

# Personal Wealth and Voting Behavior of Politicians

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## **Abstract**

In the context of inclusive economic development, politicians play a potentially facilitating or obstructing role. In this study, I analyze the effect of Dutch politicians' personal interests on the acceptance of a number of important reforms in an era of democratization and rapid economic growth (1870-1920). More precisely, I analyze whether Dutch politicians prioritized their self-interest in a number of roll-call votes establishing fiscal legislation likely impacting their personal wealth. Using newly-collected archival data and instrumental variable estimation for politicians' personal wealth, I find convincing evidence that wealthier politicians are less likely to vote in favor of legislation that is likely to decrease their own personal wealth, controlling for a wide array of electoral characteristics. The results also show that these effects are absent in important laws that do not have a direct impact on politicians' own wealth, such as votes on suffrage extension and other government intervention. The results are robust to many different assumptions and estimation procedures.

# I Introduction

By the early 20th century, most Western European countries had adopted universal suffrage (Przeworski, 2009), and witnessed substantial increases in government size and government intervention (Aidt et al., 2006), all while abstaining from a revolutionary trajectory. By contrast, some 70 years earlier, most European countries were either absolute monarchies, or otherwise countries in which power was highly centralized, and electoral institutions were either severely restricted or nonexistent. In a non-revolutionary setting such as this, incumbent politicians have played an important role in this development, either obstructing or facilitating these changes: it was politicians that had to approve important reforms such as suffrage expansion, fiscal legislation or other government intervention. The determinants of the behavior of politicians, in this context or in others, have occupied theoreticians and empiricists alike. Theoretically, the dominant perspective of politics views politicians as agents making choices under constraints to optimize their objectives. In the context of democratization, many of these theories have been developed, focusing on mechanisms such as the threat of revolution or the degree of intra-elite heterogeneity. In this view, politicians are motivated to facilitate reforms such as suffrage extension or fiscal expansion to prevent worse: revolution or civil unrest (Acemoglu and Robinson, 2000), to decrease rent-seeking by other parts of the elite (Lizzeri and Persico, 2004), to increase their power vis-à-vis another faction of the political elite (Llavador and Oxoby, 2005), or to bargain suffrage for increased government size (Aidt et al., 2010).

Another prominent strand of the literature focuses more generally on the incentives of incumbent politicians (Barro, 1973, Ferejohn, 1986) as agents for a principal, usually the electorate, with certain preferences over political outcomes such as fiscal policy or other measures of government intervention. For example, Corvalan et al. (2016) analyze fiscal policy following suffrage and eligibility extensions. Even though they take suffrage and eligibility extensions to be exogenous, they derive that politicians implement more fiscal redistribution following eligibility, but not suffrage extensions. Acemoglu (2008) can be interpreted as a case where politicians are 'perfect' agents of the principals, which in his case, are the owners of production. More commonly, models such as Peltzman (1984) or Levitt (1996) consider a setting in which the politician is optimizing their utility, given various constraints and an ideological bliss point (e.g. with regards to distributive outcomes).

A common feature of these models is that under imperfect information, politicians can pursue other policies than the agent(s) want them to. For example, politicians can choose to prioritize their own ideology (Kalt and Zupan, 1984), or vote in favor of interest groups (Grossman and Helpman, 1996). Plausibly, politicians do so in an attempt to increase their own personal income or wealth. The empirical literature has documented a variety of settings that give support to this view (Ferraz and Finan, 2009, Fisman et al., 2014, Tahoun and Van Lent, 2019).

This study attempts to test this conjecture in a very specific case: the Dutch democratization process in the late 19th and early 20th centuries. The commonly held perspective by political historians of this period is that self-interest played at most a very marginal role: because of the system of *pillarization*, in which sharp religious tensions were pacified using a system that implied the delegation of all interaction between different religious groups to elites, who were very small in number (Lijphart, 1975). In addition, the period witnessed the maturing of political factions and ideologies, culminating in the existence of

political parties, which in turn demanded a large degree of party discipline (De Jong, 1999; Rooy, 2014). The threat of revolution in the country also seemed to be marginal at best: the *vergissing* (mistake) committed in 1918 by socialist leader P.J. Troelstra, who took on a crucial role in protests around the country in the wake of the developments in Germany and Russia, illustrated the lack of appetite of the Dutch population for a socialist government (Wijne, 1999): the protests were quickly reduced to irrelevance due to the protests being met by large counter-protests, and the lack of coordination between socialist movements.

It seems that in this setting, there is little room for self-interest of politicians to play a large role. However, the system of pillarization might have come at a price: theoretically, a system that involves delegation from a large number of agents to a small number of agents might involve coordination problems such as free-riding, inducing the agents (politicians) to diverge from the wants of the principal (their constituents) (Holmstrom, 1980). Consistent with this explanation, empirically, various collective biographies of politicians document a relatively closed political elite, and a relatively closed recruitment process (Secker, 1991; van den Berg, 1983).

This study analyzes the role of politicians' personal wealth in the acceptance of several fiscal policy reforms in the late 19th and early 20th centuries that accompanied an ideological shift in Dutch (and broader European) politics away from the view that envisioned the state as a *nightwatchman*, towards a view that was more favorable to an interventionist state helping to alleviate poverty, address market failures and provide education. These fiscal policy reforms encompassed small but important increases in government spending (Vrankrijker, 1967), and are especially well-suited to address the role of politicians' self-interests, because the acceptance of these laws would have direct consequences for politicians' own personal finances. In addition, the laws vary according to the extent to which tax rates were raised. The laws were also accepted with varying degrees of consensus (Van den Berg and Vis, 2013), and the setting allows me to test the robustness of the prediction by also investigating the influence of politicians' personal wealth on other high-profile laws, such as suffrage extensions, of which the (direct) impact on politicians' personal wealth is less clear.

Using newly-collected archival data using probate inventories to estimate the wealth of politicians, I exploit publicly available data on voting records and construct a host of control variables to investigate the influence of politicians' personal wealth on the propensity of voting in favor of fiscal (and other) important reforms throughout the period 1870-1922. 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 effect of wealth on voting behavior is simultaneity: in a standard model akin to Mian et al. (2010), politicians may depart from their ideological bliss point driven by electoral constraints. In a simple addition to this model, politicians might be supposed to care about their personal wealth, which is a function of their voting behavior. The supposition that politicians might increase their own wealth by voting in favor of laws that are favored by interest groups then implies politicians simultaneously choose their (expected) future wealth and voting behavior. To find the causal effect of wealth on voting behavior, I use an instrumental variable (IV) approach. Specifically, I use measures of parental education, which are highly correlated with politician wealth, but have no plausible direct effect on politicians' voting behavior. These instruments are both relevant (correlated with politicians' wealth), and at the same time plausibly exogenous to politicians' voting behavior (the only way through which it can affect politicians'

voting behavior is through politicians' own wealth).

The findings show that more personal wealth makes politicians less likely to vote in favor of fiscal reforms: richer politicians are less likely to vote in favor of laws that are likely to have an adverse impact on their personal wealth than their poorer counterparts, keeping many other factors, such as political party affiliation, constant. The effect is statistically significant in almost all specifications. Moreover, the effect is only apparent in laws that have a plausible impact on politicians' personal wealth: in no specifications is there an effect of personal interests on voting to expand the suffrage, or to enact legislation that interferes in the economy without significantly impacting taxes or government finances, thereby confirming widespread intuitions about the Dutch political system (see e.g. Rooy, 2014; Lijphart, 1975) and ruling out several alternative explanations. In the IV estimates, the coefficient magnitude is similar, but larger in magnitude compared to the OLS estimates, suggesting only a small extent of endogeneity and a downward bias of the OLS estimates. The findings are robust to alternative definitions of the independent variable, modifications to the instrument, the inclusion of many control variables, and different estimation procedures.

The findings of this study might be generalizable to other Western European countries, as many European countries embarked on a similar trajectory. Firstly, for many European countries, the central political issue can be characterized as a conquest for universal suffrage, and they indeed implemented it around the same time (Przeworski, 2009). Secondly, the composition of the Dutch political elite, and the development it underwent after 1848 was also broadly similar to that of other countries (Clark, 2012). Thirdly, many European states also oversaw fiscal expansion and a more general increase of government intervention (Lindert, 2004).

In addition, the findings have implications for developing countries: many researchers have attempted to explain persistent differences in economic development (e.g. Acemoglu and Robinson, 2000; Sachs, 2012), and more recently, many have started to pay explicit attention to the role of political elites (see e.g. Pande, 2003; Acemoglu, 2008; Acemoglu et al., 2010; Aidt and Franck, 2019; Poulos, 2019). This paper connects the literature investigating the role of political elites to the literature investigating the role of taxation in economic development (Besley and Persson, 2013, 2014) by providing evidence that, in the context of rapid economic development, political elites' personal interests guide their decision-making, and that the composition of political elites therefore influences the acceptance or rejection of laws with important economic consequences.

## 2 Politicians & Reform

### 2.1 Electoral and Institutional Reforms

Before 1848, Dutch government institutions were centralized around the figure of the King, who held most of the power, surrounded by technocrats and loyalists. The revolutions and turmoil elsewhere in Europe in 1848 frightened the King, after which he requested the leading liberal politician to write a blueprint for a new constitution, signifying the end of the absolute monarchy and the beginning of a liberal, more democratic era. From 1848 onward, government formation and legislative power were subjected to parliamentary control. Parliament, in turn, consisted of the lower and upper houses: the lower house being a representative body, its delegate charged with representing their district, whereas formally, the upper house would occupy itself with legal coherence and would serve as a buffer against demagoguery and rash policy-making (De Jong, 1999). Van den Berg and Vis (2013) characterize the period between 1848 and the first constitutional reforms in 1887 as a highly unpredictable period, where every roll call vote was crowded in uncertainty. Not only the case in laws attempting to extend the franchise, ministers could choose to either present the parliament with possibilities to introduce amendments, but they could also "try their luck", and mandate that the law would be subject to a vote right away. Both of these trajectories were frequently chosen. The relationship between parliament and executive government was yet to be fully established and norms were being developed. For example, only in the 1870's it became the norm that governments resigned following general elections (Van den Berg and Vis, 2013).

The political battle was far from over, however, in 1848. The 1848 Constitution marked a turning point after which it was anticipated that the country would embark on a trajectory towards suffrage expansion, and likely universal suffrage (van der Kolk et al., 2018). There were various law projects and attempts at constitutional revision that aimed at extending the franchise: the first attempt took place in 1872, and wanted to implement suffrage extension by lowering the census requirements. Mainly because the lower house could not agree on an adequate number, the proposal was rejected by the lower house. Plans were further complicated by the fact that suffrage extension and fiscal reform were intertwined, which I explain in section 2.2.

The second attempt came to be only in 1887, after it became increasingly clear that the coupling of suffrage to the census excluded a too high proportion of the electorate. The attempt was hampered by the fact that confessional politicians required the position of Christian education to be taken into account into a new Constitutional revision, whereas the liberals wanted to only extend the franchise and decouple suffrage from taxation (Van den Berg and Vis, 2013). Furthermore, politicians wished to end the continued electoral calculus around a variable number of districts and politicians per district as a result of continued population growth. Finally, a motive for revision was to provide an answer with respect to eligibility and suffrage of women. When the reforms were finally adopted, it became clear that female enfranchisement was prevented. The 1887 reforms also fixed the number of seats in parliament: before, it was considered that each approx. 45,000 inhabitants should have their own delegate, whereas afterwards, the number of lower house members was fixed at 100, and the number of upper house members at 50 (De Jong, 1999), the criteria for suffrage were augmented by a host of other criteria, including the notoriously vague stipulations of "fitness" and "societal standing" (van der Kolk et al., 2018). The educational

question, however, was not yet resolved, although it was established that the new constitutional reforms did not contradict the ideas of confessional politicians.

Thirdly, plans by minister Tak van Poortvliet in 1892, aiming to address the vagueness of criterions by changing not the Constitution, but the electoral law (*Kieswet*), were subjected to fierce criticisms. His plans made the aforementioned criterion of "fitness" more concrete, by holding that in principle, all men who could read or write, and inhabited a living space ought to be enfranchised. In this conception, about 800,000 male inhabitants were estimated to be enfranchised under the purported changes, compared with 300,000 *ex ante* (van der Kolk et al., 2018). After a misunderstanding in parliament, an amendment unacceptable to the minister was accepted, and his plans were rejected. After new elections, similar plans, however, in 1896 have turned out to be more fertile. The proposals of the new minister of internal affairs Van Houten introduced two categories for suffrage: paying direct taxation, and a miscellaneous category called 'declaration', which included paying rent, passing certain exams, or having savings or a pension.

As the incomes of the Dutch population steadily rose, while the franchise requirements remained static, this also made that more and more inhabitants were enfranchised (van der Kolk et al., 2018). In the elections of 1897, about 575,000 men were enfranchised. This number rose to close to 1 million men in 1913, close to 50%. As a result, it became easier for opponents of universal suffrage to make concessions, and in 1917, confessional and liberal politicians were able to achieve a compromise by trading off universal male suffrage (wanted by liberals) and a constitutional foundation of the public funding of religiously-based schools (wanted by confessional politicians). A year later, without any significant controversy, women were also enfranchised.

