

Transition to Broader-Based Politics: The Role of Suffrage Extension in Early 20th Century Japan^{*}

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Abstract

Modern industrialisation typically coincides with gradual democratisation through enfranchisement and intra-elite competition between traditional landlords and emerging capitalists. Does the redistribution of the *de jure* political power through suffrage extension provoke the transition in intra-elite political power structures? This study exploits suffrage extension, induced by the wartime tax increase during the mid-1900s Japan, and its regional heterogeneity to estimate its impact on the occupational composition of the House of Representatives. Using a difference-in-differences framework, I show that the expansion of electorate representation resulted in a significant decline in the seat share of farmers and landlords, originally a dominant occupational group in the House. By contrast, no other major occupational groups exhibit compensational increases in their shares. In the historical context, the results suggest that suffrage expansion likely contributed to the diversification of House politics from the landlord-centred system.

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1 Introduction

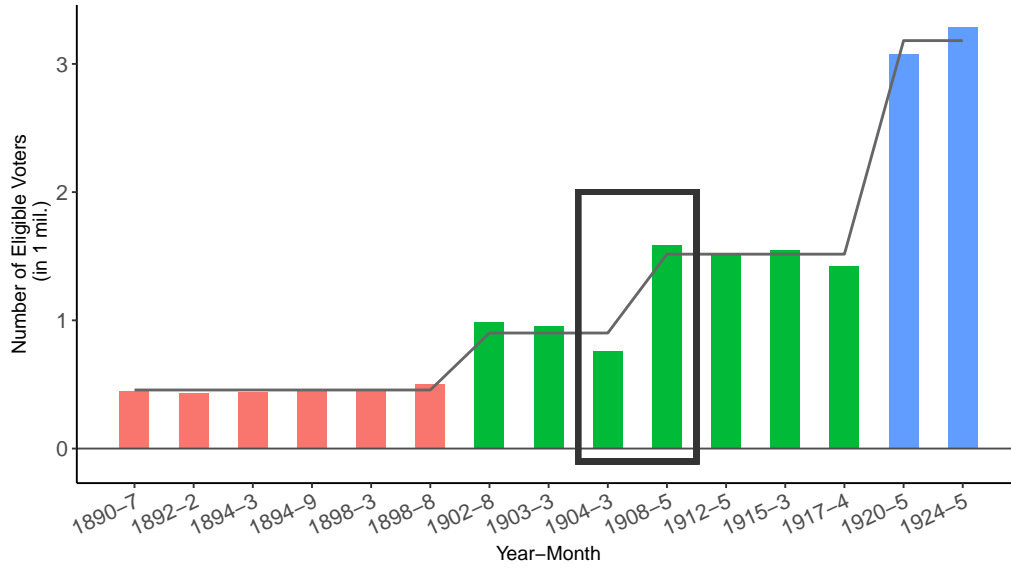
Who holds political power is fundamental in a political system. Amongst others, voting rights have arguably been at the core of democracy and political development in history, as its distribution influences whose voices are heard more in policy making. While universal suffrage is now commonly practised in most countries, institutions have long-established systems to restrict it to a certain segment of the population based upon demographic and socio-economic criteria. Coinciding with the evolution of franchise institutions towards universal suffrage is modern economic development along with industrialisation and politics characterised by the concept of *within*-elite class competition. In modern states, this *intra*-elite competition is shown to interact with politico-economic transformation (e.g. Ansell & Samuels, 2014; Beramendi, Dincecco, & Rogers, 2018; Garfias, 2018; Mares & Queralt, 2015). While industrialisation played a key role in this intra-elite dynamics by building the politico-economic capacity of certain groups, suffrage institutions may have contributed to this by distributing *de jure* political power, posing an empirical question whether this is the case.

This study addresses whether suffrage institutions relate to intra-elite power structures during the course of a modern state and economic development. Therefore, I empirically document how suffrage extension within an elite class contributed towards the transformation of Diet politics in the early 20th century Japan. Although intra-elite competition is likely multifaceted, this study examines the political domain, and thus political competition between elite groups. Like Western countries, Japan historically set severely restrictive voter eligibility criteria, limiting franchise to the upper class, until the introduction of universal male suffrage in the 1920s. Under this institution, it also experienced conflict of interests between traditional agricultural landlords and newly emerged industrial capitalists. Central to this dissent was taxation, a subject of heated debate in the Diet during this period. Considering the nature of intra-elite competition and political environment, I investigate the occupational composition of the Diet politicians and relate it to *de facto* suffrage extension. Employing the difference-in-differences (DID) framework, I show a large and persistent decline in the seat share of agricultural landlord politicians and attribute this to suffrage extension. Together with the observation that other groups do not systematically increase their shares, my results imply the diversification of Diet politics from the landlord-centred to the broader occupation-based system.

To depict how suffrage extension altered the complex intra-elite power structure, I exploit the *de facto* suffrage extension triggered by the wartime tax increase during the mid-1900s, as described in Figure 1. To finance the massive costs of the Russo-Japanese War, the Japanese government increased a wide range of national tax rates, and the aftermath of the war saw its perpetuation for post-war state management. As a result, a larger section of the population started to pay as much as the electoral rule mandates to secure voting rights, effectively expanding the size of eligible voters without shifting the tax payment threshold.¹ This empiri-

¹ Note that there were no economic restrictions on candidacy during this time (Toyama & Adachi, 1961). This

Figure 1: Number of Eligible Voters Before Universal Male Suffrage



Notes: The figure describes a change in the number of eligible voters in Japan before universal male suffrage was introduced. Bars represent the total number of eligible voters during each election, with different colours indicating different electoral systems. Lines exhibit their averages by electoral system, except for the large constituency system between 1902 and 1917, in which I compute the mean separately for the period before and after suffrage extension. The black closing line specifies the change of interest in this study. I create this figure using data from Kawato and Kawato (1990).

cal setting provides some convenience. First, unlike typical enfranchisement, no simultaneous electoral reforms occurred, and I focus exclusively on the changes in electorate size. Second, this extension is plausibly exogenous to the nature of political competition at that time. Enfranchisement is usually seen as endogenous, resulting from the deliberate choices made by the ruling elite (Acemoglu & Robinson, 2000, 2001; Aidt & Franck, 2015, 2019; Lizzeri & Persico, 2004; Llavador & Oxoby, 2005; Przeworski, 2009; Seghezza & Morelli, 2019).² The extension of interest, however, is not part of any electoral reforms and is driven primarily by fiscal and security concerns, reducing the possibility of meticulous manipulation. Lastly, this enfranchisement exhibits a regional variation attributable to the heterogeneity in the initial local economic structure, enabling me to separate the impact of suffrage extension from those of aggregate shocks.

To observe the political transformation, I quantitatively examine a change in occupational composition through seven general elections between 1902 and 1917. Occupation is a characteristic of early Diet politics during pre-World War II (WWII) Japan, and an identifier of elite groups with distinct interests. Moreover, Japan's tax system, electoral rule, and economic structure contributed to the initial political dominance of local interest-oriented farmers and landlords. The subsequent introduction of a nationalised business tax, however, began to

tax increase, therefore, altered only the set of potential voters. This study focuses on this margin, while some argue that candidate eligibility requirement should be more consequential (Corvalan, Querubín, & Vicente, 2020).

² Another study points out the likelihood of transition to democratisation *by mistakes* (Treisman, 2020).

change the circumstance, politically mobilising occupational groups such as merchants against their heavier tax burden. Although occupation may not capture all the aspects of elite competition, combined with other attributes, it allows me to clarify an important feature of the contemporary intra-elite competition. For this purpose, I digitise historical records to gather background information on electoral winners in the seven elections, as well as candidates in the two elections. Combining personal information with electoral statistics compiled by Kawato and Kawato (1990), I construct the politician-constituency-election level dataset.

I first illustrate the aggregate time trends in the occupational composition, observing a significantly large and persistent decline in the share of farmers and landlords among the electoral winners, while other occupations such as businesses and lawyers do not exhibit such substantial changes. The DID analysis, which exploits the cross-sectional variation in the magnitude of franchise expansion, reports that the previous observations are attributable to suffrage extension. These results are further confirmed by the instrumental variable strategy, motivated by the institutional feature of franchise assignment. Candidate-level supplementary analysis indicates that selection by voters, rather than candidacy entry reduction, explains the decline more accurately. Moreover, examining within-occupation changes by class and honour received prior to the electoral victory that, at least partially, reflect their social status, I show that decline is driven by the commoner class and the no-honour received, those who likely include the local interest-oriented landlords. Overall, these findings imply that consistent with the course of history, this period experienced transition from local-farmer/landlord-centred politics. Besides, as there is no large compensational increase in each of the other groups, it indicates that suffrage extension played a key role in enhancing diversification of the House of Representatives.

This study contributes to three strands of literature in economics and political science. First, it relates to the extension of suffrage institutions and implications in political, policy, and economic equilibria.³ Amongst the existing studies, this research is closely involved in the literature on the political impact of enfranchisement, in which mixed but largely null results were delivered if the extension had contributed to changes in political selection, and hence representation (Berlinski, Dewan, et al., 2011; Berlinski, Dewan, & Van Coppenolle, 2014; Cassan, Rinchan, & Mirza, 2020; Corvalan et al., 2020; de Bromhead, Fernihough, & Hargaden, 2020; Kam, 2014; Larcinese, 2016).⁴ By providing evidence on how such an extension can enhance political transformation, this study deepens understanding on the political role of suffrage insti-

³ The large body of literature discusses the impact of political inclusion through suffrage extension to politically disadvantaged population segments, including women (Aidt & Dallal, 2008; Carruthers & Wanamaker, 2015; Efthyvoulou, Kammas, & Sarantides, 2020; Kose, Kuka, & Shenhav, 2020; Lott & Kenny, 1999; Miller, 2008; Moehling & Thomasson, 2012; Morgan-Collins, 2020), racial groups (Aneja & Avenancio-León, 2019a, 2019b; Ang, 2019; Cascio & Washington, 2014; Facchini, Knight, & Testa, 2020; Kroth, Larcinese, & Wehner, 2016; Naidu, 2012), and less educated citizens (Fujiwara, 2015). Others examine the policy consequences of enfranchisement in general (Aidt, Daunton, & Dutta, 2010; Aidt & Mooney, 2014; Aidt, Winer, & Zhang, 2020; Aidt, Dutta, & Loukoianova, 2006; Husted & Kenny, 1997; Meltzer & Richard, 1981).

⁴ One of the theoretical benchmarks in the literature is the citizen-candidate framework (Besley & Coate, 1997; Osborne & Slivinski, 1996), which typically offers predictions on the changes in politicians' identity in response to shifts in voter preference distribution.

tutions, specifically in the context of modern state building. In addition, this study is related to the broad literature on democratisation and inter-and intra-class power structures. Suffrage institutions are merely *de jure* and so its redistribution does not mean immediate political power shifts, as documented in the literature on political elites capturing a democratic regime (e.g. Acemoglu & Robinson, 2008; Martinez-Bravo, Mukherjee, & Stegmann, 2017). I demonstrate that in the presence of elite infighting over resource allocation, partial democratisation through franchise expansion can pave the way to the rise in previously non-dominant groups' positions. Lastly, the present study also contributes to the political history of Japan. Although the transformation of House members' social background has been documented (Masumi, 2011b; Sato, 1992), it is attributed to other electoral reforms and the underlying socio-economic changes rather than suffrage extension. On the other hand, some point out its potential impact on the political equilibrium, although without formal or quantitative analysis (Kawato, 1992; Mitani, 1995). Building on their views, this study empirically documents that the purported transformation had indeed occurred, and was likely triggered by suffrage expansion.

The rest of this paper is organised as follows. section 2 discusses the historical and institutional background in the early 20th century Japan, introducing the case of *de facto* suffrage extension. section 3 presents the data and explains which aspect of politicians' background I focus on and how to define it. section 4 describes the empirical approaches employed in this study, interpreting the findings in a historical context. Finally, section 5 concludes the paper.

2 Historical and Institutional Background

2.1 Political and Electoral System from the Late 19c to Early 20c Japan

2.1.1 Imperial Diet and Electoral System

After the Meiji Restoration, Japan's political system experienced radical transformation from a feudal, decentralised *Shogunate* institution to centralised rule under the emperor. The new *Meiji* government aimed at establishing a modern state with a strong economy, Western-like institutions, and a powerful military. This transformation was mainly driven by the fiscal failings of Japan's feudal lords as well as an urgent sense of impending crisis against a rapidly growing presence of Western or *developed* countries in East Asia (Kitaoka, 2018). A key *political* component of this modern state-building effort was the establishment of the Imperial Constitution and Diet in 1890. The Diet—Japan's bicameral parliament—consists of the House of Representatives and the House of Lords, where members of the former chamber were selected via a general election under limited suffrage.

Although the House of Representatives did not have much decisive power in the policy-making process, as in the post-WWII,⁵ the House still wielded non-negligible influence on the

⁵ This is partly due to non-stipulation of the Diet in the constitution and the decentralised nature of the government. More details are provided in the Appendix.

cabinet's government administration, especially via the draft budget issue. The cabinet was required to propose the annual draft budget to the Diet and obtain consent for its implementation.⁶ Moreover, the primary concern of the members of the House of Representatives was typically *taxation* and budgetary issues. Suffrage was granted to those who satisfied several criteria. As one such measure was a certain amount of national direct tax payment, and direct tax paid during this time was mostly land tax, the electorate was considerably inclined towards land tax reduction, as land taxpayers perceived tax as burdensome (Banno, 2006). This voter preference distribution is the reason why elected representatives focused on the land taxation system. Hence, the first decade of the Diet developed around this budgetary (fiscal) issue and continued to be central in the politics between the Diet and the cabinet.

2.1.2 Diversification of Political Interest

Given this historical context, during the early years of the Diet, most of the elected politicians typically had two major characteristics: representatives of landowners and local-specific interests. section 2.1.1 has already discussed the former. Regarding the latter, whereas politicians' local nature partly reflects lack of national consciousness at the early stage of nation building, the electoral system is arguably another cause. Together with a small number of eligible voters, relatively compact electoral districts made politicians responsible exclusively to the voice of *their people*.⁷ Thus, this led the House of Representatives to become a 'parliament of local nobles'. As such, during the early periods, most of the elected politicians represented a narrow range of interests with no other group possessing any specific political urgency.

However, this started to change, and new political interests evolved, particularly from those engaged in business, after the Sino-Japanese War in the mid-1890s. Without other reliable sources of government revenue, land tax was initially introduced and designed so that the domestic tax system could stably finance public expenditure to push forward the government's industrial policy and armaments expansion plan.⁸ The post Sino-Japanese War policies broadened the tax base by including the non-landowner population as a vital taxpayer segment, and one of which was a business tax. As part of the post-war policies, the *Meiji* government instituted a national business tax, a drastic change in the government's policy directive because,

⁶ Although the government could implement a previous year's budget if the Diet had rejected the draft, the implementation of a past budget was not the cabinet's preferred choice.

⁷ Mitani (1995) introduces the episode of *Hirobumi Ito*, who was one of the oligarchs and founders of the *Seiyukai* political party, pointing out this issue in the electoral system. He stated that under the small-constituency system, no matter the stature of a person, he cannot be elected unless he had a special connection with his local constituency.

⁸ The land tax revenue amounted to about 60% of the total government revenue generated in the 1890s, though it steadily decreased over time, according to the National Tax Agency of Japan (<https://www.nta.go.jp/about/organization/ntc/sozei/01chiso/hyo01.htm>, last accessed on 25 December 2019). This disproportionate reliance on land tax revenue is mainly because 1) other taxes were not yet introduced or developed (except liquor tax); 2) an underdeveloped industry exempted most of the population from paying direct taxes, such as income tax; 3) the tariff's unreliability as a revenue source was due to a low tariff rate and lack of tariff autonomy; and 4) the government's aversion towards foreign loans stemming from the fear of colonisation (Kitaoka, 2018).

until then, the business group was a beneficiary rather than the bearer of the burden of state development (Banno, 1971).⁹ This policy conversion transformed the business population into a political interest group and directed them towards entering the political arena more eagerly.¹⁰

In addition, the demand for new types of politicians gradually rose. The first decade of Diet activity conveyed to prominent figures that politicians' localness was a major impediment to national development (Murase, 1999). Together with the lobbying by the business community and city residents, this new demand contributed to the introduction of large electoral districts in 1900, primarily to enhance the entry of politicians who cared about and represented broader (prefectural/national) interests.¹¹ This electoral system indeed built the foundation for groups to pursue their own interests, and political interests further diversified during the 1900s (Banno, 2010).

2.2 De Facto Suffrage Extension in the 1900s

2.2.1 Tax Increases During and After the Russo-Japanese War

When different segments of the population began to pursue their political interests, the Russo-Japanese War was fought in 1904 and lasted until 1905, which induced significantly large tax increases and consequently de facto suffrage extension. The war had a notable impact on Japan's society and government, one of which was the urgent need to mobilise resources to finance the war expenditure. To this effect, the government enacted the special taxation law for emergency in 1904 and further amended it in 1905, considerably raising a wide range of national taxes (Mitani, 1995).¹² Despite its initially transient nature, the government made the taxation law a permanent legislation in 1906 for fiscal purposes, perpetuating the increased tax rates (Ministry of Finance, Public Finance History Office, 1998).¹³ As the increase was high—for instance, land and business taxes doubled compared to the pre-war rates—it led to a certain segment of the population paying as much tax as the voter eligibility criteria required. Thus, the wartime tax increase effectively achieved the extension of suffrage.

