

Like father, like son? The economic impacts of political dynasties*

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Abstract

Democratisation was intended as a move away from hereditary rule, but political dynasties are present in more than 70% of democratic countries today. Despite their ubiquity, we have limited understanding of how political dynasties affect economic development. Bequest motives may encourage dynasts to make long-term development investments that regular politicians would not; but if dynastic descendants inherit significant electoral advantage, dynastic politics could weaken the ability of elections to select and incentivise politicians. We compile data on family connections for the universe of Indian MPs since independence, and document high and growing levels of dynasticism. 35% of villages have experienced dynastic rule since independence, but politicians who have a son are twice as likely to establish a dynasty, generating quasi-random variation in where dynasties arise. Dynastic rule has a small but negative long-run impact on earnings, asset ownership and educational attainment. Exploiting constituency boundary that result in differential exposure to founders and descendants, we decompose the small net effect of dynasties into positive founder effects and negative descendant effects. We use a close elections RD design to further show that descendant-ruled areas have slower night-time lights growth, worse public good provision, and are assessed by voters to be worse governed. Descendants inherit significant political capital from their predecessors and their poor performance appears driven by moral hazard: their vote shares are unrelated to their in-office performance and they exert less effort.

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1 Introduction

Democratisation was intended as a move away from hereditary rule, yet political dynasties are present in more than 70% of democratic countries¹. Politics is both an important and unusual occupation: it is significantly more dynastic than most other occupations, and also affects the incentives of many agents in the economy. Despite their ubiquity, we have a relatively limited understanding about how political dynasties shape economic development. In this paper, we attempt to (i) provide well-identified evidence on the economic impacts of dynastic rule in the short- and long-run; (ii) understand the mechanisms that drive these effects and (iii) suggest a theory for why dynasties may persist even when they underperform.

Economic theory makes ambiguous predictions about the consequences of dynastic rule. Dynasts differ from regular politicians in that they inherit and bequest political capital across generations. On the one hand, bequest motives might lengthen the time horizon of dynastic politicians — as they do with family firms — and incentivise them to make long-term investments that regular politicians would not (Burkart, Panunzi and Shleifer 2003). This might be good for development. On the other hand, if dynastic descendants inherit political capital that gives them large electoral advantages — a prominent name, a positive reputation, a powerful network, a party machine — then dynastic politics could lead to adverse selection (by encouraging “lemon dynasts” to seek office) and moral hazard (by dampening the performance incentives of dynastic incumbents). This would be bad for development.

We study empirically the economic effects of dynastic rule in India, where democracy is robust, elections are regular and competitive, and dynasties are salient. We compile novel data on the family connections of the universe of Indian MPs since independence and on the universe of candidates for public office since 2003. We document high and growing levels of dynasticism in Indian politics: nearly 10% of MPs are children of former officeholders, up from 2% in 1960, and almost 4500 times higher than random chance would predict. 35% of villages in India have experienced dynastic rule since independence, but variation in the gender composition of MPs’ children provides quasi-random variation in where dynasties arise. Given the barriers that women face in entering politics in a patri-

¹I classify countries as democratic or non-democratic based on the *Economist Intelligence Unit’s* democracy index, and say it has a political dynasty if it had a head of state from a political family

archal society like India, incumbents without sons may not have heirs. We see that this is empirically the case: politicians with a son are twice as likely to establish a dynasty compared to politicians without a son. Hence, areas represented in the past by incumbents who had a son are more likely to have experienced dynastic rule: an additional year of being ruled by an incumbent with a son raises the probability of dynastic rule by 1.6pp.

We exploit this exogenous variation to study the long-run impacts of dynastic rule. We find that a longer period of dynastic rule has negative and statistically significant but economically small effects. The share of a village's population that earns less than Rs 5000 (US\$85) per month increases by 0.14pp, the share living in brick houses decreases by 0.5pp, and vehicle and phone ownership decreases by 0.2pp. However, these small net effects are the result of large positive founder effects and large negative descendant effects that offset each other.

To further probe these mechanisms behind these results, we look at the in-office performance of present-day (potential) founders and dynasts. To estimate the effects of descendant rule, we use a close elections RD design comparing constituencies where a descendant narrowly won to those where she narrowly lost. Our main baseline result is that descendant rule negatively impacts local economic development in the short run. Descendant-ruled constituencies experience 6.5pp (~0.2 std dev) slower night-time lights growth during the term in office, and this result is robust to comparing border villages in the same administrative district but different political constituencies. Public good provision also worsens (~0.14 std dev) and descendants are rated by voters to perform worse (~0.28 std dev). Descendant underperformance does not appear to be driven by a left-tail of "lemon" descendants who win in marginal races. Descendants and non-dynasts in close races appear relatively similar on observable characteristics, and non-dynasts outperform descendants at all points of the performance distribution. Second, we find that close family—sons, daughter and wives—are the worst performing dynasts

Why do descendants underperform but remain so over-represented in political equilibrium? We argue that our results are most consistent with a model of dynastic politics where founders derive utility from their offspring holding political office. These bequest motives encourage would-be founders to perform better in office in order to create a good reputation that their offspring can inherit. Our

results suggest that a significant amount of political capital appears heritable: the father-child vote share correlation is 0.84, giving descendants of popular founders large electoral advantages. Bayesian voters do not update immediately upon receiving a bad performance signal from a descendant, believing that this is just a bad draw from a good politician. This creates moral hazard and allows descendants to persist in office for several periods despite delivering little in the way of development. The vote shares of descendants are uncorrelated with their in-office performance, and they appear to put less effort.

Our argument and findings relate to a small but growing literature on political dynasties, summarised recently by Geys (2017). This literature has mostly focused on documenting that power begets power ie. that dynasties arise and persist due to factors other than familial variation in political acumen (Smith 2012; Querubin 2015, 2013). Dal Bó, Dal Bó and Snyder (2009) show that holding legislative office in the US House increases the probability that family members subsequently enter the House. Querubin (2015) and Rossi (2014) also find that holding legislative office raises the probability that one's relatives do, in the Philippines and Argentina respectively. Querubin (2013) shows that institutional measures like term limits which do not tackle the underlying source of dynastic power can be quite ineffective at reducing persistence. Fiva and Smith (2018) show that intra-party networks may explain dynastic persistence, and Smith (2018) demonstrates that electoral rules and party structure significantly influence where dynasties arise and persist. Tantri and Thota (2018) study the performance of descendants in India, and also find that marginal dynasts underperform relative to regular politicians.

The remainder of the paper is organised as follows. Section 2 contains background on political dynasties in India. Section 3 describes the data used. Section 4 outlines the empirical strategy. Section 5 presents our main results. Section 6 discusses mechanisms. Section 7 proposes a theory that is consistent with our main facts, and Section 8 concludes.

2 Background

This paper considers dynasties in India for several reasons. First, despite being robustly democratic — it has held regular, free and fair elections almost without interruption since independence in 1947² — political dynasties are salient. All but 2 of India’s 14 Prime Ministers have founded a political dynasty; and $\frac{1}{3}$ of party leaders and Chief Ministers are descendants of former politicians. Perhaps the most well-known of these dynasties is the Nehru-Gandhi family that has spawned 3 Prime Ministers and 14 elected officials over 5 generations. 2019 will mark the 100th anniversary of the family’s holding leading positions in the Indian National Congress, the country’s oldest party. Second, MPs are elected in single-member districts by plurality rule, and have both a legislative and constituency development role. They receive discretionary untied funds for local area development, and chair quarterly meetings with local bureaucrats to assess the progress of local development projects and the implementation of government programs. . This paper focuses on MPs elected to the *Lok Sabha* — the lower house of India’s bicarmel national legislature — and on MLAs elected to the various state assemblies. Each term lasts 5 years (or until the parliament is dissolved) and there is no term limit. Third, empirical research on political dynasties is often stymied by the difficulties of collecting data on family ties between politicians, and we are able to circumvent these challenges in ways I describe in the next section.

3 Data

3.1 Dynastic links

We exploit two data sources to identify dynasties links: first, we compile the biographical profiles of all MPs in independent India ie. since the first parliament in 1952³. These profiles contain the names of each MP’s father, mother and spouse; the number of sons and daughters she has, as well as other personal and professional details. We code an MP as a dynastic descendant if her father, mother or spouse previously held a Lok Sabha seat or a position in the Imperial Legislative Council — a British-

²The interruption was due to the imposition of Emergency Rule in the late 1970s.

³specifically the Lok Sabha, the elected lower house of the bicarmel legislature.

era assembly consisting of both nominated and elected members — after 1862. We code an MP as a founder of a political dynasty if her son, daughter or spouse won a Lok Sabha seat in a later period.

To understand whether dynastic candidates inherit electoral advantages, we need to know the dynastic status of all candidates, not just winners. To collect this information, we exploit the fact that all candidates for public office in India since 2003 must file affidavits containing their father's or spouse's name, as well as their educational qualifications, outstanding criminal charges and assets and liabilities. We digitise, scrape, clean and merge over 105,000 nomination papers, and construct dynastic connections for the universe of Indian politicians in national and state assembly elections from 2003.

Both these methods likely underestimate the share of dynastic politicians, both (i) because they overlook family ties other than parental and spousal links (eg. nephews and brothers would be classified as non-dynasts); and (ii) the first method does so particularly because it neglects familial ties to officeholders in the state assemblies (since we only focus on the national parliament).

We verify both these procedure of identify dynastic links by conducting biographical research on winners and runners-up in close races to the Lok Sabha from 1999-2014 and by verifying our classification of politicians with the journalistic work of French (2011).

3.2 Length of dynastic rule

We link 3 sources of data to construct village-level measures of exposure to dynastic rule. First, we spatially link present-day villages from the Indian Census with the parliamentary constituencies it falls under. Second, we identify whether the representative of each constituency in each year was a founder or descendant of a political dynasty. This enables us to construct measures of the length of dynastic rule that each village is exposed to over time. Constituency boundaries have changed 3 times since 1952, with an independent Delimitation Commission tasked with redrawing the boundaries at regular, pre-specified intervals. This gives us within-constituency variation in whether villages are exposed to founders and descendants. Table 3 shows that 35% of villages have been ruled by some political dynasty since independence, with the average village having a dynasty for 10% of years. However, conditional on having a dynasty, the average share of years under dynastic rule is 30%.

3.3 Economic outcomes

Income and Asset ownership

We compile an individual-level asset census for all rural households in India which contains detailed information on the ownership of certain observable assets, such as a mobile phone, a vehicle and characteristics of the house such as wall and roof type. We collapse this data at village-level for the 554,000 villages available, and use these characteristics to construct measures of poverty.

Night light intensity

Night time luminosity is increasingly being used as a proxy for local economic activity. The data come from images taken by NASA satellites of the world at night, and each grid is assigned a score of 0-63 based on the level of brightness. The advantages of this data are that they are an annual panel, and can be cut at any spatial dimension. For example, in this paper, we use both constituency-level average light intensity and village-level light intensity as proxies for local economic activity. Henderson, Storeygard and Weil (2012) pioneered this literature and it has also been used by Costinot, Donaldson and Smith (2016) to measure agricultural productivity. 7 and 8 illustrate how India has generally become brighter over the last two decades, reflecting the rapid economic growth that has taken place during this period. Table 4 shows summary statistics for night time lights.

Public good provision

Our measures of public good provision come from the village amenities tab of the Indian Census. We construct indexes of public good availability by category according to the following procedure: we first create a z-score for each constituent public good measure in the category's public good index. The index is then the average z-score of its constituent variables. For example, the education index is based on 5 variables – the availability of government pre-primary, primary, middle, secondary and senior secondary schools. A z-score is calculated for each of the 5 variables, and the education index is the average of these 5 z-scores.

Voter perceptions

The voter perceptions data comes from a survey administered by the Association for Democratic Reform (ADR) shortly before the 2014 Lok Sabha elections. ADR is an NGO that advocates on issues to help deepen and improve the functioning of democracy in India. ADR filed the public interest litigation that culminated in the Supreme Court ruling that mandated all candidates for public office to submit affidavits disclosing their criminal charges, educational qualification, and assets and liabilities when they submit their nomination papers. ADR's survey on politician performance allows us to measure the performance of MPs elected in 2009. In the survey, voters were asked to rate how important on a scale of 1-3 each of 30 separate issues were, and then were asked to rate their MP's performance of each issue. Voters were also asked other perceptions questions such as whether they thought their MP was powerful and whether he or she spent generously during the elections.

