Enfranchisement, Political Participation and Political Competition: Evidence from Colonial India*

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Abstract

We examine how political participation and political competition are shaped by two class-based extensions of the franchise in 20th-century India. Creating a new dataset of district level political outcomes between 1921 and 1957, we find that the partial franchise extension of 1935 resulted in significantly lower incumbency advantage, while the institution of universal adult suffrage in 1950 resulted in increased candidacy. Both these franchise extensions resulted in decreased voter turnout rates, suggesting that newly enfranchised voters are less engaged in the political process.

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1. Introduction

Recent cross-country studies have shown that democratization has a positive impact on economic growth and development (Papaioannou and Siourounis, 2008; Acemoglu et al., 2019). However, democracy is a multi-faceted concept and it is not well established which components of a democratic system are the most important for subsequent development. As recently as 2018, over a quarter of the world's countries were not rated as democracies in the widely used Polity 5 database (Marshall and Gurr, 2020). In a different classification, one-third of all countries in the world were classified as autocracies despite having universal adult suffrage, due to, among other factors, a lack of political competition (Luhrmann et al., 2017). In this paper, we focus on one specific component of democratization, namely the right to vote. While enfranchisement is of course necessary to be classified as a democracy, it is by no means sufficient and prior literature has not examined how much this specific component might result in changes in other important dimensions of democracy. We study the political consequences of the gradual extension of the right to vote in India, with a specific focus on citizen participation and political competition. Using a new database on all provincial elections in colonial India, we study the impact of two major enfranchisement reforms. The first is the 1935 Government of India Act, which significantly lowered the property thresholds for voter eligibility and thereby extended the right to vote to approximately 10.4% of all citizens, with considerable variation across geographic areas. The second reform is the implementation of universal adult suffrage by the post-independence 1950 constitution of India.

Building a novel dataset on electoral results from 1921 to 1957, we track stable geographical units over time (administrative districts) and see how political participation and political competition in those units are affected by these enfranchisement reforms. We relate changes in these outcomes to the district-specific increases in enfranchisement engendered by these reforms, using a first-differenced specification. We verify that similar changes in outcomes are not seen in the period prior to the enactment of enfranchisement reforms; this is a necessary assumption for the validity of our empirical strategy.

We find that both these reforms lead to an increase in the share of voters in the total population. However, this increase in the number of voters is substantially smaller than the increase in enfranchisement itself: voter turnout, as measured by the share of registered voters who turn out to vote, decreases with the increase in enfranchisement. This suggests that newly

enfranchised voters may not be highly engaged in the political process. This decline in not reversed in the medium term, since we observe no differential changes in voter turnout in the next election. In a similar vein, while the number of candidates increased after each of these reforms, we find that it increased at a much slower pace than the increase in enfranchisement, so that the number of candidates as a share of all registered voters shows a decline in places where enfranchisement increased further. Again, this suggests that newly enfranchised voters are not participating as actively in political activity.

Despite this discouraging result on citizen participation, we do find increases in effective political competition at the district level as a result of these franchise extensions, but this varies across the two reforms. Our data creation included tracking of individual candidates over different election years (using name-matching algorithms), and we can thus examine whether enfranchisement resulted in significant political turnover. Districts that experienced greater increases in enfranchisement as a result of the 1935 reform witnessed a significant reduction in incumbency advantage, namely the probability that the incumbent would be re-elected. This is primarily attributed to the decreased probability of the incumbent to contest re-election. Districts that experienced greater increases in enfranchisement in the 1950 reform experienced greater increases in the number of candidates per seat, indicating that a given political candidate now faced off against many more contenders than before. However, this does not result in a statistically significant change in the probability of the incumbent to be re-elected. In sum, our results indicate that enfranchisement alone may not systematically reduce all the barriers to effective political engagement, and that additional reforms may be required in order to generate political competition. Unfortunately, we face significant data constraints in examining policy consequences of the franchise extensions. We show suggestive evidence that the 1935 reforms led to greater spending on primary education, but are unable to perform similar analysis for the 1950 reforms.

The consequences of political enfranchisement have long been of interest to philosophers and political scientists (Tocqueville, 1835). Economists' interest is more recent, and has focused predominantly on the consequences for policies such as aggregate government spending; this literature has found large variations in the effects of enfranchisement on the size of governments and fiscal policy outcomes, with some studies documenting an increasing relationship, others finding no relationship between enfranchisement and fiscal policy and yet others finding a non-

monotonic relationship.¹ A related literature studies the extension of the franchise to specific population sub-groups, and generally finds that policy outcomes change towards the interests of the newly enfranchised population.²

However, most of this literature does not study the specific political process through which these changes take place. In particular, there is little analysis of whether it leads to a change in the nature of political participation, political competition or the identity of elected officials. Indeed, in a median voter approach, the identity of the legislator is of little consequence to the policies implemented. This is in stark contrast with the predictions of the citizen candidate models (Osborne and Slivinski, 1996; Besley and Coate, 1997) which put forward the role of the individual preferences of the elected personnel in a world in which there are no binding promises. In such a world, if the identity of the political personnel does not change following an enfranchisement reform, policies are also unlikely to change.

Our paper contributes to the literature on the political impact of enfranchisement in two major ways. First, there are few studies on this topic in developing countries, partly because few poor countries underwent progressive democratization. Second to our knowledge, this is the first study of the democratization process of a non-independent (i.e. colony) country.

The closest papers to our present work are studies in independent countries that were considerably richer than India. Studying the U.K.'s Second Reform Act of 1867, Berlinski and Dewan (2011) find that franchise extension led to greater citizen participation as candidates and more political competition, but no increase in the share of votes for the Liberal party; Berlinski et al. (2014) show that aristocrats were equally likely to be elected after this reform. In contrast, Larcinese (2017) shows that the 1912 enfranchisement reform in Italy led to more left wing votes but not to actual change in the profile of legislators nor to an increase in political competition.

¹ Peltzman (1980) finds that total government spending does not increase following the expansion of franchise in Great Britain, Canada and the U.S., Husted and Kenny (1997) find that the extension of the franchise in the U.S. led to an increase in welfare spending, Aidt et al. (2006) find that government size increases with enfranchisement reforms in Western Europe countries, while Aidt et al. (2010) find a U-shaped relationship between franchise extension and public spending in England and Wales. See also the cross-country studies in Aidt and Jensen (2013) and Profeta et al. (2013).

² The enfranchisement of African-Americans in the U.S. led to an increase in state transfers to counties most affected by the Voting Rights Act of 1965 (Cascio and Washington, 2014) and a decrease in schooling input for blacks in counties disenfranchised during the Jim Crow era in the U.S. south (Naidu, 2012). Women's suffrage in the U.S. has been shown to lead to more progressive voting by elected representatives (Kenny and Lott, 1999) and greater public health spending and a consequent decline in child mortality (Miller, 2008). Fujiwara (2015) finds that electronic voting in Brazil, which effectively enfranchised poor and illiterate people, led to an increase in public health care spending which disproportionately benefits the poor.

Corvalan et al. (2017) similarly find that the composition of elected politicians changes only when candidate eligibility rules are relaxed, and not when suffrage is extended.

The situation of India in the first half of the 20th century differs greatly from that of these other analyses. First, it was a much poorer country at the time when suffrage extensions were enacted. Indeed, India's GDP per capita in 1950 equaled only 40% of UK's GDP per capita in 1867, 53% of Italy's in 1912 and 50% of the USA in 1850 (Maddison Project, see Bolt et al., 2018). The consequences of suffrage extensions may differ considerably based on the economic context in which they are enacted.

Second, India was still under British colonial rule until 1947. Political enfranchisement within a colonial system may have a different dynamic than that of an independent country. In contrast to theoretical models that argue that the threat of revolution forced the elite to extend the suffrage (Acemoglu and Robinson, 2000, 2006), the situation in India has often been described as a three-way interaction between the government in the U.K., the colonial government of India and the Indian independentist movement.³ As a matter of fact, the Indian National Congress, that led mass movements for independence, was not much in favour of the enfranchisement reforms: they were (rightly) denounced as a way to undermine the independence movement by attempting to "rally the moderates" (Danzig, 1969; Gallagher and Seal, 1981).⁴ We are not aware of other studies looking into the consequences of political enfranchisement under colonial rule.⁵

Finally, initial experiences with democratization may be important in explaining later trends in democracy. It has been argued that a reason why India's democracy has been so resilient takes its roots in the specific way in which its population was progressively enfranchised during

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³ The specificity of this relationship has been put forward as one determinant of the way in which enfranchisement reforms were passed in India. Referring to the 1919 Government of India Act, Rothermund (1962) for example writes: "Montagu was painfully aware that the reform scheme [...] was [...] a [...] compromise between Liberalism at home and the bureaucracy in India, between British interests and Indian national aspirations, political thought and administrative practice". Tomlinson (1976) also writes that there were [three actors in the end of the British rule in India] "... imperial planners in London, Government of India in New Delhi and the central leaders of the Indian National Congress".

⁴ Danzig (1969) writes: "[...] British rule in India could not function without the active collaboration of an elite and at least the passive acquiescence of the mass. It was feared that repression of 'extremists' would alienate the 'moderates' whose support was thus deemed vital. The government in the period 1916–17 therefore decided to 'rally the moderates' by presenting them with an acceptable ideal which would counter the extremist demand for immediate home rule."

⁵ In addition, while the "critical juncture" theories usually predict that the enlargement of franchise should be followed by more redistributive policies, the political reforms in British India were in fact contemporaneous to a reversal in the trend of income concentration from declining to increasing (Alvaredo et al., 2017). Note however that there exists a very large literature looking into the role of institutions in general on colonies and former colonies (see, among others, Acemoglu et al., 2001, 2002; Engerman and Sokoloff, 2005).

the late colonial period (Weiner, 1989; Jaffrelot, 1998; Varshney, 1998). Others, however, argue that colonial institutions were responsible for the failures of Indian democracy (Washbrook, 1998). Shani (2017) argues that there is a fundamental rupture at Independence: while there may have been parliamentary practices under colonial rule, it is the creation of universal franchise at Independence, and in particular the very act of creating the electoral rolls which rooted democracy in India. Our finding of similar results across the reforms of 1935 and 1950, namely a decline in voter turnout and an increase in political competition, suggests that universalizing suffrage may be similar in its political impact to partially extending the franchise.

The rest of the paper is organized as follows: Section 2 describes the process of enfranchisement in colonial and post-colonial India. Section 3 describes our data sources and outlines our empirical strategy. Section 4 documents the results of our empirical analysis and Section 5 concludes.

2. Franchise Extensions in India

The British empire in India lasted almost 200 years, beginning with the annexation of Bengal by the East India Company in 1757. Following the massive uprising of Indian soldiers against their British officers (the "Sepoy Mutiny" of 1857), the British crown took over the administration of the colony in 1858, and very gradual reforms were undertaken to include more representation of Indians in policymaking. However, there were no direct elections for political representatives until the Government of India Act of 1919 (also called the Montagu-Chelmsford reforms). Appendix B presents the details of these early developments. Here we review the main developments leading to the reforms of 1919, 1935 and 1950; our study examines the impact of the latter two reforms compared to the status quo ante.