## 2.2 Fiscal Reforms

After the 1848 Constitution, the fiscal system of the Netherlands bore many inheritance of its 17th and 18th century past. In particular, the country had various protectionist institutions, and many (unharmonized) excises and other regulations that were hampering virtually all product markets. In contrast to many of its neighbours, the (mass) usage of the steam engine or other techniques of mass production made little sense, because markets were still very small and disposable income relatively low.

From the 1850's onward, the government oversaw liberalization and harmonization in all sorts of domains, economic, but also institutional (Knippenberg et al., 2000): a telegraph communication system was developed, coinage was standardized, railways and other infrastructural projects launched, and trade was liberalized, with less reliance on excise duties and toll payments, and more reliance on taxes on wealth and income. Nevertheless, government size was still very limited, and while defense spending slightly decreased following more modest geopolitical ambitions (Van den Berg and Vis, 2013), government expenditures per capita did not see a structural increase (van Riel, 2018). Starting from the 1870's, rising poverty and inequality brought about more and more social unrest, the ideological paradigm of *laissez-faire* started to crumble, and more and more politicians (particularly liberals), opinion leaders and public intellectuals convinced themselves of the necessity of government intervention. In the Netherlands, the 1854 Poor Laws and the 1874 law regulating child labor were earlier signs of this trend.

Two pieces of legislation have been subjected to major fiscal reform and revision in the period of interest: first, the establishment and later the reform of the income tax (*Inkomstenbelasting*), and the estab-

lishment and reform of the inheritance tax (*Successiewet*). The income tax came into existence as a result of rising pressure on the government to reform the tax system, which, by then, consisted predominantly of taxes on real estate consumer goods, and entrepreneurial activity (a so-called *patent tax*), whereas shares and other financial assets were left virtually untouched (Vrankrijker 1967; Smit 2002). It turned out to be extremely difficult to change the fiscal system, partially because the question was intertwined with the question of suffrage - suffrage was principally granted only on the basis of paid taxation, so a change in the fiscal system would naturally have to address the way this change related to the suffrage question. The question proved to be particularly arduous in the 1870's and 1880's, after various attempts stranded.

In 1863, finance minister Betz attempted to reform the existing patent tax by making it a universal income tax, all while abolishing again many excises. The lower house ended up rejecting his plan, partially because it did not yet see the urgency, but also because compliance was dubious (Smit, 2002). In 1872, finance minister Blussé launched a similar attempt, which was rejected on the grounds that it could not unite various factions of parliament - some thought it too radical: it would tax real estate too heavily, according to some. Others thought it was too modest: there was too little progressivity in the proposal. In 1884, after a barrage of criticism, finance minister Grobbée had to withdraw a proposal that encompassed increasing excise duties, and he also failed to introduce a 'class tax', meaning progressive tax rates on income (Van den Berg and Vis, 2013).

Meanwhile, the abolition of the *Cultuurstelsel* stalled revenue coming from the colonies, and, whereas economic growth and consumption made it possible to partially compensate for this loss by the existing tax system, this was not considered enough (van Riel, 2018; Smits et al., 2000). The 1893 income tax changed that situation. Importantly, it was accomplished after 1887, the year in which constitutional reforms decoupled the question of fiscal reform from the question of suffrage expansion by adding more criteria on the basis of which suffrage was obtained - and effectively reducing the importance of the tax-based criterion. The 1893 income tax reform was introduced in two parts by its designer, the first of which encompassed taxation on (fictitious) income from wealth, and the second taxation on income from trade and profession (Fritschy, 1997). Nevertheless, the income tax remained very modest in its ambitions: the maximum tariff (for the highest incomes) implied liability of only 3,2% of yearly earned income, and the proceeds from the new taxation reached about 10% of government income in the first years after introduction.

The income tax was subsequently left intact for almost two decades, but during the First World War, in the Netherlands, a neutral country, government finances came under increasing pressure. In this context, the acting finance minister Treub managed to pass a proposal that increased the progressivity by (i) increasing the rates for higher taxable incomes, and (ii) combining the two previously separate categories, so that total taxable income would be taxed at a higher rate (Slijkerman, 2016).



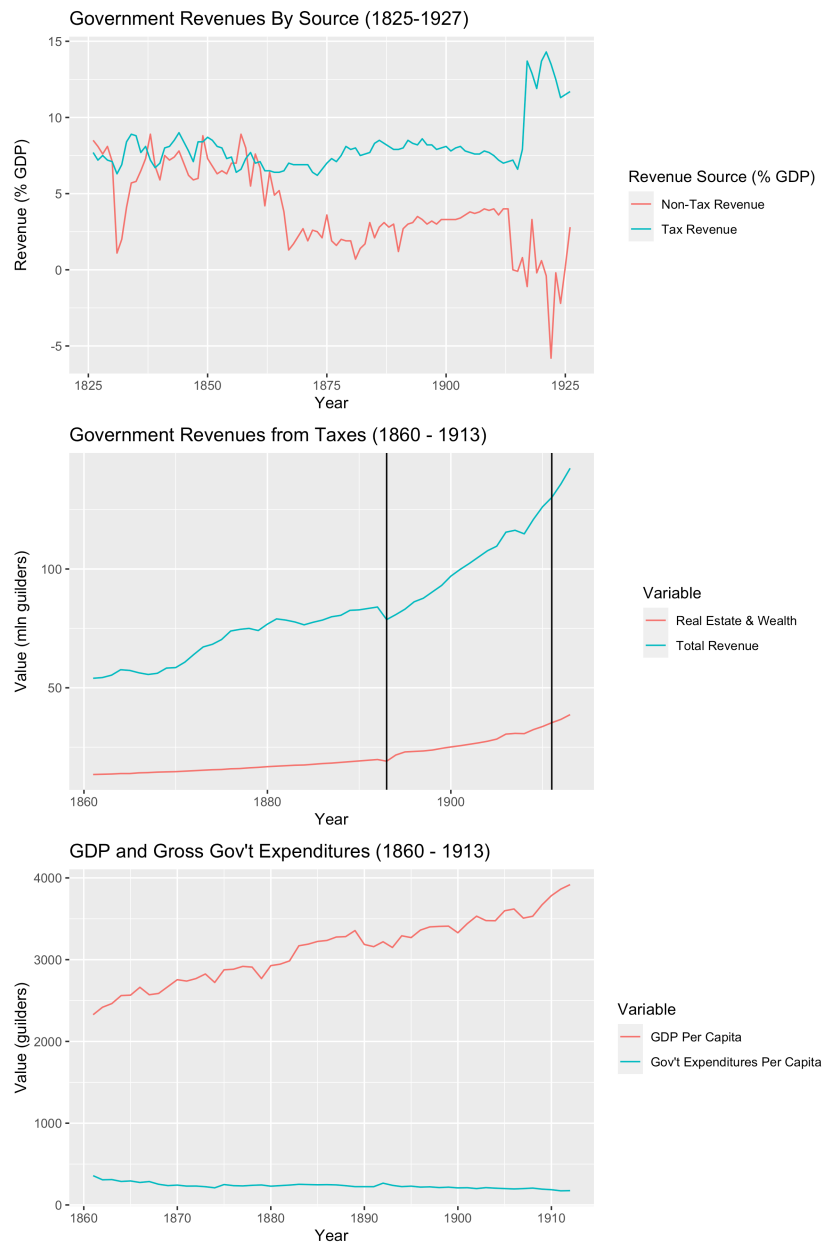


Figure 1: Government revenues and expenditures over time. Sources [Smits et al. \(2000\)](#); [van Riel \(2018\)](#)



The other major pillar in the Dutch fiscal system, the *Successiewet*, taxed inheritances, and was modified three times after a 1877 amendment made bequeathing to lineal descendants liable for taxation (which made it applicable to virtually everyone). Beforehand, inheritances were only taxable in case of bequeathing to more distant family members, which happened relatively rarely. According to the 1877 amendment, inheritances of a net value lower than 1,000 guilders were exempt from taxation, about four times the annual wage of a worker. The rates for direct descendants were set at 1% of net wealth, whereas for ascendants, the tariff was set at 3%. Tariffs for non-direct family members or unrelated individuals were slightly higher. One characteristic of the amendment was that financial assets (debt and equity) were not subjected to the same rates, but under lower rates: 0.25% and 1% respectively.<sup>1</sup>

The *Successiewet* was changed three times over the course of the period of interest. In all cases, the primary reason behind this change was government finances: more taxes had to be raised with some urgency, and inheritance taxation was an easy way to accomplish this. In all occasions, tariffs were incrementally raised, but in some cases, some other tariffs were decreased, as a compensation. The first tariff hike occurred in 1911, which encompassed a sharp increase in rates for lineal descendants, to which the majority of wealth was bequeathed (Jacobs, 2003). The tariffs were again contingent on being a descendant or ascendant: descendants paid 1.5% of net wealth, and a higher tariff if inherited net wealth was higher than 50,000 guilders: the law thus implemented progressivity. This law change also changed the status of financial assets, so that they would be taxed under regular rates.

In 1916, the amendments integrated gifts into the inheritance tax. This amendment was implemented because the law-makers wanted to assure that individuals could not transfer assets as gifts to their heirs and thereby circumvent taxation. Additionally, the 1916 amendment also further increased the rates: the tariffs for direct descendants now ranged from 2% for the inheritance with the lowest net wealth (but above the 1,000 guilders threshold) to 6% for inheritances of over 500,000 guilders.

Finally, in 1921, because government finances were in a dire state, a substantial hike in rates was again imposed: the hike meant that the minimal tariff was now set at 3.5%, even for inheritances worth less than 1,000 guilders, and, for direct descendants, could increase until 8% for inheritances worth more than 500,000 guilders. For non-direct descendants, rates were even higher. For example, if one bequeathed to brothers or sisters, the minimum rate (for inheritances worth less than 1,000 guilders) was 18%.

## 2.3 Government Intervention

The period under consideration was marked by a paradigm shift from a paradigm that considered the state as a *nightwatchman*, to one that actively considered the state as an economic actor that has the right to intervene to advance the common good. Despite the fact that this paradigm shift was broadly shared by politicians from all factions, it did not mean that the state embarked on a journey to establish the welfare state. The piece of legislation that first marked this ideological shift concerned a ban on child labor, enacted in 1874. However, because of still fierce opposition, especially related to the financing, the established law could not arrange adequate inspection, so that child labor was still frequently employed some ten years later according to a parliamentary inquiry (Schenkeveld, 2003). Nevertheless, the law marked a

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<sup>1</sup>This link contains a description (in Dutch) of different tariffs throughout time.

turning point in government intervention, as evidenced by many laws and law projects that came afterwards.

Many of these subsequent laws share this characteristic: government intervention, without putting a strain on government financing. This is also the reason why these laws are characterized as not likely having a direct impact on politicians' personal finances: there is no likely impact on (future) taxation or government debt. For example, the 1901 compulsory education law implemented compulsory education for every child until age twelve (Veld, 1987). The roll call vote was preceded by many lengthy debates: most confessional politicians wanted to legislate the right of existence of Christian schools, and socialists deplored the absence of support for poor children in the law projects. Finally, the law was accepted with a vote count of 50-49, owing to the absence of one opponent of the law.

In 1903, following successful strikes in the railway sector, the government feared that strikes would evolve into a mass opposition movement undermining the stability of the country. Trade unions were, as of 1903, entirely led under the socialist banner. The Kuyper-government responded by making striking a criminal offense for certain civil servants, among which were railroad workers. The laws were accepted and implemented in real time, and workers engaging in strikes could risk up to 6 years in prison (Koch, 2020). In the future, Christian trade unions were established, so as not to channel all dissatisfaction to socialist organizations.

Abraham Kuyper, the most prominent Orthodox Protestant politician, and one of the most important architects in Dutch politics around the fin-de-siècle, was also a prominent advocate of sovereignty in one's own circle, meaning that different religious communities should make arrangements within their own community. In the economic domain, this meant that there is a limited role for the government, but rather, that religiously-based organizations ought to provide necessary services for their communities (van Gerwen and van Leeuwen, 2000). This idea found its way to many of the pieces of legislation I investigate. One additional example concerns the 1913 *Ouderdom- en Invaliditeitswet*, in which the issue of government financing was heavily debated. Liberals opted for state-provided pensions, and made efforts to introduce this aspect in the law project, but confessional politicians thought out better to instigate a compulsory insurance-scheme for wage-earners, and a facultative insurance-scheme for self-employed workers. Since they were in the majority, the confessional politicians won, and managed to avert government-financed welfare provisions until after the second World War.

## 3 Data & Methodology

### 3.1 Data

#### 3.1.1 Voting Records

The data I use come from a variety of sources. First, I use the official Dutch government source [Staten Generaal Digitaal](#) 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 lower and upper houses 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. Sometimes, the minutes are also appended by drafts of the project law in question or information about rates and corresponding calculations, in case of fiscal legislation.

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 law (1), or against (0). Most of the time, these amendments represent piece-wise modifications to a project law, but it also happens that radical amendments overturning the vision and implications of the project law. In this case, the change in amendment can be interpreted as the decisive vote on the law, given that, if the amendment passes, the final law also likely passes. In yet other cases, a accepted amendment could imply a rejection of the law as proposed by the government, leading the minister to retract the law. This can also be interpreted as the rejection of the law.