3.4 Descriptive facts about political dynasties in India

We present 4 stylised facts about dynasties in India. First, we document that political dynasties have become more prevalent in India over time. Figure 1 shows that the share of dynastic MPs has grown over time — from 1.1% in 1952 to 8.0% in 2014 — even as democracy has matured and deepened in India. Figure 2 shows that this pattern is driven by higher shares of dynastic politicians in new cohorts rather than dynasts from old cohorts lasting longer in politics.

3 and 4 show that on average nearly 4% of candidates and 10% of winners are dynasts. This average figure masks substantial variation across states from 12% of candidates being dynastic in Punjab to just 2.1% in Tamil Nadu. Contrary to popular perception, there are fewer differences across parties in the fraction of dynastic candidates. Both the Congress party (predictably) and the BJP (perhaps more surprisingly) have a similar fraction of dynastic candidates.

Figure 5 shows that there is generally low intergenerational mobility in Indian politics. Table 1 here is a strong correlation between the vote shares of fathers and children and 6 shows significant variation in intergenerational mobility across states, rather like Chetty et al show variation in social mobility across counties in the US.

Dynastic links Table 2 shows the links that dynastic descendants have with their predecessors. The overwhelming majority of political dynasties (80%) are founded by fathers; only 12% are founded by mothers and spouses account for only 9% of dynastic descendants. Most dynastic descendants also share some political link with their predecessor: 49% represent the same constituency, 52% represent the same party family⁴, and 70% of dynastic descendants share either a constituency or party link.

4 Empirical strategy

4.1 Sons instrument

To credibly identify the effects of political dynasties on development outcomes, we need plausibly exogenous variation in where dynasties arise. Women face significant barriers to entering politics in India — nearly 90% of candidates are male — so if an incumbent does not have a son, he may not have a suitable heir. This does not imply that no daughters enter politics — in fact, Indira Gandhi, the subcontinent’s first female Prime Minister, was daughter of Jawaharlal Nehru, India’s first Prime Minister. The claim is merely that having a son increases the probability of founding a dynasty.

Table 20 shows that incumbents who have a son are 3.8pp more likely to found a dynasty. The baseline probability of founding a dynasty is quite low — only 1.6% of politicians do so, hence the marginal increase in probability of having a son is significant. It doubles the probability of founding a dynasty. We exploit this variation to study the long-run impacts of dynastic rule.

We also exploit the fact that changes in constituency boundaries generate variation in (even neighbouring villages’) exposure to founders and descendants. This will enable us to decompose the net effect of dynastic rule into a founders effect and a descendants effect.

4.2 Close elections RD design

To empirically assess the consequences of dynastic rule, we compare the economic outcomes of constituencies where dynasts narrowly win to those where dynasts narrowly lose. A naive comparison

⁴either the same party or a splinter group of the parent party.

of dynasts against non-dynast candidates is likely to result in bias: it would capture confounding factors that are correlated with being dynastic and affect recontesting decisions. For example, dynasts may be wealthier (observable) and have stronger political networks (unobservable), factors that may affect MP performance. Dynasts may also run disproportionately in poorer areas, which would also result in bias. To address these identification concerns, we use a regression discontinuity (RD) design on a sample of closely contested elections.

This strategy is based on the idea that very close elections are determined in part by essentially random components. There is empirical support for the notion that close elections make good natural experiments so long as there is covariate balance in the neighborhood of the discontinuity (Eggers et al. 2015; Lee 2008; Imbens and Lemieux 2008). We restrict the sample to close elections and estimate non-parametric RD regressions using the dynastic victory margin (positive if dynast wins, negative if they lose) as the running variable. The close election RD assumptions imply that dynasts are essentially randomly assigned to constituencies in close elections.

We estimate a regression of the form:

$$Y_{c,t+1} = \alpha + \beta \cdot \text{Dynast win}_{it} + f(\text{Dynastic win margin}_{ct}) + \text{Controls} + \varepsilon_{it}$$

where Dynast win_{ct} is a dummy variable equal to 1 if a dynast defeats a non-dynast in constituency c at time t . The coefficient β captures the effect of dynastic rule on economic outcomes over the election cycle. The function f is a flexible function of the running variable – $\text{Dynastic win margin}_{ct}$, which equals the vote share of the dynast less the vote share of the non-dynast. The identifying assumption requires that all covariates must be smooth at the cutoff. We focus on races where either the winner or runner-up is a dynast but not both. The counterfactual would be unclear if we included races where the top two candidates were dynasts. Figure ?? shows that there is balance in pre-treatment light intensity – ie. dynasts do not win in systematically brighter (economically developed) or darker (economically backward) constituencies. This is an important sanctity check for the RD design, because it tells us that if dynast-ruled places are faring worse, it is not because worse places are more likely to elect dynasts. Figure 9 shows that there is also balance in pre-treatment trends ie. that dynasts do

not win in places where light intensity is growing faster or slower over the previous 5 years (ie. the previous election cycle). This is also a sanctity check for the RD design, because it provides evidence against the view that declining areas elect dynasts or that mean reversion could explain the result that dynast-ruled places far worse. Finally, 10 shows that dynasts do not win in either larger or smaller constituencies.

5 Results

5.1 Long-run effect of political dynasties

5 presents our main results on the net long-run effects of dynastic rule. The first row contains the OLS estimates, while the 2nd row contains the IV estimates. Several points are noteworthy. First, the IV estimates are generally larger and more negative than the OLS estimates. This suggests that there is upward bias in the OLS estimates ie. that dynasties tend to arise in better places. Second, the net effect of dynastic rule appears is consistently negative; however, the effect sizes are economically very small. Third, this net effect is due to the canceling out of founder and descendant effects, which are both sizeable and opposite in sign. For example, dynastic rule reduces the probability of living in a brick house. This effect is statistically significant at the 5% level but is only 0.5pp in magnitude. However, this is due to the offsetting positive effect of founders' rule (which actually increases the probability of living in a brick house by 8pp) and the negative descendant effect (which reduces the probability of living in a brick house by 11pp). It is striking that founders and descendants effects have opposite signs for every outcome.

5.2 Economic growth

We now present baseline results on the economic impacts of dynastic rule using night time luminosity as a proxy for local economic activity. We report estimates for RD regressions where the dependent variable is the growth in night-time luminosity in a constituency over the election cycle, and the running variable is the dynastic vote margin (the difference in vote shares between the dynastic and non-

dynastic candidate). RD estimates are reported for 3 bandwidths: the optimal Imbens-Kalyanaraman bandwidth, 50% of this value and 200% of this value. Figure 11 plots the RD graph for the IK bandwidth. Our baseline result, shown in table 7, is that dynastic rule results in slower growth of night time luminosity. Column (1) shows that dynastic rule lowers night time light growth by about 6.6 pp per year. Table 4 tells us that the std deviation of night-time lights growth is 28.8 pp, so dynastic rule lowers growth by approximately 0.22 std deviations. This effect is sizeable: it is roughly the difference in growth between a constituency at the 50th percentile of the lights growth distribution (like Mysore) and a constituency at the 5th percentile (like Dhar in Madhya Pradesh). Columns (2) and (3) show that changing the bandwidth to 50% and 200% of the IK-level does not change the point estimate much, but we lose statistical significance when the bandwidth is reduced to 2.07 pp (ie. 50% of IK level) as the smaller sample yields less precise estimates.

To conduct a robustness check of our baseline results, we exploit a quirk about India, namely the fact that parliamentary and administrative borders generally do not overlap. Hence neighbouring villages may be in the same administrative district and even subdistrict – and hence tended to by the same bureaucrats – but lie in different political constituencies. We exploit this variation, running the RD regression at village-level rather than constituency-level. Moreover, we restrict attention to only those villages which are $\leq 2km$ from a constituency border. If there were some difference between constituencies where dynasties win and lose that was driving the observed negative effects of dynastic rule, including district and subdistrict FEs would control for that variation. Furthermore, figure 15 shows that there is balance in pre-treatment growth trends in night lights growth between treated (ie. dynast-ruled) villages and control (ie. non-dynast ruled) villages.

Figure 12 presents results from this village-level RD regression. Visually we can see that the results complement those from the constituency-level RD regression and demonstrate a negative effect of dynastic rule on night lights growth. 13 shows that varying the RD bandwidth from 5% to 3% has no effect on either the magnitude of the coefficient or its precision, while reducing the bandwidth further from 3% to 1% makes the coefficient more negative but greatly increases the noise. Next, we include district and subdistrict fixed effects to control for unobserved district-level factors that affect night time lights growth, such as the quality of bureaucrats, geographical factors that affect the po-

tential for economic growth, or historical institutions such as the type of land tenure system in the colonial period (Banerjee and Iyer 2005). Figure 14 shows that including district fixed effects leaves the point estimate virtually unchanged but increases standard errors, because the effective number of observations reduces, but the coefficient is still statistically significant at the 10% level. However, introducing subdistrict fixed effects, which is a very restrictive specification, marginally reduces the point estimate and increases standard errors so that the coefficient is negative but no longer statistically significant at the 10% level. Column (1) of table 8 tells us that dynastic rule reduces village-level night lights growth by 0.44 pp per annum on average. This is approximately 0.21 standard deviations, an effect size that is very similar in magnitude to the constituency-wide average effect. The effect size and statistical significance of the coefficient are similar in column (2), where the bandwidth is a dynastic victory margin of 3% rather than the 5% in column (1). In column (3), we shrink the bandwidth to 1%, and the effect size increases significantly to about 1 standard deviation, but is much less precisely estimated.

5.3 Public good provision

Night time luminosity is an increasingly used summary measure of local economy activity, and it has the advantages that it can be measured at any very fine levels of spatial disaggregation, and is measured monthly. However, we do face the criticism that elected MPs have no direct way in which to affect night time luminosity – other than perhaps through rural electrification programs (more evidence on this later). On the other hand, MPs do have leverage over public good provision. First, Indian MPs administer a Local Area Development Scheme (MPLADS), in which they have approximately US\$2m of discretionary funds to spend on any project in their constituency. This money comes with few strings attached and is usually spent on local infrastructure projects. Second, MPs are able to influence the behaviour of local bureaucrats. Existing work has shown that Indian bureaucrats responsible for local development respond to the incentives of their constituency's MPs, and are more responsive to powerful politicians and MPs from the ruling party (Nath 2015). Third, MPs can lobby the state or central government to target projects at their constituency, and politicians – like dynasts – with stronger networks or clout with the political establishment might be more able

to “pork barrel” spending in this way. One might therefore expect dynasts to be particularly effective in delivering public goods to their constituents.

We begin by conducting an RD balance check to see whether prior levels of public good provision are different in places where dynasts narrowly win an election compared to places where dynasts narrowly lose an election. Table 9 shows that for a wide range of public good provision outcomes, dynast-ruled and non-dynast ruled villages have similar prior levels of education, health, communications, transport, financial services, welfare, entertainment public goods and similar levels of electricity.

However, table 10 shows that dynastic rule worsens public good provision on nearly every measure. Most Indians study in public schools, so the availability of public schools in the village is important. Column (1) shows that dynastic rule has negligible impact on the education public goods index, which comprises the availability of government pre-primary, primary, middle, secondary and senior secondary schools. A large literature discusses systematic weaknesses in India’s primary healthcare infrastructure and agency problems in healthcare service delivery, particularly in the public sector, and suggests that these reasons may explain why India is a negative outlier in regressions of child health status on income (Chaudhury et al. 2006). Column (2) shows the effect of dynastic rule on the healthcare public infrastructure index, which comprises the respective number of community health centres, primary health centres, primary health subcentres, maternity and child welfare centres, tuberculosis clinics, dispensaries, mobile health clinics, family welfare centres, Integrated Child Development Scheme (ICDS) centres and nutritional (Anganwadi) centres. Dynastic rule worsens the healthcare index by 0.07 units, which is 0.15 standard deviations, taking a village at the 75th percentile down to the median value. Column (3) indicates that dynastic rule lowers the public health index, which comprises dummies for whether the village has treated tap water, closed drainage, any drainage, total sanitation program coverage, and a system of garbage collection, by 0.02 units or about 0.06 standard deviations.

Column (4) studies the effect on communications infrastructure – the availability of post offices, sub post offices, mobile coverage and internet cafes or services centres. Dynastic rule has no effect on this index. Column (5) examines effects on transportation public goods – the availability of public bus services and major, black topped and gravel roads. Dynastic rule reduces availability of these public

services by 0.11 units or 0.17 standard deviations. Column (6) studies the effect on financial services – presence of commercial banks, cooperative banks, and agricultural credit societies. Dynastic rule reduces availability of these services by 0.14 standard deviations. Column (7) studies social welfare infrastructure, proxied by the public distribution shops that sell subsidised goods like wheat, rice, sugar and kerosene. Dynastic rule reduces the availability of social welfare public goods by 0.15 standard deviations. The entertainment index comprises availability of community centres, sports fields and clubs, and cinema halls. Dynastic rule reduces this by 0.16 standard deviations.