As will be made clear below, there was more to these reforms than a simple increase in the enfranchised population. Indeed, each of these reforms also led to an increase in the number of legislative seats as well as to an increase in the responsibilities of the elected personnel. We will

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⁶ Weiner (1989) points out that "an impressive number of erstwhile British colonies... have maintained British style democratic institutions for all or most of their post-independence history... not a single former Dutch, Belgian or French colony currently has democratic institutions." Varshney (1998) makes the subtle argument that "It was not the British legacy per se, but rather the strategic interactions that took place between the British authorities and national-movement leaders that laid the foundations of democracy."

discuss in our section on identification strategy how we empirically deal with the different dimensions of these reforms.

2.1. The Government of India Act of 1919: "Responsible Government"

World War I and the growth of the nationalist movement convinced the British administration that institutional and political changes should be enacted in India so as to co-opt a larger share of the Indian elite in the hope of "rallying the moderates" (Danzig, 1969; Gallagher and Seal, 1981). Within a month of taking office, the new Secretary of State, Edwin Montagu, made an announcement in the British House of Commons on August 20, 1917, that promised "responsible government" in India for the first time. Following the publication of the Montagu-Chelmsford Report in 1918, this principle was given official form in the Government of India Act of 1919, which marked several clear departures from previous measures.

First, the Act instituted direct elections to provincial councils for the first time, and mandated that at least 70% of members in provincial councils were to be elected members, in contrast to the earlier policy of keeping elected members in a minority. However, suffrage was limited to those above a certain level of income or property. Our data indicate that only 2.5% of the population in a district were registered as electors in the first direct elections of 1921. As the franchise requirement were decided at the province level (see Table 1 for details of suffrage requirements in the 1919 and 1935 Acts), there was considerable variation across provinces in enfranchisement rates, as illustrated in Figure 1. All citizens who were eligible to vote were also eligible to contest the election as candidates.

Second, there was a clear demarcation of subjects over which provincial councils and ministers could propose legislation and implement policy. Certain areas, such as defence and foreign relations, remained under the purview of the central government. At the provincial level, subjects such as land revenue, finance and law and order were "reserved" for the Governor to make

electorates.

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⁷ The complete paragraph reads: "The policy of His Majesty's Government, with which the Government of India are in complete accord, is that of increasing the association of Indians in every branch of the administration and the gradual development of self-governing institutions with a view to the progressive realization of responsible government in

India as an integral part of the British Empire." Danzig (1968) shows that the language of this announcement underwent many changes, and that the inclusion of the famous phrase "responsible government" owed much to the influence of Lord Curzon. Curzon's motivation was not to encourage popular mandates but more to displace the "lawyer class" from control of Indian politics and so from any Indian home rule in the future i.e. "self-government" would mean handing over control to Indian politicians while "responsible government" meant giving it to the

decisions. Others, including education and health, were "transferred" to the purview of elected ministers, responsible in front of their legislature.⁸ This system of dual control was known as "dyarchy." Provinces had the option to enact further devolution to local governments over certain functions. While this was enacted by some provinces in the fields of education and health, the Simon Commission of 1929 felt that such devolution of responsibility was counter-productive because "Ministers responsible to the legislature have no effective control of the expenditure of money voted for mass education" (Great Britain and Simon, 1930, volume 1, pp. 51).

Third, to further cement provincial autonomy, revenues from provincial sources (including land revenue) were reserved to the use of the provinces, after they transferred a fixed proportion to the central government.

Fourth, the Act continued the 1909 policy of communal representation and separate electorates to Muslims nationwide, to Sikhs in Punjab, to Europeans, Anglo-Indians and Indian Christians in several provinces, and set aside certain reserved seats for non-Brahmins in Madras and Mahrattas in Bombay. Separate electorates meant that, for example, there were separate Muslim electoral constituencies where only Muslims could vote and only Muslims could stand as candidates. Separate representation was also provided to landholders, universities and commercial and industrial interests; most of these did not allow for directly elected representatives and will be excluded from our analysis of voter and citizen participation. The Governor had the power to nominate members of any groups who might fail to secure adequate representation. The income or property thresholds for suffrage (and therefore candidacy) were the same across members of different communities within the same geographical region.

The 1919 Act explicitly restricted suffrage to men. However, provinces could change these arrangements if they so wished. Starting with Madras in 1921, all provinces extended suffrage to women on the same terms as men by the end of the decade (Ali, 1936). Since suffrage was extended to women on the same terms as men, the property restrictions were the same for women as they were for men, meaning that in practice, most women could not be registered electors; the ratio of women to men in the electorate was 1:20.

Our analysis will focus on the eight major provinces of British India where provincial councils were set up by the reforms of 1919: Assam, Bengal, Bihar & Orissa, Bombay, Central

⁸ Appointment of ministers was left to the discretion of the Governor, with the proviso that no person could be a minister for more than six months unless he became a member of the provincial councils by election or nomination.

Provinces & Berar, Madras, Punjab and the United Provinces. Elections were held in 1921, 1923, 1926 and 1930. However, several elections were affected by political parties' boycotts. The Indian National Congress declined to participate in the 1921 elections, since Mohandas Gandhi had launched a non-cooperation movement in August of that year. In 1923, after a fierce internal party dispute over whether to boycott or not, many Congressmen participated under the banner of the Swaraj Party, with the aim of undermining the working of the ministries from within. The Swarajists did win a considerable number of seats on the provincial councils, and continued to participate in the 1926 elections despite experiencing some internal splits. In 1930, Gandhi launched a second Civil Disobedience movement six months before the elections were conducted, and Congress again boycotted these elections, leading to low voter turnout and a high fraction of uncontested seats.

Because the 1930 elections were greatly affected by boycotts, most of our analysis of the 1935 enfranchisement reform will compare the 1926 election to that of 1937, omitting the 1930 election. We show that results are similar when comparing the 1937 election to 1930.

2.2. The Government of India Act of 1935: Partial Franchise Extension

Through the 1920s, many political parties and prominent Indian individuals provided their own reports and views about constitutional changes. Two Round Table Conferences were held by the Viceroy to consult with Indian representatives. After much negotiation, the principle of federation was agreed upon, as well as continuing the provision of communal representation for Muslims. Representation for lower caste Hindus was to be ensured by setting aside seats for them, but without any provision for separate electorates. All of these provisions were finally codified in the Government of India Act of 1935.

The Act of 1935 ended the principle of "dyarchy" and conferred full autonomy on provincial councils. The concept of "reserved" and "transferred" subjects were abolished as provincial councils gained full autonomy. The Governor was obliged to act on the advice of the ministers, except in matters of "grave menace to peace or tranquillity" or "safeguarding the interests of minorities." The provincial legislative councils were expanded (and renamed Legislative Assemblies) and the bigger provinces were provided bicameral legislatures.

The franchise was considerably expanded in several ways. First, in most provinces, the property thresholds were lowered considerably (see Table 1 for details of suffrage requirements in

the 1919 and 1935 Acts). For instance, the minimum thresholds for voter eligibility in Bengal under the 1919 Act included at least Rs 1-8-0 in municipal taxes⁹ and fees, Rs 1 in public works cess, Rs 2 in chaukidari tax or occupying a house valued at Rs 150. These thresholds were reduced considerably in the 1935 Act to 8 annas, 8 annas, 6 annas and Rs 42 respectively. Given that there was little net inflation over this period, this amounted to reductions of greater than 50% in the asset thresholds required to be eligible to vote. Second, suffrage was also extended in some provinces to educated persons or literate women. Third, women who were wives or widows of qualified male voters (with higher property thresholds than required for male voting) were also allowed to vote.

As a result, the nationwide fraction of enfranchised electors increased to 11.9% in the provincial elections of 1937, though the figures varied considerably across provinces from 18.7% in Bombay and Sind to 7.8% in Bihar and Orissa (Figure 1). These differences across provinces are driven both by differences in the voting requirements across provinces, and by differences in the distribution of assets, incomes and education levels.

There was widespread participation by voters and political parties in the provincial elections of 1936-37. The Indian National Congress formed governments in eight out of 11 provinces. However, all the Congress ministries resigned in October 1939, in protest against Viceroy Linlithgow's announcement of India's entry into World War II without any consultation from Indian representatives. This extremely short tenure of the representatives elected after franchise extension makes it difficult for us to examine the policy consequences of the 1935 reform. However, there is evidence that the short-lived Congress ministries formed after the 1936-37 elections made concerted efforts in implementing their policy agendas. Education stood out as one of the main areas where the efforts of the ministries were concentrated. In Bombay, the government passed a bill that made provisions for the "better management and control of primary schools," instituted a board of education to deal with the problem of adult illiteracy in the province and provided special educational grants to disadvantaged groups (Indian National Congress, 1939). In Bihar, a mass literacy movement was initiated that "made good progress with the help of about 14,000 volunteers drawn from the intelligentsia of the province." The government in United Provinces financed the construction of "a network of 960 adult schools, 760 circulating libraries

⁹ Monetary amounts expressed as rupees, annas and paisa. There were 16 annas to a rupee and 4 paisa to an anna.

¹⁰ Note that the nationwide average enfranchisement is slightly different from the average of district-level enfranchisement rates (10.5%) due to larger districts receiving greater weight in computing the nationwide average.

and 3000 reading rooms". The Orissa government provided funds for a literacy campaign and library movement across all villages, and also abolished fees in public primary schools. We will therefore conduct an analysis of education spending as a key outcome.

The movements for Indian independence continued, with the Congress launching the "Quit India" movement in 1942; many Congress leaders were jailed for their participation in this event. After the end of World War II, it was clear to many that India would not remain a British colony for much longer. Elections to provincial and central legislatures were held in December 1945-January 1946, with all major parties participating.

2.3. The Indian Constitution of 1950: Universal Adult Suffrage

In 1947, India ceased to be a British colony and was partitioned into the two new nations of India and Pakistan. Partition resulted in one of the largest, most rapid and most violent migrations in human history (Khwaja, Mian and Bharadwaj, 2008). The first provincial elections in India were held in 1951, following the adoption of a new constitution in 1950. Direct elections were held to provincial assemblies in the early 1950s in Pakistan, but the country was affected by several interventions by the military in the political process, culminating in a military coup in 1958. Owing to these political uncertainties, our analysis excludes electoral data from Pakistan after 1947. For the India sample, since Bengal and Punjab were the most affected by the Partition, we will conduct robustness checks to ensure that our results hold when dropping these two provinces.

Independent India adopted a new constitution in 1950. The country was established as a secular democratic republic, and universal suffrage for all citizens aged 21 or older was established under Article 326 of the 1950 constitution. Consequently, the ratio of registered voters to total population increased dramatically to 49.1% in the provincial elections of 1951 and 1952. Reserved seats were retained for members of the Scheduled Castes and Scheduled Tribes, but there were no more reservations for Muslims or women under the new constitution.¹¹ There were also no provisions for separate electorates on any basis. In 1989, the minimum age to vote was reduced to 18 years by the 61st amendment to the Indian constitution.

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¹¹ Reservations for women were introduced at the village and district level councils by a constitutional amendment in 1993. A bill proposing one-third reservation for women in state and national legislatures was passed by the Upper House of Parliament in 2010, but has not yet been passed by the Lower House.

3. Data and Construction of Key Variables

3.1. Data Sources

We collected archival data on enfranchisement and election outcomes from a diverse set of sources. Our main source are the "Returns Showing the Results of Elections in India" published after each election during the colonial era. (India Office, 1921, 1924, 1927, 1931 and 1937; Government of India, 1948). We obtained these reports for all elections to provincial assemblies in the colonial period, namely those of 1921, 1923, 1926, 1930, 1937 and 1945 and digitized the data.