Tables 1 and 2 show the descriptive statistics of the fiscal reforms in question. In appendix X, I also show the corresponding statistics for laws regarding government intervention and suffrage extension. The tables show how many politicians vote in favor, how many politicians took part in the voting, and the percentage of them that voted yes. There is a large variation in the degree of consensus which is finally reached: some bills passed with a large majority of over 80% of the votes, whereas other bills have passed with a rather small margin. In the upper house, some bills have also been approved unanimously.

law	infavor	howmany	percentage	date
Successiewet 1878	48.00	80	0.60	1878-05-24
Inkomstenbelasting 1893	55.00	89	0.62	1893-06-23
Successiewet 1911	64.00	69	0.93	1911-03-10
Inkomstenbelasting 1914	68.00	80	0.85	1914-06-03
Staatsschuldwet 1914	22.00	83	0.27	1914-12-11
Successiewet 1916	48.00	77	0.62	1916-07-18
Successiewet 1921	56.00	74	0.76	1921-04-14

Table 1: Lower House

law	infavor	howmany	percentage	date
Successiewet 1878	19.00	35	0.54	1878-06-04
Inkomstenbelasting 1893	27.00	44	0.61	1893-09-28
Successiewet 1911	39.00	39	1.00	1911-05-18
Inkomstenbelasting 1914	28.00	28	1.00	1914-12-18
Staatsschuldwet 1914	40.00	40	1.00	1914-12-23
Successiewet 1916	18.00	40	0.45	1916-11-29
Successiewet 1921	34.00	41	0.83	1921-06-09

Table 2: Upper House

### 3.1.2 Wealth

I use hand-collected probate inventories, *Memories van Successie* from various Dutch provincial archival sources. Probate inventories were administered by the Dutch tax administration for the purpose of levying inheritance taxes (which was a universal tax burden from 1877 onward, although a small number of individuals qualified for an exemption). As a rule, the probate inventories had to be filed with the tax administration at the place of death. For each politicians who has voted on one of the laws in tables 1 and 2, I look for their probate inventories in the corresponding provincial archives. In total, these are 349 unique lower house politicians in these periods, making for 552 total votes. Out of these 349 unique politicians, I find 256 probate inventories, which makes the finding rate about 73%.<sup>2</sup> The proportions and finding rates for the other two categories are similar. In appendix A.1, I show that there is no selection bias and that the politicians whom I was unable to find are a random subset of the politicians who voted on these laws.

The probate inventories contain an appraisal of an individual's (taxable) net wealth, as well as their assets and liabilities. Assets are appraised in various ways: first, stocks and bonds that are traded on public exchanges are appraised according to their market value. Secondly, real estate and private bonds are usually appraised in a more opaque manner. In general, however, real estate appreciations are close to their market value, and bonds are close to their nominal value. This is consistent with evidence by Gelderblom et al. (2021), who find that default rates on these bonds are relatively low. With respect to the sensitivity of the appraisals to inflation, I anecdotally observe that the falling market prices following the default on Russian bonds, or following the onset of the First World War, are rapidly incorporated into the appraisals. Similarly, the value of real estate also seems to be sensitive to changing market prices.

Moes (2012) provides an assessment of the trustworthiness of the probate inventories. The heirs of the recently deceased were legally obligated to file the inventory of the deceased to the local tax authority, usually within 6 to 12 months since the date of decease. There was also a control mechanism: every month, the fiscal authorities received notice of the deceased in their jurisdiction, and it was actively checked whether a deceased in a particular jurisdiction had filed the registration of the inheritance in another district. Finally, the assembled probate inventory had to be declared in front of a judge, and was legally binding.

It could, however, still be possible that some assets were not declared, in order to avoid paying succession rights, or that some items were bequeathed as gift to heirs shortly before death. The law-makers

<sup>2</sup>This finding rate is a lower bound, as several politicians abstained from voting in one or more of the laws.

attempted to tackle this problem by taxing gifts, which are also registered.

### 3.1.3 Biographical Data

Furthermore, 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' party affiliation, location 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 us 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).

### 3.1.4 Other Controls

I obtain data about district-level elections from [a repository of historical Dutch Lower House elections](#). I retrieve data on all elections from 1860-1940. This allows me to identify (i) the competitors of each elected politician in each election, (ii) the margin with which an elected politician has won, and (iii) newspaper recommendations and/or party affiliation of the politicians. In the period of investigation, the political landscape underwent a transformation from an individual to a party-based political system. Before political parties existed, politicians were often organized (although more loosely) in *Kiesverenigingen* (electoral associations) on the basis of political ideology, and newspaper recommendations serve as a good indication of partisanship in this era (De Jong, 1999). I use these data to extract a variety of measures, including the strength of socialists in particular districts, electoral competition, a politician's momentum, etc. The repository 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. Secondly, 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 fewer seats than before. Nevertheless, I take data from the *IISH*, who provide data on strikes in the Netherlands throughout the nineteenth and twentieth centuries, and aggregate them to a municipality-year level, and subsequently electoral district-year level.

Next, apart from their relevance in elections, districts were not administrative units in the Netherlands. They consisted of municipalities, the lowest administrative unit. I use the HDNG-database (Boonstra et al., 2003)<sup>3</sup>, a database containing information about demographics, religion, political preferences, mobility, economic activity and development, assembled from various government sources from about 1850 to about 1950, on the municipality level. Districts usually consisted of multiple municipalities, but every major municipality was awarded its own district. I retrieve the key that allows me to match dis-

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<sup>3</sup>To make the data useable, I created an R package available [here](#)

tricts and municipalities from the [aforementioned repository](#) to compute average indicators per district (averaged on the basis of population size).

### **3.1.5 Overview of Variables**

In appendix [A.4](#), I show all variables used at some point in the analysis and their source.

## 3.2 Methodology

### 3.2.1 Baseline Model

The baseline model that I estimate (politician  $i$ , roll-call vote  $k$ ) is:

$$V_{i,k} = \alpha + \beta \cdot \text{Wealth}_{i,k} + \delta \cdot \text{LawDum}_k + \gamma \cdot \text{Party}_i + \eta \cdot \text{Controls}_{i,k} + \varepsilon_{i,k}$$

In other words, I pool laws and estimate a linear probability model with law dummies and party dummies to estimate the effect of an increase in wealth on the propensity to vote in favor, conditional on voting on a particular law and belonging to a particular party. In subsequent analyses, I use various control variables that depend on the politician  $i$ , and roll-call vote  $k$ , which can include variables unique to the politician, but constant over votes, variables unique to the district, but varying according to the politician, and variables that are unique to the politician-district combination, such as a number of electoral outcomes.

In order to ensure comparability between the wealth levels of politicians who died (and whose wealth was observed) at different points in time, I use data on asset class returns provided by [Jordà et al. \(2019\)](#) to estimate a politician's wealth at the time of voting, thereby correcting for differential asset returns to which they might have been exposed over the course of their lifetime. I start out by deflating all observed wealth to 1900 guilders. Then, I use the following recursive relationship to identify a politician's wealth at the time of voting on law  $k$  as a function of their (deflated) wealth at death:

$$\text{Wealth}_{i,t+1} = \sum_j \text{AssetShare}_{i,j,t} \cdot \text{AssetReturn}_{i,j,[t,t+1]} \quad (1)$$

In words, since a politician's wealth at death, and their portfolio composition (in terms of asset classes) are known and observed, it is possible to estimate the wealth one year before using (average) real returns on asset class  $j$ . Applying this recursively yields an estimate of the wealth at the time of voting. In [appendix A.3](#), I detail the precise assumptions used to match portfolio composition with assets class returns as provided by [Jordà et al. \(2019\)](#).

### 3.2.2 Endogeneity

The main threat to identification that I face amounts to simultaneity bias: several theoretical models, most notably [Mian et al. \(2010\)](#), suggest that politicians make voting decisions based on factors such as ideology. A politician's wealth, in turn, is likely to partially depend on the voting profile that politicians show, such that some voting behavior is rewarded by interest groups, and other behavior is not. This makes clear that both their final wealth and their voting behavior (and party affiliation) are likely to be determined by factors such as ideology and initial wealth. To illustrate, suppose that politicians whose ideology is broadly right-wing are likely to vote in favor of laws which are favored by interest groups. Those politicians would then be rewarded after voting in favor of these laws (and left-wing politicians would not), and the observed correlation between voting behavior and final wealth would be higher than the (unobserved) correlation between voting behavior and initial wealth. Hence, not taking into account this endogeneity leads likely to the estimates being biased upward.



Hence, politicians' voting behavior and their wealth are likely simultaneously determined by their ideological penchant. To estimate the impact of the former, it is necessary to either (i) use exogenous variation that is correlated to wealth, while at the same time being uncorrelated to a politician's ideology (Wooldridge, 2010; Angrist and Pischke, 2008) or (ii) find a measure of initial wealth that is measured at or before politicians' wealth is affected by their voting behavior. To this end, we pursue two strategies, one attempting the first, and one attempting the second strategy.

### 3.2.3 Identification strategy

#### Instrumental variable:

To eliminate the bias arising from the endogenous relationship between wealth and voting behavior, we find an instrument that is both relevant and valid. To that end, I find the professions of the fathers of politicians, using mainly the *Biographical Dictionary of the Netherlands* and genealogy websites, and construct an indicator variables indicating whether the father of politician  $i$  was a politician's father has ever been a politician (at any level) or not:

$$Z_i = \begin{cases} 1 & \text{if father of politician } i \text{ was active in politics} \\ 0 & \text{otherwise} \end{cases}$$

First, concerning the relevance of this instrument, politicians whose fathers were ever active in politics tend to be wealthier than politicians whose fathers were not. Validity of this instrument implies the supposition that having a father that was politically active is uncorrelated with the ideology (or other factors on the basis of which politicians make decisions) of politicians themselves. In so far as ideology is reflected in (observable) party choice, this assumption appears to be satisfied: the probability of having a father who was active in politics conditional on the politician being a confessional politician is statistically indistinguishable from the probability of having a father active in politics conditional on being a liberal politician. Having a politically active father, then, can be interpreted as a shock to wealth that is orthogonal to a politician's ideology, such that the variation in wealth caused by this shock, keeping ideology constant, identifies the causal effect of a politician's wealth on their voting behavior.

In the past, researchers have used similar instruments to account for the endogeneity of wealth. More specifically, Meer et al. (2003) used inheritances as an instrument for wealth, whereas Lusardi and Mitchell (2007) use variation in housing prices. Similarly, Tahoun and Van Lent (2019) uses returns from a retirement plan, Hilber and Liu (2008) use the occupation of the parents, education level, and parental income. Briggs et al. (2015) and Poulos (2019) use the outcome of lotteries, as they represent a random shock to personal wealth.

In appendix A.6, I provide various alternative estimates of the effect of politicians' wealth on voting behavior by employing slightly different instruments using the father's profession and expected inheritance. In particular, I use the HISCLASS (Van Leeuwen and Maas, 2011) classification to convert raw descriptions of professions to classes, and use the vector of HISCLASS dummies to instrument for politicians' wealth. Secondly, I try to measure expected inheritance by retrieving the probate inventory of the politicians' parents, and the number of siblings of the politicians. Due to data constraints, the approach by Meer et al. (2003) is not fully feasible and suffers from a lack of power, but point estimates show a

magnitude comparable to that of other IV-estimates.

**Early deaths:** Secondly, I make use of politicians who died relatively recently after having cast their votes in any of these laws. To this end, we use a dummy variable indicating whether a politician died within two (five) years after having cast the vote on a particular law, and estimate the following model:

$$V_{i,k} = \alpha + \beta_1 \cdot \text{Wealth}_i + \beta_2 \cdot \text{Died within X years} + \beta_3 \cdot \text{Wealth} \times \text{Died within X years} + \beta_4 \cdot \text{LawDum}_k + \beta_5 \cdot \text{Party}_i + \gamma \cdot \text{Controls}_{i,k} + \varepsilon_{i,k} \quad (2)$$

A politician who died fairly recently after a certain vote has less time to accrue rents from voting behavior after their political career, for example, in a lucrative function that they have occupied after their political career. Hence, it is likely that the simultaneity bias is attenuated for these observations. Secondly, the fact that a politician died closely after voting makes their wealth at death a good proxy for their initial wealth, on the basis of which they initially decided to vote. If the bias is strong, we would observe a large discrepancy in the influence of wealth on voting behavior between politicians who died later after having voted, thus having enough time to accrue rents, and politicians who died relatively shortly after having voted. On the other hand, if endogeneity plays a small role, we expect  $\beta_3$  to be insignificant. On the other hand, if the bias is large (and the effect of wealth on voting behavior is present) we would observe a  $\beta_1$  and  $\beta_3$  that are widely different in magnitude.

Regarding the expected direction of  $\beta_3$ , suppose that politicians who voted against would receive rents in the future. Then, the politicians who voted no and lived long enough to accrue those rents would be significantly wealthier than those who voted in favor, and the wealthier politicians who have been much more likely to have voted against. This implies that the influence of wealth would be smaller for politicians who died shortly after having voted than for those who did not, and we would expect a negative  $\beta_3$ .