Finally, we study the effect of dynastic rule on electricity provision. This is both an important outcome in itself and a potential explanation for slower night lights growth in dynast-ruled areas. The electricity index comprises power supply for domestic, agricultural and commercial use in summer and winter. We find that dynastic rule has no impact on this index, suggesting that slower night lights growth in dynast-held constituencies is due to other reasons, such as less economic activity in the area (which is the typical interpretation).

5.4 Voter assessment of politician performance

The previous sections illustrate how dynastic rule has negative effects on local economic activity and worsens public good provision on a number of dimensions. It is likely that voters care about these outcomes, but it is possible that dynasts perform significantly better on other aspects of governance that these outcomes do not capture. Our next measure of dynastic performance – voters’ self-reported assessments of their MP’s performance on various issues – does not suffer from this flaw. On the other hand, it is hindered by all the issues faced by subjective outcomes – priming, desirability effects, and so on, but one might perhaps expect these biases to favour political dynasties in several situations, causing voters to be biased towards giving dynasts good reviews. On the other hand, if dynasticism is viewed – like corruption, as ubiquitous but a social scourge – then voters might be biased against dynasts in their assessment.

We begin by presenting some summary statistics on voters’ preferences and assessments. Table 11 shows the importance that voters place on different aspects of an MP’s performance. Several things are noteworthy. First, voters seem to value broad-based general public goods the most highly – “bet-

ter employment opportunities”, “better public transport”, “better roads”, “better electric supply” and “drinking water” are the 5 concerns with the highest average rating. As a sanity check on the quality of the data, we find that rural voters do not care at all about urban issues like “traffic congestion” and “facilities for pedestrians” while urban voters do not care at all about rural issues like “agricultural loan availability” or “electricity for agriculture”. However, besides these, tables 12 and 13 show that there are surprisingly few differences on this between rural and urban voters. Even in rural areas, voters rate distributional issues like “subsidy for seeds and fertiliser”, “better price realisation for farm products” and “electricity for agriculture” as much less important than general public good provision. Moreover, surprisingly, there are no differences between general, OBC and SC/ST voters on the importance of reservation. If anything, there is evidence that general caste voters view the issue as more important.

Table 15 presents baseline results of the effects of dynastic rule based on voter assessments. Column (1) shows that voters assess dynastic politicians to perform significantly worse – by 0.28 score points, or 0.58 standard deviations, an effect that would take a politician performing at the median level and reduce him to a politician at the 32nd percentile. Column (2) shows that this effect is driven by non-coethnic voters (ie. voters of a different caste or religion) – the treatment effect is larger than in column (1), 0.37 score points or nearly 0.78 standard deviations. Column (3) shows that co-ethnic voters subjectively assess dynastic politicians to perform just as well as non-dynastic politicians. Note here that this is not simply a statement about ethnic bias in processing political information about performance, which other authors have documented, notably Adida et al. (2017). Columns (2) and (3) tell us that *only non-coethnics* think dynastic politicians are bad, which suggests that dynastic politicians are able to extract more loyalty from coethnics. It is possible that dynasts foster stronger clientelistic relationships, but we have no clear evidence of this.

Table 16 presents heterogeneous treatment effects, and generally shows that there are no significant differences along gender lines (columns 1 and 2), education (columns 5 and 6) and geographic location ie rural vs urban (columns 3 and 4).

6 Mechanisms

We now evaluate mechanisms that can explain our baseline result – ie. why is dynastic rule bad for development? We can broadly classify mechanisms into two categories – those which emphasise that dynasts are “bad types” (adverse selection) and those which emphasise how dynasts may have “bad incentives” (moral hazard).

6.1 Adverse selection

First, we consider whether dynastic and non-dynastic candidates differ in observable characteristics that could be responsible for their different levels of performance. We collect data on education, criminality and wealth from affidavits that candidates are mandated to file when they contest elections. Table 6 presents estimates from RD regressions of candidate characteristics against the dynastic vote margin. Figures 16 and 17 and column (1) of table 6 show that dynasts and non-dynasts have similar levels of education. Figures 18 and 19 and column (2) of table 6 show that dynastic politicians are neither more nor less likely to be criminal politicians. And column (3) of table 6 as well as figures 20 and 21 show covariate balance on wealth. This suggests that differences between dynastic and non-dynastic politicians in education, criminality and wealth are not responsible for the negative effects of dynastic rule. While we find balance on these covariates, it is of course possible that there is imbalance on other unobserved characteristics (eg. “leadership ability”) that materially affects governance.

Second, we consider the idea that our RD design finds that marginal dynastic winners underperform because they are “lemons”. Even being in a close election despite inheriting political capital from one’s father might be an especially bad signal about a dynast. If this story is responsible for our results, we should find that dynasts who win by large margins are less likely to underperform. Figure 30 suggests that non-dynastic MPs with higher vote shares perform better in office, but the in-office performance/vote share relationship is relatively flat for dynasts. Furthermore, 31 shows that dynasts perform worse than non-dynasts at all levels of the performance distribution; it does not seem that our baseline results are driven by a left tail of dynastic lemons being over-represented in the RD sample.

6.2 Political competition

Second, we examine whether dynastic victories affect political competition in subsequent elections. Recent work suggests that some portion of the incumbency advantage that is typically observed in many democracies may be due to a “scare-off effect”, where potential challengers are deterred from standing from a strong incumbent. It is possible that dynasts are perceived as having strong electoral advantages – name recognition and a family brand that the candidate can campaign and cash in on, resources from the party apparatus and loyalty from local party workers. We investigate whether there is evidence of a “scare-off” effect after dynastic victories. We use two measures of political competition – the number of candidates who contest and the victory margin (ie. the difference in vote share between the winner and runner-up) in each election. Figure 22 shows that there is no effect of dynastic victory in election t on the number of candidates who run in $t + 1$. Figure 23 shows that there is no effect of dynastic victory in time t on the vote margin in $t + 1$. These graphs provide evidence against the explanation that negative effects of dynastic rule are due to declining political competition as dynasties become entrenched after an initial victory.

6.3 Rent-seeking

Third, we investigate whether dynasts are more likely to use their position for rent-seeking. As discussed, dynasties may be able to use their clout and connections with the state machinery to divert resources and other programs and projects to their constituencies, but they may skim rent from these at the same time. Because all candidates for public office must file their assets and liabilities at each election, we are able to construct measures of personal wealth gain (of the candidate and his/her relatives) over the election cycle. We study whether dynasts have larger wealth gain on average. Figure 24 shows that there are on average no differences in asset gain between dynastic and non-dynastic MPs. This suggests that greater rent-seeking on the part of dynastic MPs cannot explain the negative effects of dynastic rule.

Fourth, dynasts may exert lower effort, because they are insured against political failure by familial control of the party. Even if they perform poorly, their family members may use their clout to

ensure they get a party ticket in the next election. We use measures of parliamentary participation to measure effort levels – attendance, questions asked, participation in parliamentary debates and sponsorship of private member bills. Figures 25-29 present the results. Figure 25 shows that there is no difference in parliamentary attendance between dynasts and non-dynasts. Figure 26 illustrates that if anything dynastic MPs ask more questions in parliament. Figure 27 shows that dynasts participate in fewer parliamentary debates non-dynast MPs, while Figure 28 shows no difference in the introduction of private member bills. Combining these various measures into an index of parliamentary effort (which is our preferred approach), we find that on average dynastic MPs do not exert more or less effort in parliament than non-dynastic MPs. Of course, we should be cautious in making welfare statements based on this result alone, as voters may value parliamentary representation more in some constituencies while other voters may appreciate the MP spending less time in parliament and more in the constituency. We also do not have data on the issues that MPs raise in parliament and whether these are germane to the interests of voters. However, with those caveats, we can say that we do not have prima facie evidence that the negative effect of dynastic rule is being driven by less effort exerted by dynastic MPs in legislative activities.

6.4 Politics within the family

Table 18 provides some evidence on the heterogeneity of governance quality within political families. Column (1) shows the baseline result that dynasts on average perform worse. Column (2) shows that immediate relatives – son, daughter, wife – perform even worse. By contrast, less connected dynasts – nephews, cousins, in-laws – perform similarly to non-dynasts. Figure shows that the underperformance of close relatives is across the distribution and not restricted to marginal winners.

6.5 Incentives

For various reasons, dynasts may inherit a vote base. For example, dynasts may inherit their predecessors' core voters regardless of how well they perform in office. Alternatively, dynasts may inherit a strong electoral machine that can deliver votes through targeted clientelism around election time.

This may mute a dynast's incentives to exert effort to deliver on development work. We test the idea that dynasts have lower electoral returns to performing well in office. Figure 33 shows that there is a positive relationship between votes in the next election and in-office performance for non-dynasts, but there is a very weak relationship for dynasts. The next 2 sections explore what sort of political capital dynasts might inherit that give them a stable vote base. We consider two sources for now—name recognition and a political network that can facilitate vote buying and other clientelist transfers.

6.6 Name recognition

Dynasts inherit a bundle of things from their predecessors – call this political capital – that confer electoral advantages. One of these things is a prominent name. Evidence from social psychology suggests that people are more likely to react positively to a name if they have heard it before. Arguably, name recognition would give politicians an electoral advantage allowing otherwise worse politicians to enter (adverse selection) and muting the incentives to perform well (moral hazard).

In this section we compare the electoral advantages of dynasts against another group of candidates who have name recognition amongst voters – celebrities. There is a regular supply of actors, actresses and sports stars – typically cricketers – in Indian politics, and we can compare their outcomes to those of dynastic candidates. Table 17 shows that celebrities do not seem to have large electoral advantages and do not appear to perform worse in office, while dynasts on average have an electoral advantage of 2.4pp and perform worse in office (based on the RD). However, the point estimates on both electoral advantage and in-office performance are similar for both dynasts and celebrity politicians, and we are unable to reject that both sets of coefficients are different.

6.7 Bequest motives

So far we have examined how the behaviour of dynastic politicians — politicians who have inherited political capital from familial predecessors — differs from non-dynasts. But the other salient feature of dynastic politicians is that they also bequest political capital across generations, and this may affect their incentives. In India, where women face significant barriers to enter politics — nearly 90% of

candidates and 80% of dynastic candidates are male — if an incumbent happens not to have a son, s(he) may not have an heir. We therefore expect bequest motives to be stronger for politicians with sons compared to those without sons. Consistent with this, table 19 shows that politicians with sons perform better while in office than those without sons. This effect is seen conditional on state and party fixed effects.

7 Theory

Our empirical results document a few key facts: (i) dynasts have electoral advantages and are over-represented in politics; (ii) dynastic descendants underperform while in office; (iii) bequest motives nudge potential founders to perform well. This section outlines a model that aims to explain these facts. It tries to formalise the idea that bequesting and inheriting political capital affects the incentives of dynastic politicians. The set-up extends the political agency framework developed by Besley and Coate (1997) by introducing some ideas from OLG macro models.

7.1 Set up

A polity consists of mass 1 of citizens, each of whom lives for 2 periods. In each period $t \in \{1, 2\}$, a politician is elected from the citizenry and must choose an effort level denoted by $e_t \in \{0, 1\}$. Citizens receive π if the incumbent chooses $e_t = 1$ and get 0 if she chooses $e_t = 0$. The incumbent is re-elected if she chooses $e_t = 1$ and is voted out otherwise.

Politicians are of 2 types — good and bad. Let f denote the proportion of good politicians in the polity. Good politicians share voters' objectives, while bad politicians aspire to use public office for private gain. Good politicians always choose $e_t = 1$ and thus receive $\pi + E$ in each period, where E denotes the legal returns — salary and other ego utility — from holding public office. Bad politicians stand to gain rents $r_t \sim U[0, R]$ if they choose $e_t = 0$. It is intuitive that bad politicians will always choose $e_t = 0$ in period 2. However, in period 1, bad politicians observe r_1 and then strategically choose effort levels to maximise private returns over the 2 periods. In particular, $e_1 = 1$ if $r_1 < \beta(E + \frac{R}{2})$ and $Pr(e_1 = 1) = \frac{\beta(E + \frac{1}{2}R)}{R(1 + \frac{\beta}{2})} = \lambda$. Unsurprisingly, bad politicians are more likely to

exert effort in the first period if they are more patient and political office confers higher legal returns.