How large was the electorate expansion? Figure 1 shows the number of people who were eligible to vote during each election under limited male suffrage between 1890 and 1924. The pe-

⁹ It also mattered that the government, still non-partisan, had made this decision as a compromise with the majority coalition in the House of Representatives backed by landowners.

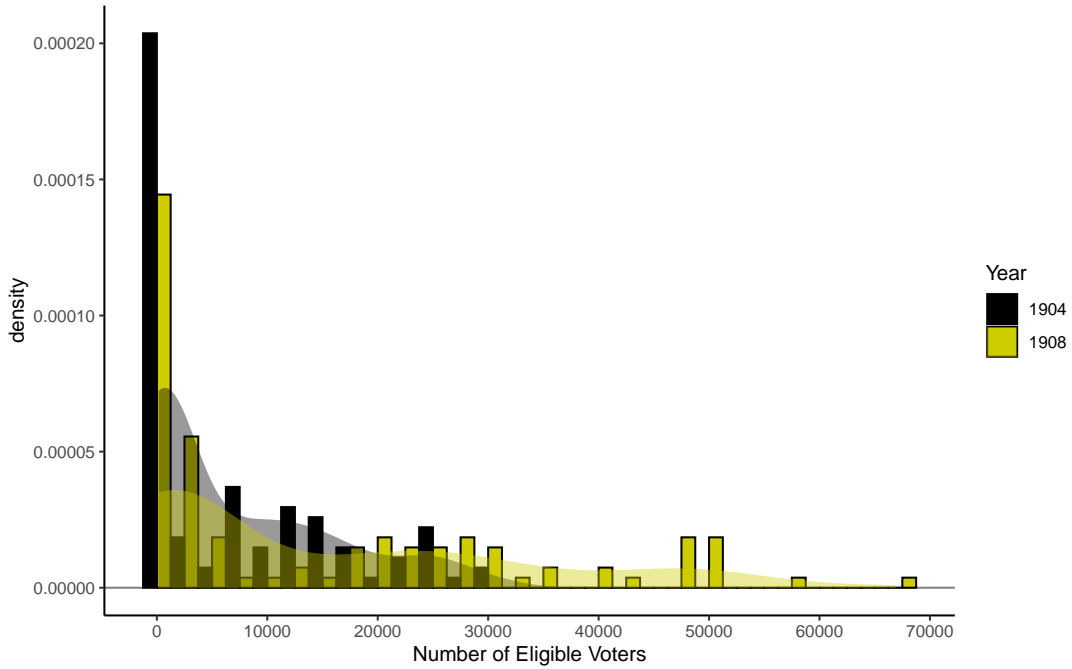
¹⁰ As the occupational structure correlated with the urban-rural relationship, although within-regional heterogeneity existed, anti-tax movements by city residents are also observed (Masumi, 2011a).

¹¹ See the Appendix for further details on the institutional design of this electoral system.

¹² These increased levies include land, income, and business taxes. Land tax was calculated based on the land price multiplied by the land tax rate. This wartime tax increase raised the land tax rate from 2.5% to 20% for urban residential land, 8% for residential land in the county area, and 5.5 % for the rest of land. With regards to income tax, corporate and individual income tax rates increased to a large extent. The new individual income tax rate increased by 70% in the first enactment and progressively between 30% and 200% depending on each income category. Also, business tax increased by 15 percentage points (Mitani, 1995).

¹³ In the post-Russo-Japanese War period, Japan suffered a fiscal deficit and war debts accumulated as the government was unable to achieve war reparations, in contrast to the Sino-Japanese War a decade ago (Ministry of Finance, Public Finance History Office, 1998).

Figure 2: Distribution of Number of Eligible Voters Across Constituencies in 1904 and 1908



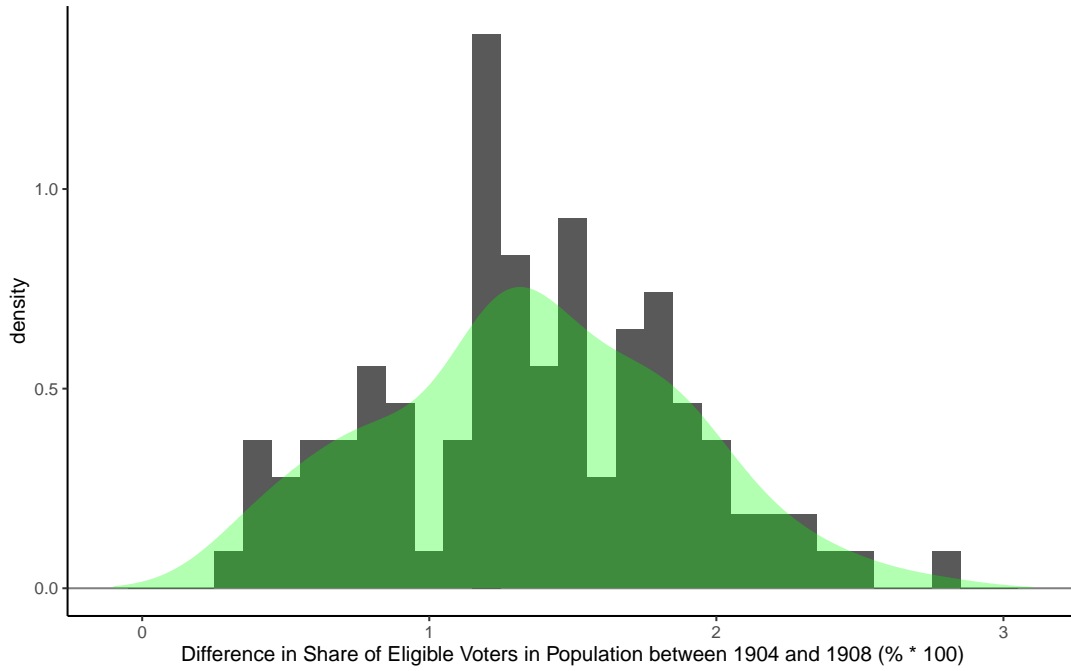
Notes: The figure presents the cross-sectional distribution of the number of eligible voters across constituencies in 1904 and 1908, respectively. Bins describe the histogram of each year with y-axis corresponding to density. Their binwidth is set to be 2500. Each shaded area is the kernel density estimate.

riod of interest is between 1902 and 1917, and elections were held under the large-constituency system. The black closing line indicates the change, which is the focus of this study: discontinuous expansion in electorate size between 1904 and 1908. As seen in the figure, comparing the number of eligible voters in 1904 and 1908, it nearly doubled. Figure 2 presents the cross-sectional distribution of electorate sizes in 1904 and 1908, respectively. This figure also indicates that these large increases occurred widely across 108 constituencies. Furthermore, Figure 3 shows the distribution of changes in electorate size, indicating that the magnitude of this electorate enlargement is heterogeneous across constituencies. This variation motivates me to employ the DID approach with this cross-sectional variation. As there was no tax payment criterion for qualifying as a candidate under the large-district electoral system, this changed only the number of eligible voters. In summary, the expansion in wartime taxes significantly enlarged the electorate size and this study quantitatively explores its political consequences.

Furthermore, the change in the composition of national taxpayers is also observed in this period, indicating the likely change in the electorate's preference distribution. It is pointed out that the share of people who paid 10 yen or more in income and business taxes had also doubled (Kawato, 1992).¹⁴ It implies that this increase in wartime tax strengthened the presence of

¹⁴ Considering the share of each direct national tax in the gross total population paying as much as the voting eligibility threshold, income and business taxes increased each share from less than 10% to around 20% between the war, while correspondingly the share of land taxpayers declined (Kawato, 1992). Note that a single person may pay multiple taxes at the same time; therefore, some people may be doubly counted as non-land and land

Figure 3: Distribution of Changes in the Share of Eligible Voters in Population Across Constituencies between 1904 and 1908



Notes: The figure presents the cross-sectional distribution of a change in the share of eligible voters in the total population across constituencies between 1904 and 1908. Bins show the histogram with y-axis being density and the binwidth set to be 0.1. The shaded area is the kernel density estimate. The share change is computed as $\Delta \text{VoterRatio}_j = \frac{\# \text{Voter}_{j1908}}{\text{Population}_{j1907}} - \frac{\# \text{Voter}_{j1904}}{\text{Population}_{j1903}}$, where j corresponds to each constituency, $\# \text{Voter}$ is the number of eligible voters in constituency j .

non-land taxpayers in the electorate.

Considering these facts, de facto suffrage extension possibly changed the electorate's preference distribution and, accordingly *those who run for election* and *those who get elected*, as the newly eligible-to-vote groups may have different political interests from what the original electorate exhibited. Moreover, the strict tax payment criterion, which allowed only a small percentage of the population to vote, indicates that this is essentially the extension *within* the upper socio-economic class. Thus, de facto suffrage extension could alter the political balance of power only within socio-economic elites. Henceforth, I examine this conjecture empirically.

2.2.2 Elections under Large District Systems

This study focuses on the elections that were conducted under the large-constituency electoral system between 1902 and 1917, with special attention to the expansion in electorate between 1904 and 1908. As the Appendix contains further details, I provide a brief overview of the basic electoral rules under this system. The number of seats assigned to a constituency/electoral district depends on its population and ranges from 1 to 11. There were 108 districts in total

taxpayers.

in 1904 and 1908,¹⁵ defined based on prefectural and municipal boundaries and population distribution.¹⁶ In these constituencies, qualified voters participated in the elections with a secret ballot and a single non-transferable vote (SNTV) (Suetake, 2010). Note that voters' eligibility depended on sex, age, residency, and tax payment, the last one of which is a 10-yen annual national tax payment for one or multiple consecutive years depending on the type of tax.

The electoral rules under the large district system were designed to better reflect non-land taxpayers' voice and enhance the entry of candidates with broader interests or a business background (Masumi, 2011a). The existing literature presupposes the partial achievement of this intention, that is, the coexistence of new central-oriented and business-related politicians, and local nobles in the House (Suetake & Takeda, 2011). My analysis takes root in this context.

3 Data

3.1 Election

I employ election data compiled by Kawato and Kawato (1990), *Shugi-in Sousenkyo Kohosha Senkyoku Tokei 1890–1990* (Candidate and Constituency Statistics of Elections in Japan, 1890–1990). This contains basic data on electoral districts as well as candidates during all the general elections of the House of Representatives held between 1890–1990.¹⁷ ¹⁸ In this dataset, each candidate's name is uniquely coded; thus, we can identify each one of them across different elections, enabling me to obtain a candidate's electoral history such as incumbency and number of past victories.

3.2 Candidates' Background

3.2.1 Data Source

To examine how de facto suffrage extension and electorate enlargement affected political selection, I collected background information on each candidate/winner from the following historical records. For electoral winners, I used *Shugi-in Giin Meibo* (Member Roster of the House

¹⁵ Note that three constituencies were established in the *Hokkaido* prefecture from the 1904 election, thus there were 105 districts prior to this formation. These three constituencies are included in my empirical analysis. Meanwhile, I excluded two electoral districts in the *Okinawa* prefecture from my dataset, as they were included in the 1912 elections.

¹⁶ The electoral districts comprise two types of constituencies: city district (*Shibu*) and county district (*Gunbu*). The latter is constructed in each prefecture by subtracting city district(s) and the independent island district(s) within each prefecture, although island districts are formally classified as county districts.

¹⁷ This dataset, and original Japanese electoral statistics during this period in general, do not contain any information on candidates with an extremely small vote share, and thus they are considered negligible. Besides, for a by-election, only information on winners is available in this dataset.

¹⁸ District-level data include the size of the electorate, voter turnout, size of the district (i.e. number of allocated seats), and number of candidates. Regarding candidates, the dataset includes names, affiliated parties, votes gained, and ranks in a district.

of Representatives), issued by the Secretariat of the House at the beginning of each Diet session. I obtained each member's electoral district, socio-economic background (class (*Zokuseki*), honour (*Eiten*), and occupation), and birthday, merged with the electoral data in section 3.1. Besides the winners in the elections of interest, I also obtained data on those who lost the 1904 and 1908 elections but were elected in any one of others, earlier or later, at the time of their first successful win. As becoming a politician can change a person's occupational or social status, I extracted each candidate's information from his first Diet (just after the first electoral victory), ensuring that my data are closer to their original backgrounds.¹⁹ Although this source itself is never complete, it provides consistent data.²⁰

Although the above source provides consistent information on candidates who were elected at least once during their life time, I needed other material for those who did not win a single election. I collected candidates' characteristics for 1904 and 1908 using historical material published during those days, including *Jinji Koshinroku* (Who's Who), as well as secondary sources, such as research studies in Japanese history. While these helped me to collect candidates' background data, some of them were not available in the accessible materials, thus rendering them as missing values in my dataset.²¹ Certainly, these data are neither complete nor as consistent as the data available in the Diet member roster. Nonetheless, they provide useful information and an overview of a candidate's characteristics.

3.2.2 Candidates' Background: Definition and Focus

Occupational Classification With regards to occupational classification, I aggregate the original occupation description into 12 categories, as shown in the Appendix, since the original format of the occupational category is not well organised.²² The upper panel of Table 1 shows the occupational composition of the winners. According to this table, most of the winners with any type of occupation can be divided into three groups: *Farming & Landlord*, *Commerce & Manufacturing*, and *Lawyer*. These categories plus candidates with *No Occupation* account for more than 80% of the observations, with the largest share being about 30% by *Farming & Landlord*. Considering the large share, this study focuses on these three occupational groups. In particular, Table 1 clearly exhibits a sharp decline in the *Farming & Landlord* share in 1908, a share that never recovered to the pre-war level. Motivated by this result, my main focus is directed at

¹⁹ See the Appendix for further discussion of this point.

²⁰ When the descriptions on the roster were difficult to read, I supplemented them with other directories such as *Gikai Seido Hyakunenshi Shugi-in Giin Meikan* (The Century History of Japanese Parliamentary System: Directory of the House of Representatives' Members).

²¹ Such candidates with missing values account for about 6%, while those without a single electoral winning experience comprise 15%, indicating that I had successfully collected information on more than half of the never-won candidates. Nevertheless, I still employ these *missing* observations when using candidates' data, assigning the missing information indicator as well as a seemingly lower-quality data source dummy to the corresponding candidates.

²² In some cases, multiple occupations are assigned to a single person. If either of them is a farming/landlord-related background, then I classify them into *Farming & Landlord*. For the rest of them, I allow multiple occupations.

Farming & Landlord to clarify whether this change is just a temporal, random fluctuation or a persistent trend shift.

Class and Honour Along with politicians' occupational background, I considered two other dimensions: class and honour. The lower panel of Table 1 shows the compositions of class and honour by year. In pre-WWII Japan, citizens were registered as one of three official class categories (*Zokuseki*) based upon the family lineage that originated during the *Edo* era: *Kazoku* (peerage), *Shizoku* (warrior class/*Samurai*), and *Heimin* (commoner). Despite the presence of heterogeneity within each class, it still reflects the social position of their families. *Shizoku* is typically considered as an elite class together with *Kazoku*, as they held ruling positions during the *Edo* era and even in the early *Meiji* period.^{23,24} Members of the House with the same occupational background may be different from a class perspective. I also considered if a candidate received any public honour prior to his electoral victory. Honour (*Eiten*) essentially comprises two ranking systems: *Ikai* (court rank) and *Kunsho* (decorative order and medal).²⁵ Although these two systems of honour are not identical, for simplicity, I regard them merely as honour.²⁶ I incorporated these into the occupational-based analysis to examine the trends in within-occupation heterogeneity.

3.3 District-level Data

In addition to individual-level data, I collected district-level population data. The main data source is *Fuken Tokeisho* (Prefecture Statistical Book), published annually by each prefectural government since the early 1870s, with a few exceptions. This covers a wide range of statistics including demographic, economic, and social indicators, while its scope varies over time and by prefecture. I collected total residential population at both city and county levels and constructed constituency level population data.²⁷

4 Empirical Investigation

The empirical analysis focuses on, as explained above, occupational background as the group's main identification with distinct, and possibly conflicting, political interests. Given this, I empirically examine how the extension of suffrage affects political selection and occupational composition of the members of the House applying two approaches: time-series-wise before-after

²³ This is reflected in the comparison between its share in population (around 5%) and members of the House of Representatives (about 27%), implying that *Shizoku* was disproportionately overrepresented in the Diet.

²⁴ Note that only a few House members were of *Kazoku*-origin as *Kazoku* was eligible to be a member of the House of Lords/*Kizoku-in*.

²⁵ The latter consists of *Kunto* and *Kinshi Kunsho* (conferred for distinguished military service).

²⁶ In my sample, those who received *Kinshi Kunsho* were also honoured with *Ikai* and *Kunto*. Also, the rank of *Kunto* corresponds to that of *Ikai*.

²⁷ More detailed description of this population data construction is provided in the Appendix.