### 3.2.4 Threats to identification

In the instrumental variable estimates, the instrument might in itself suffer from endogeneity bias. For example, politicians whose fathers were politically active could share a latent encompassing ideology, say, statism, a penchant for increasing the size of the government, and could therefore be inclined to vote in favor of laws that expand government. If a similar explanation is true, there is a direct effect of the instrument on politicians' voting behavior, and the exclusion restrictions are violated. The account of [Van Kersbergen \(2009\)](#) strongly suggests that this is not the case, because confessional parties were generally anti-statist, whereas liberal parties took a more interventionist stance from the 1870s onward. Nevertheless, there can be other latent commonalities between politicians whose fathers were also politicians, such as a network ([van den Berg, 1983](#)), an interest in politics or a family culture of debate ([Besley, 2005](#)), or systematically higher human capital and a political vocation ([Dal Bó et al., 2009](#)).<sup>4</sup>

<sup>4</sup>It is known that the role of networks declined over time, with the entry of newer generations of politicians in the lower house (Machielsen, xxxx). Secondly, human capital can come from many sources, for example, many parents of politicians were members of the clergy or educated as theologians, and not politicians. Hence, it is unlikely that human capital systematically differs between politicians whose fathers were politicians and those whose fathers weren't, and even if it did, it is unclear how that would translate into systematic voting behavior.

It is still unlikely that the aforementioned factors have a direct influence on the voting behavior of politicians, especially conditional on controlling for ideology, but I attempt to tackle this problem by comparing results of roll call votes on laws in wartime (1914-1918) vis-à-vis laws outside wartime. Since the First World War was generally unanticipated until shortly before its advent (Broadberry and Harrison, 2005)<sup>5</sup>, and since preceding realities and loyalties made little sense, there was a shift among the entire parliament towards more government intervention, if only to provide more finance to the standing army (Frey, 1997). More generally, I assume that the first World War caused enough confusion and uncertainty for such latent factors that bind all members of such 'political families' to be a very minor role. The years 1914-1918 are also the years in which many laws which I analyze were enacted, partially because of such a shift in consensus (Brok, 2012). I perform this analysis in section A.7

Secondly, it might be that richer politicians are also those politicians who inherently dislike expansion of the government, regardless of their own wealth. In other words, the relationship between wealth and voting behavior might reflect politicians' beliefs, which are coincidentally correlated with wealth. This explanation is indirectly tested by enacting several robustness checks. I conduct various analysis of other laws which do not have a direct impact on politicians' private wealth, but do involve government interference in the economy.

Thirdly, richer politicians might be better informed about the consequences for their own wealth than somewhat poorer politicians: the effect might be due to differences in information, and not self-interest. Again, considering the tradition of long debate and fine-tuning of laws in the Dutch parliaments, this seems unlikely. For example, the 1893 income tax took two years since the formation of a government that set out to implement it (Smit, 2002), and many politicians explicitly referred to tariffs and contingencies throughout the debates. In any case, I explicitly control for parliamentary experience in several regressions, which can reflect informedness, and in appendix A.8, I limit the analysis to "high-profile" politicians, of whom it is certain, based on anecdotal evidence, that they were equally well-informed.

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<sup>5</sup>Fouka (2019) and Gay (2019) use the First World War as an exogenous shocks in their empirical designs

## 4 Analysis

### 4.1 Descriptive Statistics

Table 3 show descriptive statistics on voting behavior per law according to political party. It becomes clear that the major source of dissensus among politicians in the lower house comes from confessional politicians. In many roll-call votes, liberal politicians have voted with near-unanimity, and the same is true for socialist politicians. In the upper house, two laws were unanimously approved, whereas over many others, there was significant controversy. Again, similar to the lower house, the major source of dissensus were confessional politicians, whereas liberal politicians showed near-unanimity.

Table 3: Votes in favor of Laws

law	Eerste Kamer			Tweede Kamer		
	confessional	liberal	socialist	confessional	liberal	socialist
Successiewet 1878	0.17	0.67		0.29	0.92	
Inkomstenbelasting 1893	0.25	0.82		0.31	0.88	0.50
Successiewet 1911	1.00	1.00		0.86	1.00	1.00
Staatsschuldwet 1914	1.00	1.00	1.00	0.00	0.11	0.91
Inkomstenbelasting 1914	1.00	1.00	1.00	0.68	1.00	1.00
Successiewet 1916	0.00	0.94	1.00	0.17	1.00	1.00
Successiewet 1921	0.75	0.90	1.00	0.74	0.50	1.00

Percentage of upper house and lower house members having voted in favor of fiscal reforms.

### 4.2 Benchmark Estimates

#### 4.2.1 Law and Party Controls

First, in table 4, I show baseline regression results, analyzing the influence of the personal wealth of politicians, estimated at the time of the vote on the propensity to vote in favor of the law. I begin by examining the impact in a bivariate setting (specification 1), and then include party dummies supplemented by law dummies, giving a *within-law*, *within-party* estimate of the effect of wealth on the propensity to vote in favor of fiscal regulation. I also split up the estimates for lower and upper houses.

In the first two specifications, the results show a significant negative effect of personal wealth on the propensity to vote in favor of fiscal reforms. The effect is significant, indicating that wealthier politicians are less likely to vote in favor of fiscal legislation than less wealthy politicians, also conditional on them belonging to the same party (having the same political allegiance). In specifications 3 and 4, I split up the effect into the lower house votes and the upper house results, while still controlling for political party membership. The effect retains its significance in the upper house, where the results show that personal wealth makes politicians less likely to vote in favor of the reforms. The results for the lower house, are bordering significance as well. So far, the magnitude of the results is plausible: it is about  $\frac{1}{20}$  of the magnitude of the coefficient on party. Because the wealth variable is log-transformed, the result implies that

Table 4: OLS Estimates of Wealth on the Propensity to Vote for Fiscal Reforms

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Personal Wealth	-0.024* (0.011)	-0.018+ (0.010)	-0.022 (0.013)	-0.031* (0.014)	-0.016 (0.010)	-0.026* (0.012)	0.003 (0.014)
House	Both	Both	Tweede Kamer	Eerste Kamer	Both	Tweede Kamer	Eerste Kamer
Controls	None	Party	Party	Party	Party+Law	Party+Law	Party+Law
N	482	480	313	167	480	313	167
Adj. R <sup>2</sup>	0.01	0.19	0.28	0.09	0.30	0.45	0.38

Personal Wealth is defined as  $\log(1 + \text{Wealth at Death})$ . Vote is defined as 1 if the politician is in favor of the reform, 0 otherwise.

Heteroskedasticity-robust standard errors in parentheses.

+  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

a 1% increase in wealth for cause a 2 percentage-point decrease in the propensity of voting in favor of the reforms. Another interpretation is that a 20% increase (or decrease) in a politician's wealth would be enough to overturn the influence of their political allegiance.

This latter claim is also evidenced by the R-squared of the models: a model attempting to explain the decision-making of politicians purely by their personal wealth performs poorly: it can only explain 1% of the variance in voting outcomes, whereas a model including political allegiance can already explain 28% of the variation, and a model with fixed law dummies around 45% in the lower house.

In specification 5, however, I also include law fixed-effects, which makes the estimates *within-law* estimates, that is to say, making use of variation within laws and within the composition of politicians who voted on that particular law. The results for both houses shows insignificance. This insignificance is due, however, as evidenced by specifications 6 and 7, to the absence of the effect in the upper house, and a stronger effect (compared to specifications 1 and 2) in the lower house. Especially given specification 4, this is surprising: it means that the significance in the upper house in specification 4 was actually due to differences in wealth and voting outcomes between different voting outcomes (and different compositions of the upper house), rather than to different voting outcomes with respect to wealthier and less wealthy politicians within one roll-call vote.

On first sight, it thus seems that the personal wealth of politicians does not play a role in the upper house, but does play a role in the lower house. In the remainder of the analysis, I include many control variables and employ other techniques to establish whether the effect is not due to other explanations: in particular, I include many control variables and use instrumental variable estimation to filter out potential endogeneity. I also investigate the upper house more thoroughly (in section 4.3).

#### 4.2.2 Other controls

In table 5, I present estimates with other, arguably more stringent control variables added. I focus on the lower house, as lower house members have district-specific controls, and upper house politicians do not. Specifically, I control for various electoral and demographic aspects, as well as for measures indicating the politician's electoral success, and the districts economic interests and demographics. As several variables are highly collinear (e.g., % Roman Catholics and % Protestants), I only include one of these variables in the regression equation. Similarly, the inclusion of some variables comes at the costs of many missing ob-

servations. This is the cases for some district-specific proxying for the economic interests of the districts, in the form of % of the labor force working in agriculture and industry. This has to do with the limited availability of the data on the municipal level. Hence, I include these predictors in several specifications, but omit them afterwards. In appendix A.2, I show other results with these predictors. In general, the results are very similar to those reported here. The general model include several control variables, including Amount of Strikes, and Competed Against Socialist. These variables are included to take into account a hypothesized effect that socialism and revolutionarity threat and activity might have on motivating politicians to engage in reform. Secondly, the estimates attempt to control for the demographic characteristics of the district the politician is representing. It is known that religious adherence determined voting behavior to a large extent (de Jong, 2001), but the extent to which it should dictate economic policy favored by their representatives is less obvious. To control for varying preferences with respect to economic policy, I include the share of the population active in industry, as opposed to agriculture and services, in the model. This closely resembles the strategy of Peltzman (1984).

Table 5: OLS Estimates of Wealth on the Propensity to Vote for Fiscal Reforms - Controls

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Personal Wealth	-0.026*	-0.020	-0.026*	-0.023	-0.026*	-0.025*	-0.025+
	(0.012)	(0.012)	(0.013)	(0.016)	(0.013)	(0.013)	(0.013)
Amount of Strikes		0.000	0.000	-0.008+	0.000	0.000	0.000
		(0.001)	(0.001)	(0.004)	(0.001)	(0.001)	(0.001)
% Catholics in district			-0.003**	-0.003*	-0.003**	-0.003**	-0.003**
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Share Industrial				-0.011			
				(0.348)			
Vote Share (% Total)					0.016	0.016	0.014
					(0.091)	(0.093)	(0.096)
Competed Against Socialist						0.062	0.062
						(0.092)	(0.092)
Tenure							0.000
							(0.000)
Party + Law Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	313	295	285	209	285	283	283
Adj. R <sup>2</sup>	0.45	0.47	0.49	0.48	0.48	0.48	0.48

Vote is defined as 1 if the politician is in favor of the reform, 0 otherwise.

Personal Wealth is defined as  $\log(1 + \text{Wealth at Death})$ .

Heteroskedasticity-robust standard errors in parenthesis. Results for lower house voting outcomes.

+  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

From table 5, it is clear that the estimates of the impact of wealth on voting behavior are very stable across models. Specifically, the estimate seems to hover around -0.25, and is significant at the 5% level in most cases, after controlling for a wide range of factors. The effect is again comparable to  $\frac{1}{20}$  of the effect of party alignment. Equation 1 shows the baseline model, which only controls for party and law dummies, making every estimation again a within-party, within-law estimation. In model 2, I include strikes, taking into account the explanation that politicians are more prone to reform because of the threat of revolution and civil unrest (Aidt and Franck, 2019). For similar reasons, I add a dummy indicating whether a politician competed with a socialist in their district. Both factors seem to have very little systematic ef-

fect, conditional on other factors. One factor that does seem to affect the decision-making is percentage of Roman Catholics in the district, making politicians who represent these districts less likely to vote in favor of the reforms. The share of industrial workers in a district, on the other hand, does not seem to influence the propensity of their representative to vote in favor of fiscal reform. In A.2, I substitute this variable for variables indicating the share of service and agricultural workers respectively, and the results show the same. In the remainder of the analyses, I omit this variable, as it is only available for a subset of observations (detailed in appendix A.2). It seems that the districts' economic profile does not influence the voting behavior of politicians. Finally, there is no evidence that politicians' popularity, measured by the voting share in the last elections they competed in, is correlated with their voting behavior concerning fiscal reforms.

### 4.3 Upper House

As mentioned in section 2, the upper house differs from the lower house in many important aspects. Whereas the lower house has an explicit role, ranging from the power to provide amendments to law projects, to questioning the executives about their policy and urging them to make changes, the upper house's purpose is formally to evaluate laws accepted by parliament on their legal coherence. In practice, the upper house was considered political by some, although it always had a more technocratic character than the lower house (van den Braak, 1999).

Table 6: OLS Estimates of Wealth on the Propensity to Vote for Fiscal Reforms - Upper House

	(1)	(2)	(3)	(4)	(5)
Personal Wealth	-0.031*	0.003	0.004	0.004	0.003
	(0.014)	(0.014)	(0.014)	(0.015)	(0.016)
Tenure			-0.071	-0.070	-0.071
			(0.109)	(0.156)	(0.155)
Age at Time of Vote				-0.002	-0.007
				(0.127)	(0.138)
Long Electoral Horizon					-0.019
					(0.146)
Controls	Party	Party+Law	Party+Law	Party+Law	Party+Law
N	167	167	167	167	167
Adj. R <sup>2</sup>	0.09	0.38	0.38	0.37	0.37

Vote is defined as 1 if the politician is in favor of the reform, 0 otherwise.