7.2 Bequest motives

Each politician has 1 offspring who is of the same type as the parent. Parents receive warm-glow utility δE (where $\delta < 1$) when their children hold political office. This feature does not affect the in-office behaviour of good politicians, but it lengthens the time horizon of bad politicians and can discipline their behaviour in period 2. Specifically, whereas previously $Pr(e_2 = 1|bad) = 0$, now bad politicians exert effort in period 2 if $r_2 < p\delta E$ which occurs with probability $p\delta E$. p denotes the likelihood that the offspring of a politician is elected conditional on her behaving well during her two terms in office. We concentrate below on the case where there is no uncertainty about incumbent performance and no popularity shocks so $p = 1$.

7.3 Voters

Voters are of two types – informed and uninformed. Let ω denote the fraction of uninformed voters in the polity. Informed voters observe the incumbent's performance (ie. whether $e = 1$ and the public good has been provided) and vote accordingly. If the election is between two fresh politicians, informed voters choose the politician that is more likely to be a good type. Uninformed voters do not observe incumbent performance and vote the same way as their parents.

Uninformed voters always vote for a dynastic politician (ie. the offspring of an incumbent who performed well and was therefore re-elected by their parents). Informed voters also always elect a dynastic politician, since they judge that she is more likely to be a good type than a random draw from the distribution of politicians.

$$Pr(\text{good dynast} | e_2 = 1) = \frac{f}{f + (1-f)pB} > f$$

7.4 Moral hazard

Dynastic politicians inherit a set of loyal voters thanks to uninformed voters blindly following the decisions of their parents. We can think of this as representing how goodwill generated by favourable decisions by a politician can persist over a generation. If $\omega > \frac{1}{2}$, it is clear that dynastic politicians will get re-elected regardless of their performance and will thus choose $e_1 = 0$. If $\omega < \frac{1}{2}$, dynastic politicians must still persuade some informed voters to re-elect them. With no uncertainty about performance and no other randomness in voting, informed voters will always vote out a politician who chooses $e_1 = 0$.

7.5 Introducing electoral uncertainty

It is clear that dynastic politicians do not experience moral hazard unless the set of uninformed voters is extremely large. However, when we introduce mild electoral uncertainty due to an aggregate popularity shock and an idiosyncratic voter taste shock — both standard in the probabilistic voting model used by Persson and Tabellini (2002) — we find that the incentives of dynastic politicians are dampened in a larger set of cases.

In particular, now assume that there is an aggregate popularity shock $\delta \sim U[-\frac{1}{2\psi}, \frac{1}{2\psi}]$ that all voters face as well as an idiosyncratic shock $\mu \sim [-\frac{1}{2}, \frac{1}{2}]$ that affects the calculus of each informed voter. Now the incumbent wins if $\omega + (1 - \omega)[\pi(\Delta f)] > 0$, where $\Delta f = \frac{f(1-f)(1-\lambda)}{f+(1-f)\lambda}$ is the increase in voters' subjective belief that the incumbent dynast is a good type after observing $e = 1$ relative to a random draw from the politician distribution.

If the incumbent chooses $e = 1$, her expected returns are

$$E + Pr(win|e = 1) \cdot \beta[E + \frac{1}{2}R]$$

If she chooses $e = 0$, her expected returns are

$$E + Pr(win|e = 0) \cdot \beta[E + \frac{1}{2}R]$$

The key term is the difference in win probabilities conditional on the dynastic incumbent’s period 1 action, which is negatively related to the size of the uninformed voter population ω . Hence, the dynastic incumbent will choose $e_1 = 1$ iff

$$r_1 < \frac{\psi[\pi(\Delta f)]\beta[E + \frac{1}{2}R]}{\omega}$$

As such, as uninformed voters make up a larger proportion of the electorate, we should expect dynastic incumbents to face greater moral hazard and perform worse.

7.6 Discussion

This model provides a theoretical structure that can rationalise several empirical findings from the paper, namely that (i) bequest motives can motivate better in-office performance, (ii) dynastic politicians have electoral advantages, and (iii) dynastic descendants perform worse in expectation as they have weaker performance incentives. A key weakness of the model is the fact that voters rationally choose dynastic politicians expecting that they will perform better — because, as the offspring of good performing incumbents, they are likely to be positively selected relative to a random newcomer politician. Yet these rational voters neglect the moral hazard that dynasts face and hence systematically make suboptimal choices.

8 Conclusion

Political dynasties are present in over 145 countries around the world, yet we have limited understanding of how they affect economic development. Economic theory is ambivalent: dynasts may behave more like “stationary bandits” and this longer time horizon may encourage greater investment in their constituencies. But dynasts may also inherit significant electoral advantage and weaken the ability of elections to hold them accountable. We compile novel data on the universe of Indian MPs since 1952 and the universe of Indian politicians from 2003, and document high levels of dynasticism and low intergenerational mobility in Indian politics. Nearly 35% of villages in India have

experienced dynastic rule since independence, but politicians with a son are twice as likely to establish a dynasty. We exploit variation in the gender composition of MPs' children, which creates quasi-random variation in where dynasties arise. We find that the net long-run effect of dynastic rule is negative but economically small. This is because it is the result of positive founder effects and negative descendant effects. Using a close elections RD design, we find that dynastic rule has negative impacts on local economic development in the short run: night time luminosity growth slows by 0.12 std dev per year, public good provision is worse, and voters assess dynastic MPs to perform worse, particularly non-coethnic voters. These results are not driven by a left-tail of dynasts who are drawn into marginal races; rather, the performance distribution of dynasts is first-order stochastically dominated by that of non-dynasts. Close family are the worst-performing dynasts. We also find that dynasts seem to have weaker performance incentives—their vote shares in subsequent elections are less correlated with in-office performance today than is the case for non-dynasts. In this way, inheriting political capital may mute the performance incentives of dynastic politicians.

Our results are most consistent with a theory of dynastic politics in which founders have bequest motives but the inheritance of political capital by descendants creates moral hazard and leads to underperformance. Future work on political dynasties could study the factors that break the dynastic equilibrium.

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Figure 1: Prevalence of dynastic candidates across states