Table 1: Composition of Electoral Winners by Year: Occupation, Class, and Honour Receiving

| Classification | 1902 | 1903 | 1904 | 1908 | 1912 | 1915 | 1917 |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|
| Occupation | | | | | | | |
| Farming & Landlord | 0.356 | 0.386 | 0.380 | 0.290 | 0.251 | 0.256 | 0.253 |
| Commerce & Manufacturing | 0.191 | 0.186 | 0.187 | 0.195 | 0.243 | 0.243 | 0.243 |
| Lawyer | 0.141 | 0.141 | 0.150 | 0.174 | 0.169 | 0.150 | 0.150 |
| Fishery | 0.000 | 0.003 | 0.005 | 0.011 | 0.005 | 0.008 | 0.005 |
| Banking | 0.048 | 0.045 | 0.032 | 0.029 | 0.047 | 0.042 | 0.032 |
| Railway | 0.003 | 0.000 | 0.000 | 0.003 | 0.000 | 0.000 | 0.003 |
| Media | 0.048 | 0.040 | 0.061 | 0.069 | 0.077 | 0.098 | 0.121 |
| Education | 0.008 | 0.003 | 0.005 | 0.008 | 0.011 | 0.016 | 0.021 |
| Medical Service | 0.024 | 0.019 | 0.005 | 0.016 | 0.016 | 0.005 | 0.032 |
| Military Service | 0.013 | 0.013 | 0.003 | 0.005 | 0.008 | 0.008 | 0.005 |
| Public Service | 0.019 | 0.016 | 0.021 | 0.021 | 0.016 | 0.024 | 0.011 |
| No Occupation | 0.157 | 0.152 | 0.150 | 0.179 | 0.164 | 0.150 | 0.135 |
| Class | | | | | | | |
| Heimin/Commoner | 0.697 | 0.715 | 0.728 | 0.718 | 0.759 | 0.752 | 0.736 |
| Shizoku/Warrior | 0.290 | 0.277 | 0.269 | 0.280 | 0.238 | 0.245 | 0.264 |
| Kazoku/Peerage | 0.013 | 0.008 | 0.003 | 0.003 | 0.003 | 0.003 | 0.000 |
| Honour | | | | | | | |
| Eiten/Honour | 0.128 | 0.109 | 0.087 | 0.140 | 0.166 | 0.185 | 0.193 |
| Ikai | 0.128 | 0.104 | 0.082 | 0.090 | 0.119 | 0.145 | 0.145 |
| Kunsho | 0.048 | 0.045 | 0.032 | 0.082 | 0.098 | 0.116 | 0.132 |

Notes: The table presents a share of the House of Representatives' members with each occupation, class, and honour receiving background by year from 1902 to 1917. It is calculated by taking the average of each corresponding dummy using the electoral winner sample. For occupation, because a small percentage of politicians possess multiple occupations (except for those with *Farming & Landlord*), the sum in each year may exceed one. Each occupation's definition is presented in Appendix. With respect to class and honour, section 3.2.2 provides the definition and description.

comparison analysis and difference-in-differences (DID) estimation, using the House member level data. In addition to the simple DID specification, I construct the instrumental variable exploiting the institutional system of voter eligibility and run the two-stage least squares to estimate the possible non-linear trend. This analysis is followed by my attempts to interpret the results in the historical context and to uncover the mechanism underlying the results with a supplementary analysis using candidate-level data.

4.1 Before-After Design

4.1.1 Empirical Framework

The first approach is to examine if any change is observed by comparing before and after suffrage extension, as it enables to describe what happened during the periods of interest. Specifically, I compared the backgrounds of the electoral winners between the before- (1902, 1903,

and 1904 elections) and after-periods (1908, 1912, 1915, and 1917 elections). Formally, for candidate i , district j and year t , I estimate the following linear probability model:

$$\Pr(y_{ijt} = 1 \mid \{\alpha_j\}_j, After_t) = \alpha_j + \beta After_t, \quad (1)$$

where y_{ijt} is a dummy variable to indicate an electoral winner i 's characteristics, α_j is j 's electoral district fixed effect, and $After$ is a dummy variable that takes one for $t \in \{1908, 1912, 1915, 1917\}$ and 0 otherwise. Running this regression, I estimate the difference in the probability that a winner i has a characteristic specified with y_{ijt} between the before and after the electoral size increase. Hence, this effectively specifies the before-after comparison of the electoral winners' characteristics. y_{ijt} corresponds to an occupational dummy and an interaction of the occupational dummy and the other background variables, i.e., honour and class. Also, for the purpose of checking the trends in the before- and after- periods, the following linear probability model is estimated:

$$\Pr(y_{ijt} = 1 \mid \{\alpha_j\}_j, \{Year_t\}_t) = \alpha_j + \sum_t \beta_t Year_t, \quad (2)$$

where $Year_t$ is a year dummy for each t . This specification allows me to investigate if any change observed from Equation 1 is a trend break, and not driven by the overall (up/downward) trend or only some specific year's incidence. Although these estimations possibly include the effects of other shocks, it is still informative to describe what ensured during the periods of interest.

4.1.2 Results

First, let us graphically compare the compositions of three major occupations: *Farming & Landlord*, *Commerce & Manufacturing*, and *Lawyer*, as discussed in section 3.2.2. Figure 4 shows changes in the composition over time. As mentioned in section 3.2.2, there is a sharp decline in the share of *Farming & Landlord*, and this decline seems to indicate a trend shift rather than a continuous downward trend. In contrast, *Commerce & Manufacturing* exhibits an upward shift but only from 1912 onwards, though there seems a slight increase between 1904 and 1908. The share of *Lawyers* also rose marginally between 1904 and 1908, but it later declined to the before-period level.

Second, I formally estimate Equation 1 and Equation 2 for these three occupations. Specifically, y_{ijt} is the occupation dummy. Table 2 shows the regression results for each occupational category. We can interpret the coefficient estimates as the difference in the probability of being each occupation between the before- and after-periods as well as between each year and 1904, depending on the specifications. The results confirm my observations from the above figures. Regarding *Farming & Landlord* in the first and second columns, again there is a decline between 1904 and 1908. This is a trend shift as there is statistically no significant change in the before

Table 2: Before-After Comparison of Occupational Composition

| | Farmer | Farmer | Business | Business | Lawyer | Lawyer |
|-----------------------------|---------------------|---------------------|--------------------|---------------------|--------------------|---------------------|
| <i>AfterDummy</i> | −0.1117 (0.0223) | | 0.0424 (0.0185) | | 0.0176 (0.0186) | |
| <i>Year</i> ₁₉₀₂ | | −0.0232 (0.0205) | | 0.0034 (0.0198) | | −0.0096 (0.0180) |
| <i>Year</i> ₁₉₀₃ | | 0.0061 (0.0196) | | −0.0019 (0.0178) | | −0.0096 (0.0148) |
| <i>Year</i> ₁₉₀₈ | | −0.0897 (0.0253) | | 0.0079 (0.0215) | | 0.0237 (0.0214) |
| <i>Year</i> ₁₉₁₂ | | −0.1293 (0.0296) | | 0.0554 (0.0254) | | 0.0185 (0.0249) |
| <i>Year</i> ₁₉₁₅ | | −0.1240 (0.0283) | | 0.0528 (0.0259) | | 0.0026 (0.0215) |
| <i>Year</i> ₁₉₁₇ | | −0.1266 (0.0330) | | 0.0554 (0.0255) | | 0.0000 (0.0239) |
| District FE | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Num. obs. | 2647 | 2647 | 2647 | 2647 | 2647 | 2647 |

Notes: This table presents the results of before-after analysis for each of the three occupations with *AfterDummy* and the year Dummies, respectively. The robust clustered standard errors at district-level are in parentheses.

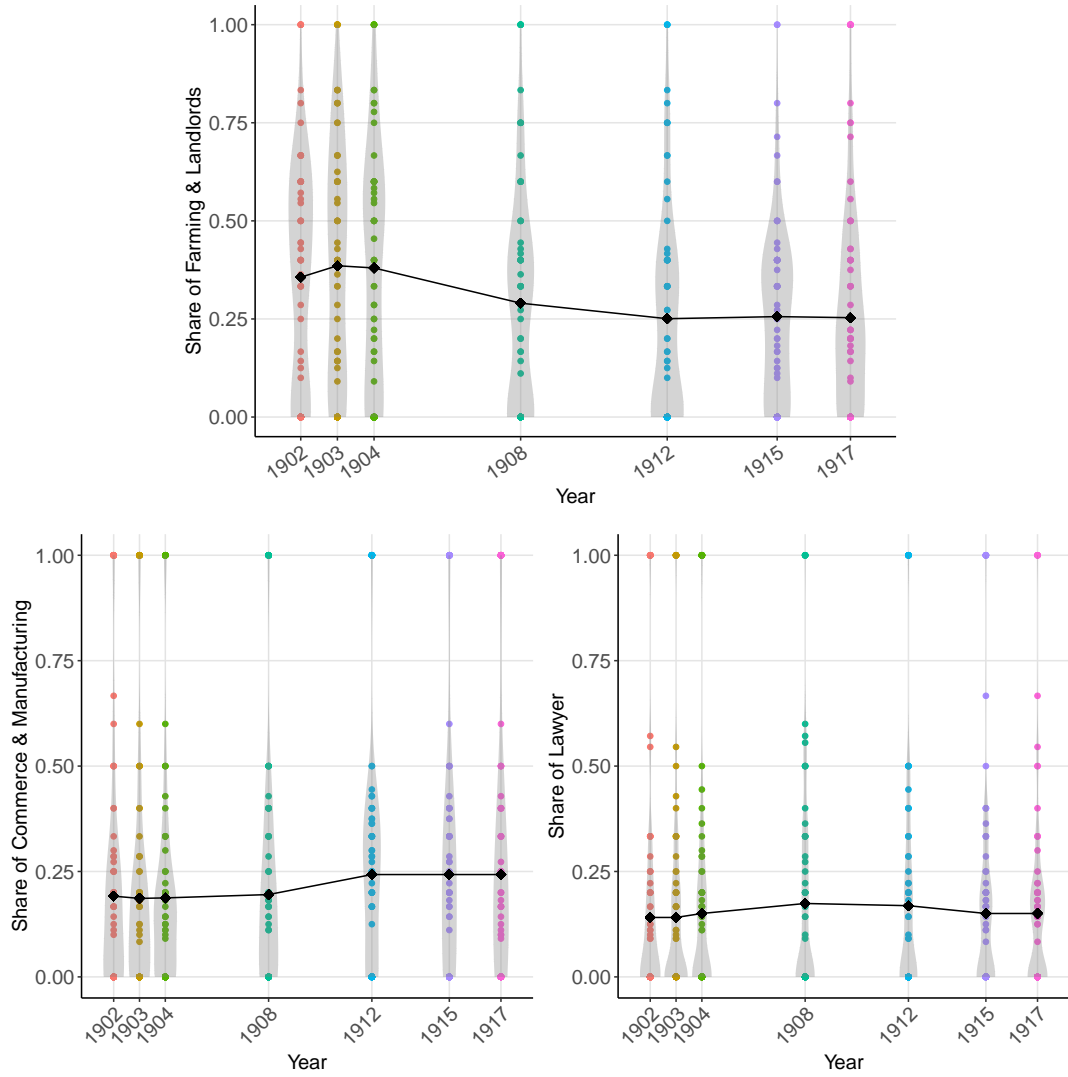
period.²⁸ These estimates indicate that one is about 9% and 12%, and less likely to have *Farming & Landlord* background in 1908 and the subsequent years, respectively.²⁹ This observed decline is as large as a quarter or one-third of its occupation's share in 1904. On the other hand, the estimates for *Commerce & Manufacturing* and *Lawyer* indicate that the changes observed between 1904 and 1908 are not significantly large, whereas the estimated coefficients are both positive. Hence, my estimates together and the figures imply that politicians with a *Farming & Landlord* background significantly decreased between 1904 and 1908, corresponding to the extension of suffrage.

Are these changes driven by some specific groups of winners within each occupation? To address this question, I divide each occupational group by class and honour. The results are presented in the Appendix. Examining the estimates by class, I observe substantial changes only for the *Heimin* group in every occupation. For instance, the estimates suggest that one is less likely to possess *Farming & Landlord* \times *Heimin* background, implying that *Farming & Landlord*'s decline between 1904 and 1908 seems driven by *Heimin*. We also find heterogeneity by honour conferred prior to the electoral victory. In *Farming & Landlord*, we find that the decline observed above derives from the No-Honour group. The differential impacts by honour

²⁸ Even if we replace the base year from 1904 to 1908 in estimating Equation 2, the same result is derived with statistically no significant difference during the after-period but there is a substantial difference between 1908 and the before-period.

²⁹ Here, a further drop is observed in the share of farmers and landlords between 1908 and 1912. The factors underlying this decline are not certain, but a possible explanation is the post-war taxation reforms, wherein reduction in the land taxation rate to a large extent compared to the other two taxes, while income tax reforms lagged others, and business tax rates were revised moderately (Ministry of Finance, Public Finance History Office, 1998). Effectively, this may decreased the number of land taxpayers with suffrage.

Figure 4: Before-After Comparison of Farming & Landlords Share



Notes: This figure presents the yearly cross-sectional distribution of shares of *Farming & Landlord* , *Commerce & Manufacturing* , and *Lawyer* by constituency and its mean by election. The coloured point indicates each constituency depending on its y . Each vertical plot represents each year's distribution with its thickness describing the density of the value of each y . The black line exhibits the means of y -axis weighted by the number of seats assigned.

conferred are also observed for *Commerce & Manufacturing*. Thus, we observe that the heterogeneous changes in the probabilities of having each occupational background based on one's social status are possibly reflected in the honour conferred.

At this point, the observation indicates a significant transformation in political selection during this period. These changes are consistent with the historical context in which newly politicised groups started entering Japan's political domain that was previously dominated by the *Farming & Landlord* group. Besides, judging from the timing of the changes, electorate expansion through de facto suffrage extension is possibly the underlying cause. In the following section, I further investigate if this conjecture is likely to hold.

4.2 Difference-in-Differences Design

4.2.1 Empirical Framework

Motivated by the first analysis, I next estimate the impact of suffrage extension using the DID specification, exploiting the cross-sectional variation in the expansion in electorate size. That is, I estimate the following linear probability model:

$$\begin{aligned} \Pr(y_{ijt} = 1 \mid \{\alpha_j\}_j, \{\delta_t\}_t, \Delta \text{VoterRatio}_j, \text{After}_t, \mathbb{X}_{ijt}) \\ = \alpha_j + \delta_t + \gamma \Delta \text{VoterRatio}_j \cdot \text{After}_t + \eta \mathbb{X}_{ijt}, \end{aligned} \quad (3)$$

where

$$\Delta \text{VoterRatio}_j = \frac{\# \text{Voter}_{j1908}}{\text{Population}_{j1907}} - \frac{\# \text{Voter}_{j1904}}{\text{Population}_{j1903}},$$

the 1908–1904 difference in the number of eligible voters per population, y_{ijt} is a dummy identical to the before-after specification, δ_t is a year-fixed effect, and \mathbb{X}_{ijt} is a set of controls. $\Delta \text{VoterRatio}_j$ indicates the change in a district’s electorate size normalised by its population size and is interpreted as the treatment intensity of the enlargement in the electorate. Figure 3 shows the distribution of VoterRatio_j , from which we can observe that there is a substantial variation across districts. I define the treatment variable in a way that it does not vary over time, using data only for 1904 and 1908, as the electoral size does not substantially change after 1908. Population data are taken from one year prior to 1904 and 1908 each in order to avoid using the population that could be affected by the elections. Besides, one of the requirements to become an eligible voter is to possess residence of at least one year, which justifies the use of one year-before population size to normalise.

By employing this specification, I attempt to identify the parameter of interest, γ , under the parallel trend assumption. This specification allows me to control the district time-invariant characteristics and year-specific common factors, which can mitigate the concern in the previous before-after design such that the estimates are contaminated with national-level time-variant unobserved shocks. Since my dataset comprises multiple years in the pre-treatment period, I also consider the pre-trend of the estimates. I can also control for the extrapolated district-specific pre-trends³⁰, the district-specific trend as well as the prefecture-level time-varying shock.³¹

³⁰ Following Bhuller, Havnes, Leuven, and Mogstad (2013), I first estimate each district’s trend of outcomes using the observations in the pre-treatment period (1902, 1903, and 1904), and control the interaction of these estimated slope coefficients and electoral linear trends in Equation 3 to exclude the potentially differential pre-trends across constituencies. To account for the pre-trend control variable estimated in advance, I report the p-value for this specification computed by the percentile-t cluster bootstrap. Note that since three out of six districts in *Hokkaido* prefecture appear only from the 1904 election onwards, it is not possible to estimate the pre-trends for these districts; therefore, I set a zero to the estimated pre-trend variable for these districts.

³¹ While the group-specific trend is widely used in similar empirical settings, there is a concern of *overcontrolling* when the treatment effects are time varying (Goodman-Bacon, 2018). Since this may be relevant in my setting, the results with the district-specific trend should be viewed with caution.

Individual-level characteristics are controlled for estimates' efficiency although they have no significance for the validity of the identifying assumption.

Note that this analysis assumes that a large increase in the electorate size corresponds to a large change in the electorate composition. This implies that I must use the magnitude of constituency level electorate enlargement to approximate the degree of new eligible voters' entry whose interests are likely different from the original electorate.