Personal Wealth is defined as  $\log(1 + \text{Wealth at Death})$ .

Results for upper house voting outcomes.

Heteroskedasticity-robust standard errors in parenthesis.

+ p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

The results for the upper house in table 6 show that the initial significance in the baseline model is explained away by other factors: the initial effect of wealth on the likelihood to vote in favor of the reforms was a consequence of the differences in wealth between the different constitutions of the upper house that voted on these laws. The results are consistent with the view of the upper house being less political, there being no indication that politicians' allowed their personal interests to influence their voting behavior. The inclusion of various controls, a politician's length of stay in the upper house until the moment of



voting, their age at the time of the vote, and their long electoral horizon (time until retirement) played no role, as did the age of entrance, which was omitted because of collinearity concerns. The null results are also the reason why the remainder of the analysis focuses on the lower house: in the upper house, there is no indication that personal interests of politicians play a role.

## 4.4 Tackling Endogeneity Concerns

### 4.4.1 IV Estimates

An important concern regarding the OLS results is that they might suffer from endogeneity bias. I attempt to tackle the problem in two ways: by using instrumental variable estimation, and by exploiting deaths shortly after having voted on a particular law, so that a politician's wealth at death is very close to a politician's wealth at the time of voting.

In this section, I give an overview of the instrumental variable results. As an instrument, I use an indicator, indicating whether the father of politician  $i$  had also been active in politics at some level, at some moment. This indicator has predictive power over the wealth of politicians, in that politicians whose fathers were active in politics tend to be more wealthy than politicians whose fathers were not. A witness to the relevance of the instrument is the F-statistic in the first-stage regression, which is higher than 10 in all regressions, and the estimation likely does not suffer from a weak instruments problem (Murray, 2006). In section 3.2.4, I argue that the instrument is also plausibly exogenous, and does not influence politicians' voting behavior directly other than through influencing their wealth. In appendix A.6, I provide estimation results using alternative specifications. These results are virtually identical to the results reported here: the coefficient on personal wealth is significant in almost all specifications, and the value of the F-statistic is similar in magnitude to those reported here. I also use alternative, but very similar instruments and obtain very similar results to the ones reported here.

Table 7 shows the results. I use the same analyses as before, to facilitate comparison between the OLS and IV estimates.

The results convincingly show that personal wealth causally affects voting behavior of politicians. The point estimate of the instrumented wealth points, is in the hypothesized (negative) direction, and moreover, the point estimate is substantially larger than the OLS estimates, potentially indicating that endogeneity caused OLS estimates to be biased towards zero. The estimates are now of a magnitude that is comparable to  $\frac{1}{5}$  of the effect of political affiliation on voting outcomes, although in several estimations, the estimate is slightly more noisy than before. The estimates imply that a 1 percent increase in personal wealth would decrease the propensity to be in favor of the fiscal reforms with about 7 percentage points. Even in the most general model, the estimates are still significant at the 10%-level. The estimates are robust to the inclusion of various control variables, and in results reported in appendix A.6, it can be seen that, for example, replacing Catholic Share by Protestant share, or including more control variables, does not change the results. Apart from the Catholic share and the share of Socialist vote, none of the control variables attain significance. The Catholic share coefficient indicates that politicians in districts where the Catholic share is higher are less inclined to vote in favor of the reforms. Anecdotal evidence does suggest Catholic politicians (and presumably their electorate) were less inclined to progressive social

Table 7: IV Estimates of Wealth on the Propensity to Vote for Fiscal Reforms

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Personal Wealth	-0.055 (0.037)	-0.051 (0.038)	-0.068+ (0.039)	-0.087* (0.035)	-0.069+ (0.040)	-0.069+ (0.039)	-0.068+ (0.040)
Amount of Strikes		0.000 (0.001)	0.000 (0.001)	-0.006 (0.004)	0.000 (0.001)	0.000 (0.001)	0.001 (0.001)
% Catholics in district			-0.003** (0.001)	-0.004** (0.001)	-0.003** (0.001)	-0.003** (0.001)	-0.003** (0.001)
Share Industrial				-0.012 (0.330)			
Vote Share (% Total)					-0.010 (0.089)	-0.004 (0.090)	-0.011 (0.091)
Tenure						0.030 (0.076)	0.020 (0.075)
Socialist Vote Last Election (% Total)							-0.002+ (0.001)
Party + Law Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
F-Stat. First stage	36.81	34.51	32.05	43.18	30.7	32.12	30.35
N	312	296	287	211	287	287	285
Adj. R <sup>2</sup>	0.45	0.46	0.47	0.43	0.46	0.46	0.46

Vote is defined as 1 if the politician is in favor of the reform, 0 otherwise.

Personal Wealth is defined as  $\log(1 + \text{Wealth at Death})$ , and instrumented by Fathers profession.

Heteroskedasticity-robust standard errors in parenthesis. Results for lower house voting outcomes.

+  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

policy until the early twentieth century. The socialist vote share presumably reflects competition: the higher the socialist share, the more likely the opponent (and winning politician) was not a socialist, and hence opted to vote against the reforms.

#### 4.4.2 Died Shortly After Voting

The second way in which I attempt to minimize the bias generated by endogeneity is by exploiting early deaths among politicians after having voted on these laws. For this purpose, I construct a dummy variable, which equals 1 if a politician died within  $x$  years after having voted on a particular law, and 0 otherwise. In this analysis, I use  $x \in \{2, 5\}$ , where the analysis for within 5 years is relegated to appendix A.6. I estimate empirical models similar to equation 2, which I augment stepwise with control variables. The expectation is that, if endogeneity plays a large role, such that politicians who have voted against the reforms, and stayed alive long enough to accrue rents, the coefficient on Wealth and the coefficient on Wealth x Died Within X Years would be dissimilar.

The results are shown in table 8. The first three rows are of interest. The coefficient on personal wealth in these regressions generally exceeds the magnitude of those in tables 4 and 5: the point estimate is now around -0.04, indicating that a percentage point increase in wealth would decrease the propensity to vote in favor of fiscal reform with 0.04 percentage point, which is quite substantial. The coefficient is stable across all specifications. The coefficient on having died within two years is generally not significant, apart from in model (2), where it attains a significance level of 10%. More importantly, the coefficient on the interaction effect between personal wealth and having died within two years is never significant, likely

Table 8: OLS Estimates of Wealth on the Propensity to Vote for Fiscal Reforms - Endogeneity Test

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Personal Wealth	-0.041*	-0.038*	-0.039*	-0.038+	-0.039*	-0.037*	-0.037*
	(0.016)	(0.017)	(0.017)	(0.023)	(0.017)	(0.018)	(0.018)
Died Within 2 Years	-0.397	-0.425+	-0.307	-0.350	-0.320	-0.286	-0.285
	(0.241)	(0.250)	(0.257)	(0.326)	(0.262)	(0.266)	(0.267)
Wealth x Died Within 2 Years	0.034	0.036	0.027	0.031	0.029	0.025	0.025
	(0.022)	(0.023)	(0.024)	(0.030)	(0.024)	(0.025)	(0.025)
Amount of Strikes		0.000	0.000	-0.008+	0.000	0.000	0.000
		(0.001)	(0.001)	(0.004)	(0.001)	(0.001)	(0.001)
% Catholics in district			-0.003**	-0.003*	-0.003**	-0.003**	-0.003**
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Share Industrial				-0.097			
				(0.350)			
Vote Share (% Total)					0.031	0.029	0.028
					(0.092)	(0.094)	(0.097)
Competed Against Socialist						0.056	0.056
						(0.092)	(0.092)
Tenure							0.000
							(0.000)
Party + Law Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	313	295	285	209	285	283	283
Adj. R <sup>2</sup>	0.45	0.48	0.49	0.48	0.48	0.48	0.48

Vote is defined as 1 if the politician is in favor of the reform, 0 otherwise.

Personal Wealth is defined as  $\log(1 + \text{Wealth at Death})$ .

Heteroskedasticity-robust standard errors in parenthesis. Results for lower house voting outcomes.

+  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

indicating that endogeneity likely does not play a substantial role in biasing the coefficient estimates. The control variables play a minor role, with the exception of the percentage of Catholics in a district, which makes politicians who represent them less likely to vote in favor of the reforms. Other control variables attempting to gauge the politicians' electoral position and the demographic and economic characteristics of the district remain insignificant after controlling for party and law.

## 5 Other Laws

### 5.1 Government Intervention

One of the possible threats to identification focused on the conjecture that politicians from political families might share a latent ideology, statism (or alternatively, the opposite) that causes them to prefer government intervention regardless of party allegiance. In this case, the instrument has a direct influence on the dependent variable and the exclusion restriction is violated. I test this conjecture to focus on laws that encompass an expansion of the government, *without* having a direct influence on politicians' personal wealth. If it were true that statism was a latent factor driving the decision-making of politicians, the results should indicate that personal wealth is significant in these cases as well, as a result of the endogeneity of the instrument. Hence, I turn to the analysis of laws that imply government intervention, but do not necessarily put a strain on government finances. Among the laws that I analyze are the *Woningwet*, *Leerplichtwet*, *Invaliditeits- en Ouderdomswet*. These laws have in common that they bring about government intervention, without putting a strain on government finances: most of these law concern private arrangements between employers and employees, or alternatively, allowed private parties (pillars) to fund their own organizations (van Gerwen and van Leeuwen, 2000).

Table 9: OLS Estimates of Wealth on the Propensity to Vote for Social Redistribution - Controls

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Personal Wealth	-0.001 (0.008)	-0.001 (0.008)	0.001 (0.008)	0.001 (0.010)	0.001 (0.008)	0.001 (0.009)	0.001 (0.009)
Amount of Strikes		0.002+ (0.001)	0.002* (0.001)	0.001 (0.003)	0.002* (0.001)	0.002* (0.001)	0.002+ (0.001)
% Catholics in district			0.000 (0.001)	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)
Share Industrial				-0.060 (0.223)			
Vote Share (% Total)					0.002 (0.068)	0.002 (0.068)	0.000 (0.069)
Competed Against Socialist						-0.008 (0.045)	-0.009 (0.046)
Tenure							0.000 (0.000)
Party + Law Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	573	556	532	373	532	532	532
Adj. R <sup>2</sup>	0.44	0.44	0.43	0.40	0.43	0.43	0.43

Vote is defined as 1 if the politician is in favor of the reform, 0 otherwise.

Personal Wealth is defined as  $\log(1 + \text{Wealth at Death})$ .

Heteroskedasticity-robust standard errors in parenthesis. Results for lower house voting outcomes.

+  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

In table 9, I provide baseline estimates of the influence of politicians' wealth on the propensity to vote in favor for these laws. I control for party and law fixed effects in all specifications. As becomes clear, the point estimate in these regressions is near zero, indicating that personal wealth seemingly plays no role in the decision-making of politicians, after controlling for various other factors. Furthermore, in neither

of these cases does the coefficient attain significance. Standard errors are about ten times larger than the coefficient estimate.

I gradually augment the specifications in 9 with several control variables: specification 1 is the baseline estimate, controlling for political party and law, and I add the amount of strikes, from specification 2 onward. This variable attains significance in all cases, although the economic significance seems to be very marginal. The coefficient magnitude implies that there would have had to be tens of strikes in a given district to alter the propensity to vote in favor of social redistribution even by a percentage point.

Similarly, I add religious shares from specification 3 onward, and I augment this model by an indicators of a district's economy, the share of the labor force working in industry. Because this variable is only available for a limited number of districts, and hence entails the sacrifice of many observations, I omit it from further specifications, after observing it is non-significant. Furthermore, I augment the model by a politician's electoral position, indicated by the vote share, tenure, and test the 'threat of revolution' hypothesis by including a socialist dummy. All of the results show that the estimate is very close towards zero, leaving virtually no doubt that the personal wealth of politicians played virtually no role in the establishment of these laws. Paying attention to the explanatory power of the models, I note that they are comparable to the R-squared statistics in the preceding section, indicating that, as previously, and unsurprisingly, the bulk of the explanatory power comes from political party allegiance.

In contrast to the results on fiscal legislation, these results strongly support the traditional interpretation of Dutch politics by political historians, implying there is no role for self-interest of politicians when voting on laws that do not have a direct impact on taxation and thus, their personal finances. The results also serve to show that there is no likely common latent ideology (such as statism or anti-statism) that would cause the exclusion restriction in the IV regressions to be violated. If the influence that is now attributed to wealth is actually due to a latent ideology shared by relatively richer politicians, then this influence should also be apparent in laws that imply government intervention, but do not directly affect the personal wealth of politicians. These results show convincingly that there is no relationship between personal wealth and voting behavior in those laws, effectively showing that the instrument is likely to be exogenous and relatively richer politicians do not share a common ideology.

## 5.2 Electoral Law

Next, I also investigate the influence of politicians' personal wealth on voting behavior when it comes to several law projects (both failed and realized) aimed at expanding the franchise. Comparing the incentives of politicians in these situations with the incentives when faced with government intervention and fiscal legislation, it seems that there is no direct effect of suffrage expansion on the personal wealth of politicians. For this reason, we should expect no influence of politicians' personal wealth on their voting behavior on these laws, but on the other hand, politicians might anticipate that future, more democratized parliament tend to vote in favor of more fiscal legislation, giving richer politicians an incentive to vote against these laws. Theoretically, therefore, the effect is more ambiguous than in the other cases.

