-0.0001 (0.0001)		0.0004 (0.001)	
RK_pct	0.020 (0.026)	-0.079** (0.039)		0.088 (0.114)	
polpartyliberal	2.276 (1.544)		36.060 (6,298.349)	21.274 (10,622.490)	-24.156 (4,468.723
polpartysocialist	19.099 (6,580.320)		38.937 (8,107.892)	24.135 (16,416.910)	-5.574** (2.773)
Constant	70.181 (19,888.540)	5.138 (5.399)	24.628 (33.797)	-12.614 (22.269)	16.105 (12.458)
Observations Log Likelihood Akaike Inf. Crit.	41 -10.177 38.355	31 -12.982 37.963	40 -2.587 17.173	34 -4.358 24.716	36 -6.492 24.983

Note:

Table 9: Analysis of Social Redistribution

		De	pendent varia	ble:	
	(1)	(2)	(3)	(4)	(5)
log(1 + wealth_timevote)	0.006 (0.059)	-0.002 (0.065)	0.005 (0.067)	0.004 (0.077)	0.005 (0.114)
agricul_share					-1.770 (1.571)
share_aandeel					107.558* (60.238)
amount_strikes					0.111 (0.123)
Percentage				0.0003 (0.008)	0.002 (0.011)
Turnout				-2.194** (1.103)	-0.645 (1.588)
days_to_next_el			-0.001 (0.0004)	-0.001 (0.0004)	-0.001** (0.001)
age_of_vote			-0.00003 (0.00003)	-0.00002 (0.00004)	0.00000 (0.00005)
RK_pct		0.0002 (0.004)	-0.0004 (0.004)	-0.001 (0.005)	-0.0001 (0.006)
polpartyliberal	2.540*** (0.315)	2.580*** (0.408)	2.612*** (0.410)	2.614*** (0.416)	2.994*** (0.583)
polpartysocialist	1.500*** (0.327)	1.382*** (0.412)	1.321*** (0.419)	1.412*** (0.443)	1.443** (0.681)
Constant	-0.101 (0.645)	-0.059 (0.766)	0.671 (0.966)	2.285 (1.492)	0.870 (2.082)
Observations Log Likelihood Akaike Inf. Crit.	505 -261.434 530.868	391 -217.522 445.044	386 -212.655 439.310	341 -179.234 376.467	236 -105.175 234.350

Note:

Table 10: Analysis of Social Redistribution

	Depende	ent variable:
	(1)	(2)
services_share		0.323 (0.776)
nearestcompetitormargin		0.011 (0.010)
amount_strikes	0.062 (0.060)	0.095 (0.065)
Percentage	, ,	-0.003 (0.014)
Turnout		2.720* (1.579)
days_to_next_el	-0.002 (0.002)	-0.003 (0.002)
age_of_vote	-0.00001 (0.00004)	0.00000 (0.0005)
RK_pct	-0.002 (0.005)	-0.002 (0.007)
polpartyliberal	3.642*** (0.513)	3.625*** (0.544)
polpartysocialist	2.059*** (0.543)	2.240*** (0.577)
og(1 + wealth_timevote):lawAntistakingswet 1893	0.250** (0.118)	0.317** (0.139)
og(1 + wealth_timevote):lawArbeidscontractwet 1907	-0.037 (0.141)	0.044 (0.162)
og(1 + wealth_timevote):lawHoger Onderwijswet 1904	-0.179* (0.092)	-0.131 (0.107)
og(1 + wealth_timevote):lawKinderwetje 1874	0.168* (0.095)	0.258** (0.115)
og(1 + wealth_timevote):lawLeerplichtwet 1901	-0.194** (0.092)	-0.155 (0.102)
og(1 + wealth_timevote):lawOngevallenwet 1901	0.090 (0.092)	0.134 (0.107)
og(1 + wealth_timevote):lawStaatspensioen 1916	-0.148 (0.099)	-0.144 (0.112)
og(1 + wealth_timevote):lawWet Ouderdom Invaliditeit 191	, ,	-0.253** (0.120)
og(1 + wealth_timevote):lawWoningwet 1901	0.139 (0.122)	0.102 (0.129)
og(1 + wealth_timevote):lawZiektewet 1913	-0.052 (0.108)	-0.152 (0.123)
Constant	1.062 (1.410)	-1.418 (2.179)
37	(1.410)	(2.179)
Observations Log Likelihood Akaike Inf. Crit.	386 -145.818 325.635	328 -121.289 284.577