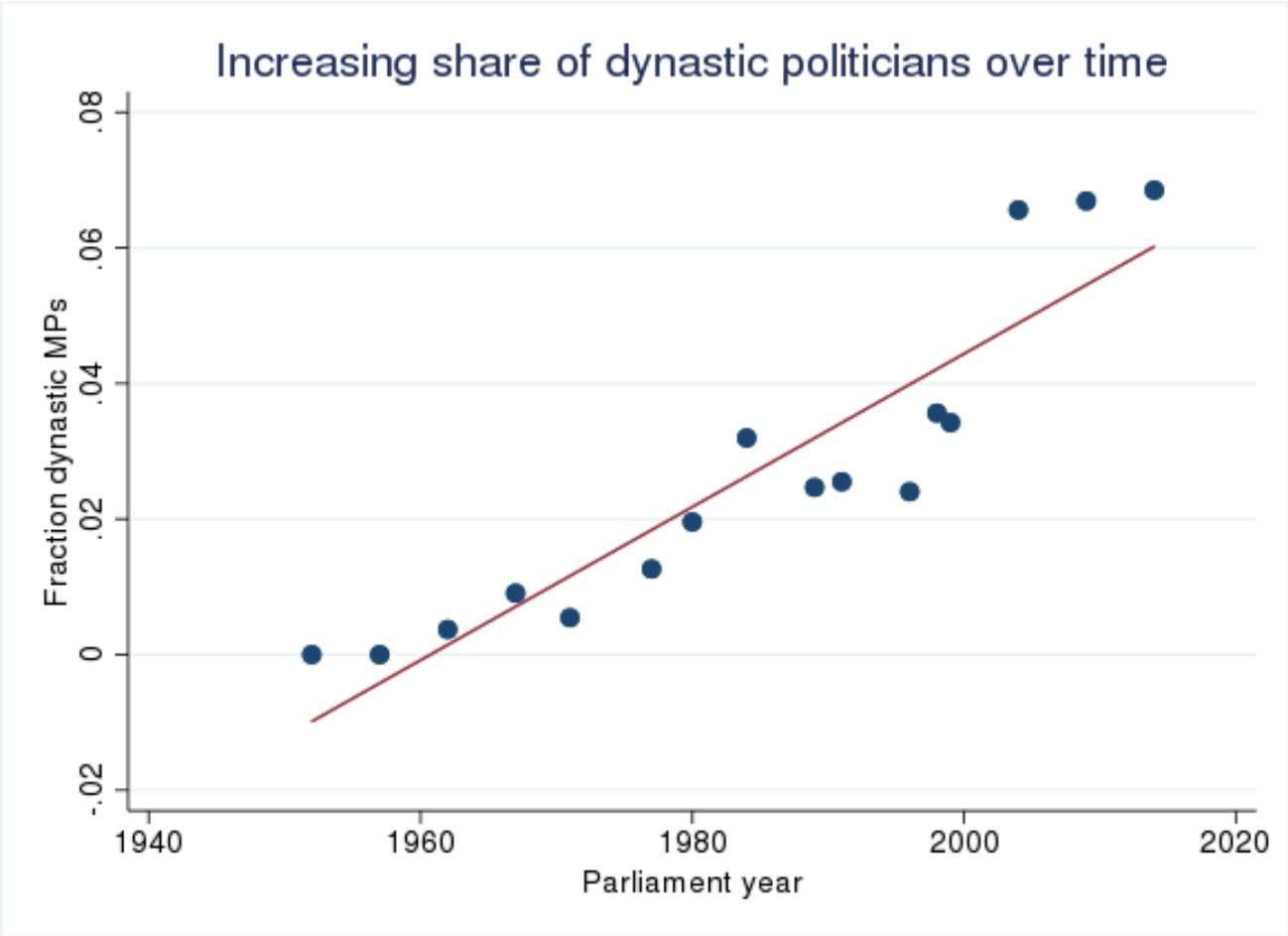


Figure 2: Prevalence of dynastic candidates across states

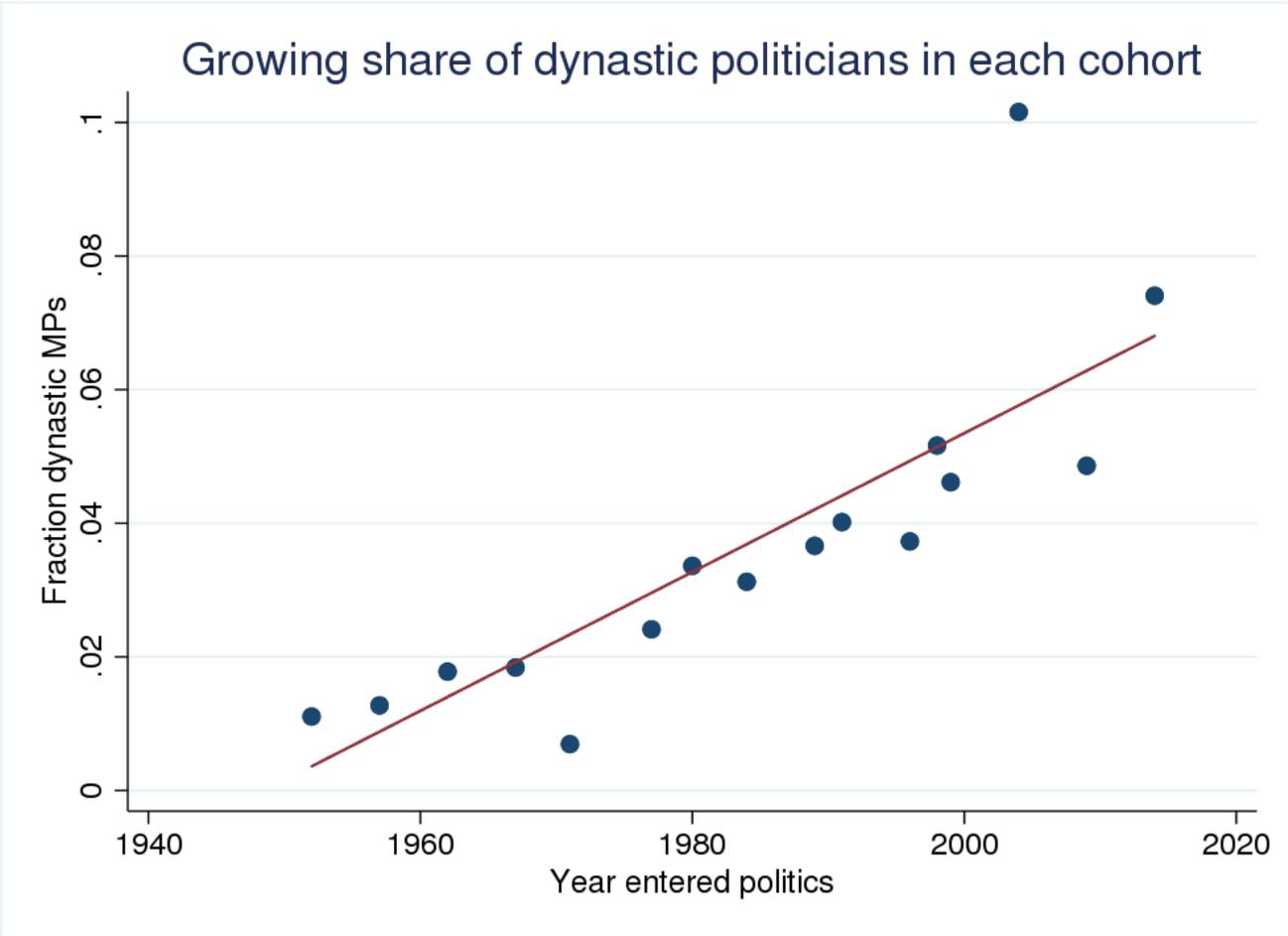


Figure 3: Prevalence of dynastic candidates across states

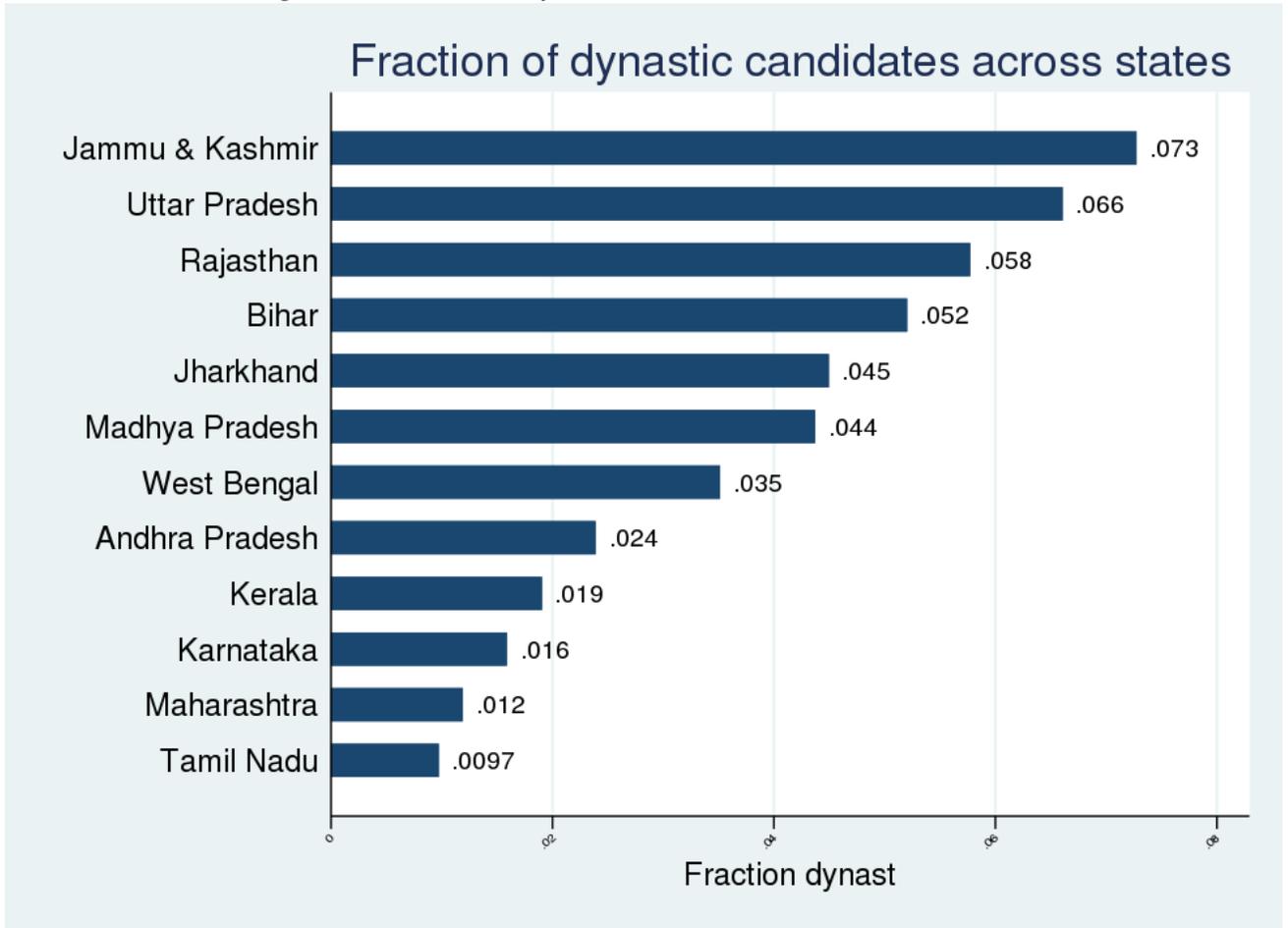


Figure 4: Prevalence of dynastic winners across states

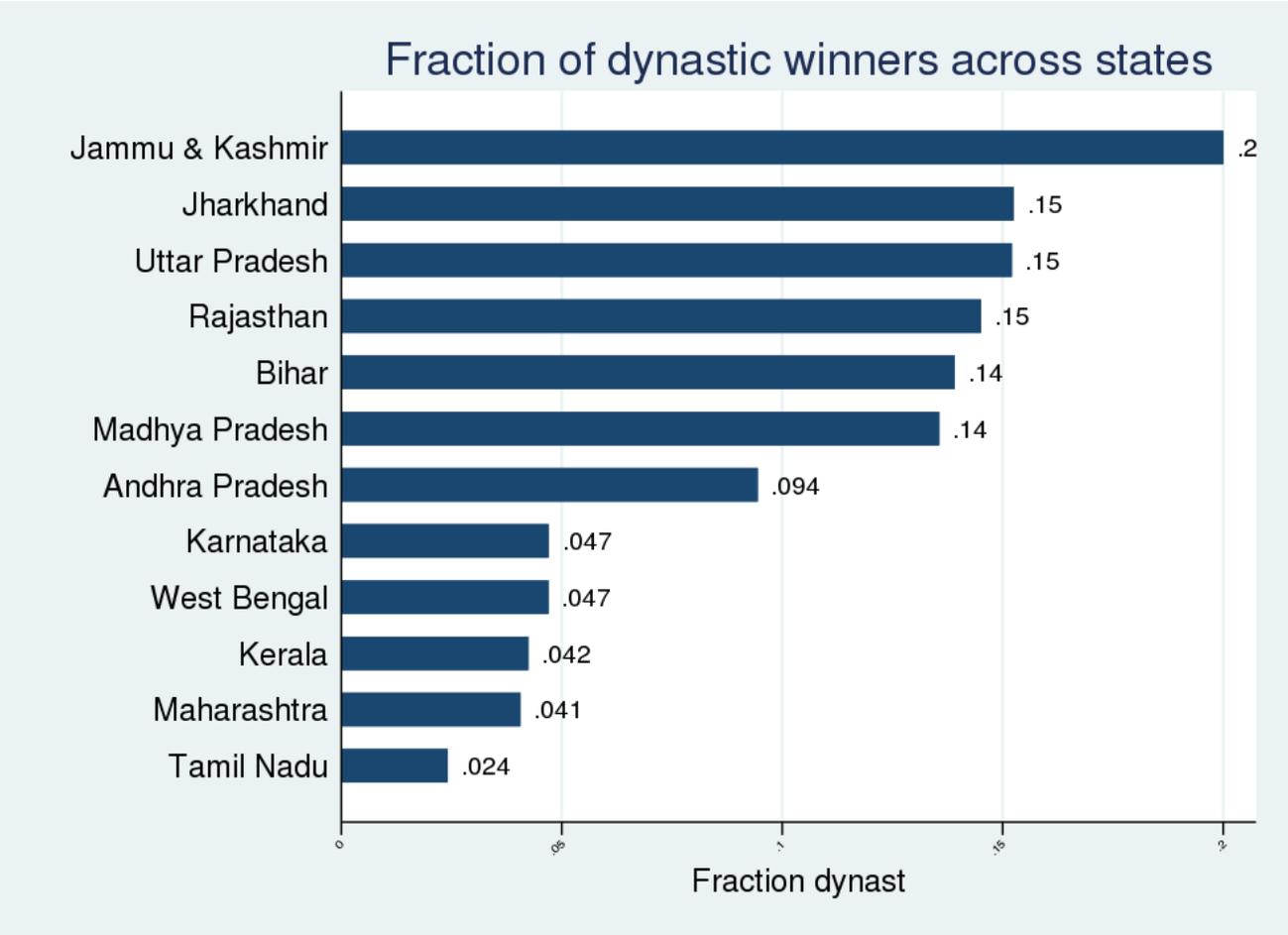


Figure 5: Intergenerational mobility in politics

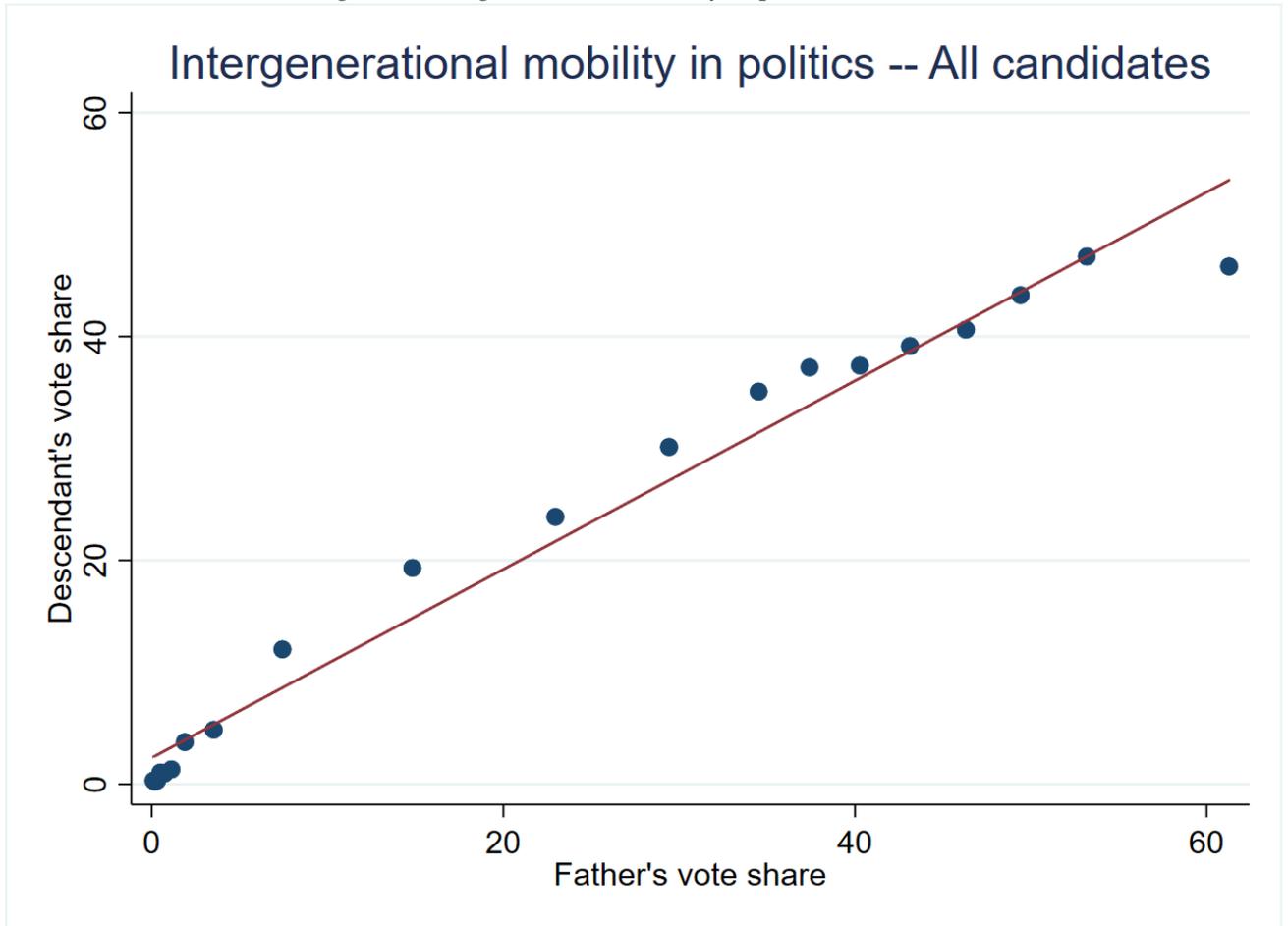