In table 10, I present results for roll call votes on expansion of the suffrage, in 1872, 1887, 1892, 1896 and 1918. I provide seven specifications, where the baseline is controlling for political affiliation and law fixed-effects, again making the estimate an average of the *within-law*, *within-party* effects. As becomes clear,

the magnitude of the coefficient is very small: specification 1 shows an effect size that is much smaller than the effect in the votes on fiscal legislation. This is consistent with the characterization of the political elite and the political system by many political historians. For example, authors such as Lijphart (1975) and De Jong (1999) describe the Dutch political transformation in the late nineteenth century as one of increasing party loyalty, made imperative by the reality of pillarization.

Authors of leading collective biographies (Secker, 1991; van den Braak, 1999; van den Berg, 1983) have similarly shared the conception that the recruitment and behavior of the political elite was aimed principally at defending the interests of their own group. Moes (2012) studies aristocrats as a group, highlighting explicitly their representation as a group. Even historians who otherwise disagree with the vision implied by Lijphart (Rooy, 2014) do not accord any importance to the personal interests of politicians. Only rarely it is suggested that the personal background of politicians could be an important factor determining their political behavior. Rather, worldview, ideology and religion play a much more important role in their politics. The results in this section are consistent with these views: there are no indications that self-interest plays a role over and beyond political allegiance: party allegiance and corresponding ideological alignments are by far the strongest explanatory factor of politicians' voting behavior on electoral laws.

Table 10: OLS Estimates of Wealth on the Propensity to Vote for Suffrage Expansion

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Personal Wealth	-0.001 (0.017)	-0.010 (0.019)	-0.015 (0.020)	-0.011 (0.022)	-0.017 (0.020)	-0.017 (0.020)	-0.015 (0.020)
Amount of Strikes		0.006+ (0.003)	0.006+ (0.003)	0.006* (0.003)	0.004 (0.003)	0.004 (0.004)	0.004 (0.004)
% Catholics in district			-0.001 (0.001)	-0.001 (0.001)	0.000 (0.001)	-0.001 (0.001)	-0.001 (0.001)
Share Industrial				-0.089 (0.469)			
Vote Share (% Total)					-0.157 (0.108)	-0.159 (0.108)	-0.162 (0.109)
Electoral Turnout (%)						-0.036 (0.159)	-0.043 (0.160)
Tenure							-0.002 (0.004)
Party + Law Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	267	246	243	214	243	243	243
Adj. R <sup>2</sup>	0.29	0.28	0.28	0.24	0.28	0.28	0.28

Vote is defined as 1 if the politician is in favor of the reform, 0 otherwise.

Personal Wealth is defined as  $\log(1 + \text{Wealth at Death})$ .

Heteroskedasticity-robust standard errors in parenthesis. Results for lower house voting outcomes.

+  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

In table 10, the results are corroborated after inclusion of various control variables. In subsequent models, in addition to law and political allegiance controls, I include the number of strikes as a proxy for the 'revolutionary threat' (Lizzeri and Persico, 2004) explanation for reform. In specification 2, I add religious shares in each district, and in specification 3 I add two indicators of the relative economic position of the district. In specification 4, I add electoral controls, gauging the popularity or monopolistic power of a politician (Lizzeri and Persico, 2001). In analyses where religion (% of Catholics, Protestants

in a district) is included, the corresponding coefficient is also consistently significant, over and above the influence of political party. In no specification does the coefficient of Wealth attain significance. In fact, conditional on the inclusion of party and law dummies, no other variable is consistently significant, including the number of strikes, consistent with [Acemoglu and Robinson \(2000\)](#) and [Dower et al. \(2020\)](#). Finally, there seems to be some support for the notion of monopoly power: the coefficient on the "Nearest Competitor Margin" is negative, indicating that if a politician had won the latest election by a larger margin, the probability of voting in favor of franchise extension decreases.



## 6 Conclusion

This study focused on the voting behavior of politicians and the influence of their personal financial interests by analyzing several roll call votes of important pieces of fiscal legislation (and other key laws and law projects) in late 19th and early 20th century Netherlands. On the one hand, it is plausible that personal considerations influence political decision-making in case of imperfect control of politicians' actions by the electorate: the economics literature would suggest that a centralized, delegated political system such as *pillarization* would leave ample opportunities for politicians to pursue their self-interest (Kalt and Zupan, 1990; Mian et al., 2010). On the other hand, the politico-historical literature accentuated the absence of self-interest and the relevance of ideology, party allegiance and discipline (de Haan, 2003; Lijphart, 1975).

The analysis distinguished between pieces of legislation where the acceptance would directly lead to increased taxation, that is, lead to a likely direct increase in (expected future) tax burden, as opposed to other laws, in which an effect on personal finances would be less plausible and less clear. The analyses showed that, in the case of fiscal legislation, which directly impacts politicians' personal finances, there is a statistically and economically significant effect of personal wealth on the propensity to vote in favor of fiscal legislation. The magnitude of this effect is economically significant: a 1% increase in wealth would decrease the propensity to vote in favor of fiscal legislation with 0.3 to 0.7 %, depending on the point estimate. Comparing the obtained point estimates to the estimates pertaining to political party or allegiance, a wealth increase (or decrease) ranging from a 20% to 40% would suffice to overturn a politician's propensity to vote arising from their ideological allegiance to a political party. Moreover, the results seem to be robust to a wide number of specifications and control variables. The instrumental variable estimates show an increased magnitude compared to the OLS estimates, indicating that endogeneity biases the coefficient on wealth downwards, rather than upwards.

The analysis also showed that this effect is largely absent in roll call votes on laws that do not directly impact the personal wealth of politicians. In these cases, either standard errors are very large, the point estimate is close to zero, or both. Similarly, this result is robust to many specifications and estimation procedures. I interpret this as showing additional evidence in favor of the proposition that personal interests influence politicians' decision-making. For the Netherlands, these results indicate that the political system might have come with a previously neglected source of rents (e.g. in Persson et al., 1997): even when keeping many variables related to the electoral profile constant, politicians' personal interests seem to influence their voting behavior in a way consistent with them evaluating the effects for their personal wealth.

The results also make it more likely that politicians' personal interests played a role in endogenous bargaining within parliament over tax rates: if personal wealth has an influence on voting outcomes, it might also have an influence on the parameters of that law. In other words, the wealthier part of the Dutch political elite might have used their position to bargain a lower tax rate than would have been the case if they were less wealthy. This is explicitly reflected in the failure of some law projects, such as the 1872 income tax attempt (Van den Berg and Vis, 2013). Extrapolating this logic, this bargaining process influences equilibrium tax rates, and ultimately, government size. It is a possibility then, that the personal interests of politicians have, by consistently bargaining low tax rates, delayed the advent of the welfare

state until after World War II (cf. Lindert, 2004).

Furthermore, whereas various authors in various literatures suggest that the latent threat of socialism or instability motivated politicians (e.g. Aidt and Jensen, 2014; Aidt and Franck, 2019; Van den Berg and Vis, 2013), this analysis does not uncover specific effects of this threat at the politician-district level. This can also be a product of the specific *pillarization* system of the Netherlands: socialism was relatively late to take a foothold, and Catholic and Protestant pillars were in the process of co-opting forms of organization usually associated with socialism (mass mobilization and petitioning, trade unions). Disregarding that issue, and more generally, the results of this study might serve as a benchmark for what happened in many other (Western) European countries. Many Western European countries saw a very similar transition from oligarchy in the early 19th century to democracy, marked by the adoption of universal suffrage shortly after the First World War (Przeworski, 2009). In addition, many other countries also experienced a decline of the influence of the landed aristocracy, in spite of variation in the degree of adaption (Lieven, 1992). It is thus likely that the results and implications of this study might be generalizable to various other Western European countries.

More broadly, and more speculatively, this study might also have implications for the comparative development of presently developing economies. It is known that developing economies have much less fiscal capacity than developed economies (Besley and Persson, 2013; Johnson and Koyama, 2017). This improved fiscal capacity then, in turn, promotes economic growth (Dincecco and Katz, 2016; Dincecco, 2015). Mokyr and Nye (2007) argue that one of the factors for developing state capacity in the then-rapidly developing United Kingdom was a comparatively unified political elite. This study nuances that picture by providing evidence that a similarly unified political elite can slow down the process of state capacity by prioritizing their own interests: in a counterfactual world, where politicians' wealth would have been closer to the wealth of the average population, they might have been inclined to accept more taxation, and accept higher equilibrium tax rates.

Finally, in contrast to the results on fiscal legislation, i.e. laws that directly impact a politician's personal finances, the analyses of suffrage extensions and broader government intervention show no indication of personal wealth influencing politicians' decision-making. In light of the findings by Aidt et al. (2006), who find that expansion of the franchise increases government spending, I find that politicians are unable to factor in this effect into their decision-making, as there is no discernible influence of politicians' personal interest on the acceptance of these laws, indicating that they do not expect changes in expected future taxes: the estimated coefficient on wealth in these analyses never shows significance, and the magnitude is very small. Alternatively, when concerned with these laws, the characterization of the Dutch political elite of the nineteenth and early twentieth century as acting purely on the grounds of ideology and group interests (as in Lijphart, 1975) might be more accurate.

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# Appendices

## A.I Selection bias

### A.I.I Selection in Found Probate Inventories

In order to find out whether the final sample of probate inventories is a representative sample of all politicians, I estimate the following linear probability model:

$$\text{Found}_i = \alpha + \gamma \cdot \text{Law} + \delta \cdot \text{Party} + X_i\beta + e_i \quad (3)$$

Ideally, we want that that all politicians are randomly selected around a certain base finding rate - that is to say, we want the characteristics of politicians to be unrelated to them being found or not, both unconditionally and conditionally on other factors. We firstly show results indicating the baseline differences in collection rates according to demographic variables, and then according to law and party. Firstly, we notes that most of the point estimates of the linear probability model in the left panel are very close to zero. The confidence intervals for many intervals are also very narrow, indicating an absence of selection bias with respect to these variables. Hence, even though some of these estimates are statistically significant, the point estimate is close to zero that the economic significance is near-zero. There are three exceptions to this rule: the nearest competitor margin, electoral turnout and share of workers active in industry have a greater variance. This makes sense, as these are not variables that are characteristic to the politician, but rather to the district in which they are elected. Nevertheless, none of these estimates is significantly different from zero, indicating the absence of a selection bias also with respect to these covariates.

Selection bias: Coefficient estimates for various variables

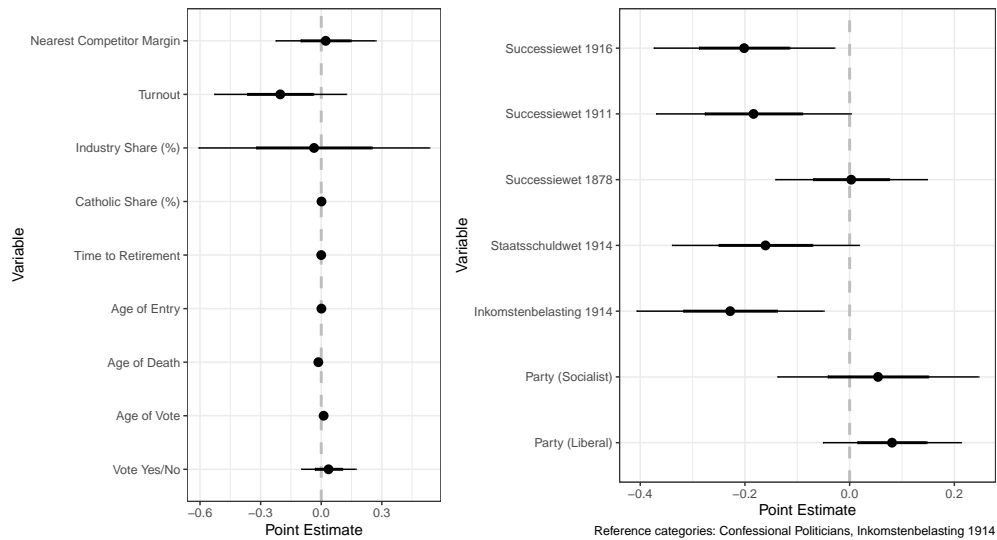


Figure 2: Coefficient Estimates on Pr(Found)

In the right panel, we show the coefficient estimates for party and law dummies. First, we note that even though liberals and socialists are more likely to have been found relative to confessional politicians, these estimates are statistically insignificant, and the null hypothesis of no difference in finding rates according to political parties is not rejected. Secondly, there are statistically and economically significant differences in finding rates between the laws. This is likely a consequence of the availability of archival sources: as politicians who voted in later laws die later (on average), a larger fraction of later politicians dies after 1927, rendering their probate inventories unavailable. Hence, later laws have slightly less overall finding rates, but all other characteristics, including most significantly voting outcomes, but also demographics and district characteristics remain balanced within laws.