4.2.2 Results

Given the results in section 4.1.2, I focus on *Farming & Landlord*, and the results are presented in Table 3. Overall corresponds to the results with a *Farming & Landlord* dummy as the dependent variable, while the rows with Class and Honour indicate that the dependent variables are replaced with the specified subgroup dummies of *Farming & Landlord*. Column (1) of each table describes the estimates with the simplest model of DID specification with no control, while column (2) adds the individual-level controls.³² The coefficients are statistically significant at 5% and 1% levels, respectively, with negative values that are consistent with the results from the before-after analysis in section 4.1.2.³³ These estimates suggest that a one percentage point increase in the voter share in population is associated with a decline in the probability of having the *Farming & Landlord* background by about 7 ~ 8 percentage points. Multiplying the estimate, say -0.069 , by the sample mean of $\Delta VoterRatio_j$ ³⁴, 1.59, yields -0.11 . This is compatible with the estimated change in the probability of being *Farming & Landlord* in section 4.1.2. By contrast, as explained in the Appendix, I do not observe a statistically significant result for *Commerce & Manufacturing* and *Lawyer* that is robust across specifications.

To examine the pre-treatment trend as well as how the estimates differ by year, Figure 5 shows the event-study plots for *Farming & Landlord*, interacting year dummies with $\Delta VoterRatio_j$. We do not observe any systematic difference or trend in the pre-treatment before-period but find systematically negative coefficients in the post-treatment after-period. Although the coefficients fluctuate, these estimates describe a trajectory that corresponds to the results obtained in section 4.1.2, supporting our observations in the previous analysis.

Another possibility is the persistence of a downward trend from the before- to the after-period. For the sake of verification, Figure 6 shows the trends of the share of the politicians with *Farming & Landlord* background by two groups of constituencies: those with high increase in electorate and those with lower growth. This figure clearly exhibits no ongoing decreasing trend from the before-period, rather the share increases between 1902 and 1904 in the high increase group, although the initial levels of the share are different. From this observation, we

³² Individual-level controls include a three-year-age category dummy, five-year-birth cohort dummy, number of past electoral victories, and the incumbent dummy. My findings are robust to the choice of the individual controls as well as to the specifications of age and cohort variables.

³³ These results are robust even if I include the share of taxpayers above the threshold in the population as a control.

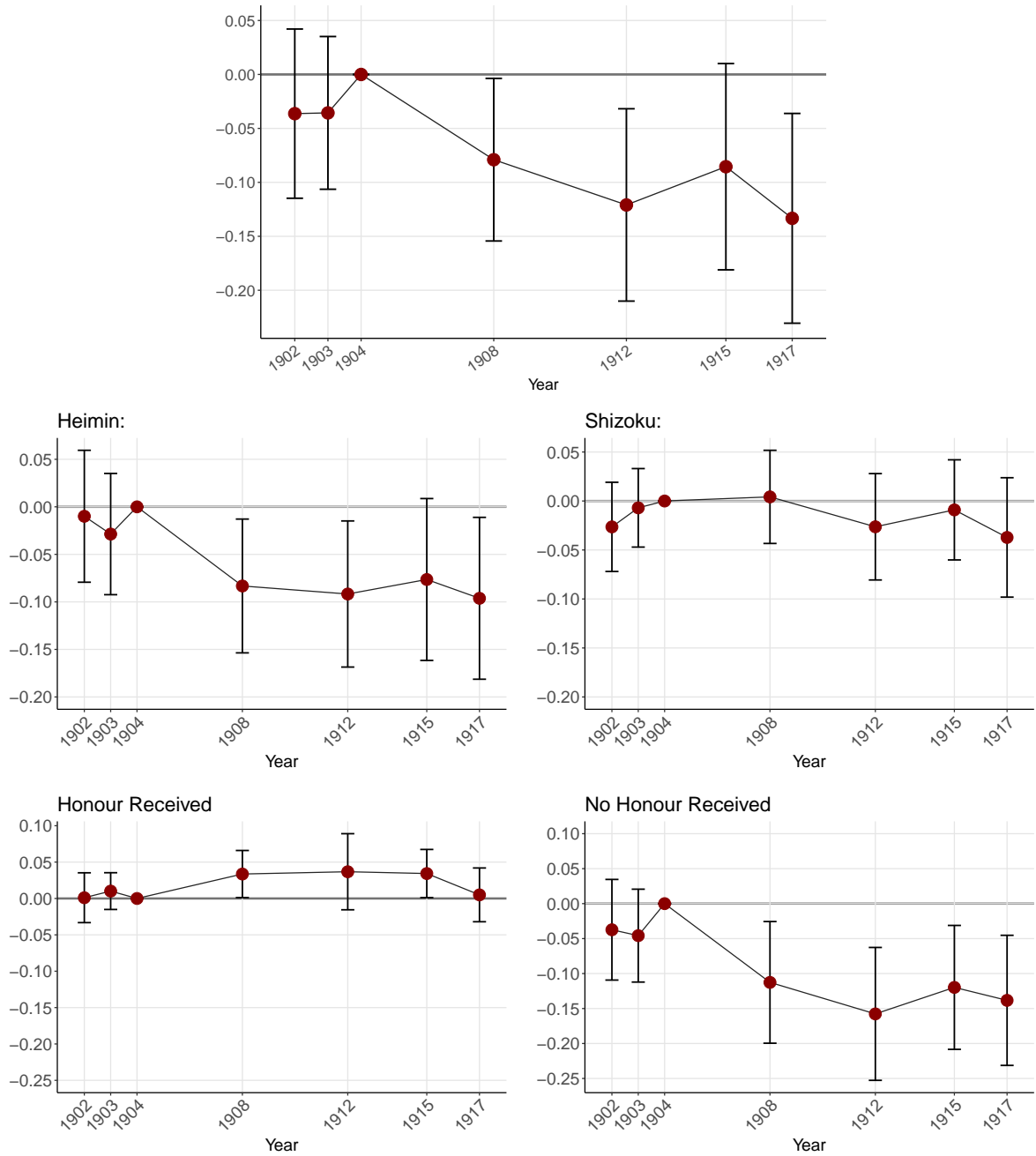
³⁴ This is the sample average weighted by the number of seats assigned in each constituency.

Table 3: DID Analysis of Farming & Landlord

| | (1) | (2) | (3) | (4) | (5) |
|--|-------------------|-------------------|------------------------------|-------------------|-------------------|
| Farming/Landlord: Overall | | | | | |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy}$ | -0.069 (0.031) | -0.081 (0.029) | -0.081 (0.03) [0.000] | -0.067 (0.042) | -0.121 (0.037) |
| Num. obs. | 2647 | 2647 | 2647 | 2647 | 2647 |
| Class: Heimin | | | | | |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy}$ | -0.067 (0.027) | -0.074 (0.026) | -0.074 (0.026) [0.000] | -0.073 (0.035) | -0.124 (0.035) |
| Num. obs. | 2646 | 2646 | 2646 | 2646 | 2646 |
| Class: Shizoku | | | | | |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy}$ | -0.002 (0.021) | -0.006 (0.021) | -0.007 (0.021) [0.679] | 0.008 (0.029) | 0.003 (0.02) |
| Num. obs. | 2646 | 2646 | 2646 | 2646 | 2646 |
| Honour | | | | | |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy}$ | 0.027 (0.015) | 0.024 (0.014) | 0.024 (0.013) [0.041] | 0.047 (0.029) | 0.003 (0.016) |
| Num. obs. | 2647 | 2647 | 2647 | 2647 | 2647 |
| No Honour | | | | | |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy}$ | -0.096 (0.033) | -0.105 (0.031) | -0.105 (0.031) [0.000] | -0.113 (0.052) | -0.125 (0.038) |
| Num. obs. | 2647 | 2647 | 2647 | 2647 | 2647 |
| District FE and Year FE | ✓ | ✓ | ✓ | ✓ | ✓ |
| Individual Control | | ✓ | ✓ | ✓ | ✓ |
| District Extrapolated Pre-trend | | | ✓ | | |
| District Trend | | | | ✓ | |
| Prefecture FE * Year FE | | | | | ✓ |

Notes: The table reports the results of DID analysis with the Farming and Landlord dummy as the dependent variable, together with class and honour conferring indicators. Five different specifications are employed. Individual controls include a three-year-age category dummy, five-year-birth cohort dummy, number of past electoral victories, and the incumbent dummy. District Extrapolated Pre-trend indicates the specification controlling for the estimated pre-trend of outcomes. Clustered robust standard errors at district-level are in parentheses. In column (3), the p-values computed with the percentile-t cluster bootstrap with 1000 draws are in brackets.

Figure 5: Event Study Plot of DID Analysis: Farming & Landlords

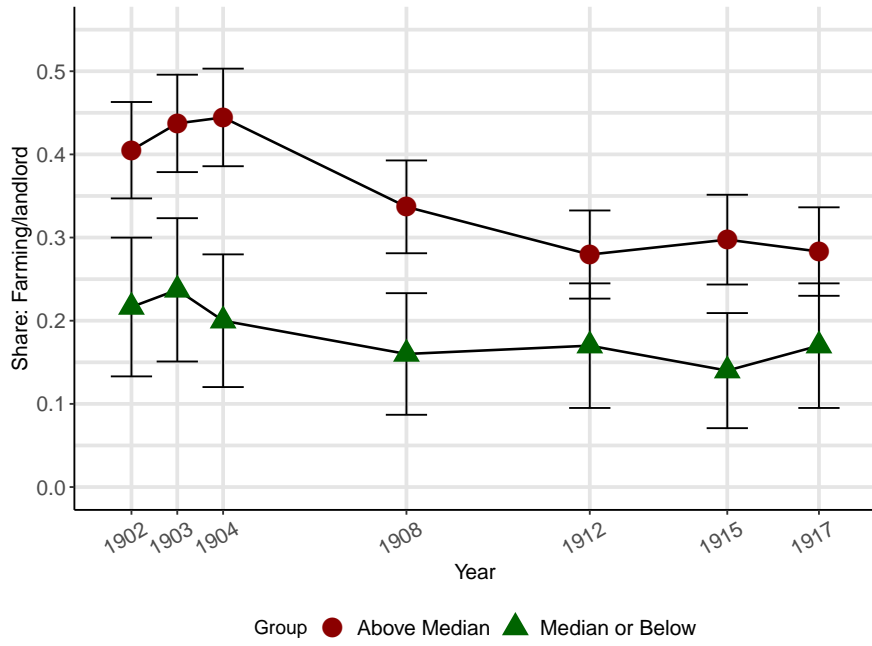


Notes: Estimated coefficients of DID specification and their 95% CIs of *Farming & Landlord* by dependent variable with District FE + Year FE + Individual Controls. The top panel corresponds to the overall farmers and landlords, the middle two figures present the plots by class, and the bottom report by honour conferred prior to the electoral victory.

can confirm that any results with the DID specifications are not likely driven by the pre-existing trend.

Next, as in the before-after design, I further examine the intensity of heterogeneity within each occupation. I again focus on class and honour. In Table 3, I observe significantly negative estimates for *Heimin* that are robust across different specifications and close to my estimates for

Figure 6: Trend by Group: Farming & Landlords



Notes: This figure presents the shares of electoral winners with *Farming & Landlord* background by constituencies with different magnitudes of electorate size expansion. The red points represent those constituencies with $\Delta \text{VoterRatio}_j$ above the median, while the green ones correspond to districts below its median.

Farming & Landlord overall. In contrast, *Shizoku* exhibits almost 0 negative estimated coefficients, which turn to be even positive in columns (3) and (4). These results are also compatible with the results obtained in section 4.1.2, implying that the decrease in the number of politicians with *Farming & Landlord* background between 1904 and 1908 is driven exclusively by commoner farmers and landlords. The corresponding event-study plots confirm this in Figure 5. Hence, my estimation results indicate that only *Heimin* farmers and landlords contributed to the decline in aggregate *Farming & Landlord*'s share.³⁵

The results also show heterogeneity by the honour conferred, as in the fourth and fifth rows of Table 3. On the one hand, *Farming & Landlord* without honour has significantly negative coefficients that remain stable over different specifications. On the other hand, for those with honour, we observe significantly positive coefficients except for one specification, suggesting that although the estimates are not as robust as above, *Farming & Landlord* with honour possibly increased during the after-period in those constituencies experiencing a significant increase in number of voters. The corresponding event-study plots are shown in Figure 5. *Farming & Landlord* without conferred honour exhibits a similar locus to those for *Farming & Landlord* and *Heimin Farming & Landlord*, indicating no particular trend in the pre-treatment before-

³⁵ One possible explanation can be that the share of commoner politicians declined regardless of occupation and this drives my results here, which may also apply to public honour conferring case below. To check this possibility, I presents the similar results of the DID analysis for each class and honour conferring status in the Appendix, pooling all occupational groups. I find no such compositional changes for class and honour conferring.

period and significant and persistent decreases in the post-treatment after-period. Alternatively, those farmers and landlords who received some honour increased in the after-period, except for 1917, while having no systematic difference in the before-period. This implies a clear distinction between *Farming & Landlord*-politicians with and without conferred honour after the electorate expansion.

Overall, the DID framework reveals that there seems to a significant decline in the share of politicians with farming- or landlord-origin and this is plausibly caused by the increase in electorate size. As a robustness check, I also use the alternative specification, and present it in the Appendix. These results are also consistent with what I have observed so far; hence, the estimates do not seem to be driven by the specifications in Equation 3. As the expansion in electorate size presumably reflects the change in its composition and the possible indication of voters with different political interests from those of the existing ones, the results above suggest that a change in voter preference distributions owing to the expansion of suffrage likely provoked the shift from the political dominance of *Farming & Landlord* to politics based on more diverse occupational groups.

4.2.3 Assignment Mechanism Considered

Thus far, I ran the regressions using expansion in electorate size as the key regressor; however this could be contaminated by the non-linear differential trend across constituencies.³⁶ To mitigate this concern and to clarify how the electorate expanded, I explicitly incorporate the institutional mechanism of voter eligibility into my estimation. As explained above, the national tax payment primarily governed voter eligibility. Precisely, those who paid the national tax above or equal to the threshold, that is, 10 Japanese yen during the period, were eligible to vote and the electorate size increased after the war because the war-time tax increase made more people pay that amount. Let us consider the case where tax payments are determined by the product of the tax base (e.g. income) and tax rate. Then, conceptually the change in electorate size derives from the following:³⁷

³⁶ One consideration is that the economic boom induced by the war could affect the local industrial structure differently across districts.

³⁷ Note that there can also be $\#\{\text{people who satisfy } (\text{tax base}_{\text{Before}} \times \text{tax rate}_{\text{Before}} < \text{threshold}) \wedge (\text{tax base}_{\text{After}} \times \text{tax rate}_{\text{Before}} \geq \text{threshold})\}$ in the newly enfranchised population. I omit this from Equation 4 because this portion can easily be removed in the data.

$$\begin{aligned}
& \#\{\text{people who satisfy} \\
& \quad (\text{Tax Base}_{\text{Before}} \times \text{Tax Rate}_{\text{Before}} < \text{Threshold}) \\
& \quad \wedge (\text{Tax base}_{\text{Before}} \times \text{Tax Rate}_{\text{After}} \geq \text{Threshold})\} \\
& + \#\{\text{people who satisfy} \\
& \quad (\text{Tax base}_{\text{Before}} \times \text{Tax Rate}_{\text{Before}} < \text{Threshold}) \\
& \quad \wedge (\text{Tax base}_{\text{After}} \times \text{Tax Rate}_{\text{After}} \geq \text{Threshold}) \\
& \quad \wedge (\text{Tax base}_{\text{Before}} \times \text{Tax Rate}_{\text{After}} < \text{Threshold})\} \tag{4}
\end{aligned}$$

The former portion represents the population segment that could not vote with the lower pre-war tax rate but turned eligible voters with the higher post-war tax rate. While the latter describes those who became eligible to vote because of the growth in the tax base together with the post-war higher tax rate structure, it may partially reflect the post-war differential trends across districts. To eliminate the number of newly eligible voters induced by the wartime and post-war economic development, I attempt to subtract the latter part from the total number of newly enfranchised population. This would yield the former part that may be used as an instrumental variable under some assumptions.

For this procedure, I employ prefectural-level data on the number of taxpayers. The data source is the Annual Statistical Report of National Tax Office. This book records the number of taxpayers in each bracket of tax amounts by the type of tax. I focus on the direct national tax, consisting of three types of levies: land, income, and business. The detailed procedure is given in the Appendix. Primarily, I exploit the post-war period's feature of the record stipulating in the taxpayer numbers within each category based separately on the pre- and post-war rate. As the change in the number of above-threshold taxpayers—based on the pre-war tax rate, must reflect the expansion in the tax base—this change between 1902 and 1906 is used to approximate the change resulting from the economic growth. Thus, it is possible to construct the proxy for the former term in Equation 4 by deflating the total number of new taxpayers above the threshold, which corresponds to the total in Equation 4, with the approximated growth of the taxpayers following the expansion in the tax base.

I use this variable—allocated to each constituency from the prefectural level and based on the initial electorate size in 1902—as an instrument for the district-level electorate size increase Equation 3, controlling for the total number of taxpayers above the threshold in $1902 \times \text{After}_i$. Here, I assume that the exclusion restriction holds conditional on the initial size of the taxpayer pool remaining above the threshold. I estimate the model with the two-stage least squares in which the second stage specification is given by Equation 3, and the first stage is the regression of the interaction term in Equation 3 on the interaction of the instrument with the after dummy

with all the covariates.³⁸³⁹

The estimation results for *Farming & Landlord* are given in Table 4 with the same format as in the case without instrumentation. The results are qualitatively similar to those without the instrument, although the coefficient sizes are basically larger in this case, and the estimated coefficient becomes smaller and statistically indistinguishable from zero in column (3).⁴⁰ Overall, even after accounting for the possible non-linear trend, we have similar results.