Note: *p<0.1; **p<0.05; ***p<0.01

C.1.3 Electoral Law

Table 11: Analysis of Suffrage Extension

		Dependen	t variable:	
•	1872	1887	1892	1896
	(1)	(2)	(3)	(4)
log(1 + wealth_timevote)	-0.047	0.493	-0.353*	-1.127
	(0.278)	(0.426)	(0.214)	(0.773)
agricul_share	53.090	-10.104	5.888*	-27.764**
0 –	(35.821)	(16.768)	(3.158)	(13.261)
share_aandeel	-28.835	165.091	26.821*	-33.021
	(19.303)	(158.612)	(13.862)	(224.322)
amount_strikes	-0.898	-19.177		0.537
	(0.754)	(4,281.975)		(0.658)
Percentage	-0.026	0.288	0.013	
Ü	(0.030)	(0.268)	(0.023)	
Turnout	-16.147**	-12.351	3.693	
	(7.225)	(9.841)	(2.350)	
days_to_next_el	0.022**	-0.159		
	(0.011)	(246.285)		
age_of_vote	0.0002	-0.0001		0.0003
	(0.0002)	(0.0003)		(0.0002)
RK_pct	-0.083*	-0.119	-0.034*	0.154**
-	(0.043)	(0.074)	(0.019)	(0.066)
polpartyliberal	1.295	39.942	2.001**	10.009**
	(0.965)	(8,563.952)	(0.826)	(4.316)
polpartysocialist			17.680	28.986
			(2,399.545)	(4,443.680)
Constant	1.212	27.574	-0.919	1.466
	(5.038)	(39,898.110)	(3.070)	(8.707)
Observations	44	55	64	47
Log Likelihood	-15.756	-9.328	-28.313	-7.981
Akaike Inf. Crit.	53.511	40.657	74.627	33.962

Note:

Table 12: Analysis of Suffrage Extensions

		Dep	endent variab	le:	
	(1)	(2)	(3)	(4)	(5)
log(1 + wealth_timevote)	-0.073 (0.088)	-0.113 (0.093)	-0.138 (0.096)	-0.144 (0.097)	-0.103 (0.101)
agricul_share					1.327 (1.701)
share_aandeel					-3.518 (6.579)
amount_strikes					0.027 (0.046)
Percentage				-0.009 (0.008)	-0.012 (0.008)
Turnout				0.407 (0.826)	0.204 (1.020)
days_to_next_el			0.002 (0.001)	0.002* (0.001)	0.002* (0.001)
age_of_vote			-0.00003 (0.00005)	-0.00003 (0.00005)	-0.00002 (0.00005)
RK_pct		-0.005 (0.006)	-0.006 (0.006)	-0.005 (0.006)	-0.005 (0.006)
polpartyliberal	1.987*** (0.302)	1.802*** (0.354)	1.838*** (0.368)	1.846*** (0.381)	1.765*** (0.398)
polpartysocialist	17.299 (1,071.785)	16.147 (724.337)	15.795 (834.749)	15.887 (838.312)	15.709 (837.181)
Constant	0.181 (0.971)	0.900 (1.097)	1.560 (1.434)	1.577 (1.605)	1.126 (1.794)
Observations Log Likelihood Akaike Inf. Crit.	242 -136.650 281.299	229 -130.204 270.408	215 -120.168 254.335	215 -119.258 256.516	206 -114.559 253.118

Note:

Table 13: Analysis of Suffrage Extension

	Dependent variable:		
	(1)	(2)	
agricul_share		1.355	
		(1.801)	
share_aandeel		-5.942	
		(7.935)	
amount_strikes		0.060	
		(0.051)	
Percentage	0.003	0.002	
	(0.009)	(0.010)	
Turnout	-0.580	-0.784	
	(0.901)	(1.146)	
days_to_next_el	-0.001	-0.0004	
,	(0.002)	(0.002)	
age_of_vote	-0.00005	-0.00003	
	(0.0001)	(0.0001)	
RK_pct	-0.009	-0.010	
-1	(0.007)	(0.007)	
polpartyliberal	1.947***	1.770***	
	(0.411)	(0.429)	
polpartysocialist	15.741	15.613	
	(791.160)	(797.739)	
log(1 + wealth_timevote):lawKieswet 1872	-0.150	-0.095	
	(0.108)	(0.114)	
log(1 + wealth_timevote):lawKieswet 1887	-0.007	0.057	
	(0.108)	(0.114)	
log(1 + wealth_timevote):lawKieswet 1892	-0.208*	-0.158	
	(0.107)	(0.112)	
log(1 + wealth_timevote):lawKieswet 1896	-0.064	-0.024	
	(0.107)	(0.113)	
Constant	2.343	1.639	
	(1.738)	(1.899)	
Observations	215	206	
Log Likelihood	-108.738	-103.722	
LUL LINCIII IUUU	100.700	100.722	

Note:

- C.2 Lower House After 1918
- C.2.1 Taxes
- C.2.2 Social Redistribution
- C.2.3 Electoral Law
- C.3 Upper House

references