Figure 6: Prevalence of dynastic candidates across states

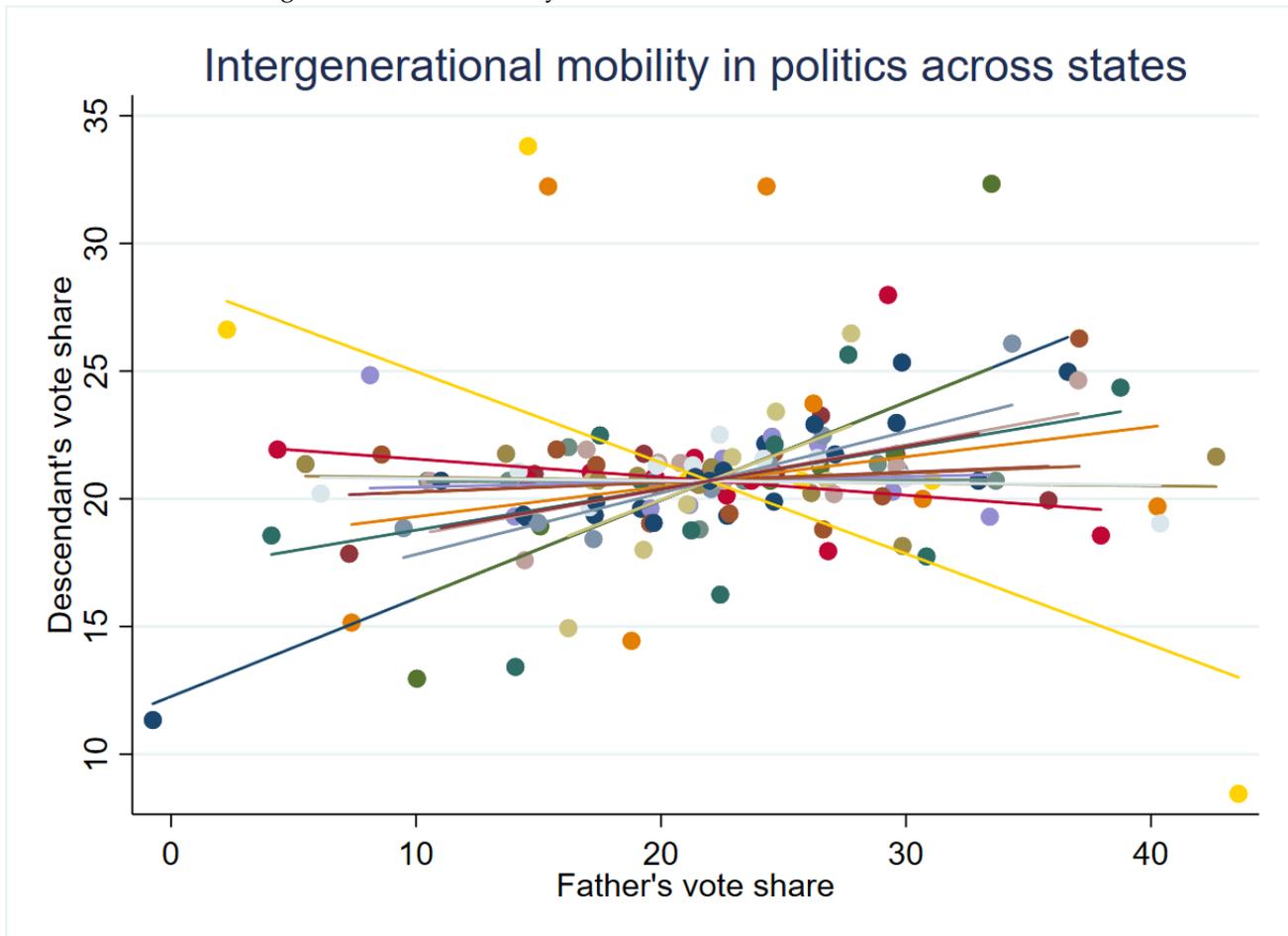


Figure 7: India at night – 1996

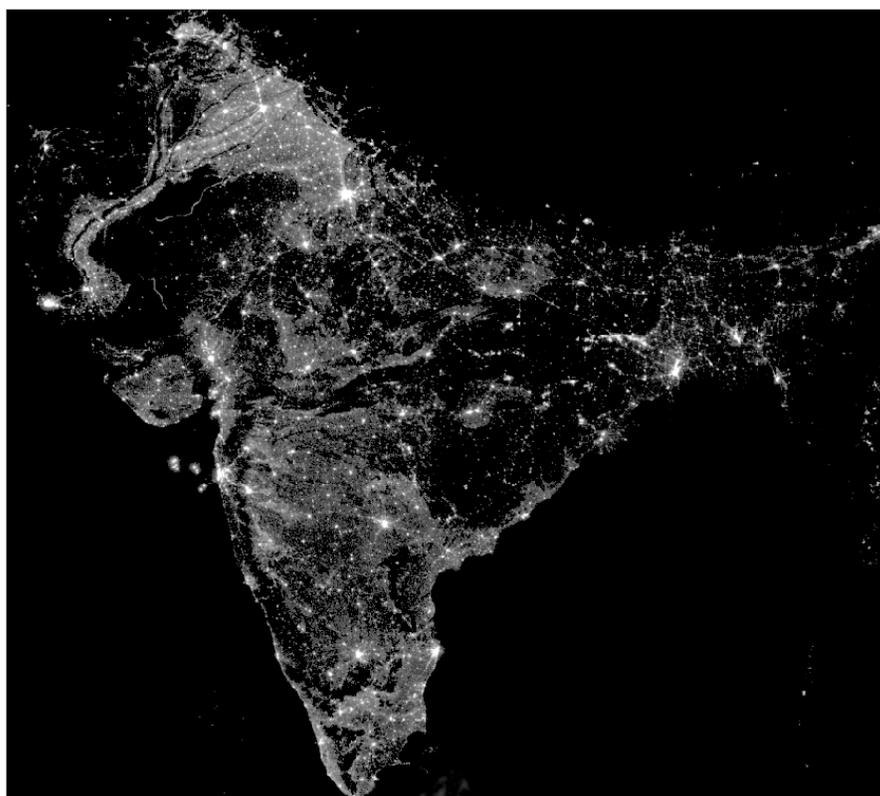


Figure 8: India at night – 2013



Figure 9: Balance – night lights growth in pre-period

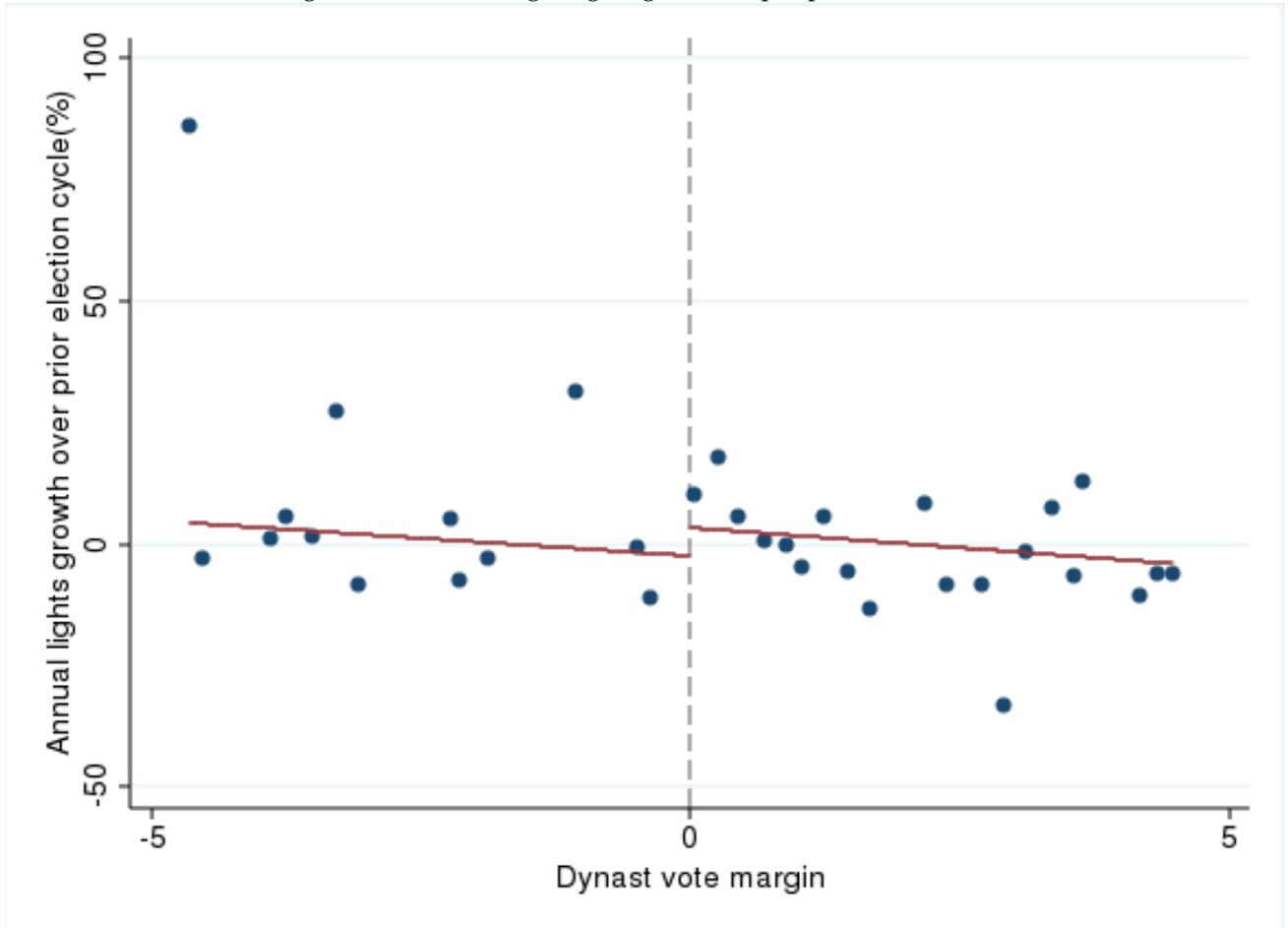


Figure 10: Balance – constituency size

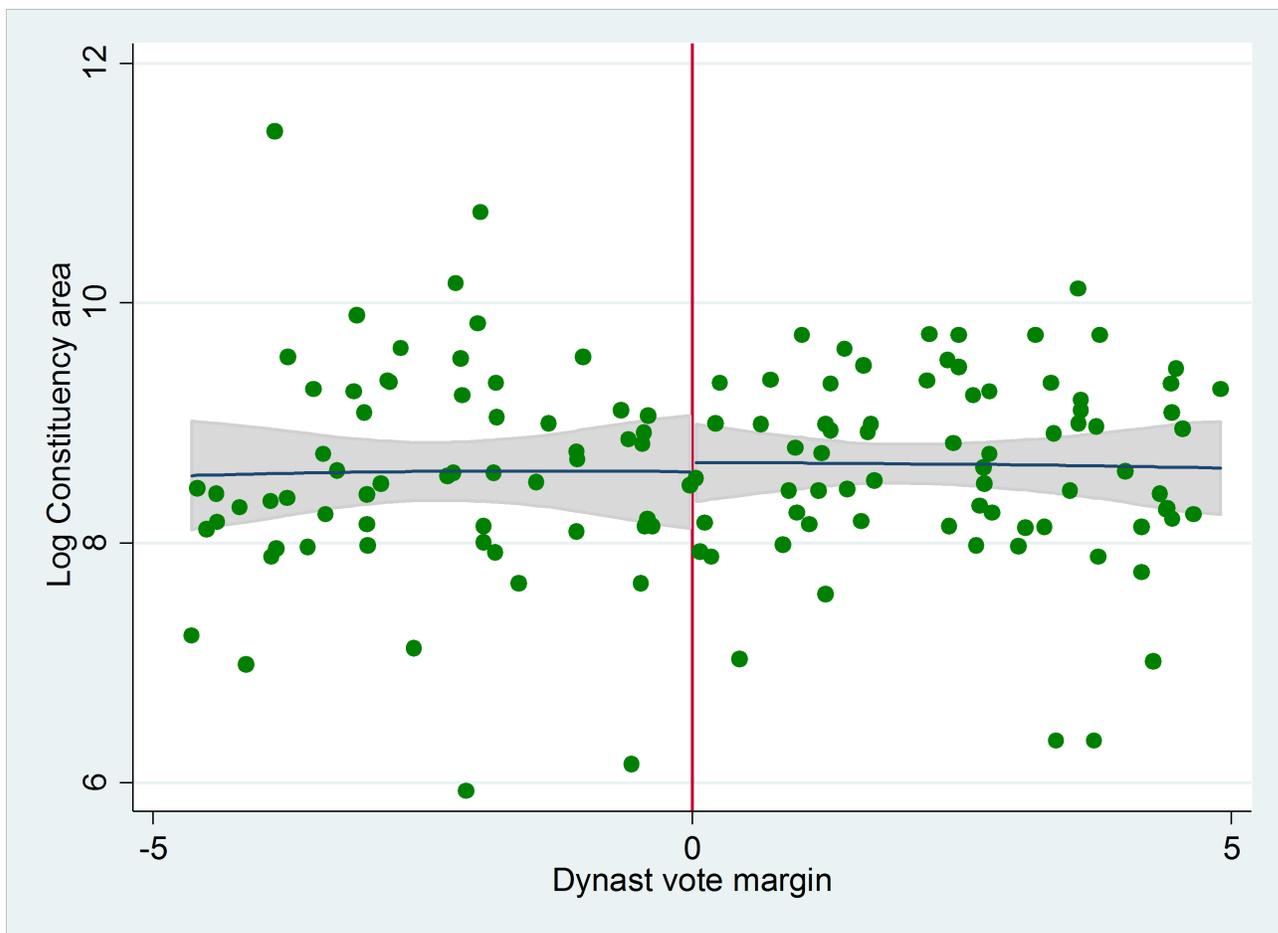


Figure 11: Baseline RD results on night lights (constituency level)