These reports are somewhat inconsistent in the variables they report. All of them report the number of registered voters, the number of votes cast and the number of candidates in each constituency. Reports of elections before 1937 do not report parties, or the names of non-winning candidates. Even names of winners are missing for some provinces and years, and vote shares or winning margins are typically not available. We used supplementary sources of information to create a full panel of election winners' names over time. These include previous efforts to construct systematic compilations of electoral results (Reeves et al., 1975 for United Provinces and Yadav, 1987 for Punjab), government-published election reports, and the "Who's Who" publication from *Times of India* year book. Data for the post-colonial period was obtained from the official election reports of the Election Commission of India for elections in the 1950s. 12

To be able to track individuals across time, an extensive data cleaning effort was conducted since winners' names are often spelled differently in different election years. Such variations can occur because of different English transliterations of the same Indian name (e.g. Mitra, Maitra and Mitter are all the same name); the person's title (Khan, Doctor, Rai Bahadur etc) being included with the name in one year and not in another; only initials being provided in one year and being fully spelled out in another; address or occupation included in the name field in one year and not in another etc. To account for these issues, we used a combination of fuzzy matching computer algorithms and manual checking to systematically identify all instances of a candidate name in any election year turning up as a candidate name in the same district in any one of the other election years.¹³ We are therefore able to track whether winners in one election win again in the next one,

¹² We thank Francesca Jensenius for sharing these digitized data with us.

¹³ We thank the Trivedi Centre for Political Data at Ashoka University for their assistance and collaboration in this task.

whether prior winners re-run for election in the next period (for winners from 1930 onwards) and whether non-winners run for re-election (from 1937 onwards).

We also collected data on the education and occupation of election winners, as revealed by the candidate names in the colonial-era election reports. Several candidate names mention advanced degrees such as a BA or PhD or LLB or FRCS; similarly, several candidate names mention the profession of the candidate such as doctor or lawyer or agriculturist. However, the data is far from complete on this dimension. Only 10-12% of candidate names mention education or occupation and the fraction varies considerably across provinces and years. The extent of missing data on this precludes systematic analysis on the characteristics of candidates. Even such partial data is not available in the post-colonial election reports.

3.2. Data Aggregation to District Level

To track the variables over time, we face the issue of constructing geographically stable units over time. Electoral constituency boundaries changed over time, and both the enfranchisement reforms we examine greatly expanded the number of elected representatives. As a consequence, we created district-level aggregate variables, since these administrative district boundaries remained relatively stable over time. In the few cases in which new districts were created, it was always possible to aggregate districts back to their previous boundaries. We consistently perform our analysis at the level of the 1921 district boundaries.

We should note that constituency-level boundaries differed from district boundaries in several ways. First, some districts contained several electoral constituencies; these are aggregated together by simple addition of the number of candidates, number of seats etc before computing district level ratios. Second, many districts contained separate constituencies for different religions, so that Hindus and Muslims living in the same area were in fact part of different electoral constituencies. Again, we aggregate our variables over these different types of constituencies. Note that such aggregation does not introduce any particular bias in our measures, since eligibility conditions for enfranchisement were the same across all religions. Third, some large constituencies are spread over several districts. For such cases, we "disaggregate" the outcome variables of this constituency over its constituent districts, weighted by how much of the population of that constituency came from each district.

3.3. Measures of Political Participation

We construct three main measures of political participation. The first is voter turnout, defined as the ratio of total votes cast in a specific election to the total number of registered voters. This variable is not defined for constituencies where candidates were elected unopposed, since no election was formally held. The relationship between enfranchisement and voter turnout is ambiguous ex-ante. Obviously, when citizens are given the right to participate in the political process, we would expect to see an increase in the number of registered voters and possibly also in total number of votes cast (our next measure captures this latter effect). However, it is not clear whether the ratio of the two will necessarily increase. In particular, if the newly enfranchised voters are less educated, less informed or wary about the new democratic process, we may observe no increase or even a decrease in our measure of voter turnout.

Our data show that voter turnout increased dramatically from 33% of registered voters in 1930 to 57% in 1937 (Table 2, Panel A). However, this is partially attributable to the Congress-led boycott of the 1930 elections, which led to depressed turnout. Comparing to the previous election in 1926, we still see an increase in turnout from 51% to 57% of registered voters. In contrast, voter turnout declined slightly from 49% in 1945 to 46% in 1951, the first election after the institution of universal adult suffrage in 1950.

A supplementary measure tracks the share of voters among the total population i.e. the extent to which the change in enfranchisement effectively changed political participation of the population as a whole, and changed the median voter. This is not our preferred measure of voter participation because we do not observe the population of each constituency and we do not know the number of voters in a constituency when the election is unopposed in that constituency. As a consequence, we cannot exclude the constituencies with uncontested elections from our computation of the share of voters among the total population of a district. While this was not an issue for computing voter turnout, since we have data on the number of electors of each constituency, it is for the share of voters in the population. This limits the extent to which we can interpret this variable: in principle, we cannot distinguish if an increase in the ratio of voters to population is due to a decrease in the number of uncontested elections in that district or to a genuine increase in the number of voters, holding the number of uncontested elections constant.

Table 2, Panel A shows that the share of voters did increase after each reform, rising to 5.5% in 1937 from 0.5% in 1930. Note that this illustrates the computation issue with this variable

discussed above: as already mentioned,1930 was an election affected by calls of boycott. Indeed, compared to 1926, the share of voters in the population dropped from 1.2% to 0.5%, part of which is due to a decrease in the number of voters (responding to the call of boycott) and another part of which is due to an increase in the share of uncontested elections. Voters as a share of the total population increased from 4.5% to 22.6% between 1945 and 1951.

Our second measure of political participation measures citizen participation as candidates, since the enfranchisement reforms also increased the share of citizens who were eligible to become candidates. However, as with voters, the newly eligible candidate pool may not translate into actual candidacy if there are significant informational, financial or societal barriers to becoming candidates. We measure this as the number of candidates per 1000 registered voters in the district, so that this measure gives us an idea of what fraction of the potential candidate pool actually become candidates. A supplementary measure would be similar to the voter share of the population, namely the ratio of the number of candidates to the population.

Note that these two measures can move in opposite directions: for instance, we can see clearly that both of these measures of candidate participation declined considerably between 1926 and 1930, reflecting the impact of the Congress-led boycott. In contrast, after the franchise extension of 1935, the candidate share of the population tripled between 1930 and 1937 reflecting the expansion of the potential candidate pool, but the share of registered voters who became candidates actually fell by 25 percent. This suggests that the expansion of the candidate pool did not translate to an equal expansion in the number of actual candidates. In a similar manner, the number of candidates per 100,000 population increased more than three-fold after the franchise extension of 1950, but the share of registered voters that become candidates fell by 15 percent.

3.4. Measures of Political Competition

Our first measure of political competition is the number of candidates per seat in the district, which reflects the extent of opposition faced by those standing for election. The average candidate-seat ratio increased after both the franchise extensions, from 2.27 in 1926 to 2.60 in 1937 (as expected, the boycott in 1930 resulted in an unusually low candidate-seat ratio of 1.83), and from 2.21 in 1945 to 4.52 in 1951 (Table 2, Panel A).

Our second measure of political competition is the fraction of uncontested elections, which is measured as the number of elections in a given district that had the number of candidates less

than or equal to the number of seats available. If there is a large increase in candidacy across all constituencies as a result of enfranchisement, we would expect to observe a decline in the fraction of uncontested elections. We see in Table 2, Panel B that the share of uncontested elections indeed decreases drastically after each reform, even when omitting the spikes caused by calls for boycott. The fraction of uncontested elections fell from 15% in 1926 to 6% in 1937, and from 26% in 1945 to 0.2% in 1951.

Our third measure of political competition is incumbency advantage or the incumbent reelection rate. We compute this at the district level as the fraction of incumbent politicians who get re-elected in the next election. So "incumbency advantage 1923" refers to the fraction of incumbent politicians (i.e. those who got elected to the provincial legislature from that district in 1921) that win re-election in 1923. Table 2, Panel A shows that the fraction of incumbents who got re-elected fell from 35% in 1926 to 13% in 1937 (note that the boycott in 1930 leads to a large increase in incumbency advantage), and from 28% in 1945 to 11% in 1951. When we track incumbent performance directly from 1926 to 1937, we find that 15% of 1926 incumbents are reelected in 1937, very similar to the earlier figure of 13% of 1930 incumbents who get re-elected in 1937.

For the later elections which provide data on all candidates (not just the winners), we can compute the percentage of incumbents who run for re-election and thereby examine how much of the decline in incumbency advantage is due to not re-running versus re-running but not winning. This seems to be a big contributor: only 16% of previous winners run for re-election in 1951 (after franchise extension), compared to 34% in 1945. It is not just winners who are less likely to run for re-election: on examining all candidates (winners and non-winners) we see that 11% of all candidates run for re-election in 1951, compared to 19% in 1945. 14

3.5. Measures of Enfranchisement

Our main explanatory variable is the enfranchisement rate, which is defined simply as the number of registered electors in the district divided by its total population. We aggregate the constituency-level number of registered voters to the district level, using the procedures described

¹⁴ We should note that all of these figures are significantly lower than in more modern data e.g. over the period 1980-2007, more than 70% of incumbents ran for re-election in India's state assembly elections (Bhalotra, Clots-Figueras and Iyer, 2018).

in section 3.2. To compute district-level population data, we use census data from 1921, 1931 and 1951 (the 1941 census quality and coverage was compromised by the constraints of wartime). We linearly interpolate population numbers for the in-between years. Our data show that on average only 2.8% of a district population was eligible to vote in 1926, and this fraction increased to 10.5% in the 1937 election (Table 2, Panel C). The introduction of universal adult franchise also had a huge impact, raising the average fraction of enfranchised population in a district to 49% in the 1951 elections. In order to circumvent any issues with population interpolation, we also compute enfranchisement using the nearest census population as the denominator rather than the interpolated population. In other words, we use the census of 1921 population figures for the elections in the 1920s, the census of 1931 figures for the elections of 1930 and 1937, and the census of 1951 figures for the elections of 1945, 1951 and 1957. Increases in enfranchisement over time are very similar when using this alternative measure (Table 2, Panel C).

A better measure of enfranchisement would use the population above the age of 21 in the denominator rather than total population. For the censuses of 1921 and 1931, data availability constraints lead us to use the population above age 20 rather than 21. For the 1951 census, we have district-level population above the age of 24. We also have single-age population distribution for 10% of the population, which we can extrapolate to create the population above age 21. Enfranchisement measures using these slightly different age-specific variables for 1951 have a correlation of 0.99; we show results using the latter measure. We should note that age data is likely to be very poorly recorded amongst a largely illiterate population without good birth records, and in fact, these estimated populations above age 21 or 24 turn out to be *lower* than the total number of registered voters for a large number of districts in 1951. While we will show that our results are robust to using these age-specific enfranchisement measures, our main measure will be the one described earlier, namely the number of registered voters divided by the total district population.

A potential source of mismeasurement in our data arises from the possibility that not all eligible voters may be actually registered to vote. An electoral roll was prepared for every constituency on which the names of all persons appearing to be entitled to be registered as electors was to be entered. Once prepared, the roll was to be published in the constituency together with a notice specifying the mode and time period within which any claims by individuals who felt that they should be included in the roll (or any persons feeling they should be excluded from the roll) was to be submitted to the revising authorities. The responsibilities for the preparation of the roll,

the timing of its publication, the procedure for addressing claims regarding the electoral roll and the constitution of the revising authorities were all left to local (district) administration officials.