4.2.4 Candidate Entry and Electoral Selection

Given the above results that the suffrage expansion plausibly contributed to the decline in the seat share of the *Farming & Landlord* politicians in the House, which drove this change, candidate entry to the election or selection process by voters during the election? Although my dataset does not seem to provide a complete answer to this question, it is still possible to conceptualise based on the comparison of differences in candidates' and electoral winners' occupational composition in the Appendix and the supplementary regression analysis. The difference in *Farming & Landlord*'s within-candidate share between 1904 and 1908 is -0.066 , while the change in the within-winner share is -0.09 . Thus, approximately, about 70% of the share reduction can be attributed to the change in the candidate entry and 30% to the selection in the election. This is reasonable because the cost to contest an election during this period was quite substantial as contemporary documents show that this worked as an entry deterrence when the number of eligible voters rose (Kawato, 1992); hence, if potential candidates form an expectation of their payoff based on their winning possibility and the running cost, it is optimal for some of them not to run for an election. Besides, as the candidates' entry does not explain the decline totally, we can also infer that voters' aggregate behaviours were different between 1904 and 1908. These are consistent with the electoral competition model that allows for endogenous candidate entry.

In addition to the simple comparison of the occupational compositions of both candidates and winners, I run the supplementary regressions. As described in section 3.2.1, candidates' information during the 1904 and 1908 elections is partially available.⁴¹

³⁸ The first-stage results are presented in the Appendix.

³⁹ As this instrument may not be strong enough according to the first-stage Kleibergen-Paap F-statistic, following Andrews, Stock, and Sun (2019), I also report the weak instrument-robust 95% confidence sets implemented with Sun (2018).

⁴⁰ This seems attributable to the significantly positive coefficients in *Shizoku Farming & Landlord*, possibly cancelling out the negative estimates in *Heimin*, although the reason underlying this result is not clarified.

⁴¹ As discussed in section 3.2.1, I was not able to collect all the candidates' information and hence some observations miss their values in socio-economic background variables. While I regard them as non-*Farming & Landlord* candidates in this analysis, the Appendix presents the corresponding results assuming that all of the candidates, either with missing information or whose information taken from relatively lower-quality sources, have *Farming & Landlord* background. The results are qualitatively similar to those shown in this section although the estimates are less precise in some cases.

Table 4: DID-IV Analysis of Farming & Landlord

| | (1) | (2) | (3) | (4) | (5) |
|--|-------------------|-------------------|------------------------------|-------------------|-------------------|
| Overall | | | | | |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy}$ | -0.372 (0.174) | -0.398 (0.185) | -0.396 (0.185) {0.034} | -0.025 (0.157) | -0.789 (0.386) |
| | [-1.161; -0.153] | [-1.267; -0.167] | [-1.263; -0.165] | [-0.510; 0.255] | [-2.781; -0.334] |
| Num. obs. | 2647 | 2647 | 2647 | 2647 | 2647 |
| Kleibergen-Paap F-statistic | 8.78 | 8.79 | 8.829 | 8.429 | 6.604 |
| Class: Heimin | | | | | |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy}$ | -0.394 (0.177) | -0.418 (0.189) | -0.419 (0.192) {0.041} | -0.296 (0.163) | -0.716 (0.35) |
| | [-1.230; -0.172] | [-1.305; -0.182] | [-1.301; -0.181] | [-0.954; -0.066] | [-2.647; -0.367] |
| Num. obs. | 2646 | 2646 | 2646 | 2646 | 2646 |
| Kleibergen-Paap F-statistic | 8.772 | 8.782 | 8.823 | 8.422 | 6.603 |
| Class: Shizoku | | | | | |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy}$ | 0.023 (0.045) | 0.021 (0.047) | 0.024 (0.047) {0.469} | 0.273 (0.117) | -0.073 (0.171) |
| | [-0.068; 0.148] | [-0.073; 0.150] | [-0.074; 0.151] | [0.085; 0.680] | [-0.460; 0.345] |
| Num. obs. | 2646 | 2646 | 2646 | 2646 | 2646 |
| Kleibergen-Paap F-statistic | 8.772 | 8.782 | 8.823 | 8.422 | 6.603 |
| Honour | | | | | |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy}$ | 0.016 (0.068) | 0.026 (0.069) | 0.01 (0.065) {0.861} | 0.122 (0.113) | 0.088 (0.13) |
| | [-0.147; 0.178] | [-0.125; 0.203] | [-0.126; 0.217] | [-0.143; 0.386] | [-0.135; 0.524] |
| Num. obs. | 2647 | 2647 | 2647 | 2647 | 2647 |
| Kleibergen-Paap F-statistic | 8.78 | 8.79 | 8.829 | 8.429 | 6.604 |
| No Honour | | | | | |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy}$ | -0.388 (0.188) | -0.424 (0.199) | -0.421 (0.197) {0.046} | -0.146 (0.192) | -0.877 (0.412) |
| | [-1.201; -0.152] | [-1.321; -0.175] | [-1.335; -0.176] | [-0.741; 0.196] | [-3.080; -0.466] |
| Num. obs. | 2647 | 2647 | 2647 | 2647 | 2647 |
| Kleibergen-Paap F-statistic | 8.78 | 8.79 | 8.829 | 8.429 | 6.604 |
| Instrumentation | ✓ | ✓ | ✓ | ✓ | ✓ |
| District FE and Year FE | ✓ | ✓ | ✓ | ✓ | ✓ |
| Individual Control | | ✓ | ✓ | ✓ | ✓ |
| District Extrapolated Pre-trend | | | ✓ | | |
| District Trend | | | | ✓ | |
| Prefecture FE * Year FE | | | | | ✓ |

Notes: Notes: The table reports the results of DID analysis with the Farming and Landlord dummy as the dependent variable, together with both class and honour receiving indicators. All the models are estimated with the instrumental variable discussed in the text, using the two-stage least squares method. Four different specifications are employed. Individual controls include a three-year-age category dummy, five-year-birth cohort dummy, number of past electoral victories, and the incumbent dummy. Robust clustered standard errors at district-level are given in parentheses. P-values computed by the percentile-t cluster bootstrap with 1000 draws are presented in braces. Weak instrument-robust 95% confidence sets are presented in brackets.

Hence, using the available data, I estimate the following models:

$$y_{ijt} = \alpha_j + \delta_t + \gamma \cdot \Delta \text{VoterRatio}_j \cdot \text{After}_j + \mu \cdot \Delta \text{VoterRatio}_j \cdot \text{After}_j \cdot \text{Farming}_{ijt} + \eta \mathbb{X}_{ijt} + \varepsilon_{ijt} \quad (5)$$

where $\text{Farming}_{ijt} = \mathbb{1}\{\text{Occupation}_{ijt} = \text{Farming \& Landlord}\}$, and y_{ijt} is the electoral victory dummy, log of vote share, or normalised rank in a constituency.⁴² The parameter of interest here is μ . Motivated by the triple difference approach, this specification allows me to examine if the electoral performances of candidates with *Farming & Landlord* background differ depending on the electorate size change. Besides, using this candidate data, I also estimate Equation 3 to see if there is a negative impact of the electorate enlargement on the entry of *Farming & Landlord* candidates.

Table 5 presents the results of these four outcomes with four different specifications. While the statistical significance of the estimates varies across the specifications, the estimated coefficients are rather stable and consistently negative in all the three models. The upper two rows show that in the constituencies with a larger electorate expansion, candidates with a *Farming & Landlord*-origin are less likely to win, attain a smaller vote share, and are consequently lower-ranked within their districts, after the suffrage expansion. These results support the view that the decline in the number of *Farming & Landlord* politicians is due to voters' electoral selection.⁴³ Meanwhile, the bottom row reports the results of estimating Equation 3 with the candidate sample, indicating that there may also be a decrease in the entry of *Farming & Landlord* candidates as well. Overall, the results do not necessarily rule out either of the channels, rather implying that both may be the plausible reasons why the *Farming & Landlord* politicians decreased.

4.3 Discussion: Interpreting Results in the Historical Context

Based on the results obtained in section 4.1.2 and section 4.2.2, I discuss these results in a historical context. In the above analysis, the significant decline in the share of *Farming & Landlord* background politicians is prominent. Overall, the House members with the *Farming & Landlord* background exhibited around 10% decline in seat share between the before- and after-periods. This is the shift in trend rather than a simple downward trend that could go through from the early 1900s to 1910s. Furthermore, the DID estimation shows growth in the larger electorate size, as more *Farming & Landlord* shares decrease. Therefore, this suggests

⁴² I construct the normalised rank in the following way: first by re-defining candidate i 's rank as $\sum_{k \in \text{Candidate}} \mathbb{1}\{\text{RawRank}_k \leq \text{RawRank}_i\}$, where RawRank_i is candidate i 's original rank in a district (i.e. candidate i is ranked at RawRank_i -th place), so that the higher ranked candidates correspond to larger values; then normalise these re-defined ranks to take mean 0 and standard deviation 1 within each pair of district and year. Based on this transformation, we can interpret larger values of this variable as higher ranks.

⁴³ As the entry of *Farming & Landlord* candidates is endogeneous, this results may possibly be biased owing to the selection problem. The direction of the bias, however, is expected to be upward since candidate entry and one's predicted winning probability (or vote share) should be positive. Thus, my results presented here can be biased towards zero and so their main implications are still valid even in the presence of the selection problem.

Table 5: DID Analysis for Candidates in 1904 and 1908

| | (1) | (2) | (3) | (4) |
|---|-------------------|-------------------|-------------------|-------------------|
| log(Vote Share) | | | | |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy}$ | 0.034 (0.054) | 0.04 (0.054) | 0.043 (0.056) | 0.031 (0.075) |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy} \cdot \mathbb{1}\{\text{Farming}\}$ | -0.143 (0.095) | -0.168 (0.096) | -0.185 (0.102) | -0.173 (0.109) |
| Winning Dummy | | | | |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy}$ | 0.103 (0.041) | 0.111 (0.041) | 0.108 (0.042) | 0.088 (0.054) |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy} \cdot \mathbb{1}\{\text{Farming}\}$ | -0.218 (0.143) | -0.234 (0.143) | -0.22 (0.155) | -0.247 (0.166) |
| Normalised Rank | | | | |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy}$ | 0.199 (0.066) | 0.216 (0.065) | 0.214 (0.067) | 0.28 (0.083) |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy} \cdot \mathbb{1}\{\text{Farming}\}$ | -0.497 (0.275) | -0.541 (0.282) | -0.606 (0.313) | -0.516 (0.32) |
| Farming/Landlord Dummy | | | | |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy}$ | -0.041 (0.033) | -0.026 (0.032) | | -0.06 (0.034) |
| District FE and Year FE | ✓ | ✓ | ✓ | ✓ |
| Individual Control | | ✓ | ✓ | ✓ |
| District * Farming Dummy | | | ✓ | |
| Prefecture FE * Year FE | | | | ✓ |
| Num. obs. | 1074 | 1074 | 1074 | 1074 |

Notes: The table reports the results of DID analysis of Equation 5 and Equation 3. The study sample comprises candidates in the 1904 and 1908 elections, whose vote gain is as much as officially recovered. The models are estimated using the ordinary least squares method. Individual controls include electoral variables (number of past electoral victories, incumbent dummy, and first-run dummy), and the variables on personal information availability (dummies to indicate missing information and that the quality of information may be lower than others despite not-missing information). Due to data availability, I did not include age and birth variables; however, adding these variables to the estimation improves the precision of estimates. Clustered robust standard errors at district-level are in parentheses.

that de facto suffrage extension between 1904 and 1908 possibly drove this change. Exploring the question, particularly regarding which strata of farmers and landlords declined, I find that those from the *Heimin* (commoner) class as well as those without any honour received prior to the electoral victory. In any case, these two categories are the majority of *Farming & Landlord*-politicians and so one may wonder if these two exhibit greater decreases than *Shizoku* and those with honour plausibly because their initial smaller shares simply would not allow me to detect them statistically. *Shizoku*-farmers and landlords and those who were conferred honours, however, do not show any significant change between 1904 and 1908 (honoured farmers and

landlords even increased in the after-period), implying that overall there was no such contraction of *Farming & Landlord*-politicians.

What does this mean in the historical context? As discussed in section 2, during the early years of the Diet, members of the House of Representatives were characterised disproportionately with *Farming & Landlord*-background and their localness, because they focused exclusively on the interests of their small constituencies rather than the greater (prefectural/national) good. Thus, the Diet was the assembly of local nobles in the initial period of the 1890s. Along with the nation-building programme, some prominent politicians in the government recognised this as an issue that must be resolved, primarily because in the scramble for local benefits, it could hamper national development. Moreover, as the economy developed alongside the wars, such as the Sino-Japanese War in 1894, political interests diversified from a land-taxation single-issue perspective. Subsequently, the 1900s observed the transition from the local noble-centred politics to a mixture of the local and broader interests-based legislators (Suetake, 2010). In this historical context, my findings suggest that this transition was perhaps, at least partially, driven by the expansion of suffrage between 1904 and 1908. Although my analysis does not clarify how the distribution or characteristics of voters changed during the before- and after-periods, it still implies that the expansion of the electorate possibly played a key role in this political transformation.

This view is supported by the results on the within-*Farming & Landlord* heterogeneity across class and honours receiving, in which it can be observed that only *Heimin* and farmers who were not honoured and landlords experienced a sudden decrease in their shares. As stated above, the *Shizoku* (warrior, *Samurai* class) can be considered as an elite class compared to *Heimin* (commoner) itself in an aggregate sense. Despite the ambiguity of how different farmers and landlords from both the *Shizoku* and *Heimin* classes are, this result may reflect that *Heimin* farmers and landlords may include more *local nobles*, rather than those who had broader interests as well as connections. Honour also described a person's social status. In the pre-WWII Japan, honour (*Ikai* and *Kunsho*) was given to those who served the country, especially in the public sector such as government officials and military personnel. Hence, if one received the honour, then it suggests that he, with *Farming & Landlord* background, may hold such a position before being elected; therefore, qualitatively different from those who were simply elected in their regions. Such differences may include both educational and work experience as well as connection to the central government. Thus, if these characteristics and their class systematically differentiate farmers and landlords without honour and with *Heimin*-origin from the others (i.e. *Shizoku*, honour received), the decline in no-honour/*Heimin* farmers and landlords who dominated the House of Representatives during the early periods (and the increase in honour received) indicate the transition from the politics of local nobles.

Although my DID analysis shows no systematic change in other major occupations in contrast to *Farming & Landlord*, *Farming & Landlord*'s share contraction implies the increase in other occupations' shares. To understand how occupational composition in the House of Rep-

representatives changed over time, Figure 7 depicts the time series variation across three indices: fractionalisation, polarisation, and the Gini coefficient, each being computed separately with full sample and without the sample *Farming & Landlord*. The fractionalisation index describes how the occupational structure of the House is fractionalised across groups, and its high value indicates more fractionalisation. Likewise, the polarisation index shows how the occupational composition is *polarised*, whose value is maximised when the total share of the two group's amounts to 50% each.⁴⁴ The Gini coefficient represents, as in the usual case, the extent of unequal seat allocation amongst the occupational groups.

Figure 7 clearly exhibits the discontinuous jumps between 1904 and 1908 in all the indices calculated using the full sample, consistent with my observations above. Specifically, the fractionalisation index rose sharply in 1908 and later, implying that any reduction in the share of *Farming & Landlord* politicians results in the House consisting of smaller groups. The other two indices, in contrast, become smaller in the after-period. The implication of the declines in these indices is that the smaller share of *Farming & Landlord* is not followed by the increases witnessed in a few of the other groups, such as *Commerce & Manufacturing* and *Lawyer*. Rather, as the indices' values remain almost unchanged when computed without *Farming & Landlord* politicians, a wide range of occupational groups raise their shares, thus effectively diversifying the occupational composition of the House. Indeed, because generally the correlation between the fractionalisation and polarisation indices is positive for the low levels of diversity but becomes negative for its high levels (Montalvo & Reynal-Querol, 2005), our results of increasing fractionalisation and decreasing polarisation indicate the greater occupational diversity. Thus, during this period, we observe that power transition from the *Farming & Landlord* is not to another dominant group but to the broader occupational based House.