### **A.1.2 Selection in Voting on Laws**

[Which politicians voted and which politicians did not?]

## A.2 Data Linking

### A.2.1 Introduction

In this section, I describe how I proceed from the data on voting outcomes to a dataset with control variables as described in section 3. This serves two purposes. First, reproducibility: this guide serves as a walkthrough through the code on the [Github Repository](#) of this paper. The reader has only to fork the Github repository for this paper, and execute the R code to reproduce all analyses that are found in this paper. Additionally, 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. Secondly, I attempt to be as transparent as possible by showing what data I combined, and how.

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.

### A.2.2 Primary Data

For an analysis of each and every law, I find the document which contains the voting outcome on the law in question, and I code this information into 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 [Staten Generaal Digitaal](#), and finally, `date`, the date of the roll call vote. The date is important so as to calculate an estimate of politicians' personal wealth at the time (in the year) of the vote, and the name is important so as to match the politician to an identifier that allows the voting data to be merged with the data on personal wealth.

### A.2.3 Find Politician ID

The first step is to match the politician's name as written in the voting records to an identifier that contains the information necessary to find the politicians' wealth, district they represent, their demographic characteristics and all other controls. To do this, I need to employ name matching. Some names, particularly those of aristocrat politicians are not written out in full and therefore do not exactly match the names as used in the database provided by the *Politiek Documentatiecentrum*. Hence, I have to employ a fuzzy name matching strategy. The issue is further complicated by the presence of brothers, fathers/sons in the same house, so that it is impossible to match using surnames only. To minimize potential errors, we use fuzzy name matching on a filter "list of candidate matches" for each name in the voting records. This procedure is implemented in the function `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. The first idea is implemented in the function, and the results are checked afterwards.