This source of mismeasurement can lead to bias in our estimates if district level registration rates are correlated with other unobservable district-specific trends that also drive the outcome. This could be the case, for instance, if districts that experienced lower (or more) political competitive for any reason also promoted greater rates of registration and therefore record higher enfranchisement figures. We perform two tests to guard against the possibility of such endogenous pre-trends. First, we examine whether our enfranchisement measure predicts political outcomes prior to the actual implementation of the 1935 Act and the 1950 constitution, and find that it does not have a statistically significant relationship prior to the enactment of the reforms. Second, we control explicitly for such pre-reform trends as a robustness check in our estimation.

4. Empirical Strategy

We examine whether increased enfranchisement leads to a change in measures of political participation and competition by comparing such changes in districts with large enfranchisement increases to those in districts with smaller increases. Our main regression specification is:

$$\Delta Y_d = \alpha + \gamma \Delta Enfranchisement_d + X_d'\delta + e_d$$
 (1)

where ΔY_d is the measured change in political participation or competition among the constituencies of district d, $\Delta Enfranchisement_d$ is a measure of the change in enfranchisement in district d, and X_d is a vector of district level covariates such as total population, population growth between censuses, urbanization rates, gender ratios, literacy rates, and religious mix; e_d is an error term. For the 1951 election data, we also include the fraction of refugees in the population as an additional control in order to account for the direct effects of partition and displacement on political outcomes.

Our main analysis is conducted for the first election after the enfranchisement reform—the 1937 provincial elections for the 1935 Government of India Act and the 1951 state elections for the 1950 constitution. Due to concerns about electoral boycotts, we will compute changes between 1937 and 1926 in order to measure the impact of the 1935 reform, and show the change between

1930 and 1937 as a robustness checks. For the 1950 enfranchisement, we compute the change between 1945 and 1951.

This first-difference specification is equivalent to a difference-in-difference strategy, where we compare changes over time and across districts that experienced greater or lesser increases in enfranchisement. As such, the specification controls for any time-invariant characteristics of districts such as geography, prior history, length of colonial rule, land tenure systems or other institutional characteristics. In addition, because of the difference in difference approach, we control for all the changes induced by the reforms that are common to the districts under consideration, such as the fact that each reform leads to an increase in the responsibilities dealt with by the elected representative.

The identifying assumption is that *changes* in enfranchisement rates are uncorrelated with other time-varying characteristics of the district that may also affect changes in political participation or competition. We partially achieve this goal by controlling for several district level observable characteristics X_d . Controlling for these characteristics in a first-difference specification means that we are controlling for differential trends based on these characteristics. However, data on certain key variables (e.g. district level income or wealth distributions) are not available. The identification concern is that such unobserved characteristics may determine both enfranchisement rates (our explanatory variable) and our outcome variables, leading to a bias in our estimates of γ . So, in addition to controlling for a whole host of district level covariates, we will also examine whether $\Delta Enfranchisement$ affects measures of political competition in the period before enfranchisement actually happens ("placebo" test). This will also verify whether there are any pre-reform differences in trends between district of high and low enfranchisement changes, which could invalidate a difference-in-difference approach. We also conduct a number of other robustness tests for the validity of our empirical strategy in Sections 4.1 and 4.2.

Finally, we will analyze the relationship between our enfranchisement measure and measures of political participation and competition in the election following the first post-enfranchisement election. This enables us to examine whether the medium-term effects of enfranchisement reforms are similar to or different from the short-run effects.

5. Impact of Franchise Extensions on Political Participation and Competition

5.1. Partial Franchise Extension of 1935

We find that voter turnout, defined as the number of votes as a fraction of registered voters, declines significantly after the 1935 enfranchisement reforms. Table 3 shows the results of running specification (1) for the 1935 reforms, comparing the 1937 elections to that of 1926 (as the 1930 election was affected by boycotts). Our preferred specification is in column (3), where we include the district demographic controls mentioned earlier and exclude four districts that are outliers in terms of the enfranchisement variable. We find that increasing the fraction enfranchised by 10 percentage points reduces voter turnout by 7.1 percentage points. Given that voter turnout in 1926 was 51 percent, this is a reasonably large reduction, suggesting that turnout would have been considerably higher (as a fraction of registered voters) without the franchise extension. We should note that this is not a continuation of pre-existing trends: the relationship between change in enfranchisement and change in voter turnout is statistically insignificant between 1923 and 1926 (column 4), and positive in sign, as opposed to the negative effect we find in column 3. We have verified that the coefficients in columns 3 and 4 are statistically different from each other at the 10% level of significance. This effect seems to be of a sudden and permanent decrease, as the change between 1937 and 1945 is small and insignificant, showing that this decline in voter turnout is not reversed after one election (Table 1, panel A, column 5).

When we examine voters as a share of the total population, the results are consistent with the voter turnout as defined above. Districts that experienced greater increases in enfranchisement also observed an increased voter share in the population, but the increase in voters is much less than the increase in the fraction enfranchised: a 10 percentage point increase in the enfranchised population share leads to only 4.5 percentage point increase in the voter share of the population (Appendix Table A2, panel A, column 3). This strongly suggests that the newly enfranchised voters are less likely to participate in the political process. As with the voter turnout measure, we see no relationship with our enfranchisement measure in periods before the enfranchisement (1923 to 1926) or in later years (1937 to 1945).

The results on citizen participation as candidates are similar to the results on their participation as voters. While enfranchisement results in a higher candidate-to-population ratio (Appendix Table A2, panel B), the increase is proportionally lower than the increase in the

potential candidate pool. The share of registered voters who are candidates thus shows a statistically significant decline in places that experienced greater enfranchisement (Table 3, panel B, column 3). As before, we see no such decline prior to the enfranchisement reform in the places that saw greater enfranchisement (column 4), so that our results are not simply a continuation of pre-existing trends. Interestingly, this decline seems to be somewhat reversed in the medium term, since places with higher enfranchisement increases do have greater candidacy increases between 1945 and 1951 (column 5); however, we should be cautious about interpreting this coefficient, since the medium-term increases between 1945 and 1951 are likely to be conflated with the effects of the enactment of universal adult franchise in 1950.

Turning to our measures of political competition, we find that political competition measures based on number of candidates do not much change due to enfranchisement. A 10 percentage point increase in enfranchisement results in 0.26 additional candidates per seat, a statistically insignificant coefficient (Table 3, panel C, column 3). In terms of political competition, our preferred specification shows that there is no change in the fraction of uncontested elections in more versus less enfranchised districts (Table 3, panel D, column 3). Both of these "non-results" are consistent with a lower candidacy response from newly enfranchised voters.

Despite no increase in the number of candidates, the 1935 franchise extension did lead to a statistically significant reduction in incumbency advantage, namely the share of incumbents that get re-elected. Increasing enfranchisement by 10 percentage points leads to a 14.5 percentage point decline in the share of incumbents who are re-elected, meaning that this reform seems to have led to a large turnover in the identity of elected representatives (Table 3, panel E, column 3). We noted earlier that 35.4% of 1923 incumbents were re-elected in 1926, while only 15.3% of 1926 incumbents were re-elected in 1937 (Table 2, panel B). The average increase in enfranchisement between 1926 and 1937 was 7.7%; our coefficient thus implies that variation in enfranchisement across districts accounts for 55% of the decline in incumbency advantage between 1926 and 1937. As with our earlier variables, there is no significant relationship with the change in enfranchisement in the pre-reform period (Table 3, panel E, column 4), making it unlikely that our results are driven by pre-trends in unobservable characteristics, and the difference between the

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¹⁵ While this low fraction of incumbents running for re-election may be partially attributable to the fact that we are comparing over a longer time frame (1926 to 1937) that skips one election in between, it does not invalidate our strategy as long as the impact of this factor is similar across all districts.

coefficients in columns 3 and 4 is statistically significant. Further, there is no significant difference between places with high and low enfranchisement increases in the post-reform period (Table 3, panel E, column 5), suggesting that there was no reversal or exacerbation of this short-run effect over the longer period.

Further analysis reveals that this decline in incumbency advantage arises primarily due to a reduced propensity of the incumbents to run for re-election; this reduction is significantly higher in the more enfranchised districts. In particular, a 10 percentage point increase in enfranchisement results in a 14.3 percentage point decline in the likelihood of the incumbent running for re-election (Appendix Table A2, panel C, column 3), which almost exactly matches the decline in the likelihood of the incumbent winning re-election.¹⁶

We conduct several robustness checks for our results, shown in Table 4. First, we show that our results remain similar in size and significance when we use the nearest census population to calculate enfranchisement rates rather than interpolated population (column 1). Our results also remain significant when we use the age-specific population as the denominator to calculate enfranchisement rates (column 2). In fact, with this measure of enfranchisement, we also see a statistically significant increase in the number of candidates per seat. Not surprisingly, all the coefficients are smaller in magnitude in these two columns, since our denominator variable is smaller than the interpolated total census population that we used earlier, and hence our enfranchisement variable is higher on average resulting in a smaller magnitude for the regression coefficient. Both of these adjusted enfranchisement variables are highly correlated with our original variable in Table 3, with correlation coefficients of 0.94 and 0.78 respectively.

All of our results are robust to controlling for the change in the number of seats in each district (Table 4, column 3). Similar robustness checks for our supplementary variables are shown in Appendix Table A3. While our first-difference specification controls for the overall change in the number of seats generated by the reforms, this increase may be differential across districts in ways that may be correlated with trends in political participation or competition. Our results indicate that this is not so, since all our coefficients are of similar magnitude and statistical significance when controlling for the district-level increase in the number of seats. These results

¹⁶ We are unable to examine this variable for the period 1923 to 1926, since pre-1937 election reports do not contain names of non-winning candidates.

also mean that the decline in voter turnout cannot be attributed to factors like dispersed voter attention across many electoral races.

In another robustness check, we examine changes between 1930 and 1937 as our main dependent variable, instead of the changes between 1926 and 1937. As mentioned several times before, this comparison is likely to be flawed due to the boycotts in 1930. Nevertheless, all our results remain similar to our base specification in terms of the magnitude and statistical significance of the coefficients (Table 4, column 4). While the decline in incumbency advantage, as measured by the fraction of incumbents that win the next election, is not significant in this specification, the decline in the fraction of incumbents that run for re-election remains significant and of the same magnitude as in our base specification (Appendix Table A3, panel C, column 4).

A major concern in any difference-in-difference estimation is the presence of potentially confounding pre-trends in the outcome variable, that may be correlated with the explanatory variable of interest. We have already shown that areas with greater enfranchisement increases are not statistically different in terms of their political outcomes prior to the enactment of franchise extension (Table 3, column 4). Here we implement a more rigorous way to control for pre-trends, namely re-running our main results but including an explicit control for the changes in the outcome variable between 1923 and 1926 (pre-reform period). The size and significance of our coefficients remains similar to the main specification (Table 4, column 5).

A related concern in our statistical analysis may be the presence of district-specific unobserved characteristics that drive both changes in enfranchisement as well as changes in political participation and competition, despite the fact that we have controlled for several demographic characteristics of the district. One way to control for such omitted variables problems is to use an instrumental variable, namely something that changes district level enfranchisement but is uncorrelated with district-specific characteristics. In our setting, one key source of variation in enfranchisement rates across districts is the wealth threshold and other rules for enfranchisement chosen by the provincial government which were usually uniform over the whole province with only a few exceptions (see Table 1). While this may not be fully uncorrelated with district characteristics, it does provide a somewhat exogenous reason for enfranchisement rates to vary across districts. Accordingly, we reran our empirical specification using province dummies as

instruments for district-level enfranchisement changes.¹⁷ Again, we find the same results as before: a significant decline in voter turnout and number of candidates as a share of registered voters (despite a significant increase in these ratios as a share of total population—see Appendix Table A3), a large decline in incumbency advantage and no effect measures of competition based on number of candidates (Table 4, column 6).