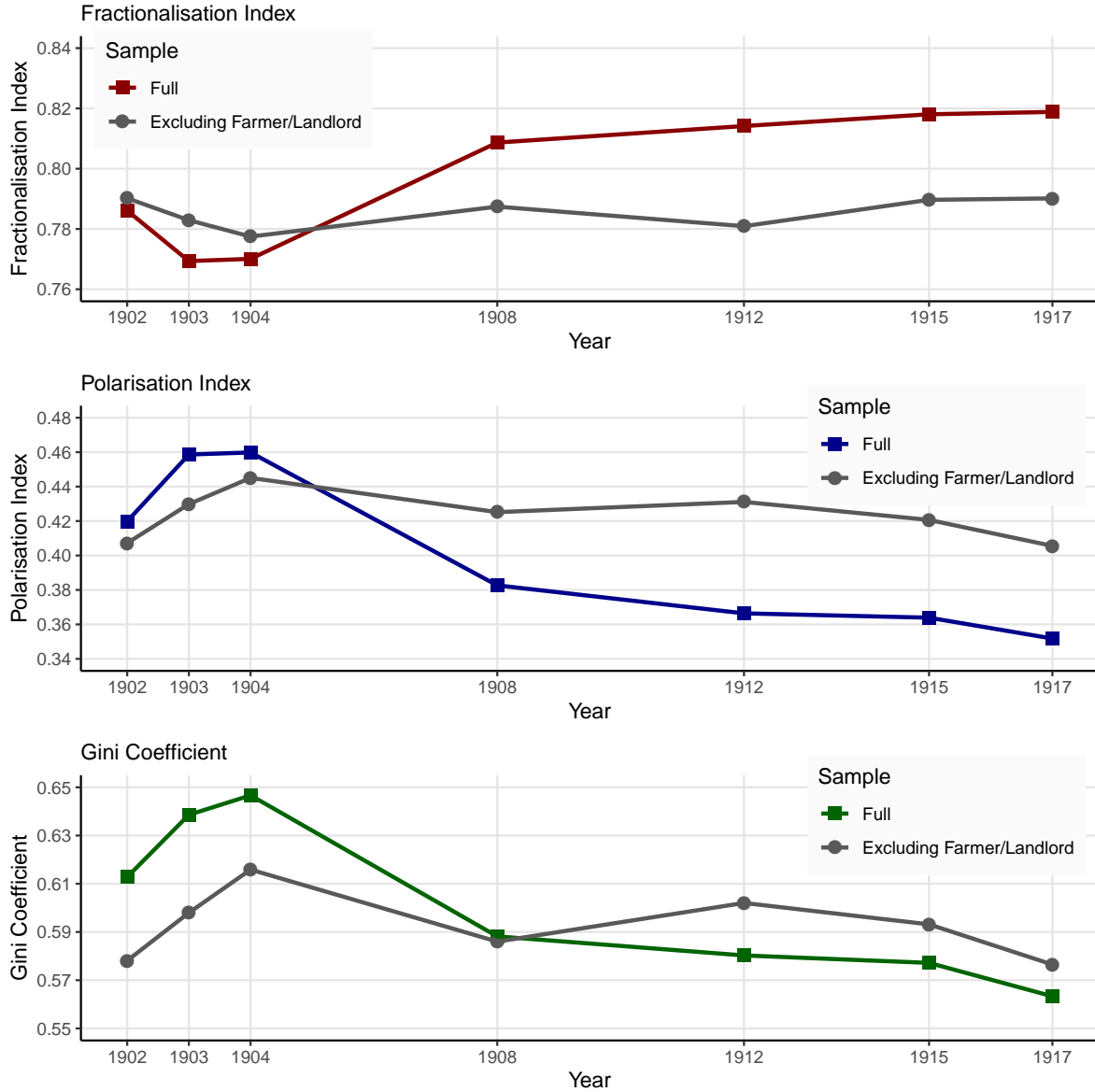
5 Conclusion

In this study, I examine the extension of suffrage and the historical transformation of the political elite structure from an occupational perspective in the early 20th century Japan, focusing on the House of Representatives. Over the course of history, as in the case of contemporaneous Western countries, during this period, Japan was undergoing industrialisation and thus economic development. Along with the efforts of modern nation-building, it also exhibited a gradual transition to a democratic regime in terms of electoral participation through several franchise extensions. At the same time, this period witnessed the diversification of political interests that transformed the politics of agricultural landlords and local nobles. This study attempts to uncover the role of suffrage extension in this political transformation.

To empirically examine if and how suffrage extension played a key role in these dynamics,

⁴⁴ In the existing literature on intergroup conflict (e.g. ethnicity) and development, such a circumstance presumably faces higher propensities of conflict eruption (Montalvo & Reynal-Querol, 2005) and hampers social integration beyond ethnicity (Bazzi, Gaduh, Rothenberg, & Wong, 2019).

Figure 7: Occupational Composition in the House: Descriptive Indices



Notes: The figure describes changes in the three indices of occupational composition in the House of Representatives' seats by election under the large-constituency electoral system. The three indices, namely fractionalisation, polarisation, and the Gini coefficient, are computed using the full sample and the sample excluding farmers and landlords, respectively. Computing the indices, I use each occupation as a unit of calculation and its share in the House seats as a value. Formally, let s_{jt} be the share of group j at time t ; then, the fractionalisation index is calculated as $Fractionalisation_t = 1 - \sum_j s_{jt}^2$; the polarisation index is computed as $Polarisation_t = 1 - \sum_j \left(\frac{1/2 - s_{jt}}{1/2} \right) s_{jt}$, proposed by Montalvo and Reynal-Querol (2005); and the Gini coefficient is measured following the standard definition. The share of each occupation can be found in the upper panel of Table 1. A larger coefficient indicates that a small number of occupations accounts for larger shares.

I focus on de facto suffrage extension induced by the wartime tax increases during the Russo-Japanese War in the mid-1900s, which doubled the electorate size. My empirical investigation employs the DID framework supplemented by the DID-instrumental variable strategy based on the institutional feature of voter eligibility, exploiting regional heterogeneity in the magnitude of the extension. The results show a substantial and persistent decline in the seat share of *Farming & Landlord* politicians, who were originally dominant in the House, and that this is likely driven by the expansion of suffrage. Furthermore, no other major occupational groups compensated this observed decline of *Farming & Landlord*, indicating that suffrage extension helped the House members to diversify in terms of their occupational background rather than enhance the power of transition from one dominant group to another.

Although my results may not be applicable to the case of other countries, they still provide insights about suffrage institutions and their political implications. The above results imply that in the presence of political competition amongst elites, the relatively small-scale enlargement of the electorate can still alter the power balance within the elite class. Besides, in the context of nation-state building and industrial development, they suggest that extended suffrage can work to consolidate the Diet as a national assembly rather than an assembly of local nobles. Essentially, they present a historical case that shows how *who votes* it relates to *who becomes a politician* in addition to *which policy is chosen* that has been extensively explored in the literature.

Nonetheless, there are some caveats to this study. First, my dataset does not allow me to investigate exactly how the electoral distribution of preference/identity changed with the expansion of suffrage. Rather, this study assumes that, to some extent, the distributional change corresponds to the magnitude of the electorate enlargement, which may not be completely the case. Second, this study focuses exclusively on occupation, class, and national honour; thus, it does not incorporate the role of political parties. Japan's political history has focused disproportionately on this dimension. This simplification can be, nonetheless, justified as no major political parties of that time built on the specific occupational groups. Hence, while these limitations may obscure some aspects of the political transformations witnessed during this period, this study provides a clear case study of suffrage extension through the simplification of the dynamics of political transition.

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Appendix

A1. Background

A1.1 Historical Context and Institutional Background

As discussed in the body, the *Meiji* Japanese government held representative parliament consisting of two Houses, the House of Representatives and the House of Lords. The selection of the former House's members is via general election, while the latter is the mixture of elections by top taxpayers and appointment. Only the House of Representatives can be considered rather as a democratic legislature in this system.

The institution as a whole was not designed and maintained as democratic as post-WWII Japan. The constitution stipulates that the sovereignty belongs to the emperor and hence people's rights are heavily restricted. Under the constitution, whereas the *Meiji* central government possessed a substantial political power in intergovernmental relation with local authorities and thus the system was *centralised* in this regards, the central government was itself organised and managed in a *decentralised* manner (Kawato, 1992). Practically, the exercise of the rights of sovereignty by the emperor was managed by multiple state agencies in the name of their *supports* to the emperor. These agencies include *Genro* (Oligarchs), the Privy Council, the Army and Navy, the cabinet, and the Diet. Besides, the constitution does NOT stipulate a parliamentary cabinet system, in which the cabinet needs to be accountable for the Diet. This enabled the basic cabinet operation independently from the Diet while declaring their non-partisanship, especially during the early days of Diet politics. Even within the Diet, the House of Lords that exclusively represent nobles and social elites, possessed almost an equal status as the House of Representatives did (Kawato, 1992). This led to frequent overturns of the bills passed in the House of Representatives by the House of Lords.

Under this political system, electoral legislation experienced several major reforms during the pre-WWII period. Figure 8 summarises these reforms in a time-series manner. This paper concern the period under the large-constituency system, separately elaborated as below. As you can see, all of these formal reforms involve a bundle of rule changes, not just the tax payment condition for voter eligibility. This, for instance, makes it hard to exploit other electorate size changes as shown in Figure 1, even if the magnitude of the change looks larger than that of the extension focused in this study.

A1.2 Electoral System under Large District System

This study focuses on the elections under the large-constituency electoral system between 1902 and 1917, with a particular focus on the electorate enlargement between 1904 and 1908 in Figure 9. The large-constituency system was enacted in 1900, with some important differences from the prior electoral rule, the small-constituency system. One is, as its name suggests, electoral district size, both in a sense of geography and of the number of assigned seats (Kawato,

1992). In contrast to the previous system with one or two seats assigned in each district, constituency consists of two types essentially: city district (*Shibu*) and county district (*Gunbu*). 56 cities with more than 30,000 population are qualified to be independent districts, most of which are single-member constituencies (as opposed to the name) whereas some large cities hold more seats ranging from 2 to 11 (Tokyo) depending on population size. The county districts are the rest of each prefecture aside from city districts, with four exceptions of *island* districts on which four remote islands are based. The number of seats assigned in each county district depends on its population size as city districts, but one seat per 130,000 people, with the maximum 12. This disproportionality between the city- and county-district benefits the former and reflects the consequence of bargaining by urban-based politicians (Mitani, 1995). Table 6 shows each district and its assigned seats. *Hokkaido* prefecture possessed only three city-districts in the 1900 legislation and added three county-districts later from the 1904 election. No district in *Okinawa* prefecture until 1912, and thus I exclude it from my sample.

Relaxing tax payment restriction is also the characteristics of the 1900 legislation (Kawato, 1992). The tax amount criterion was loosened from 15 to 10 yen annual national tax payment. Besides, the legislation shortened the years of non-land tax payment required to be eligible voters. Originally in the 1890s, while land taxpayers were given suffrage if they pay 15 yen or more for a year or longer, income tax payment needs at least three years, disproportionately preventing non-land taxpayers from participating in the election. The 1900 legislation made it shorter to two years, hence relaxing the restriction especially for non-land taxpayers. Residential restriction for voting right is also relaxed together with these tax payment criteria. Therefore, through these relaxation of tax payment restriction, policy-making seemingly became more open particularly to the non-landtaxpayers via election.

Another change is the introduction of the secret ballot and single non-transferable vote (SNTV) (Suetake, 2010). In the 1890s, open ballot and block voting was adopted, that is, voters are required to write their own names on ballots and casted two votes if two seats are assigned to their constituencies. By the 1900 legislation, however, voters were able to cast only a single ballot without being identified who they voted for. The SNTV was introduced in order to reflect voices of minority groups and also to prevent the coalition of local nobles (Suetake, 2010). Hence, the electoral system became closer to the proportional representation system (Kawato, 1992).

With these new electoral rules, the 1900 legislation (and its subsequent amendment in 1902) was designed to change the nature of politicians. As described in section 2.1.2, the elected members of the House of Representatives are disproportionately landowners and local interests-oriented, which was recognised as a problem by the prominent figures of those days. Through the large-constituency system, they aimed at enhancing the entry of the politicians who had broader interests as opposed to localness. The system also purposed to foster the business sector's entry to the House of Representatives. This is because the some specific contents of the electoral reform resulted from the lobbying by the business sector as well as from the

recognition that the House should include more representatives of the business sector along with the industrial development (Masumi, 2011a). Considering this intention of the 1900 legislation, the literature perceives that the consequence is mixed: while new central-oriented and business-related politicians entered the House of Representatives, a significant share of local nobles was still observed, resulting in their coexistence in the diet (Suetake & Takeda, 2011).

Figure 8: Major Electoral Reforms in the Pre-WWII Periods

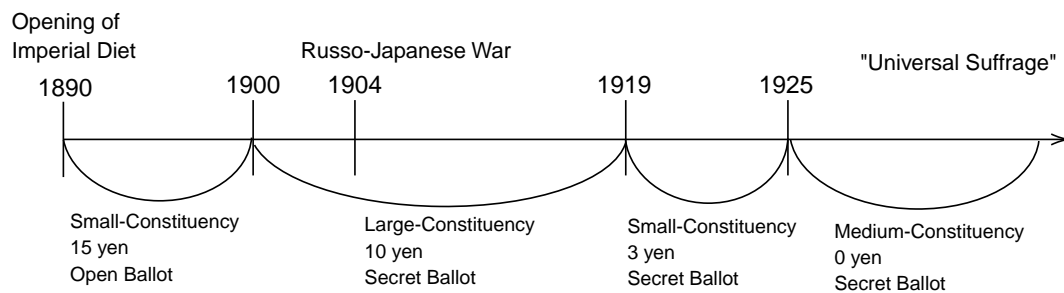
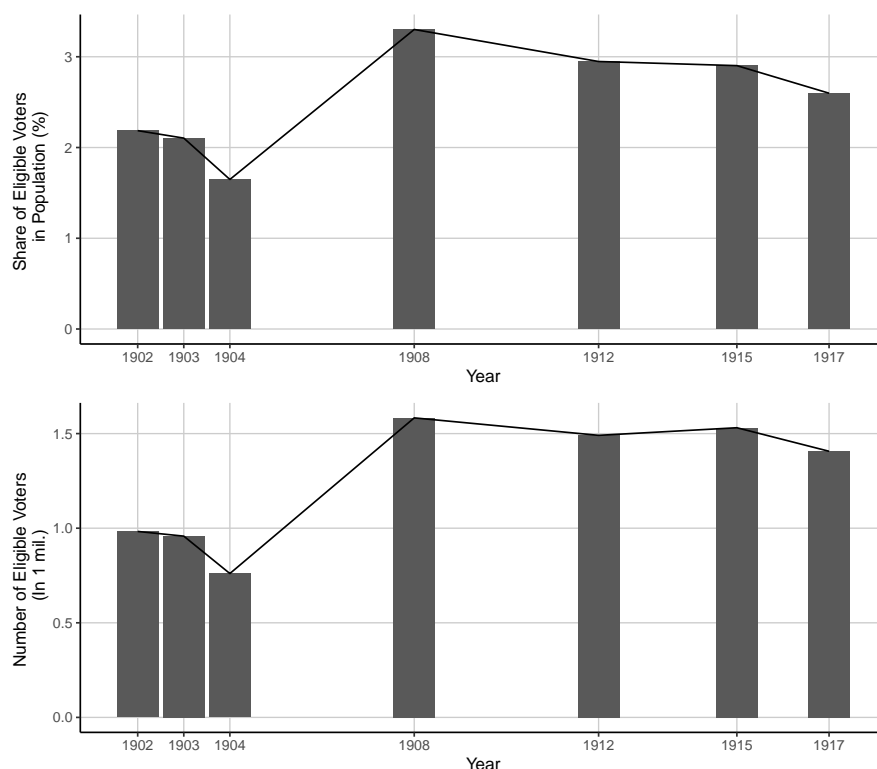


Figure 9: Number of Eligible Voters Under Large-Constituency System



Notes: The figure describes a changes in the number of eligible voters in Japan under the large-constituency electoral system. The lower panel presents the total number of eligible voters in Japan, while the upper one exhibits its share in the total population (all prefectures included), each by year. Since some constituencies were established in the middle of this period, I exclude the districts that are not present for all years when computing the total voter size (e.g. Okinawa) for the purpose of a consistent comparison. The number of eligible voters comes from Kawato and Kawato (1990). The population data is taken from *Historical Statistics of Japan*.

Table 6: List of Constituencies by Prefecture Under Large-Constituency System

| Prefecture | Constituency | # of Seats | Prefecture | Constituency | # of Seats |
|------------|-----------------|------------|------------|------------------------------|------------|
| Tokyo | Tokyo city | 11 | Yamagata | Yamagata city | 1 |
| | County | 5 | | Yonezawa city | 1 |
| Kyoto | Kyoto city | 3 | Akita | County | 6 |
| | County | 5 | | Akita city | 1 |
| Osaka | Osaka city | 6 | Fukui | County | 6 |
| | Sakai city | 1 | | Fukui city | 1 |
| | County | 6 | | County | 4 |
| Kanagawa | Yokohama city | 2 | Ishikawa | Kanazawa city | 1 |
| | County | 6 | | County | 5 |
| Hyogo | Kobe city | 2 | Toyama | Toyama city | 1 |
| | Himeji | 1 | | Takaoka city | 1 |
| | County | 11 | | County | 5 |
| Nagasaki | Nagasaki city | 1 | Tottori | Tottori city | 1 |
| | County | 6 | | County | 3 |
| Niigata | Tsushima island | 1 | Shimane | Matsue city | 1 |
| | Niigata city | 1 | | County | 5 |
| | County | 12 | Okayama | Oki islands | 1 |
| | Sado island | 1 | | Okayama city | 1 |
| Saitama | | 9 | Hiroshima | County | 8 |
| Gunma | Maebashi city | 1 | | Hiroshima city | 1 |
| | Takasaki city | 1 | | Onomichi city | 1 |
| | County | 6 | | County | 10 |
| Chiba | | 10 | Yamaguchi | Akamagaseki/Shimonoseki city | 1 |
| Ibaraki | Mito city | 1 | | County | 7 |
| | County | 9 | Wakayama | Wakayama city | 1 |
| Tochigi | Utsunomiya city | 1 | | County | 5 |
| | County | 6 | Tokushima | Tokushima | 1 |
| Nara | Nara city | 1 | | County | 5 |
| | Gunbu | 4 | Kagawa | Takamatsu city | 1 |
| Mie | Tsu city | 1 | | Marugame city | 1 |
| | Yokkaichi city | 1 | Ehime | County | 5 |
| | County | 7 | | Matsuyama city | 1 |
| Aichi | Nagoya city | 2 | Kochi | County | 7 |
| | County | 11 | | Kochi | 1 |
| Shizuoka | Shizuoka | 1 | Fukuoka | County | 5 |
| | County | 9 | | Fukuoka city | 1 |
| Yamanashi | Kofu city | 1 | | Kurume city | 1 |
| | County | 4 | | Mojiku city | 1 |
| Shiga | Otsu city | 1 | | Kokura city | 1 |
| | County | 5 | Oita | County | 10 |
| Gifu | Gifu city | 1 | | | 6 |
| | County | 7 | Saga | Saga city | 1 |
| Nagano | Nagano city | 1 | | County | 5 |
| | County | 9 | Kumamoto | Kumamoto | 1 |
| Miyagi | Sendai city | 1 | | County | 8 |
| | County | 6 | Miyazaki | | 4 |
| Fukushima | Wakamatsu city | 1 | | Kagoshima city | 1 |
| | County | 8 | Hokkaido | County | 7 |
| Iwate | Morioka city | 1 | | Oshima island | 1 |
| | County | 5 | | Sapporo district | 1 |
| Aomori | Hirosaki city | 1 | | Hakodate district | 1 |
| | Aomori city | 1 | | Otaru district | 1 |
| | County | 4 | | Sapporo county | 1 |
| | | | | Hakodate county | 1 |
| | | | | Nemuro county | 1 |

Notes: The table presents the list of constituencies by prefecture under the large-constituency electoral system. # of Seats describes the number of seats of the House of Representatives assigned to each constituency. The order follows the one typically used in this period as well as the source. Since I do not use the data of *Okinawa* prefecture, no constituency in this prefecture is presented here.