#### A.2.4 Find District

After having obtained politicians' id numbers, I 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 obtained from the *Politiek Documentatiecentrum*. Their information, in turn, is compiled from primary sources, such as the *Handelingen* which also contain the voting outcomes. 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
```

Parsing this information requires evaluating the string, particularly, whether there is more than one district, and secondly, relating the parsed years to the variable indicating when the vote took place, so as to determine which was the district the politician was representing at the time of the vote. I also analyze several laws which took place under proportional representation (1918 onwards). For these observations, there are no districts, hence, there are no district-level control variables and this function does not apply.

#### A.2.5 Number of Strikes

Next, on the basis of politicians' id numbers, the date of vote, and the district they represented at that time, I can extract several other control variables. Firstly, I proceed by extracting various control variables based on the district-time data that we have. The function `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 ([van der Velden, 2016](#)), which provides information about strikes, number of lockouts and other conflicts on a municipality-year level from 1573-2014. I use information on the Huygens-ING Lower House repository (elaborated on in section 3) 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 key from municipalities to districts to merge a variable containing the total number of strikes, lockouts and other conflicts in a given year in a given district to the main dataset using the district the politician is representing during a particular vote.

#### A.2.6 Religious Composition of District

Afterwards, I use the function `find_religion`, which takes district-year information to look up the religious composition in the *nearest* year in which census data about religious composition per district

is available. The raw data is again taken from the Huygens-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 reason for no cut-off point, after which the observation will become an NA is the relatively small variance over time. 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), but the function uses only relative shares.

### A.2.7 Politician Demographics

In addition, I use the function `find_demographics` to look up several variables related to the demographics of politicians. This function makes use of the politician ID and the date of vote to extract several variables, some of which use information of the day of vote. It returns an array of demographic variables: gender, starting date of political career, end date 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, time until the next election, and political affiliation.

All these variables come straight from the *Politiek Documentatiecentrum*, with the exception being political affiliation (political party) and time until the next election. More precisely, for the time until the next selection, the function is taking the district and the date, and uses the elections database (mentioned hereafter) 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 computed. The political affiliation is taken from the *PDC*, and I use the *PDC* data and a key for political affiliation to construct a political affiliation variable, relating about 50 different (combinations of) political parties to three main ideological currents, i.e. confessional parties, liberal parties and socialist parties.

### A.2.8 Electoral Data

I use the database [Repositorium Tweede Kamerverkiezingen](#), which contains data on all election candidates and all election results from 1848-1917 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, I start out by finding the latest election before the roll call vote, and for this election, I look up the amount of people eligible to vote, the number of days since the last election in the same district, and the voter turnout. Afterwards, I look up all the candidates that took part in this election to retrieve the names of all contenders, and retrieve the margin of the winning candidate to the runner-up, 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).

Voter turnout has been shown in recent research ([Lijphart, 1997](#); [Fumagalli and Narciso, 2012](#)) to drive government expenditures, welfare spending and government revenues in a contemporary context.

Grossman and Helpman (1996) and Lizzeri and Persico (2005) show theoretically that electoral competition might influence politicians' decision-making in various ways, and Griffin (2006) provides a review and critique of many empirical studies that address this question. The various variables proxying for a socialist contender are motivated by the so-called 'threat of revolution' hypothesis Aidt and Jensen (2014); Aidt and Franck (2019), which holds that a threat of civil unrest or revolution motivates incumbent politicians to enact reforms.

### A.2.9 District Economic Controls

Next, I retrieve information from the [Historical Database of Dutch Municipalities](#) with the purpose of finding district aggregates of various demographic statistics. This idea is implemented in the function `find_econcontrols`, which merges the data with several variables that proxy for the economic characteristics of the district politician  $i$  is representing. The database is based on many primary sources, in particular, censuses (*Volkstellingen*), and the *Uitkomst der Beroepstellingen* (Profession Counts). I retrieve two subsets 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 aforementioned available *Beroepstellingen* from surveys the Dutch government took at three relevant moments in time. The surveys have featured slight modifications over time, so they are not intertemporally comparable (Peeters, 2021), but they are cross-sectionally comparable. Because there is no intertemporal comparability, I have to use the data for the municipalities coming from the same year. I choose the year that is closest in absolute value to the year of voting. This also makes the data more scarce, since missing data cannot be replaced by data from another point in time.

The survey features count variables of around 50 professions on a municipality level. I aggregate these professions into three categories: agriculture, industry, and services, and then compute the share of the active labor force in these sectors. Afterwards, I aggregate the outcomes to the district level. Second, I use a measure of municipal wealth. I 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. Similarly, the survey closest to the date of voting is used. The idea behind these variables is to proxy for the economic interest of different sectors, and originates with Peltzman (1984), who controls for district economic characteristics in a contemporary setting.

### A.2.10 Politician Wealth

Finally, I implement the idea described in equation 1 in the function `find_wealth`, which first finds and extracts the years between the politician's death and the vote, and then, from year  $t + 1$  to year  $t$  computes the continuously compounded return on the politician's portfolio weighted by asset class in the portfolio. This function recursively applies that calculation, so that portfolio shares grow in proportion to the returns provided in the Jordà et al. (2019) database. At the year of vote, the value of all asset classes is summed together, yielding an approximation of wealth at the time of voting if the politician were an average investor. In section A.3, I explain in detail how this is done.

### A.3 Portfolio Composition and Asset Returns

As mentioned, I use the "Rate of Return on Everything" (Jordà et al., 2019) 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 (Gelderblom et al., 2021), 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 the average return on safe assets in that year for each country. The dataset also features a variable that measures the average return on capital. In further robustness analyses, I employ this measure, instead of the more heterogeneous measure outlined above, but it has very little effects on coefficient magnitudes in the main analysis.

Then, I use these returns to compute the size of each asset class in the preceding year. I use continuously compounded returns. In the previous year, I use the corresponding returns to compute the size of each asset class in the year preceding that year. I start this procedure in the year of death, and end in the year of the vote.



## A.4 All Variables and Sources

In table II, I show all variables in the analysis and their respective primary sources, on the basis of which I calculated the variables used in the analysis.

<b>Panel A: Dependent variable:</b>	
<b>Description</b>	<b>Source</b>
Whether a politician voted in favor (1) or against (0) a law	Staten Generaal Digitaal
<b>Panel B: Wealth variables:</b>	
Wealth at the time of voting	Archival records + RoROE
Portfolio Share Real Estate (% of Total Assets)	Archival Records
Bond Share (% Total Assets)	Archival Records
Stock Share (% Total Assets)	Archival Records
Share of Domestic Assets (% Total Assets)	Archival Records
Share of Foreign Assets (% Total Assets)	Archival Records
<b>Panel C: Economic interest controls</b>	
Share of Tax-liable Individuals in Municipality	HDNG
Share of Labor Force in Industry (Nearest Year)	HDNG
Share of Labor Force in Agriculture (Nearest Year)	HDNG
Share of Labor Force in Services (Nearest Year)	HDNG
Share of District in Total Tax Rev.	HDNG
Total Labor Force in District	HDNG
Amount of strikes in district in year $t - 1$	IISG
<b>Panel D: Electoral controls</b>	
Vote Share = $\frac{\text{Number of Votes in Election Preceding Vote}}{\text{Total Votes}}$	Repositorium Elections
Days Elapsed since Last Election	Repositorium Elections
Dummy whether Socialist was Balloteering in the District	Repositorium Elections
Percentage of Vote Garnered by Socialist Candidates	Repositorium Elections
Turnout = $\frac{\text{Turned out voters}}{\text{Eligible voters}}$	Repositorium Elections
Nearest Comp. Margin = $\frac{\text{Number of votes runner-up} - \text{number of votes politician}}{\text{Turnout}}$	Repositorium Elections
<b>Panel E: Demographic controls</b>	
Political affiliation	PDC
Tenure (Time Active in Politics)	PDC
Days to Next Election (From Day of Vote)	PDC & Repositorium Elections
Years until Retirement from Politics	PDC
Age of Politician at the Time of Vote	PDC and Repositorium Elections
Age of Politician at First Entrance	PDC
Percentage Reformed (Hervormd) Protestants in district	HDNG
Percentage Reformed (Gereformeerd) Protestant in district	HDNG
Percentage Roman Catholic in district	HDNG
<b>Panel F: Instruments</b>	
Career information	Genealogy sites, Dutch Biographical Dictionary
Parental Wealth	Archival Records
# Siblings	Genealogy websites

Table II: Variables used in the Analysis

## A.5 Analysis of Second-Order Effects

In this section, I analyse whether portfolio composition has an influence on voting behavior, keeping wealth constant. In general, because some fiscal legislation (such as the 1893 income tax) targets disproportionately a particular category of assets, politicians' portfolio composition might influence their voting behavior, keeping their wealth and other factors constant. On the other hand, other fiscal legislation taxed all assets equivalently. Following the main analyses, I show the results for the lower house in table 12.

Table 12: OLS Estimates of Portfolio Composition on the Propensity to Vote for Fiscal Reforms

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Real estate (%)	0.008 (0.089)							-0.115 (0.168)
Shares (%)		-0.091 (0.093)						-0.128 (0.314)
Bonds (%)			0.008 (0.090)					-0.272 (0.224)
Domestic Assets (%)				-0.006 (0.087)				0.273 (0.214)
Foreign Assets (%)					-0.160 (0.158)			
Domestic Shares (%)						-0.112 (0.108)		-0.375 (0.377)
Domestic Bonds (%)							-0.008 (0.105)	
Party + Law + Wealth Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	313	313	313	313	313	313	313	313
Adj. R <sup>2</sup>	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45

Results are for Lower House only. Vote is defined as 1 if the politician is in favor of the reform, 0 otherwise.

Heteroskedasticity-robust standard errors in parentheses.

+  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Models 1 to 7 show the results of a particular category of assets on the propensity to vote. The results show point estimates very close to zero, and no significance. Model 8 shows an estimation involving all different elements of the portfolio, with the exception of foreign assets, which is 1 - domestic assets, and hence multicollinear. Similarly, domestic assets - domestic shares = domestic bonds, and one of the three variables has to be omitted from the analysis. None of the variables seems to be significantly related to the propensity to vote in favor of fiscal legislation. This is consistent with the fact that most of the fiscal legislation was aimed at taxing net wealth, and thus, taxing all categories of assets in the same way.

## A.6 Analyses with Alternative Instrumental Variables

### A.6.1 Died within 5 years

In table 13, I show the estimates testing for endogeneity based on a cut-off point of having died after five years. In case of a strong presence of endogeneity, we would observe large differences in the probability of voting in favor of fiscal reforms, conditional on whether a politician had died five years ago or not, because only politicians that died later could have accrued rents from having a particular voting profile. Hence, the interaction term Wealth x Died within 5 years should be significant in this case. The results show that the interaction term is never significant. Neither is there an average difference in wealth between politicians who died later than five years after having cast a particular vote and those that did not. This indicates that there is no differential relationship of wealth on the propensity to vote in favor that is conditional on having died early - and hence, there is no indication of endogeneity influencing the results.

Table 13: OLS Estimates of Wealth on the Propensity to Vote for Fiscal Reforms - Endogeneity Test

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Personal Wealth	-0.041* (0.017)	-0.037* (0.018)	-0.040* (0.018)	-0.041+ (0.025)	-0.040* (0.019)	-0.037* (0.019)	-0.037+ (0.019)
Died Within 5 Years	-0.338 (0.240)	-0.348 (0.256)	-0.277 (0.259)	-0.395 (0.331)	-0.289 (0.266)	-0.250 (0.269)	-0.248 (0.271)
Wealth x Died Within 2 Years	0.030 (0.022)	0.031 (0.023)	0.026 (0.024)	0.035 (0.030)	0.027 (0.025)	0.023 (0.025)	0.023 (0.025)
Amount of Strikes		0.000 (0.001)	0.000 (0.001)	-0.009* (0.004)	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)
% Catholics in district			-0.003** (0.001)	-0.003* (0.001)	-0.003** (0.001)	-0.003** (0.001)	-0.003** (0.001)
Share Industrial				-0.101 (0.350)			
Vote Share (% Total)					0.030 (0.093)	0.028 (0.095)	0.026 (0.098)
Competed Against Socialist						0.056 (0.092)	0.057 (0.092)
Tenure							0.000 (0.000)
Party + Law Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	313	295	285	209	285	283	283
Adj. R <sup>2</sup>	0.45	0.47	0.49	0.48	0.48	0.48	0.48

Vote is defined as 1 if the politician is in favor of the reform, 0 otherwise.

Personal Wealth is defined as  $\log(1 + \text{Wealth at Death})$ .

Heteroskedasticity-robust standard errors in parenthesis. Results for lower house voting outcomes.

+  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

The estimates are furthermore very similar to the estimates in table 8. The point estimates are similar, indicating that a 1 percentage point increase in wealth implies a reduction of 4% in the probability of voting in favor of fiscal reforms. Very little control variables show significance, with the exception of the Catholic share variable, and the party and law fixed effects. Altogether, the estimates show that there is no indication of endogeneity severely influencing the results.

## A.6.2 Other specifications

In this section, I show regression results with two alternative sets of independent variables. In table 14, I show the IV estimates with a different set of predictors. The predictors relate to the demographics of the politician, while I still control for the religious composition of the district. These estimates show very much the same pattern as the estimates in table 7. In particular, the coefficient on personal wealth is significant in almost all models, including the most general models. The coefficient estimate ranges from about -0.08 to -0.06, indicating that a 1 percentage increase in wealth decreases the propensity to vote in favor of the reforms with 6 to 8 percentage points.

Table 14: IV Estimates of Wealth on the Propensity to Vote for Fiscal Reforms

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Personal Wealth	-0.055 (0.037)	-0.058 (0.036)	-0.061+ (0.036)	-0.066+ (0.038)	-0.066+ (0.039)	-0.059 (0.039)	-0.078+ (0.040)
Age (Time of Vote)		-0.003 (0.002)	-0.001 (0.003)	0.000 (0.003)	0.000 (0.003)	-0.001 (0.003)	0.000 (0.003)
Age (Time of Entry)			-0.004 (0.003)	-0.005+ (0.003)	-0.005+ (0.003)	-0.005* (0.003)	-0.005 (0.003)
Age of Death				-0.002 (0.003)	-0.001 (0.002)	-0.001 (0.003)	-0.002 (0.003)
Time to Retirement					-0.002 (0.004)	-0.003 (0.004)	-0.003 (0.004)
Amount of Strikes						0.001 (0.001)	0.001 (0.001)
% Catholics in district							-0.003** (0.001)
Party + Law Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
F-Stat. First stage	36.81	41.13	40.34	35.28	35.52	35.07	32.58
N	312	312	312	312	312	296	287
Adj. R2	0.45	0.45	0.45	0.44	0.44	0.46	0.46

Vote is defined as 1 if the politician is in favor of the reform, 0 otherwise.

Personal Wealth is defined as  $\log(1 + \text{Wealth at Death})$ , and instrumented by Fathers profession.

Heteroskedasticity-robust standard errors in parenthesis. Results for lower house voting outcomes.

+  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

These results again confirm that personal wealth influences politicians' decision-making, such that the wealthier the politician, the less likely they are to vote in favor of these fiscal reforms. The demographic variables seem to have no statistically significant effect, and a proxy for the time to retirement (related to the influence of term limits as in Barro (1973)) also does not influence the propensity to vote in favor or against the reforms. The share of Catholics again attains significance.

Next, in table 15, I show yet again different specifications. Specification 1 is the baseline model, whereas specification 2 and 3 compare the estimates while controlling for economic interests of different districts: the coefficients on the share of the labor force working in agriculture and in industry respectively do not attain significance, but it does render the coefficient on personal wealth larger: after controlling for economic interests of the electorate, the influence of personal wealth on voting behavior becomes more apparent. Because this information is only available for a select number of districts, I omit the variables from the regression and include an alternative proxy for religious distribution: the percentage of Dutch

Reformed inhabitants on the district. The coefficient approximately mirrors the coefficients on Catholic share in previous regressions, and is highly significant. Furthermore, I include several variables related to the electoral position of the politician in the regression equation. This does not materially change the estimates of personal wealth, but rather makes it more precise: the coefficient is significant at the 5% level in these equations.

Table 15: IV Estimates of Wealth on the Propensity to Vote for Fiscal Reforms

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Personal Wealth	-0.055 (0.037)	-0.070* (0.034)	-0.068* (0.034)	-0.081+ (0.041)	-0.083* (0.042)	-0.083* (0.042)	-0.085* (0.043)
% of District in Agriculture		-0.376 (0.254)					
% of District in Industry			-0.316 (0.343)				
% Dutch Reformed in District				0.004** (0.001)	0.004** (0.001)	0.004** (0.001)	0.004** (0.001)
Nearest Competitor Margin (%)					-0.053 (0.122)	-0.069 (0.179)	-0.085 (0.183)
Electoral Turnout Latest Election (%)					-0.025 (0.155)	-0.027 (0.157)	-0.004 (0.161)
Total Vote Share (%)						0.018 (0.132)	0.024 (0.135)
% Socialist Vote in District							-0.002+ (0.001)
Party + Law Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
F-Stat. First stage	36.81	46.24	47.43	29.69	28.8	28.46	26.66
N	312	215	215	287	287	287	285
Adj. R <sup>2</sup>	0.45	0.44	0.44	0.45	0.44	0.44	0.44

Vote is defined as 1 if the politician is in favor of the reform, 0 otherwise.

Personal Wealth is defined as  $\log(1 + \text{Wealth at Death})$ , and instrumented by Fathers profession.

Heteroskedasticity-robust standard errors in parenthesis. Results for lower house voting outcomes.

+  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

The other estimates in the regressions are also consistent with what was observed before: a positive influence of the Dutch Reformed share mirroring the negative influence of the Catholic share, and no discernable influence of electoral constraints, apart from the negative coefficient on socialist voting share, which is most likely due to competition and contrasting ideologies, rather than a motivation for politicians to vote in favor of reforms.

## A.6.3 Other instruments

### A.6.3.1 Hisclass

In table 16, I show the results using a slightly different instrumental variable: this time, we use an indicator that is based on the Hisclass manual coding of professions. If the profession belongs to the highest Hisclass, the indicator takes on the value 1, otherwise 0. The results of this estimation are similar to the results in table 7.

Table 16: IV Estimates of Wealth on the Propensity to Vote for Fiscal Reforms

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Personal Wealth	-0.056+ (0.029)	-0.040 (0.029)	-0.042 (0.028)	-0.055+ (0.028)	-0.042 (0.028)	-0.042 (0.029)	-0.045 (0.029)
Amount of Strikes		0.000 (0.001)	0.000 (0.001)	-0.007+ (0.004)	0.000 (0.001)	0.000 (0.001)	0.001 (0.001)
% Catholics in district			-0.003** (0.001)	-0.003** (0.001)	-0.003** (0.001)	-0.003** (0.001)	-0.003** (0.001)
Share Industrial				-0.019 (0.323)			
Vote Share (% Total)					0.003 (0.087)	0.003 (0.089)	-0.006 (0.090)
Tenure						0.005 (0.068)	0.000 (0.068)
Socialist Vote Last Election (% Total)							-0.002+ (0.001)
Party + Law Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
F-Stat. First stage	59.46	54.24	59.99	68.09	58.58	57.92	54.28
N	312	296	287	211	287	287	285
Adj. R <sup>2</sup>	0.45	0.47	0.49	0.47	0.48	0.48	0.48

Vote is defined as 1 if the politician is in favor of the reform, 0 otherwise.

Personal Wealth is defined as  $\log(1 + \text{Wealth at Death})$ , and instrumented by Hisclass.

Heteroskedasticity-robust standard errors in parenthesis. Results for lower house voting outcomes.

+  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

In particular, in the more general models, politicians' personal wealth is always bordering significance at the 10% level, and in some specifications, i.e. models 1 and 4, the coefficient is significant. The point estimates are slightly larger in magnitude than the OLS estimates: in this case, a 1% increase in wealth would bring about a 5 percentage point decrease in the likelihood of voting in favor of fiscal legislation, all else equal. This suggests that the OLS estimates bias the results towards zero, rather than exaggerating the effect. The results provide evidence for the interpretation that personal wealth is an important factor driving politicians' decision-making on fiscal legislation. As for the control variables, the Catholic share in the politicians' districts keeps showing a negative sign, although it is not economically significant. Similarly, the amount of votes for a socialist candidate in the latest election before the vote seems to have the opposite effect to what was hypothesized: the more votes for a socialist, the lower the probability of voting in favor of the reforms. Most likely, this is due to the fact that in close races between socialists and their detractors, their detractors have won, and they tended to vote against these laws.

### A.6.3.2 Expected Inheritance

In table 17, we show the results with yet another instrumental variable: following the literature, we use expected inheritance as a proxy for personal wealth. Expected inheritance is defined as Parental Wealth over (No. of Siblings+1), where Personal Wealth is again collected using the *Memories van Successie* probate inventories. The analysis suffers from the limited availability of observations - not enough parents of politicians died in the period in which the archives are available, and in other cases, politicians (presumably) already received inheritances because of the timely death of (one of their) parents. Hence, the analysis is limited to a particular subset of observations and therefore suffers from a lack of power. The point estimates, however, are very similar to the estimates obtained in other IV-analyses: in this case, a 1% increase in wealth is expected to decrease the probability of voting in favor of fiscal reforms with about 5 to 6%.

Table 17: IV Estimates of Wealth on the Propensity to Vote for Fiscal Reforms

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Personal Wealth	-0.053 (0.057)	-0.052 (0.057)	-0.051 (0.068)	-0.050 (0.045)	-0.052 (0.075)	-0.052 (0.068)	-0.064 (0.048)
Amount of Strikes		0.000 (0.001)	0.000 (0.001)	-0.014 (0.014)	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)
% Catholics in district			-0.001 (0.002)	-0.002 (0.002)	-0.002 (0.002)	-0.002 (0.002)	-0.002 (0.002)
Share Industrial				0.520 (0.450)			
Vote Share (% Total)					0.054 (0.131)	0.059 (0.134)	0.044 (0.136)
Tenure						0.045 (0.120)	0.053 (0.109)
Socialist Vote Last Election (% Total)							-0.003+ (0.001)
Party + Law Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
F-Stat. First stage	23.27	22.42	21	13.85	20.92	21.24	19.15
N	182	175	167	119	167	167	165
Adj. R2	0.49	0.50	0.49	0.49	0.49	0.49	0.48

Vote is defined as 1 if the politician is in favor of the reform, 0 otherwise.

Personal Wealth is defined as  $\log(1 + \text{Wealth at Death})$ , and instrumented by Expected Inheritance.

Heteroskedasticity-robust standard errors in parenthesis. Results for lower house voting outcomes.

+  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

All things considered, these results also provide evidence in favor of the hypothesis that personal wealth is an important driver in the decision-making of politicians. The effect seems to be larger than indicated by the OLS results, again confirming the suspicion that the OLS results are biased towards zero.

## A.7 Analysis with Laws during First World War

In table 18, I show the results limited to the three laws that were passed during World War I. The estimates are virtually identical to the original OLS estimates. Even though the amount of observations is very limited, the results still show statistical significance in various models, and border on statistical significance in others.

Table 18: OLS Estimates of Wealth on the Propensity to Vote for Fiscal Reforms - World War I

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Personal Wealth	-0.031+ (0.019)	-0.031+ (0.019)	-0.030 (0.019)	-0.020 (0.025)	-0.030 (0.019)	-0.032+ (0.019)	-0.031 (0.019)
Amount of Strikes		0.000 (0.001)	0.000 (0.001)	-0.008+ (0.004)	0.000 (0.001)	0.001 (0.001)	0.001 (0.001)
% Catholics in district			0.000 (0.002)	-0.002 (0.002)	0.001 (0.002)	0.000 (0.002)	0.000 (0.002)
Share Industrial				0.425 (0.713)			
Vote Share (% Total)					-0.110 (0.132)	-0.052 (0.136)	-0.059 (0.139)
Competed Against Socialist						0.166 (0.113)	0.173 (0.115)
Tenure							0.000 (0.000)
Party + Law Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	127	127	121	78	121	121	121
Adj. R <sup>2</sup>	0.58	0.58	0.57	0.55	0.57	0.58	0.57

Vote is defined as 1 if the politician is in favor of the reform, 0 otherwise.

Personal Wealth is defined as  $\log(1 + \text{Wealth at Death})$ .

Heteroskedasticity-robust standard errors in parenthesis. Results for lower house voting outcomes.

+  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

## A.8 Analysis with "High-profile" Politicians