5.2. Universal Adult Suffrage of 1950

We conduct a similar analysis for the adoption of the 1950 constitution that granted universal adult suffrage to all adult citizens of India. This was a very large expansion of the franchise, increasing the fraction of enfranchised population in a district by 36.5 percentage points on average, compared to the last pre-independence election of 1945 (Table 2, Panel C). In theory, the impact of such a large extension can be quite different from the earlier expansion of 7-8 percentage points, especially because of the different characteristics of those enfranchised by each reform. Our regression specification is still based on equation (1), but with changes now being measured between the elections of 1945 and 1951.

Our results on citizen participation as voters and candidates are similar in direction but smaller in magnitude, as compared to the results for the 1935 reform. We find that the introduction of universal adult franchise resulted in a large and statistically significant decline in voter turnout and number of candidates, measured as a share of registered voters. A 10 percentage point increase in enfranchisement reduces voter turnout under universal adult franchise by 5.1 percentage points (Table 5, panel A, column 3), smaller than the reduction of 7.1 percentage points under the partial franchise extension. The decline of voter turnout cannot be attributed to pre-existing trends, since the effect of enfranchisement on voter turnout in the previous period is small in magnitude, opposite in sign and statistically insignificant (column 4). We have verified that the coefficient in column 3 is significantly different from that in column 4 at the 5% level of significance. We also see only a very small coefficient on enfranchisement in the next period, suggesting that the decline

¹⁷ We find a strong and significant "first stage" for this regression: the F-statistic for the province dummies as predictors of enfranchisement change is 16.05, even after controlling for district demographics and pre-reform changes in political outcomes. We recognize that this instrumental variables strategy is potentially subject to a failure of the "exclusion restriction," namely that province characteristics may affect political outcomes through channels other than enfranchisement policies. Hence, this is shown only as a robustness check and not as our main specification.

in voter turnout in areas of greater enfranchisement is somewhat permanent and unlikely to be reversed in a short time frame.

In a similar manner, a 10 percentage point increase in enfranchisement results in 0.011 fewer candidates per 1000 registered voters (Table 5, panel B, column 3). This is statistically significant, but considerably smaller than the reduction of 0.14 candidates observed for the 1935 reform. Note that, like the 1935 reform, the 1950 reform did increase citizen participation as a share of the population: both number of voters and number of candidates as a share of total population increased significantly in areas with greater enfranchisement (Appendix Table 4, panels A and B). However, these increases were proportionally much smaller than the increase in enfranchisement.

The results on political competition after the 1950 franchise extension are a little different from those following the 1935 franchise extension. We find that universal adult suffrage leads to a statistically significant increase in the number of candidates contesting a given seat, which might make it more difficult for any candidate to win. A 10 percentage point increase in enfranchisement leads to a 0.42 increase in the candidate-seat ratio (Table 5, panel C, column 3); as with voter turnout, we have verified that this coefficient is significantly different from the increase in the period before. Despite this increase in the number of candidates per seat, and the overall decrease in the fraction of unopposed seats, we find no significant relationship between franchise extensions and the fraction of unopposed seats (Table 5, panel D), similar to the result for the 1935 franchise extension. Also in contrast to the results for the earlier reform, we find no change in incumbency advantage as a result of universal adult suffrage, measured either as the propensity of incumbents to win the next election (Table 5, panel E, column 3) or the propensity of incumbents to run for reelection (Appendix Table A4, panel C, column 3). Interestingly, there may be some pre-trends in these variables since we see marginally significant coefficients for the changes between 1945 and 1951 in these incumbency advantage variables (Table 5, panels E, column 4).

We conduct a number of robustness checks for the relationships documented in Table 5: using alternative measures of enfranchisement (using census population or estimated age-specific population as the denominator rather than interpolated census population), controlling for the increase in the number of seats, dropping the provinces of Punjab and Bengal to avoid any confounding effects of partition-related deaths or displacement, controlling for the change in political outcomes before the franchise extension (i.e. the change from 1937 to 1945), and using

province dummies as instruments for the district-level changes in enfranchisement. Our results are robust to all these checks (see Table 6), with only two exceptions: the increase in candidate-seat ratio is not significant when using age-specific population as the denominator for the enfranchisement variable (as mentioned earlier, there is likely to be significant measurement error in the age-specific population measure), and the decrease in candidates as a fraction of registered voters is not significant when using province dummies as instruments for enfranchisement.

Overall, we find that voter turnout and citizen participation as candidates decreases as enfranchisement increases, suggesting that newly enfranchised voters tend to be less politically engaged. These reforms also affect some dimensions of political competition: the 1950 reforms lead to increased candidacy, while incumbents were significantly disadvantaged in their re-election probabilities by the 1935 reforms.

5.3. Policy Effects of Enfranchisement: Education Spending after 1935

Delineating the policy effects of the enfranchisement reforms is difficult for two reasons. First, for the 1935 reforms, the Congress-led ministries that were elected in 1937 resigned in 1939, in protest against Viceroy Linlithgow's unilateral announcement of India's entry into World War II. Policy decisions after 1939 would also be confounded by the effects of wartime constraints. This gives us a relatively short time frame to assess the impact of enfranchisement. Second, district-level expenditure data is not available for the post-independence period, making it difficult to replicate the analysis using spending data. Data on other related variables, such as the availability of public goods, is only available from the decennial censuses beginning in 1961.

We nevertheless conducted a first-difference analysis using data on per capita education spending at the district level, which we were able to obtain for the provinces of Assam, Bihar, Central Provinces and United Provinces for the years 1931-1940. Using the period 1931-1934 as "pre-enfranchisement" and 1937-1940 as "post-enfranchisement" years, we calculate the difference in the per capita spending on education and regress it on district level enfranchisement increases as in equation (1). We find that districts that experienced larger increases in enfranchisement also experienced larger increases in per capita spending, though the effects are

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¹⁸ The district-level data on educational spending comes from the "Report on the Working of District Boards" for the provinces of Assam, Bihar, Central Provinces and United Provinces. The Reports are part of an annual series that contain information on educational spending incurred by local governments across the provinces of British India.

estimated somewhat imprecisely given the limited nature of the data. In particular, we find that districts with a 10 percentage point increase in enfranchisement had 0.01 rupees per capita higher education spending, which is 5 percent of the pre-1935 mean. This estimate is computed after controlling for demographics and removing outliers, and is statistically significant at the 10% level of significance (Appendix Table A6, panel A, column 3). Most of this increase is attributable to the increase in primary school spending rather than middle school spending, though these coefficients are not statistically significant (Appendix Table A6, panels B and C). We take these results as suggestive though far from conclusive. Unfortunately, similar district level expenditure data is not available for the post-independence period.

6. Conclusions

Most studies of suffrage extensions are situated within the context of a redistribution of political rights from native elites to other emerging native groups. The fact that we examine such a relationship in the context of colonial elites extending suffrage rights to native elites is interesting in and of itself. Our study is also situated in a much poorer country, compared to previous studies on the U.K. or the U.S. Using data on electoral outcomes before and after the 1935 constitutional reform, we document three important facts about the relationship between franchise extension and measures of political participation and competition. First, we show that even though extending the franchise increased the fraction of voters in the population, the newly enfranchised voters appear less engaged in the electoral process as evidenced by a reduction in voter turnout. Second, we do not find any evidence of the 1935 reforms influencing political competition as measured by the number of candidates per seat and the share of uncontested elections. Finally, we find evidence of churn in the pool of elected candidates post the 1935 reform as corroborated by the reduction in the re-election rate of incumbents between the 1926 and 1937 elections. The findings have important implications for a better understanding of the successes and limitations of partial franchise extensions in the context of colonial rule where ultimate authority over important matters of the state remain with a foreign power that is neither representative nor accountable. They also highlight the role of an important intervening mechanism (i.e. enfranchisement) in the relationship between democracy and development.

In addition to the 1935 reform, we also examine the consequences of the 1950 constitution that gave suffrage rights to all Indians above the age of 21. The results of this large increase in

enfranchisement are surprisingly consistent with those of the partial enfranchisement: while the share of voters in the population goes up, the increase is only moderate and voter turnout measured as a share of registered voters decreases significantly. We conclude that the newly enfranchised voters are less politically engaged, consistent with them being poorer and less educated. For the 1950 reform, we find increased citizen participation as candidates, but in contrast to the 1935 reform, there is no decline in the share of incumbents who get re-elected.

Both political participation and political competition are important intervening mechanisms through which franchise extension can affect public goods provision. We hope, therefore, that future work can examine the relationship between franchise extension and state investments in public infrastructure such as schools, hospitals, and health clinics that are commonly associated with political patronage. There is also scope for future research to extend the analysis in this paper to other cases of suffrage extensions under the umbrella of colonial governments to establish the external validity of its results.

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Table 1: Suffrage Requirements in the 1919 and 1935 Acts, by Province

	Eligibility Rules to Vote (non-S	Special Interest Constituencies)			
Province	1919 Act	1935 Act			
Bengal	Paid municipal taxes and fees of at least Rs 1-8-0 (Rs 3 in Howrah and Cossipore-Chitpur); paid road and public works cess of at least Rs 1; paid chaukidari tax of at least Rs 2; occupied a house with assessed value of at least Rs 150 in Calcutta; paid any income tax; retired or pensioned officer of armed forces.	Assessed any income tax, municipal tax in Calcutta, municipal tax of at least 8 annas, public works cess of at least 8 annas, chaukidari tax of at least 6 annas, or union rate of at least 6 annas; occupied a house of annual value at least Rs 42; passed matriculation exam of any university; retired, pensioned or discharged officers or soldiers; widows and mothers of officers and soldiers; literate women; wives of qualified voters (who are subject to much stricter property limits than above). No men allowed to vote in the Muhammadan women's constituency.			
Madras	Madras City: paid any tax in previous year or occupied a house of at least Rs 60 annual value; Other areas: paid any income tax or at least Rs 3 of other taxes or owned or leased land with annual rent value of at least Rs 10; retired or pensioned officer of armed forces.	Assessed any income tax, profession tax, property tax, house tax (or tenants of such property) or motor vehicles tax; registered landholder or occupancy ryot; leased immovable property worth at least Rs 100 in annual rent (Rs 50 in rural areas); literate persons; retired, pensioned or discharged officers or soldiers; widows and mothres of officers and soldiers; wives of qualified voters (subject to stricter property limits than above).			
Bombay (included Sind in 1919)	Occupied a house with annual rental value of at least Rs 36 (Rs 120 in Bombay and Karachi cities; Rs 24 in Panch Mahals or Ratnagiri districts); paid any income tax; retired or pensioned officer of armed forces; monthly wages of at least Rs 40 for Bombay city textile workers; owned or leased land paying at least Rs 32 in land revenue (Rs 16 in Panch Mahals, Ratnagiri and Upper Sind Frontier).	Owners and tenants on land assessed at least Rs 8 in land revenue; owners or tenants of houses with annual rental value of at least Rs 18 (Rs 60 in Bombay city) or capital value of Rs 750; those who have passed the matriculation of the University of Bombay; retired, pensioned or discharged officers or soldiers.			
United Provinces	Occupied a house with annual rental value of at least Rs 36, or paid municipal tax on income of at least Rs 200; paid any income tax; retired or pensioned officer of armed forces; owned land paying at least Rs 25 in land revenue; tenants paying at least Rs 25 in rent for permanent tenure holder or fixed rate tenants, and Rs 50 for others.	Assessed any income tax; municipal tax on income of at least Rs 150; owner or tenant of a house with rental value at least Rs 24; owns land with land revenue of at least Rs 5 (or under-proprietor in Oudh of same); tenant of land with rent at least Rs 10; special provisions for Kumaon; passed the upper primary examination; retired, pensioned or discharged officer or soldier; widows and mothers of officers and soldiers; literate women; wives of qualified voters (with much stricter property limits than above).			