Source: Toyama and Adachi (1961).

A2. Data

A2.1 Data Source on the House Member Information and Population

Electoral Winner As explained in section 3.2.2, my main source of the information on the members of the House of Representatives (electoral winner) is the member roster of the House, published as of the beginning of each Diet. One of the advantages of using the member roster to attain each member's information is its publication timing. Typically, a directory summarises one's personal history (e.g. career) without specifying the timing of each event, and this can give imprecise background information, especially in my research context. The period of interest was in the middle of rapid social change, transforming the country from Edo feudal society to the modern industrialised economy. Specifically, in this period, nobles sometimes took *honorary* posts in banks or other companies later in their lives, which is sometimes hard to gauge whether purely honorary or not. Hence, the usage of the sources such as a directory may provide background information with larger measurement error and even possibly causing bias in estimation. For instance, the availability of honorary positions might increase along with Japanese economic development that contaminates the estimate of the electorate size change effect. This type of roughness has been recognised in the literature on Japanese political history (Aoki, 1995). *Shugi-in Giin Meibo* can mitigate this problem.

Candidates without Electoral Victory For their information, I combined multiple sources, depending on availability, ranging from the historical material published in those days and secondary sources. One of the historical materials used is *Jinji Koshinroku* (Who's Who), which first published in 1903 and subsequently in every one to five years during the pre-WWII period. This introduces big names alive as of the publication, containing their detailed information such as occupation, class, honour, birth year, birthplace, and father's brief background. I referred to the materials published as close as possible to each election year, but in some cases I collected the information from the records some years after elections. Also, I checked other primary materials published in those periods as well as secondary sources. The secondary materials include the research papers in history, in which local big names are analysed, and the websites typically describe historical figures who contributed to the local community.

Constituency level Population In some prefectures, population statistics are not available for the years of my interest, or occasionally the disaggregated data within a prefecture is not provided in the prefecture statistics. When data of the exact years of interest are missing, I employ one of the following ways. First, when the aggregate prefectural data is available but not within-prefecture with no other resource, I use the ratio of each constituency's population of the closest year (within the before- and after-periods, respectively) as a weight to allocate prefecture level population. Second, when only the aggregate prefectural data is available in the *Fuken Tokeisho* and we have a material for a city-level data (e.g. city statistical book), I

use it for the city population and calculate the county district population by subtracting the city population from the prefectural total. Third, when even prefecture level data are missing, I linearly interpolate them within the before- and after- periods, respectively.

A2.2 Occupational Classification and Composition

Table 7 provides the concordance table between the *raw* description of occupation and the classification used in this paper. *Farming & Landlord* includes farming, landlord, and forestry, which are considered to represent land tax-related interest. The category that consists of the widest variety of occupational descriptions is *Commerce & Manufacturing*. I separate the following categories from *Commerce & Manufacturing*, as those occupations can have different interests: *banking*, *Railway*, and *Media*. If no occupation is written, they are classified into *No Occupation*, though this category may cover both people with indeed no job and those who had some but were not recorded.

Table 7: Occupation Classification: Definition

| Occupational Classification | Raw Occupation |
|-----------------------------|--|
| Farming & Landlords | Farming, Landlord, Livestock Industry, Fruit Union Head |
| Commerce & Manufacturing | Commerce (including Tabacco, Tabi, Trading, Fertilizer, Timber, Medicine, Insurance), Manufacturing (including Brewing, Soy Sauce Brewing, Pottery, Sugar, Fertilizer, Silk, Cotton Spinning, Textile, Cotton Material, Crepe, Electrical Equipment), Director of Rice Exchange, Rice Broker, Hot Spring Hotel, Traveler Accomodation, Transportation, Shipping, Money Lending, Rental and Leasing, Warehouse, Pawnbroker, Chamber of Commerce, Stock Brokage, Civil Engineering, Architect, Mining (including Coal and Gold), Electric Power, Office Worker, Company Director, Miscellaneous Business |
| Lawyer | Lawyer |
| Fishery | Fishery, Fishery Union Head |
| Banking | Banking(including Agricultural and Industrial Bank, Industrial and Commercial Bank, and National Bank; bank employee, president, director, auditor, and advisor) |
| Railway | Railway Company |
| Media | Newspaper (journalist, employee, president, and supervisor), Magazine (journalist, employee, salesperson, and president), Publishing, News Agency, Writer |
| Education | Teacher/Lecturer (including vocational school, junior high school, university), Professor, Educator, School Principal |
| Medical Service | Doctor, Pharmacist |
| Military Service | Army (including captain, colonel, second lieutenant of infantry, paymaster, surgeon major-general, and surgeon-colonel), Navy (rear admiral, captain, surgeon general) |
| Public Service | public servant (prefecture, Taiwan), mayor/governor (city, county, prefecture), Minister (Agriculture and Commerce), Vice-Minister (Finance, Internal Affairs), Secretary of Prime Minister, Notary, Kinkeino-ma shiko |

Table 8: Occupation Composition of Candidates and Winners: 1904 and 1908

| Occupation | Classification | 1904 | 1908 | Difference |
|----------------------------|----------------|-------|-------|------------|
| Farming and Landlord | Candidate | 0.331 | 0.265 | -0.066 |
| | Winner | 0.380 | 0.290 | -0.090 |
| Commerce and Manufacturing | Candidate | 0.193 | 0.188 | -0.005 |
| | Winner | 0.187 | 0.195 | 0.008 |
| Lawyer | Candidate | 0.141 | 0.163 | 0.022 |
| | Winner | 0.150 | 0.174 | 0.024 |
| Fishery | Candidate | 0.004 | 0.012 | 0.008 |
| | Winner | 0.005 | 0.011 | 0.005 |
| Banking | Candidate | 0.040 | 0.042 | 0.002 |
| | Winner | 0.032 | 0.029 | -0.003 |
| Railway | Candidate | 0.002 | 0.010 | 0.008 |
| | Winner | 0.000 | 0.003 | 0.003 |
| Media | Candidate | 0.054 | 0.063 | 0.009 |
| | Winner | 0.061 | 0.069 | 0.008 |
| Education | Candidate | 0.011 | 0.012 | 0.001 |
| | Winner | 0.005 | 0.008 | 0.003 |
| Medical Service | Candidate | 0.014 | 0.019 | 0.005 |
| | Winner | 0.005 | 0.016 | 0.011 |
| Military Service | Candidate | 0.007 | 0.008 | 0.000 |
| | Winner | 0.003 | 0.005 | 0.003 |
| Public Service | Candidate | 0.024 | 0.019 | -0.004 |
| | Winner | 0.021 | 0.021 | 0.000 |
| No Occupation | Candidate | 0.184 | 0.209 | 0.025 |
| | Winner | 0.150 | 0.179 | 0.029 |

Notes: The table presents a share of the House of Representatives' members with each occupational background in 1904 and 1908, respectively, and their difference. Each share is calculated from taking the mean of each occupational dummy using the electoral winner sample in 1904 and 1908. Because a small portion of the politicians possess multi-occupations (except for those who with *Farming & Landlord*), the sum in each year may exceed one. I compute the difference as $Share_{o1908} - Share_{o1904}$ for each occupation o . Each occupation's definition is presented in Table 7

A2.3 Politicians' Other Socioeconomic Characteristics

Class Pre-WWII Japan had the registration system that classifies citizens into one of the three class categories (*Zokuseki*) based upon family lineage originated in *Edo* era: *Kazoku* (peerage), *Shizoku* (warrior class/*Samurai*), and *Heimin* (commoner) and no substantial change occurred even after the *Meiji* Restoration. *Zokuseki* system was introduced by the *Meiji* government as a replacement for the former social status. *Shizoku* is basically equivalent to *Bushi/Samurai* in the *Edo* era and before. *Kazoku* includes previous court nobles, feudal lords, those who were demoted from nobility, and some newly honoured ones. All the rest is typically considered as *Heimin*, amounting for 95% of the total population. While it is certain that there is a variation within a class in terms of social and economic conditions, it still reflects the social position of the family. *Shizoku* is typically considered as elite class together with *Kazoku*, as they held ruling positions during *Edo* era and even in the early *Meiji* era. Note also that *Shizoku* exhibited aggressive political activism after they officially lost their privilege enjoyed during *Edo* era. Together with landlords, they played a leading role in the Movement for Liberty and Civil Rights during about 15 years prior to the diet opening, which requested institutional reforms including the establishment of the constitution and the opening of the parliament (Kitaoka, 2018).

Public Honour Public honour system has its root in Japan's aristocracy since the pre-medieval periods. After the *Meiji* Restoration, the Japanese government engaged itself in the reformation of the system. In the pre-WWII period, honour (*Eiten*) basically comprises two ranking systems: *Ikai* (court rank) and *Kunsho* (decorative order and medal). The latter consists of *Kunto* and *Kinshi Kunsho*, the latter of which was conferred for distinguished military service. These were more or less conferred for those who made notable contributions to the country in the form of, for instance, military and public services.

A2.4 Construction of the Instrument

In this section, I describe how to construct the instrument used in section 4.2.3. The source of data is the Statistical Book of Japanese Tax Office (*Shuzeikyoku-Nenposho* and *Shuzeikyoku-Tokei-Nenposho*). It summarises and records the basic statistics of the tax collection at national and prefectural level. From this source, I collect the prefectural level statistics on the number of direct national taxpayers by tax type, which is divided into each bracket of tax amount paid, in 1902 and 1906. Specifically, the types used are land, income, and business taxes. For the 1906 data, each bracket consists of two numbers: the taxpayer size in each bracket based on the pre-war level as well as the post-war level, increased, tax rates.⁴⁵

Denote the pre- and post-war tax rates as $tax\ rate_{Before}$ and $tax\ rate_{After}$, as well as the tax type s 's number of taxpayers above the threshold based on $tax\ rate_{Before}$ and $tax\ rate_{After}$ as $\#\{tax\ rate_{Before}\}_s$ and $\#\{tax\ rate_{After}\}_s$. Using the data describe above, the steps of the variable construction is as follows:

1. For each prefecture j , calculate the growth rate of the taxpayer number above the threshold for each tax type s in 1902 and 1906 based on the pre-war tax rate, denoted as g_{Before} ⁴⁶, i.e.,

$$g_{Before_s} = \frac{\#\{tax\ rate_{Before}\}_{s, 1906} - \#\{tax\ rate_{Before}\}_{s, 1902}}{\#\{tax\ rate_{Before}\}_{s, 1902}}.$$

2. Compute the number of taxpayes above the threshold in 1906 who are eligible for voting only at the post-war tax rate by

$$\#\{tax\ rate_{AfterOnly}\}_{s, 1906} = \#\{tax\ rate_{After}\}_{s, 1906} - \#\{tax\ rate_{Before}\}_{s, 1906}.$$

3. Approximate the former part for each tax type s by deflating the computed taxpayer number in the Step 2 with g_{Before} , i.e.,

$$\widetilde{\#\{tax\ rate_{AfterOnly}\}_{s, 1906}} = \#\{tax\ rate_{AfterOnly}\}_{s, 1906} / g_{Before_s}.$$

4. Sum $\widetilde{\#\{tax\ rate_{AfterOnly}\}_{s, 1906}}$ up over tax types and allocate the summed one to each constituency with the share of each constituency's electorate size in the prefecture as a weight, since the unit of calculation above is prefecture and tax type:

⁴⁵ Note that this latter number includes the former, that is the latter is not the number based on *only* the post-war level tax rate.

⁴⁶ For notational simplicity, I omit a subscript j , which corresponds to a prefecture until Step 4.

$$\widetilde{\#\{tax\ rate_{AfterOnly}\}}_{j, 1906} = \frac{\#Voter_{j1902}}{\sum_{j \in Prefecture} \#Voter_{j1902}} \times \sum_{s \in \{land, income, business\}} \widetilde{\#\{tax\ rate_{AfterOnly}\}}_{s, j, 1906}.$$

5. For standardisation, divide this by the constituency population in 1902:

$$IV_j = \frac{\widetilde{\#\{tax\ rate_{AfterOnly}\}}_{j, 1906}}{Population_{j1902}}.$$

Note that we observe three electoral districts in *Hokkaido* prefecture (out of six districts) only from the 1904 election and so we cannot use the number of eligible voters as of 1902 as weights in the step 4. Hence, for the districts in *Hokkaido* prefecture, I instead use the eligible voter size at the 1904 election in this step.

The first stage results with this instrumental variable are shown in Table 9. The dependent variable is $\Delta VoterRatio_j \times After_t$, the explanatory variable of interest in the DID analysis. The estimated coefficients and the standard errors are similar across specification. Besides, all models pass the F-test for weak instruments at the conventional level of statistical significance. The relevance of the instrument to the dependent variable is, therefore, likely strong enough.

Table 9: First-stage Regression of the 2SLS

| | (1) | (2) | (3) | (4) | (5) |
|---------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Instrument | 18.6151 (6.2824) | 18.6085 (6.2765) | 18.7359 (6.3056) | 18.6831 (6.4351) | 23.6990 (9.2242) |
| District FE and Year FE | ✓ | ✓ | ✓ | ✓ | ✓ |
| Individual Control | | ✓ | ✓ | ✓ | ✓ |
| District Extrapolated Pre-trend | | | ✓ | | |
| District Trend | | | | ✓ | |
| Prefecture FE * Year FE | | | | | ✓ |
| Num. obs. | 2647 | 2647 | 2647 | 2647 | 2647 |

Notes: The table presents the results of the first-stage regression of the DID interaction term on the instrument and controls. The instrument correspond to the variable explained in section 5. The dependent variable is $\Delta VoterRatio_j \times After_t$. The choice of controls, which are omitted here, follow the other DID specifications, except for the share of total number of direct national taxpayers above the threshold in population interacted with $After_t$, the after-period dummy. Column (3) includes the extrapolated pre-trend of *Farming & Landlord* dummy. Robust clustered standard errors at district-level in parentheses.

A3. Results

A3.1 Before-After Design

Table 10: Before-After Comparison By Class

| | | Fam: Heimin | Fam: Shizoku | Busi: Heimin | Busi: Shizoku | Law: Heimin | Law: Shizoku |
|--------------------|-------------|-------------------|-------------------|------------------|-------------------|------------------|-------------------|
| After Dummy | | | | | | | |
| | After Dummy | -0.104 (0.015) | -0.008 (0.008) | 0.037 (0.014) | 0.006 (0.008) | 0.04 (0.012) | -0.023 (0.008) |
| Year Dummy | | | | | | | |
| | Year: 1902 | -0.023 (0.028) | 0 (0.015) | 0.006 (0.025) | -0.005 (0.014) | -0.02 (0.022) | 0.011 (0.014) |
| | Year: 1903 | 0.007 (0.028) | 0 (0.015) | -0.01 (0.025) | 0.006 (0.014) | -0.01 (0.022) | 0 (0.014) |
| | Year: 1908 | -0.095 (0.028) | 0.005 (0.015) | 0.008 (0.025) | -0.003 (0.014) | 0.037 (0.022) | -0.013 (0.014) |
| | Year: 1912 | -0.098 (0.028) | -0.031 (0.015) | 0.043 (0.025) | 0.011 (0.014) | 0.034 (0.022) | -0.016 (0.014) |
| | Year: 1915 | -0.111 (0.028) | -0.013 (0.015) | 0.053 (0.025) | 0 (0.014) | 0.026 (0.022) | -0.024 (0.014) |
| | Year: 1917 | -0.132 (0.028) | 0.005 (0.015) | 0.037 (0.025) | 0.018 (0.014) | 0.024 (0.022) | -0.024 (0.014) |

Notes: The table presents the results of before-after analysis each for the three occupations by class with *After-Dummy* and the year Dummies being regressors, respectively. Every specification employs 2646 observations. Robust clustered standard errors at district-level in parentheses.