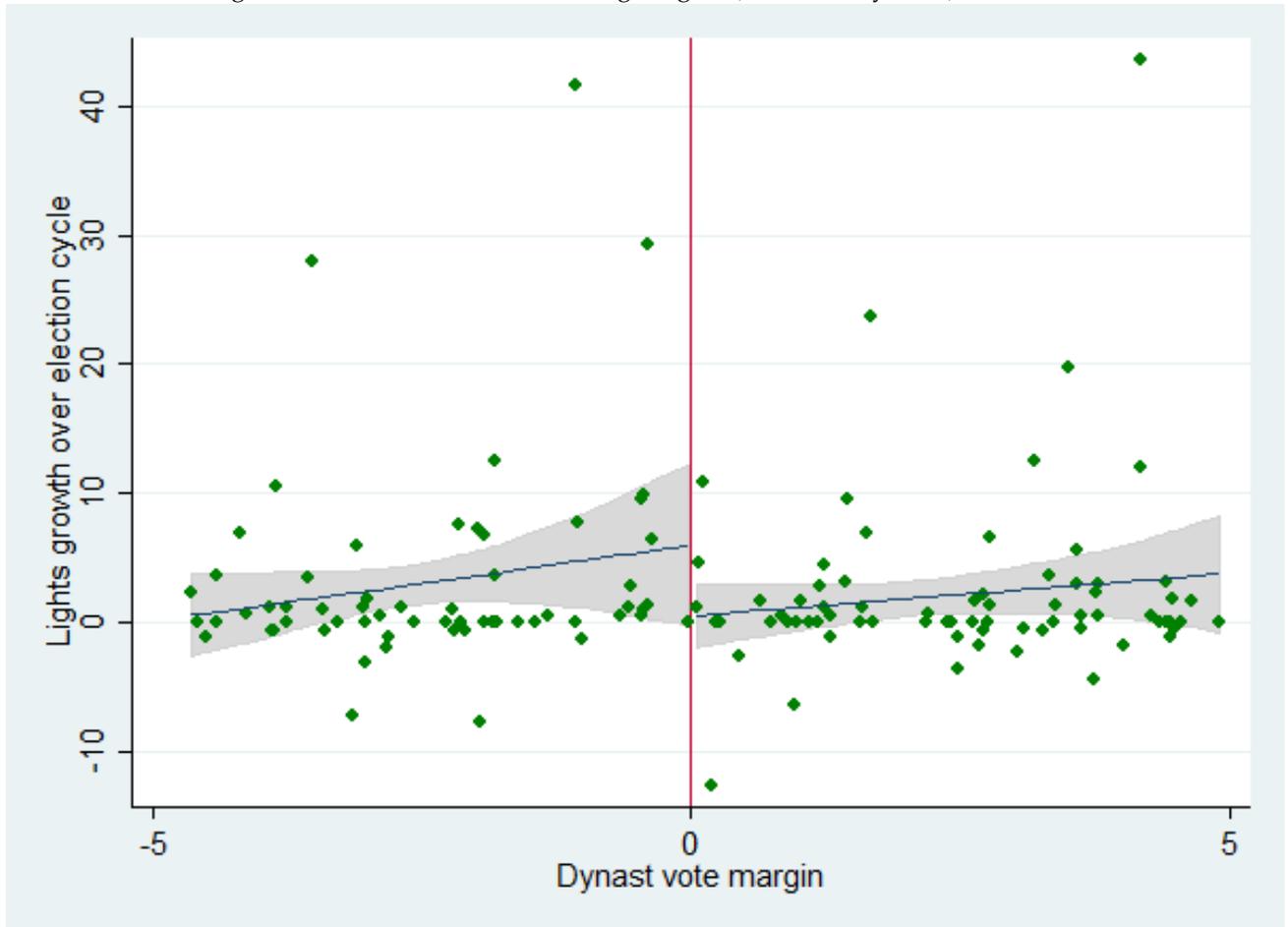


Figure 12: RD results on night lights (village-level)