Province	1919 Act				
Punjab	Owned or occupied property of at least Rs 96 in annual rental value (or total value Rs 4000); paid municipal tax of at least Rs 50; paid any income tax; retired or pensioned officer of armed forces; owned or leased land paying at least Rs 25 in land revenue; was an assignee of land revenue of at least Rs 50.				
Bihar (included Orissa in 1919)	Paid municipal tax of at least Rs 3; paid any income tax; retired or pensioned officer of armed forces; holds estate paying at least Rs 12 in local cess; holds a tenure assessed at least Rs 100 for local cess; holds land as raiyat paying at least Rs 48 in land revenue (Rs 16 in Orissa and Chota Nagpur divisions, Rs 64 in Patna division and Munghyr district, Rs 24 in Santhal Parganas); paid Bengal Local Self-Government Act tax of at least Rs 1-8-0.				

Berar

Central Provinces and Owner or tenant of a house of annual rental value at least Rs 36; paid municipal tax on income of at least Rs 200; paid any income tax; retired or pensioned officer of armed forces; lambardar of a mahal; owns estate of land revenue at least Rs 100; holds a tenure assessed at least Rs 50 in annual revenue (Rs 40 in Bhandara, Balaghat, Nimar, Chhindwara and Seoni districts; Rs 30 in Raipur, Bilaspur, Drug, Chanda and Betul districts).

1935 Act

Assessed any income tax; direct municipal tax of at least Rs 50; profession tax or district board tax of at least Rs 2; owner or occupancy tenant with land revenue assessed at least Rs 5; assignee of land revenue of at least Rs 10; tenant of at least 6 acres of irrigated land or 12 acres of unirrigated land; owned non-land immovable property worth at least Rs 2000 (Rs 50 for SC); tenant of immovable property with annual rental value at least Rs 60 (Rs 36 for SC); zaildars, inamdars, sufedposh or lambardar; attained the primary educational standard; retired, pensioned or discharged officers and soldiers; widows and mothers of officers and soldiers; wives of qualified men (with much higher property limits than above); literate women and SCs.

Assessed any income tax; municipal tax of at least Rs 1-8-0; chaukidari tax of at least 9 annas; occupies land or buildings with annual rent at least Rs 24 (Jamshedpur); holds land with rent of at least Rs 6 or cess of at least 3 annas (non-Jamshedpur); passed matriculation exam of any university; retired, pensioned or discharged officers and soldiers; widows and mothers of officers and soldiers; wives of qualified men (with much higher property limits than above); literate women. No men can vote in the Muhammadan women's constituency.

Assessed any income tax; haisivat tax of at least Rs 75; holds estate of land revenue at least Rs 2; owner or tenant of a building with annual rental value of at least Rs 6; watandar patel/patwari; registered deshmukh/deshpandia/lambardar; passed middle school examination; retired, pensioned or discharged officers and soldiers (also including Nizam's soldiers); widows and mothers of offiers and soldiers; literate or primary educated women; wives of qualified men (with higher property limits than above). SCs qualified if he is a kotwar, jaglia or village mahar holding office.

Province	1919 Act	1935 Act
Assam	Paid municipal tax of at least Rs 3 (Rs 2 for Nowgong, Rs 1-8-0 for Sylhet, Rs 1 for rural constituencies); paid any income tax; retired or pensioned officer of armed forces; assessed tax of at least Rs 1 under Bengal Municipal Act 1876; owned land assessed at land revenue of at least Rs 1.	Assessed any income tax; municipal tax of at least Rs 2 (Rs 1-8-0 in Sylhet, Rs 1 in small towns); chaukidari tax of at least 8 annas in Sylhet, Cachar and Goalpara districts; owns land with land revenue at least Rs 7-8-0; pays local rates of at least 8 annas; rented land of at lesat Rs 7-8-0 in Lakhimpur, Sibsagar, Darrang, Nowgong, Kamrup and Garo HIlls districts; passed middle school examination; retired, pensioned or discharged officers and soldiers; widows and mothers of offiers and soldiers; literate women; wives of qualified men (with higher property limits than above). No man can vote in constituencies reserved for women.
NWFP	No legislative assembly.	Assessed any income tax; municipal tax of at least Rs 50; district board tax of at least Rs 2; owned immoveable property of at least Rs 600; tenant of immovable property with annual rental value of at least Rs 48; owner or tenant of at least 6 acres irrigated land or 12 acres unirrigated land or land assessed to land revenue of at least Rs 5; assignee of land revenue of at least Rs 10; zaildars, inamdars or lambardar; passed middle school examination; retired, pensioned or discharged officers and soldiers; widows and mothers of offiers and soldiers; literate women; wives of qualified men (with higher property limits than above).
Orissa	No separate legislative assembly; see Bihar above.	Assessed any income tax; municipal tax of at least Rs 1-8-0; chaukidari tax of at least 9 annas (Cuttack, Puri, Balasore districts and Angul subdivision); pays rent or land revenue of at least Rs 2 (Rs 1 in Sambalpur); passed matriculation exam of any university; retired, pensioned or discharged officers and soldiers; widows and mothers of officers and soldiers; wives of qualified men (with much higher property limits than above); literate women.
Sind	No separate legislative assembly; see Bombay above.	Owners, permanent tenants and alienees on land assessed at least Rs 8 in land revenue; Hari cultivators on land assessed at least Rs 16 in land revenue; owners or tenants of houses with annual rental value of at least Rs 18 (Rs 30 in Karachi city) or capital value of Rs 750; those who have passed the matriculation of the University of Bombay; retired, pensioned or discharged officers or soldiers; widows and mothers of officers and soldiers; literate women; wives of qualified voters (who are subject to much stricter property limits than above).

Source for the 1919 Act: H.N. Mitra (ed.). 1921. *The Govt of India Act 1919: Rules Thereunder and Govt. Reports 1920.* Calcutta: Annual Register Office. Source for the 1935 Act: *Government of India Act, 1935*. The Government of British India.

Table 2: Summary Statistics of Key Variables

	1921	1923	1926	1930	1937	1945	1951	1957
# districts		201	201	201	201	201	167	167
# seats per district		2.6	2.6	2.6	6.5	6.5	13.1	13.5
Panel A: Measures of political participation								
Voter turnout	0.277	0.431	0.512	0.332	0.569	0.491	0.462	0.492
Voters as a share of total population	0.005	0.009	0.012	0.005	0.055	0.045	0.226	0.250
Candidates per 1000 registered voters	0.360	0.335	0.270	0.192	0.144	0.090	0.077	0.049
Candidates per 100,000 population	0.727	0.661	0.582	0.457	1.376	1.083	3.787	2.490
Panel B: Measures of political competition								
Candidate-seat ratio	2.82	2.46	2.27	1.83	2.60	2.21	4.52	3.11
% uncontested elections		0.146	0.150	0.461	0.059	0.259	0.002	0.008
Incumbency advantage (% of winners from last time who win again)		0.260	0.354	0.419	0.130	0.277	0.114	0.301
Incumbency advantage (comparing 1937 to 1926)					0.153			
% of winners from last time who rerun					0.237	0.344	0.159	0.429
% of winners who rerun (comparing 1937 to 1926)					0.223			
% of candidates from last time who rerun						0.193	0.114	0.155
Panel C: Measures of enfranchisement								
% enfranchised (interpolated pop in denominator)		0.027	0.028	0.029	0.105	0.126	0.491	0.512
% enfranchised (nearest census pop in denominator)		0.027	0.030	0.029	0.117	0.118	0.491	0.545
% enfranchised (age-specific pop in denominator)		0.051	0.055	0.059	0.241	0.321	1.083	1.199

Notes: Voter turnout is not defined for uncontested constituencies. Districts with incomplete coverage over time are excluded. Data before 1947 include all districts of British India; data for 1951 and 1957 exclude districts that became part of Pakistan and Bangladesh after independence in 1947. "Age-specific population" refers to population aged 20 and above for years prior to 1947, and to population aged 21 and above for 1951 and 1957 obtained by extrapolation from a 10% single-age sample.

Table 3: Impact of 1935 Reforms on Political Participation and Competition

			Remove Outliers	Period before	Period after
	1926 to 1937	1926 to 1937	1926 to 1937	1923 to 1926	1937 to 1945
	(1)	(2)	(3)	(4)	(5)
Panel A: Change in voter tu	`	• /			
Change in % enfranchised	-0.727**	-0.759**	-0.707*	0.319	-0.005
	(0.285)	(0.341)	(0.391)	(0.370)	(0.292)
Observations	198	198	195	195	193
R-squared	0.030	0.078	0.084	0.140	0.240
Panel B: Change in candida	ites per 1000 reg	istered voters			
Change in % enfranchised	-0.938**	-1.471***	-1.384**	0.077	0.543***
	(0.387)	(0.495)	(0.587)	(0.542)	(0.152)
Observations	201	201	197	197	197
R-squared	0.024	0.093	0.115	0.213	0.313
Panel C: Change in candida	ate-seat ratio				
Change in % enfranchised	-0.335	1.445	2.636	-0.282	-2.649*
	(1.636)	(1.617)	(1.894)	(2.738)	(1.566)
Observations	201	201	197	197	197
R-squared	0.000	0.116	0.107	0.091	0.308
Panel D: Change in fraction	of unopposed s	eats			
Change in % enfranchised	1.265**	0.945	0.290	-0.878	-0.232
_	(0.631)	(0.739)	(0.655)	(0.731)	(0.669)
Observations	201	201	197	197	197
R-squared	0.021	0.090	0.073	0.077	0.197
Panel E: %incumbents of la	ast election re-ele	ected			
Change in % enfranchised	-0.637	-1.086**	-1.452***	0.015	-0.092
	(0.414)	(0.453)	(0.553)	(0.681)	(0.452)
Observations	201	201	197	197	197
R-squared	0.010	0.080	0.085	0.086	0.107
Controls	N	Y	Y	Y	Y
Remove outliers	N	N	Y	Y	Y

Notes: Robust standard errors in parentheses. ***indicates statistical significance at 1%, **at 5%, *at 10%. Controls include district population, literacy, urbanization, gender ratio, fraction of Hindus and Christians, and fraction of population employed in agriculture in 1921, and population growth rates between 1921 and 1931.