Table 11: Before-After Comparison By Honour Receiving

| | | Fam: Honour | Fam: No Honour | Busi: Honour | Busi: No Honour | Law: Honour | Law: No Honour |
|--------------------|-------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|
| After Dummy | | | | | | | |
| | After Dummy | 0.015 (0.006) | -0.127 (0.016) | 0.022 (0.005) | 0.021 (0.015) | 0.006 (0.006) | 0.012 (0.013) |
| Year Dummy | | | | | | | |
| | Year: 1902 | 0.005 (0.011) | -0.028 (0.03) | 0.005 (0.009) | -0.002 (0.027) | 0.003 (0.011) | -0.012 (0.023) |
| | Year: 1903 | 0 (0.011) | 0.006 (0.03) | 0.005 (0.009) | -0.007 (0.027) | 0.005 (0.011) | -0.015 (0.023) |
| | Year: 1908 | 0.005 (0.011) | -0.095 (0.03) | 0.008 (0.009) | 0 (0.027) | 0.003 (0.011) | 0.021 (0.023) |
| | Year: 1912 | 0.008 (0.011) | -0.137 (0.03) | 0.037 (0.009) | 0.018 (0.027) | 0.005 (0.011) | 0.013 (0.023) |
| | Year: 1915 | 0.024 (0.011) | -0.148 (0.03) | 0.018 (0.009) | 0.034 (0.027) | 0.011 (0.011) | -0.008 (0.023) |
| | Year: 1917 | 0.029 (0.011) | -0.156 (0.03) | 0.037 (0.009) | 0.018 (0.027) | 0.016 (0.011) | -0.016 (0.023) |

Notes: The table presents the results of before-after analysis each for the three occupations by honour receiving prior to the electoral victory, with *AfterDummy* and the year Dummies being regressors, respectively. Every specification has 2647 observations. Robust clustered standard errors at district-level in parentheses.

A3.2 Difference-in-Differences: Other Occupations / Class & Honour

Table 12: DID Analysis for Commerce & Manufacturing / Lawyer

| | Busi. (1) | Busi. (2) | Busi. (3) | Busi. (4) | Law. (1) | Law. (2) | Law. (3) | Law. (4) |
|--------------------------------------|-------------------|-------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|
| Overall | | | | | | | | |
| $\Delta VoterRatio \cdot AfterDummy$ | -0.007 (0.036) | 0.001 (0.035) | 0.022 (0.049) | 0 (0.07) | 0.053 (0.037) | 0.058 (0.039) | 0.086 (0.063) | 0.063 (0.064) |
| Num. obs. | 2647 | 2647 | 2647 | 2647 | 2647 | 2647 | 2647 | 2647 |
| Class: Heimin | | | | | | | | |
| $\Delta VoterRatio \cdot AfterDummy$ | -0.005 (0.033) | 0.003 (0.032) | 0.013 (0.045) | 0.017 (0.063) | 0.039 (0.025) | 0.04 (0.025) | 0.109 (0.035) | 0.051 (0.046) |
| Num. obs. | 2646 | 2646 | 2646 | 2646 | 2646 | 2646 | 2646 | 2646 |
| Class: Shizoku | | | | | | | | |
| $\Delta VoterRatio \cdot AfterDummy$ | -0.005 (0.021) | -0.005 (0.021) | 0.011 (0.027) | -0.028 (0.057) | 0.015 (0.034) | 0.018 (0.035) | -0.023 (0.05) | 0.012 (0.043) |
| Num. obs. | 2646 | 2646 | 2646 | 2646 | 2646 | 2646 | 2646 | 2646 |
| Honour | | | | | | | | |
| $\Delta VoterRatio \cdot AfterDummy$ | -0.004 (0.014) | -0.006 (0.014) | -0.015 (0.018) | -0.036 (0.028) | 0.015 (0.027) | 0.015 (0.027) | 0.015 (0.019) | -0.008 (0.03) |
| Num. obs. | 2647 | 2647 | 2647 | 2647 | 2647 | 2647 | 2647 | 2647 |
| No Honour | | | | | | | | |
| $\Delta VoterRatio \cdot AfterDummy$ | -0.003 (0.038) | 0.007 (0.037) | 0.037 (0.053) | 0.036 (0.072) | 0.039 (0.037) | 0.043 (0.037) | 0.071 (0.059) | 0.07 (0.053) |
| Num. obs. | 2647 | 2647 | 2647 | 2647 | 2647 | 2647 | 2647 | 2647 |
| District FE and Year FE | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Individual Control | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ |
| District Trend | | | ✓ | | | | ✓ | |
| Prefecture FE * Year FE | | | | ✓ | | | | ✓ |

Notes: The table reports the results of DID analyses with the Commerce & Manufacturing and Lawyer dummies, respectively, as the dependent variable, together with class and honour receiving indicators interacted. Four different specifications are employed. Individual controls include 3-year-age category dummy, 5-year-birth cohort dummy, the number of past electoral victory, and the incumbent dummy. Clustered robust standard errors at district-level in parentheses.

Table 13: DID Analysis for Class & Honour

| | (1) | (2) | (3) | (4) |
|--|-------------------|-------------------|-------------------|------------------|
| Class: Heimin | | | | |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy}$ | 0.002 (0.053) | 0.008 (0.054) | 0.041 (0.052) | 0.006 (0.081) |
| Num. obs. | 2646 | 2646 | 2646 | 2646 |
| Class: Shizoku | | | | |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy}$ | -0.004 (0.053) | -0.011 (0.055) | -0.041 (0.051) | -0.01 (0.076) |
| Num. obs. | 2646 | 2646 | 2646 | 2646 |
| Honour | | | | |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy}$ | 0.02 (0.044) | 0.014 (0.046) | 0.007 (0.055) | -0.06 (0.055) |
| Num. obs. | 2647 | 2647 | 2647 | 2647 |
| No Honour | | | | |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy}$ | -0.02 (0.044) | -0.014 (0.046) | -0.007 (0.055) | 0.06 (0.055) |
| Num. obs. | 2647 | 2647 | 2647 | 2647 |
| District FE and Year FE | ✓ | ✓ | ✓ | ✓ |
| Individual Control | | ✓ | ✓ | ✓ |
| District Trend | | | ✓ | |
| Prefecture FE * Year FE | | | | ✓ |

Notes: The table reports the results of DID analysis with each of class and public honour conferring dummies as the dependent variable, regardless of one's occupation. Four different specifications are employed. Individual controls include a three-year-age category dummy, five-year-birth cohort dummy, number of past electoral victories, and the incumbent dummy. Clustered robust standard errors at district-level are in parentheses.

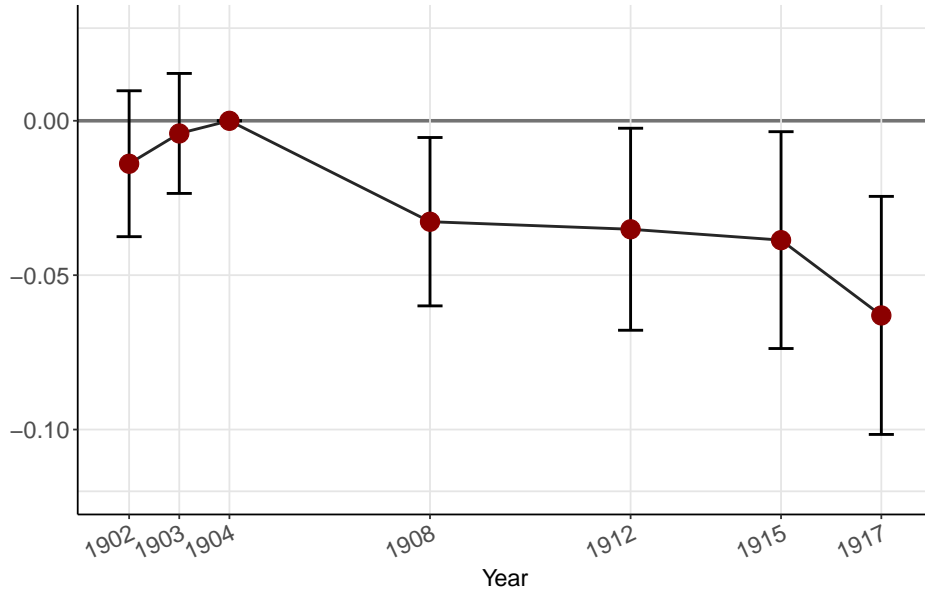
A3.3 Difference-in-Differences: Alternative Specification

In addition to the difference-in-differences specification in Equation 3, I employ an alternative specification as a robustness check. Specifically, I Estimate the following linear probability model:

$$\begin{aligned} \Pr\{y_{ijt} = 1 | \{\alpha_j\}_j, \{\delta_t\}_t, \ln(Voter)_{jt}, After_t, \mathbb{X}_{ijt}\} \\ = \alpha_j + \delta_t + \gamma_b \cdot \ln(Voter)_{jt} + \gamma_a \cdot \ln(Voter)_{jt} \cdot After_t + \eta \mathbb{X}_{ijt} \end{aligned} \quad (6)$$

where $\ln(Voter)_{jt}$: Number of eligible voters in district j at year t , \mathbb{X}_{ijt} includes the log-difference of population between 1903 and 1907 $\times After_t$.

Figure 10: Event Study Plot of DID Analysis: Farming & Landlords



Notes: Estimated coefficients of DID specification and their 95% CIs of *Farming & Landlord* with District FE + Year FE + Individual Controls. The coefficients are estimated by running the regression of Equation 6

Table 14: DID Analysis for Farming & Landlord: Alternative Specification

| | (1) | (2) | (3) | (4) |
|-------------------------------|-------------------|-------------------|-------------------|-------------------|
| Overall | | | | |
| $\ln(Voter)$ | 0.034 (0.088) | 0.041 (0.09) | -0.018 (0.111) | 0.168 (0.076) |
| $\ln(Voter) \cdot AfterDummy$ | -0.037 (0.014) | -0.036 (0.014) | -0.018 (0.015) | 0.004 (0.017) |
| Class: Heimin | | | | |
| $\ln(Voter)$ | 0.058 (0.075) | 0.066 (0.077) | 0.042 (0.091) | 0.132 (0.065) |
| $\ln(Voter) \cdot AfterDummy$ | -0.048 (0.01) | -0.048 (0.01) | -0.045 (0.01) | -0.017 (0.01) |
| Class: Shizoku | | | | |
| $\ln(Voter)$ | -0.024 (0.049) | -0.024 (0.047) | -0.059 (0.059) | 0.036 (0.037) |
| $\ln(Voter) \cdot AfterDummy$ | 0.01 (0.01) | 0.013 (0.01) | 0.027 (0.012) | 0.021 (0.012) |
| Honour | | | | |
| $\ln(Voter)$ | -0.019 (0.037) | -0.014 (0.034) | 0.002 (0.045) | -0.013 (0.017) |
| $\ln(Voter) \cdot AfterDummy$ | 0.001 (0.003) | 0 (0.003) | -0.001 (0.004) | 0.004 (0.004) |
| No Honour | | | | |
| $\ln(Voter)$ | 0.053 (0.086) | 0.055 (0.087) | -0.02 (0.111) | 0.181 (0.075) |
| $\ln(Voter) \cdot AfterDummy$ | -0.039 (0.014) | -0.035 (0.013) | -0.017 (0.014) | 0 (0.015) |
| District FE and Year FE | ✓ | ✓ | ✓ | ✓ |
| Individual Control | | ✓ | ✓ | ✓ |
| District Trend | | | ✓ | |
| Prefecture FE * Year FE | | | | ✓ |

Notes: The table presents the results of before-after analysis each for the three occupations by honour receiving prior to the electoral victory, with *AfterDummy* and the year Dummies being regressors, respectively. Every specification has 2647 observations in the Overall, Honour, and No Honour analyses. The numbers of observations in the Class parts are both 2646. Robust clustered standard errors at district-level in parentheses.

A3.4 Candidate-level Analysis: Robustness Check

In this section, I re-examine the candidate level analysis as in section 4.2.4 to check the robustness of the results in terms of the candidate level data quality. As discussed in section 3.2.1, I collected the personal records of the candidates who did not win any election in his lifetime from the various sources, including possibly unreliable sources in a sense of consistency. Also, the information on some of the candidates cannot be obtained in this way, rendering them as missing values in my dataset. In my analysis, I used all the candidate observations, regardless of their data source quality and missing values. Thus, a portion of them may possibly be treated as non-farming/landlord candidates despite their true status as farmers and landlords, because of lack of historical records.

To check the sensitivity of my results in this regards, I herein run the same regressions as in section 4.2.4 with three different assignments of *Farming & Landlord* dummy: assigning *Farming & Landlord* dummy = 1 for all missing candidates, for all candidates with relatively lower quality data source, and for both of such candidates. Table 15 reports the results, which are qualitatively similar to Table 5, although I observe smaller and less precise estimates in the results for the winning dummy and *Farming & Landlord* dummy as the dependent variables. Overall, the issue of data availability may not be large enough to overturn the main implications of my results.

Table 15: DID Analysis for Candidates in 1904 and 1908

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| log(Vote Share) | | | | | | | | | | | | |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy}$ | 0.045 (0.054) | 0.049 (0.054) | 0.043 (0.056) | 0.046 (0.076) | 0.054 (0.051) | 0.062 (0.051) | 0.067 (0.053) | 0.035 (0.076) | 0.067 (0.05) | 0.073 (0.05) | 0.068 (0.052) | 0.052 (0.077) |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy} \cdot \mathbb{1}\{\text{Farming}\}$ | -0.159 (0.097) | -0.169 (0.095) | -0.224 (0.088) | -0.174 (0.115) | -0.231 (0.095) | -0.259 (0.095) | -0.262 (0.1) | -0.254 (0.102) | -0.24 (0.091) | -0.256 (0.09) | -0.286 (0.085) | -0.253 (0.105) |
| Winning Dummy | | | | | | | | | | | | |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy}$ | 0.106 (0.043) | 0.112 (0.043) | 0.109 (0.045) | 0.101 (0.055) | 0.096 (0.042) | 0.107 (0.042) | 0.103 (0.043) | 0.092 (0.055) | 0.1 (0.044) | 0.107 (0.044) | 0.104 (0.045) | 0.101 (0.056) |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy} \cdot \mathbb{1}\{\text{Farming}\}$ | -0.173 (0.122) | -0.174 (0.124) | -0.18 (0.14) | -0.17 (0.141) | -0.143 (0.121) | -0.167 (0.122) | -0.209 (0.128) | -0.174 (0.141) | -0.123 (0.108) | -0.132 (0.111) | -0.178 (0.119) | -0.129 (0.125) |
| Normalised Rank | | | | | | | | | | | | |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy}$ | 0.21 (0.065) | 0.219 (0.065) | 0.212 (0.067) | 0.294 (0.082) | 0.193 (0.065) | 0.216 (0.066) | 0.216 (0.068) | 0.287 (0.083) | 0.204 (0.065) | 0.219 (0.066) | 0.212 (0.069) | 0.297 (0.082) |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy} \cdot \mathbb{1}\{\text{Farming}\}$ | -0.435 (0.23) | -0.437 (0.235) | -0.595 (0.261) | -0.402 (0.267) | -0.391 (0.229) | -0.454 (0.234) | -0.525 (0.25) | -0.445 (0.262) | -0.365 (0.2) | -0.391 (0.204) | -0.528 (0.217) | -0.372 (0.227) |
| Farming/Landlord Dummy | | | | | | | | | | | | |
| $\Delta \text{VoterRatio} \cdot \text{AfterDummy}$ | -0.009 (0.038) | -0.026 (0.032) | -0.06 (0.034) | -0.06 (0.034) | -0.009 (0.038) | -0.026 (0.032) | -0.026 (0.032) | -0.06 (0.034) | -0.009 (0.038) | -0.026 (0.032) | -0.06 (0.034) | -0.06 (0.034) |
| Missing=Farming/Landlord | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Unreliable=Farming/Landlord | | | | | | | | | | | | |
| District FE and Year FE | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Individual Control | | | | | | | | | | | | |
| District * Farming Dummy | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ |
| Prefecture FE * Year FE | | | | | | | | | | | | |
| Num. obs. | 1074 | 1074 | 1074 | 1074 | 1074 | 1074 | 1074 | 1074 | 1074 | 1074 | 1074 | 1074 |

Notes: The table reports the results of DID analysis of Equation 5 and Equation 3 with alternative assignment of *Farming* & *Landlord* dummy. The study sample comprises candidates in the 1904 and 1908 elections, whose vote gain is as much as officially recovered. The models are estimated using the ordinary least squares method. Individual controls include electoral variables (number of past electoral victories, incumbent dummy, and first-run dummy), and the variables on personal information availability (dummies to indicate missing information and that the quality of information may be lower than others despite not-missing information). Due to data availability, I did not include age and birth variables; however, adding these variables to the estimation improves the precision of estimates. Clustered robust standard errors at district-level are in parentheses. *Missing=Farming/Landlord* indicates the specifications in which all the observations with missing background information are considered as *Farming* & *Landlord*. Likewise, *Unreliable=Farming/Landlord* specifies that in the corresponding specifications, I assign *Farming* & *Landlord* dummy = 1 to every observation whose background information are collected from seemingly relatively lower quality sources.