Table 4: Impact of 1935 Reforms on Political Participation and Competition: Robustness Checks

	nt with census	Enfranchisement			Control for pre-	Province
	pop as	with age-specific	Control for	Different time	reform change in	dummies as
	denominator	pop as denominator	change in #seats	period	outcome	instrument
	1926 to 1937	1926 to 1937	1926 to 1937	1930 to 1937	1926 to 1937	1926 to 1937
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Change in voter	,	ested seats only)				
Change in % enfranchised	-0.659*	-0.275*	-0.739*	-1.245**	-0.613*	-1.556**
	(0.369)	(0.146)	(0.377)	(0.527)	(0.358)	(0.622)
Observations	195	194	195	173	195	195
R-squared	0.083	0.084	0.136	0.161	0.163	0.056
Panel B: Change in cand	-	_				
Change in % enfranchised	-1.332**	-0.585**	-1.401**	-1.315***	-1.392**	-2.784**
	(0.539)	(0.240)	(0.578)	(0.341)	(0.584)	(1.184)
Observations	197	196	197	197	197	197
R-squared	0.116	0.123	0.123	0.144	0.124	0.081
Panel C: Change in cand	idate-seat ratio)				
Change in % enfranchised	2.414	1.236**	2.665	2.400	2.530	3.714
	(1.757)	(0.612)	(1.885)	(1.707)	(1.642)	(2.907)
Observations	197	196	197	197	197	197
R-squared	0.106	0.110	0.108	0.126	0.323	0.105
Panel D: Change in fract						
Change in % enfranchised	-0.034	-0.054	0.288	0.404	-0.188	1.532
	(0.708)	(0.341)	(0.656)	(0.972)	(0.526)	(1.241)
Observations	197	196	197	197	197	197
R-squared	0.072	0.068	0.073	0.061	0.448	0.059
Panel E: %incumbents o						
Change in % enfranchised	-1.116**	-0.461***	-1.448***	-0.744	-1.452***	-2.501**
	(0.511)	(0.174)	(0.552)	(0.816)	(0.553)	(1.167)
Observations	197	196	197	197	197	197
R-squared	0.074	0.076	0.086	0.121	0.088	0.068
Controls	Y	Y	Y	Y	Y	Y
Remove outliers	Y	Y	Y	Y	Y	Y

Notes: Robust standard errors in parentheses. ***indicates statistical significance at 1%, **at 5%, *at 10%. Controls include district population, literacy, urbanization, gender ratio, fraction of Hindus and Christians, and fraction of population employed in agriculture in 1921, and population growth rates between 1921 and 1931.

Table 5: Impact of 1950 Reforms on Political Participation and Competition

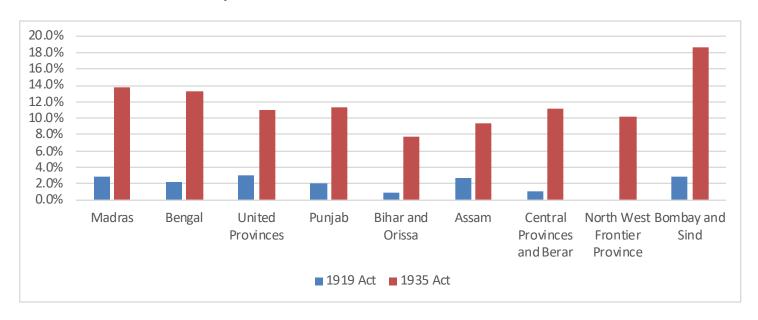
		Controls	Remove outliers	Period before	Period after
	1945 to 1951	1945 to 1951	1945 to 1951	1937 to 1945	1951 to 1957
	(1)	(2)	(3)	(4)	(5)
Panel A: Change in voter tu					
Change in % enfranchised	-0.534***	-0.522***	-0.509***	0.053	0.069
	(0.121)	(0.145)	(0.176)	(0.205)	(0.085)
Observations	163	163	159	159	163
R-squared	0.096	0.227	0.217	0.147	0.202
Panel B: Change in candida	tes per 1000 reg	gistered voters			
Change in % enfranchised	-0.165***	-0.114***	-0.111**	-0.060	-0.026
	(0.039)	(0.043)	(0.055)	(0.088)	(0.034)
Observations	167	167	163	163	163
R-squared	0.072	0.193	0.189	0.238	0.395
Panel C: Change in candida	ite-seat ratio				
Change in % enfranchised	0.206	3.715**	4.210**	-0.947	-1.669
	(1.996)	(1.581)	(1.719)	(0.961)	(1.679)
Observations	167	167	163	163	163
R-squared	0.000	0.202	0.271	0.247	0.344
Panel D: Change in fraction	of unopposed s	seats			
Change in % enfranchised	-0.258	-0.186	-0.367	0.712	-0.017
	(0.322)	(0.334)	(0.402)	(0.446)	(0.029)
Observations	167	167	163	163	163
R-squared	0.004	0.108	0.114	0.156	0.089
Panel E: %incumbents of la	st election re-el	ected			
Change in % enfranchised	0.201	0.107	0.003	-0.508*	0.396
-	(0.134)	(0.181)	(0.196)	(0.266)	(0.250)
Observations	167	167	163	163	163
R-squared	0.009	0.067	0.080	0.114	0.159
Controls	N	Y	Y	Y	Y
Remove outliers	N	N	Y	Y	Y

Notes: Robust standard errors in parentheses. ***indicates statistical significance at 1%, **at 5%, *at 10%. Controls include district population, literacy, urbanization, gender ratio, fraction of Hindus and Christians, and fraction of population employed in agriculture in 1931, population growth rates between 1931 and 1951, and the fraction of refugees in 1951.

Table 6: Impact of 1950 Reforms on Political Participation and Competition: Robustness Checks

	Canana	A:£	Cantual fan	Dura Daniel C	Controlling for	Province
	Census pop as denominator	Age-specific pop as denominator	Control for	Drop Punjab &	pre-reform	dummies as
			change in #seats	Bengal	change	instrument
	1945 to 1951	1945 to 1951	1945 to 1951	1945 to 1951	1945 to 1951	1945 to 1951
D I A CI	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Change in voter t	•	• /	0.40 Calculu	0.40.44	0.400 atestes	0.01.1 desteste
Change in % enfranchised	-0.508***	-0.163***	-0.436**	-0.424*	-0.492***	-0.811***
	(0.186)	(0.062)	(0.194)	(0.245)	(0.170)	(0.309)
Observations	159	158	159	135	159	159
R-squared	0.214	0.200	0.222	0.247	0.327	0.199
Panel B: Change in candid		gistered voters				
Change in % enfranchised	-0.115**	-0.044**	-0.172***	-0.156**	-0.101*	0.197
	(0.056)	(0.019)	(0.059)	(0.069)	(0.057)	(0.124)
Observations	163	162	163	139	163	163
R-squared	0.190	0.187	0.215	0.193	0.221	0.044
Panel C: Change in candid	late-seat ratio					
Change in % enfranchised	4.170**	0.949	5.298***	6.548***	3.558**	10.233***
	(1.738)	(0.729)	(1.915)	(2.333)	(1.690)	(2.903)
Observations	163	162	163	139	163	163
R-squared	0.268	0.245	0.280	0.297	0.385	0.209
Panel D: Change in fractio	n of unopposed s	seats				
Change in % enfranchised	-0.358	-0.077	-0.726	-0.850	0.286*	0.081
<u> </u>	(0.415)	(0.135)	(0.442)	(0.550)	(0.171)	(0.793)
Observations	163	162	163	139	163	163
R-squared	0.114	0.112	0.133	0.093	0.894	0.108
Panel E: %incumbents of	last election re-el	ected				
Change in % enfranchised	0.012	0.049	-0.215	-0.017	0.058	0.451
.	(0.203)	(0.071)	(0.219)	(0.261)	(0.200)	(0.436)
Observations	163	162	163	139	163	163
R-squared	0.080	0.083	0.106	0.070	0.097	0.055

Figure 1 Enfranchisement Rates by Province



Notes: Enfranchisement rate for the 1919 Act is calculated as the number of registered voters in the 1921 election divided by the populatio of the province in the 1921 census. Enfranchisement rates for the 1935 Act is computed as the number of registered voters in the 1937 election divided by the province population in the 1931 census.

Enfranchisement, Political Participation and Political Competition: Evidence from Colonial India

Guilhem Cassan University of Namur Lakshmi Iyer University of Notre Dame Rinchan Ali Mirza University of Kent

Appendix A: Tables

Appendix Table A1 Summary Statistics for Control Variables

	1921	1931	1951
Number of districts	201	201	167
Total population (millions)	1.13	1.24	1.59
Population growth rate (annual, since last census)	0.010	0.014	0.015
Fraction literate	0.044	0.044	0.166
Fraction female	0.480	0.480	0.482
Fraction urban	0.109	0.121	0.158
Fraction Hindu	0.702	0.703	0.847
Fraction Muslim	0.234	0.243	0.105
Fraction Sikh	0.013	0.015	0.024
Fraction Christian	0.011	0.013	0.014
Fraction in agriculture	0.704	0.276	0.701
Fraction in industry	0.113	0.045	0.102
Fraction in commerce	0.065	0.027	0.058
Fraction refugees			0.027

Figures for 1951 exclude districts that became part of Pakistan in 1947.

Figures for fraction of population engaged in agriculture, industry and commerce are defined differently in the census of 1931 and hence are not comparable to the censuses of 1921 and 1951.

Appendix Table A2 Impact of 1935 Reforms on Political Participation and Competition: Supplementary Me

		Controls	Remove Outliers	Period before	Period after
	1926 to 1937	1926 to 1937	1926 to 1937	1923 to 1926	1937 to 1945
	(1)	(2)	(3)	(4)	(5)
Panel A: Change in voter sh	are of total pop	ulation			
Change in % enfranchised	0.319***	0.355***	0.447***	0.009	-0.086
	(0.053)	(0.055)	(0.040)	(0.018)	(0.072)
Observations	201	201	197	197	197
R-squared	0.314	0.398	0.493	0.180	0.358
Panel B: Change in candida	tes per 100,000	population			
Change in % enfranchised	2.252	3.747***	4.574***	0.496	0.033
_	(1.637)	(1.367)	(1.720)	(0.881)	(0.942)
Observations	201	201	197	197	197
R-squared	0.017	0.289	0.291	0.228	0.297
Panel C: %incumbents of la	st election who	re-run			
Change in % enfranchised	-0.491	-0.857*	-1.425**		-0.243
_	(0.473)	(0.514)	(0.587)		(0.457)
Observations	201	201	197		197
R-squared	0.005	0.098	0.117		0.119
Controls	N	Y	Y	Y	Y
Remove outliers	N	N	Y	Y	Y

Notes: Robust standard errors in parentheses. ***indicates statistical significance at 1%, **at 5%, *at 10%. Controls include district population, literacy, urbanization, gender ratio, fraction of Hindus and Christians, and fraction of population employed in agriculture in 1921. and population growth rates between 1921 and 1931.

Appendix Table A3 Impact of 1935 Reforms on Supplementary Measures: Robustness Checks

	1926 to 1937	with age-specific pop as denominator 1926 to 1937	1926 to 1937	Different time period 1930 to 1937	Control for pre- reform change in outcome 1926 to 1937	Province dummies as instrument 1926 to 1937
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Change in voter s						
Change in % enfranchised	0.416***	0.145***	0.445***	0.426***	0.453***	0.316***
	(0.034)	(0.017)	(0.040)	(0.045)	(0.038)	(0.053)
Observations	197	196	197	197	197	197
R-squared	0.479	0.375	0.512	0.474	0.536	0.458
Panel B: Change in candid	lates per 100,000 ¡	oopulation				_
Change in % enfranchised	2.998*	0.927*	4.329***	5.040***	4.748***	-2.821
	(1.546)	(0.504)	(1.545)	(1.710)	(1.672)	(2.551)
Observations	197	196	197	197	197	197
R-squared	0.267	0.257	0.476	0.289	0.319	0.171
Panel C: %incumbents of	last election who i	re-run				-
Change in % enfranchised	-1.216**	-0.439**	-1.401**	-1.454**		-2.163*
	(0.533)	(0.189)	(0.591)	(0.581)		(1.177)
Observations	197	196	197	197		197
R-squared	0.112	0.104	0.127	0.118		0.110
Controls	Y	Y	Y	Y	Y	Y
Remove outliers	Y	Y	Y	Y	Y	Y

Notes: Robust standard errors in parentheses. ***indicates statistical significance at 1%, **at 5%, *at 10%. Controls include district population, literacy, urbanization, gender ratio, fraction of Hindus and Christians, and fraction of population employed in agriculture in 1921, and population growth rates between 1921 and 1931.

Appendix Table A4
Impact of 1950 Reforms on Political Participation and Competition: Supplementary Measures

		Controls	Remove outliers	Period before	Period after
	1945 to 1951	1945 to 1951	1945 to 1951	1937 to 1945	1951 to 1957
	(1)	(2)	(3)	(4)	(5)
Panel A: Change in voter sh	are of total pop	oulation			
Change in % enfranchised	0.153***	0.241***	0.208***	-0.021	-0.097**
	(0.047)	(0.056)	(0.065)	(0.046)	(0.048)
Observations	167	167	163	163	163
R-squared	0.056	0.184	0.139	0.175	0.309
Panel B: Change in candida	tes per 100,000	population			
Change in % enfranchised	5.620***	8.280***	9.161***	-0.051	-4.660***
	(1.230)	(1.152)	(1.267)	(0.501)	(1.535)
Observations	167	167	163	163	163
R-squared	0.129	0.415	0.425	0.333	0.414
Panel C: %incumbents of la	st election who	re-run			
Change in % enfranchised	0.197	0.123	0.065	-0.527*	0.436*
	(0.148)	(0.196)	(0.215)	(0.269)	(0.261)
Observations	167	167	163	163	163
R-squared	0.007	0.129	0.147	0.156	0.191
Panel D: %candidates of las	st election who	re-run			
Change in % enfranchised	0.191*	0.139	0.117	-0.173	0.013
	(0.109)	(0.141)	(0.150)	(0.152)	(0.123)
Observations	167	167	163	163	163
R-squared	0.012	0.131	0.150	0.337	0.161
Controls	N	Y	Y	Y	Y
Remove outliers	N	N	Y	Y	Y

Notes: Robust standard errors in parentheses. ***indicates statistical significance at 1%, **at 5%, *at 10%. Controls include district population, literacy, urbanization, gender ratio, fraction of Hindus and Christians, and fraction of population employed in agriculture in 1931, population growth rates between 1931 and 1951, and the fraction of refugees in 1951.

Appendix Table A5 Impact of 1950 Reforms on Supplementary Measures: Robustness Checks

	Canque non es	Aga specific per	Control for	Drop Punjab &	Controlling for pre-reform	Province dummies as
	Census pop as denominator	Age-specific pop as denominator	change in #seats	Bengal	change	instrument
	1945 to 1951	1945 to 1951	1945 to 1951	1945 to 1951	1945 to 1951	1945 to 1951
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Change in voter	()	\ /	(3)	(7)	(3)	(0)
Change in % enfranchised	0.223***	0.076***	0.258***	0.260***	0.202***	0.043
change in 70 emilanemeta	(0.067)	(0.021)	(0.070)	(0.072)	(0.066)	(0.124)
Observations	163	162	163	139	163	163
R-squared	0.144	0.134	0.155	0.207	0.165	0.099
Panel B: Change in candid	lates per 100,000	population				
Change in % enfranchised	9.402***	2.529***	7.610***	6.592***	9.141***	19.609***
_	(1.343)	(0.597)	(1.452)	(1.603)	(1.270)	(2.784)
Observations	163	162	163	139	163	163
R-squared	0.423	0.327	0.451	0.334	0.438	0.162
Panel C: %incumbents of	last election who	re-run				
Change in % enfranchised	0.083	0.028	-0.164	-0.101	0.107	0.407
	(0.221)	(0.067)	(0.230)	(0.271)	(0.219)	(0.459)
Observations	163	162	163	139	163	163
R-squared	0.147	0.149	0.171	0.099	0.156	0.135
Panel D: %candidates of l	ast election who i	re-run				
Change in % enfranchised	0.134	0.023	-0.021	-0.009	0.124	0.268
	(0.155)	(0.043)	(0.161)	(0.184)	(0.150)	(0.366)
Observations	163	162	163	139	163	163
R-squared	0.150	0.150	0.167	0.105	0.151	0.145
Controls	Y	Y	Y	Y	Y	Y
Remove outliers	Y	Y	Y	Y	Y	Y

Notes: Robust standard errors in parentheses. ***indicates statistical significance at 1%, **at 5%, *at 10%. Controls include district population, literacy, urbanization, gender ratio, fraction of Hindus and Christians, and fraction of population employed in agriculture in 1931, population growth rates between 1931 and 1951, and the fraction of refugees in 1951.

Appendix Table A6 Impact of 1935 Reforms on Education Spending

Dep var: Change in per capita spending between pre-1937 (1931-1934) and post-1937 (1937-1940)

Mean of spending variable over 1931-

	1934		<u>Controls</u>	Remove outliers
		(1)	(2)	(3)
Panel A: Change in Total Educ	cation Spending p	er Capita		
Change in % enfranchised	0.198	0.059	0.116*	0.100*
		(0.074)	(0.058)	(0.056)
Observations		93	93	92
R-squared		0.007	0.085	0.082
Panel B: Change in Primary So	chool Spending p	er Capita		
Change in % enfranchised	0.136	0.026	0.103*	0.095
		(0.054)	(0.062)	(0.075)
Observations		93	93	92
R-squared		0.005	0.183	0.178
Panel C: Change in Middle Sch	hool Spending per	r Capita		
Change in % enfranchised	0.038	-0.075**	-0.054	-0.048
		(0.035)	(0.043)	(0.051)
Observations		93	93	92
R-squared		0.060	0.106	0.100
Controls		N	Y	Y
Remove outliers		N	N	Y

Notes: Robust standard errors in parentheses. ***indicates statistical significance at 1%, **at 5%, *at 10%. Controls include district population, literacy, urbanization, gender ratio, fraction of Hindus and Christians, and fraction of population employed in agriculture in 1921, and population growth rates between 1921 and 1931.

Enfranchisement, Political Participation and Political Competition: Evidence from Colonial India

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Appendix B: Constitutional Reforms Prior to 1919

B.1: The Act of 1858: From Company to Crown

The British Empire in the Indian subcontinent lasted nearly 200 years. In 1757, following the battle of Plassey, the East India Company established a foothold in Bengal. Over the following five decades, large parts of the areas of present-day India, Pakistan, Bangladesh, and Burma (Myanmar) were brought under British political control by means of conquest or cession by local rulers due to treaty violations. In 1817–1818, after winning a series of battles in central India, the British emerged as the dominant political power in the subcontinent, with all remaining native states accepting the East India Company as the "paramount power" in India. Further territory was added to British India in the following decades by means of conquest, accusing the native rulers of "misrule" and, controversially, by refusing to recognize adoptions and annexing areas where the native ruler died without a natural heir.¹

Following the revolt of 1857, when Indian soldiers in the Company's army mutinied against their officers, the administration of India was taken over by the British Crown in 1858. Historians disagree as to whether the mutiny was a planned war of independence against British power or an uncoordinated uprising of soldiers who felt a threat to their religion and traditional practices (Spear, 2002), or simply a mutiny by soldiers who wanted increased pay and greater career opportunities (David, 2002). After some initial reverses, the British rallied and were able to suppress the mutiny by the end of 1858. A decision was made to stop further annexation plans, with the queen's proclamation of 1858 stating specifically, "We desire no extension of our present territorial possessions." British India thus comprised 55% of the total area of the Indian subcontinent (excluding Burma and Sind) and about 77% of the total population in 1911.

The Act of 1858 set up a system of government centred in Whitehall, authorizing the Secretary of State in England with overarching powers, including the "superintendence, direction

¹ See Iyer (2010) for details of these different modes of annexation, and Bowen (2008) and Stern (2012) for detailed analyses of the East India Company's administrative and political arrangements.

and control of all acts, operations and concerns which relate to the government or revenues of India, and all grants." The "Viceroy and Governor-General" was the Crown's representative in India, reporting to the Secretary of State. The Viceroy was advised by an Executive Council, whose strength was increased from four to five by the Indian Councils Act of 1861, with the possibility of 6-12 additional members for strictly legislative purposes. Provincial Governors had the power of making laws for issues related to the provinces; however, their powers were subordinate to those of the Governor-General. Administration was entrusted to a newly created Indian Civil Service (ICS), in which the entry of Indian officers was (very) gradually permitted over time.

B.2. Precursors to Direct Democracy: Making "Common Cause" with the People of India

Political figures in England soon became concerned with the political and administrative future of India. Prime Minister Gladstone was a strong advocate of having a more inclusive government, stating in 1878: "Let us only make common cause with her people: let them feel that we are there to give more than we receive;...Unless we can produce this conviction in the mind of India, in vain shall we lavish our thoughts and our resources upon a merely material defence..." Concerns about the growth of local political organizations led to the creation of the Indian National Congress by Allan Octavian Hume as a venue for the expression of Indian demands. The first session of the Congress was held in Bombay in 1885, where the main demands were for the enlargement of legislative councils and their powers, simultaneous examinations for the ICS in India and in England, and other administrative reforms.

Following Viceroy Dufferin's minute in November 1888, which stated that the "time has come to give a still wider share in the administration of public affairs to ... Indian gentlemen," the Indian Councils Act of 1892 was passed. This Act increased the strength of legislative councils in the central government and in the provinces, and introduced some representation of Indian interests by stating that the majority of non-official seats should be filled on the recommendation of such bodies as municipalities, district boards, chambers of commerce and universities. However, the term "election" was sedulously eschewed (Menon, 1957). These councils had the right to ask questions and to discuss, but not vote upon, the budget.

The rise of "extremist" elements within the Congress, notably Tilak's demand for *swaraj* (home rule) and *swadeshi* (boycott of British goods), and the extreme unpopularity of British actions like the partition of Bengal province in 1905, led the colonial government to think about

further measures of devolution of power to Indians. Viceroy Minto stated: "The political atmosphere is full of change; questions are before us which we cannot afford to ignore, and which we must attempt to answer; and to me it would appear all-important that the initiative should emanate from us, that the Government of India should not be put in the position of appearing to have its hands forced by agitation in this country or by pressure from Home..." At the same time, the Muslim community began to mobilize politically, with the Aga Khan visiting the Viceroy and the establishment of the All-India Muslim League in 1906. One of the Muslim League's objectives was "to protect and advance the political rights and interests of the Musalmans of India," as part of which many Muslims were in favor of separate electorates and reserved seats for Muslims in councils.

The Indian Councils Act of 1909 (also known as the Minto-Morley reforms) provided for greater inclusion of Indians into government by expanding the size of councils at both the centre and provincial levels, though officials and nominated members continued to be in the majority. The principle of elected members was introduced for the first time, with non-official members of these councils being elected indirectly by groups of local bodies, landholders, trade associations and universities. Muslims were given separate representation in the provinces of Madras, Bombay, Bengal, United Provinces and East Bengal & Assam. The powers of the councils were expanded only slightly: they could now discuss the budget, propose and vote on resolutions (which the Viceroy could overrule), and ask supplementary questions. It was the reforms of 1919 that introduced directly elected representatives for the first time.

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