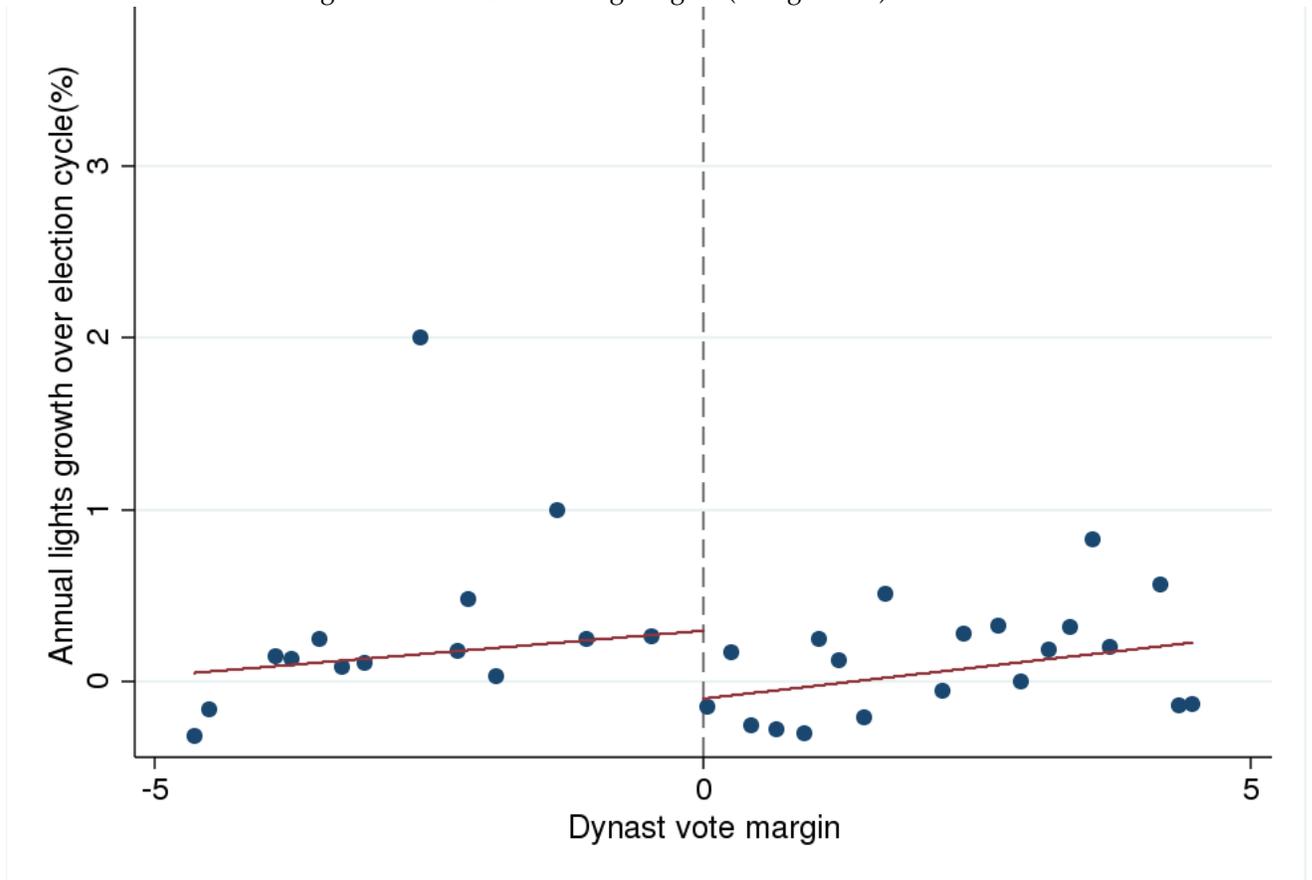


Figure 13: RD result on night lights (village-level) w/different bandwidths

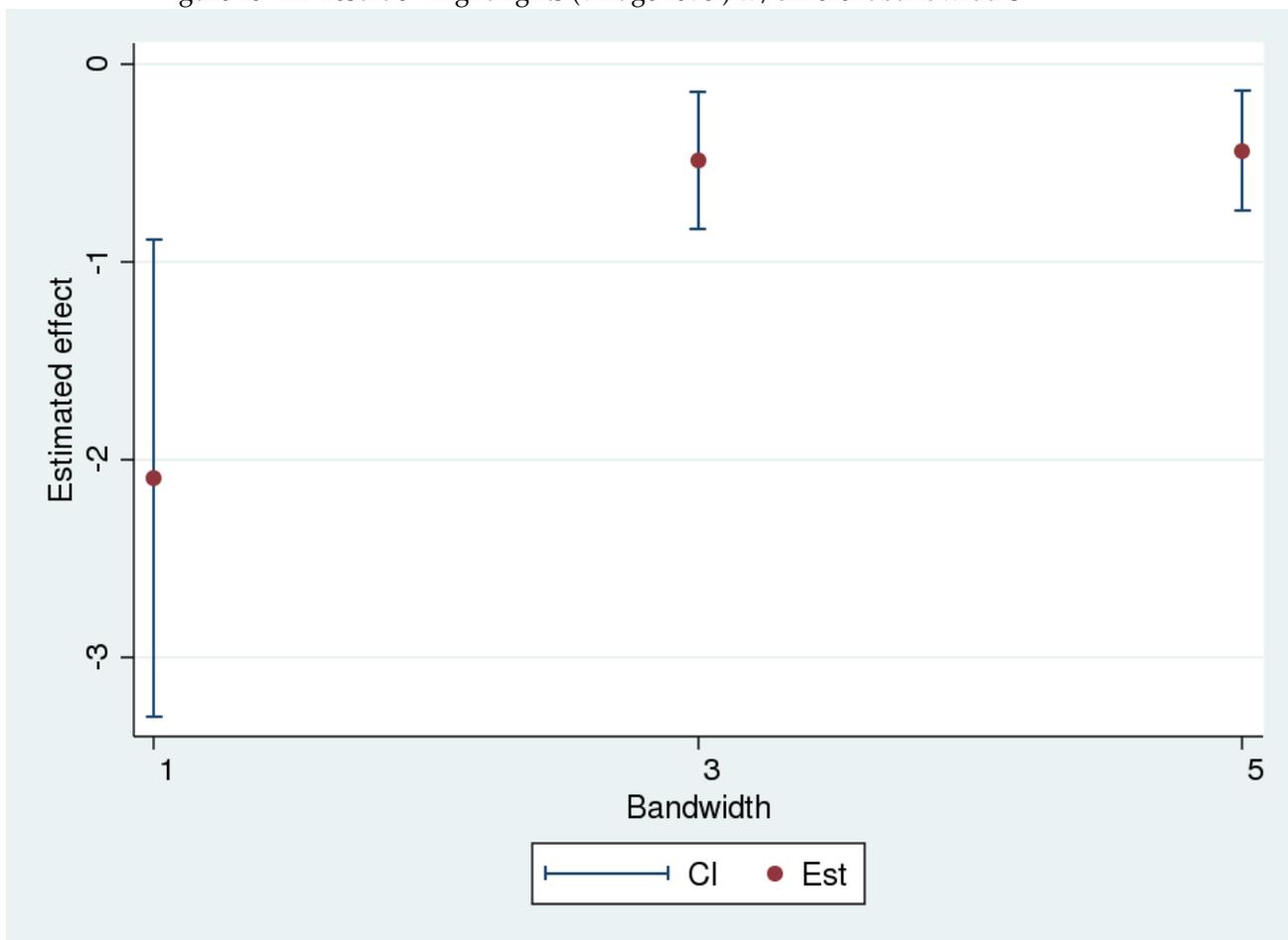


Figure 14: RD result on night lights (village-level) w/ FEs

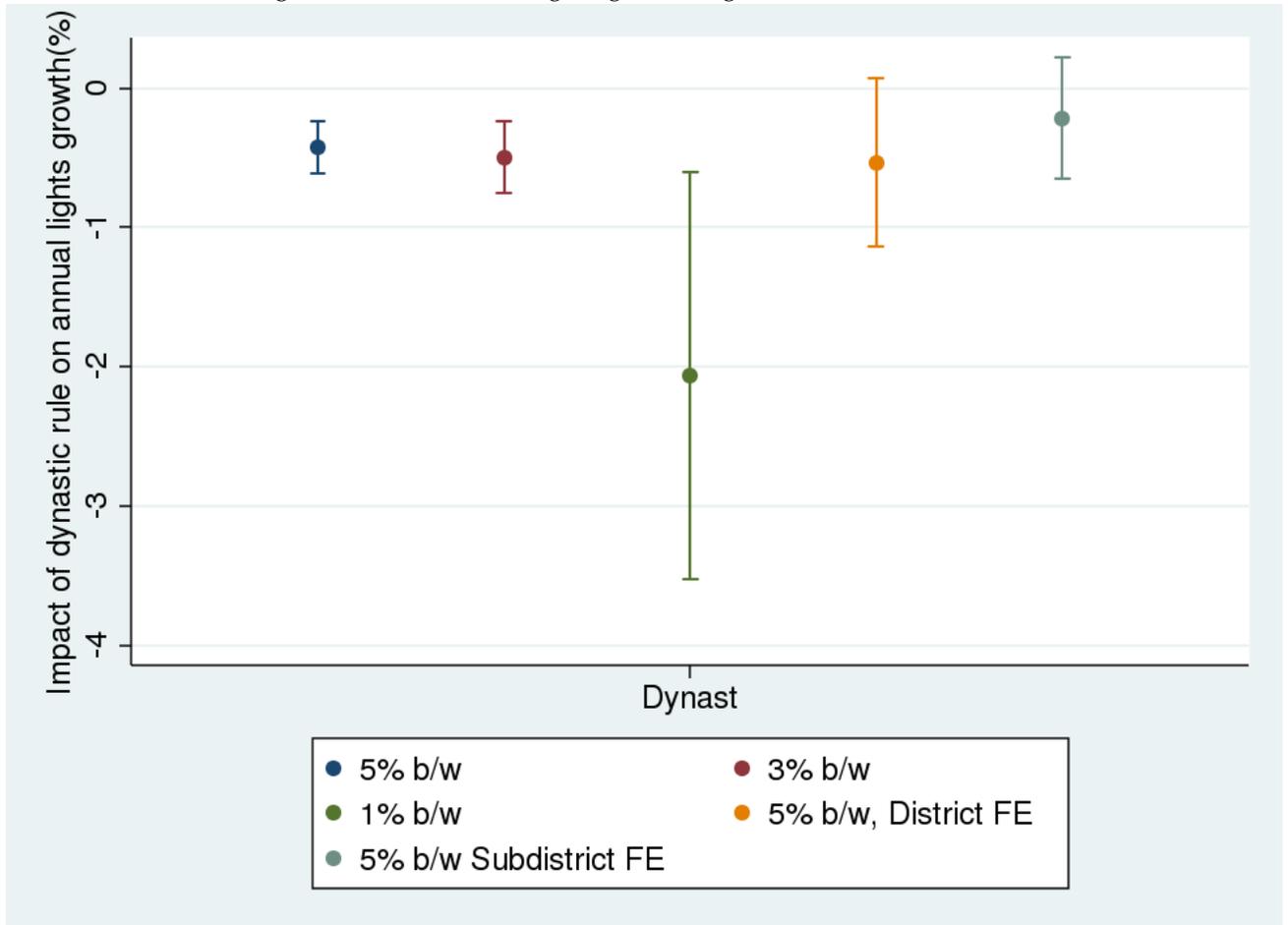


Figure 15: Placebo RD – village level

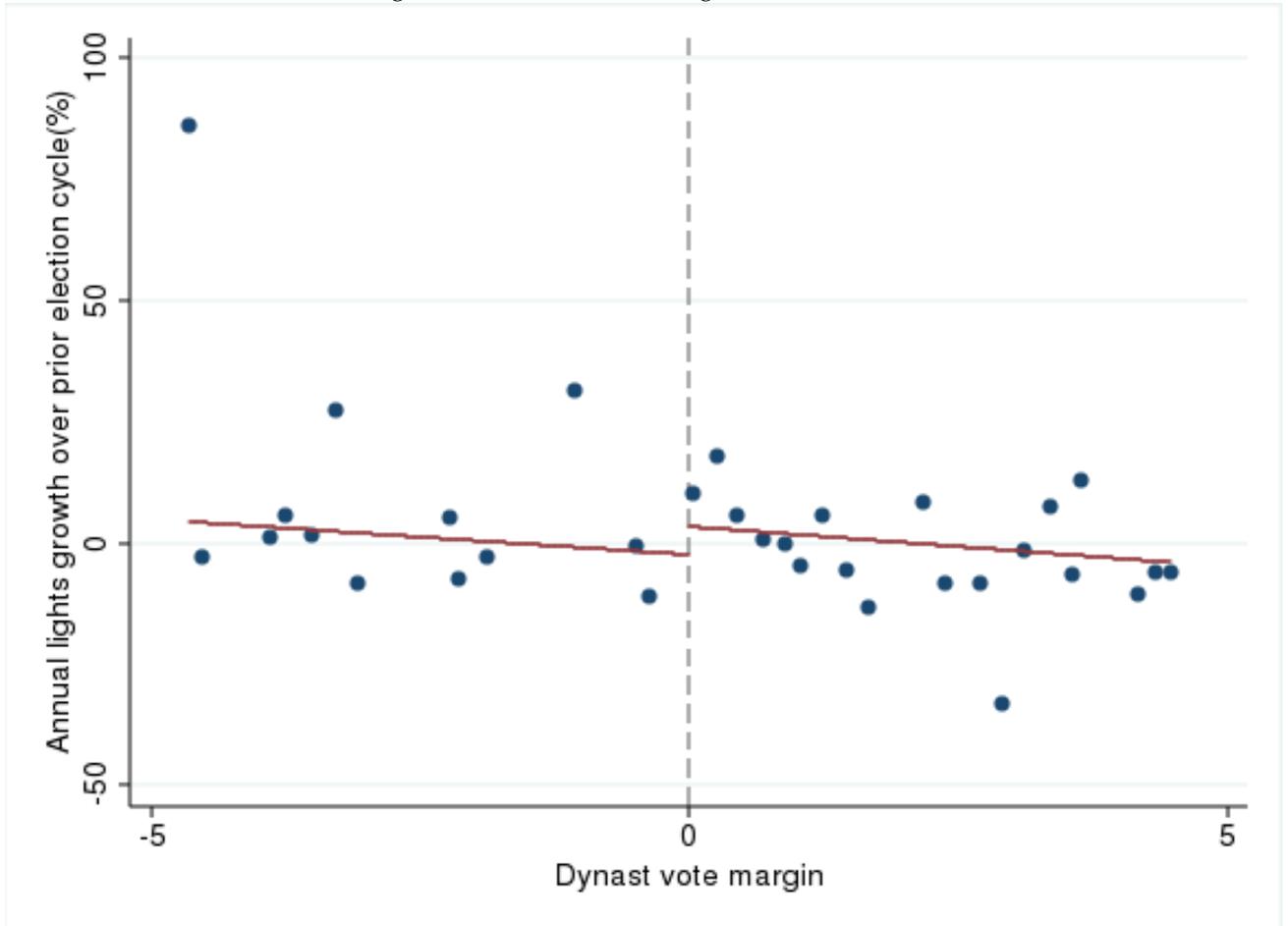


Figure 16: Candidate balance – Education

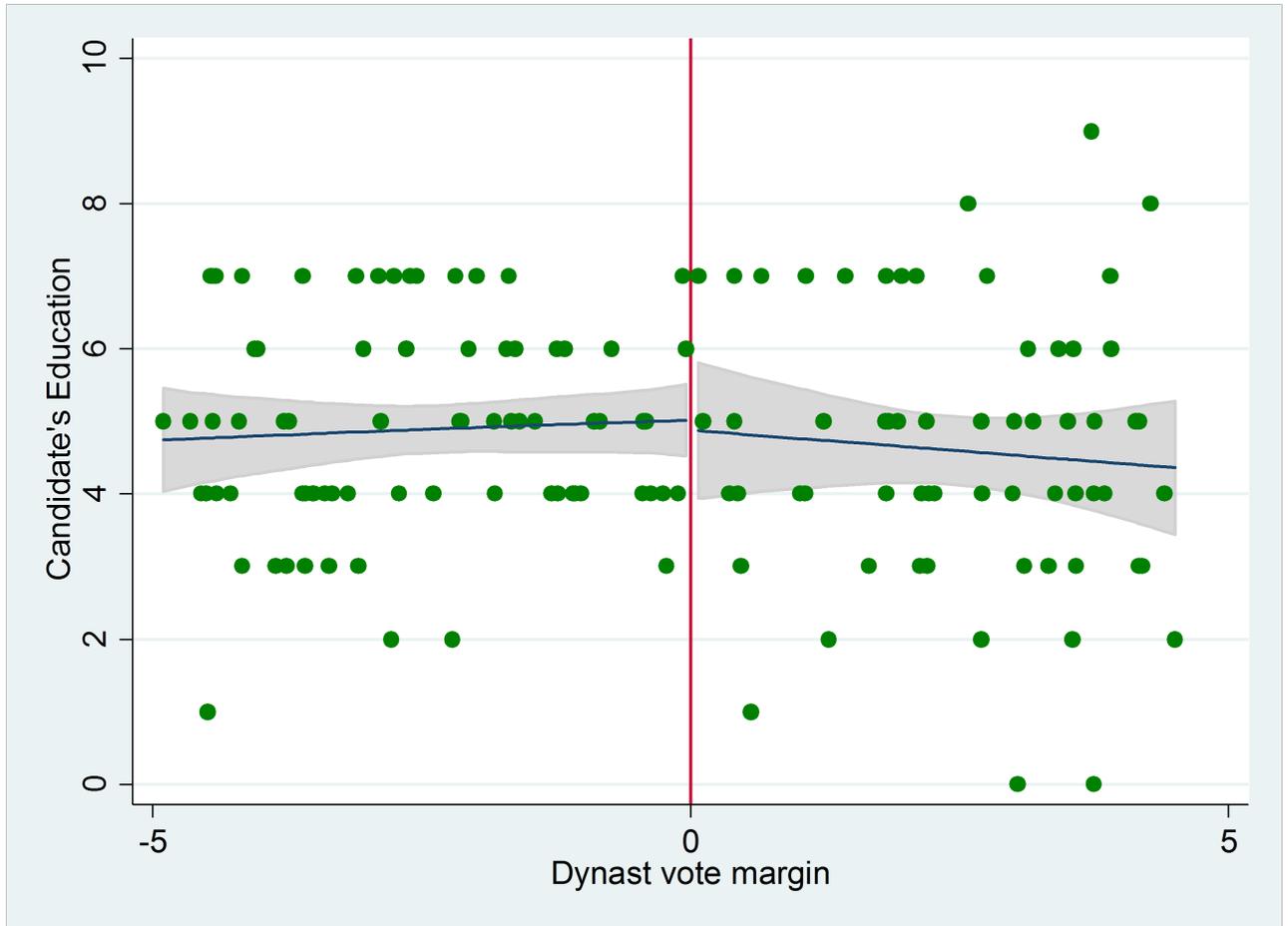


Figure 17: Candidate balance – Education (different bandwidths)

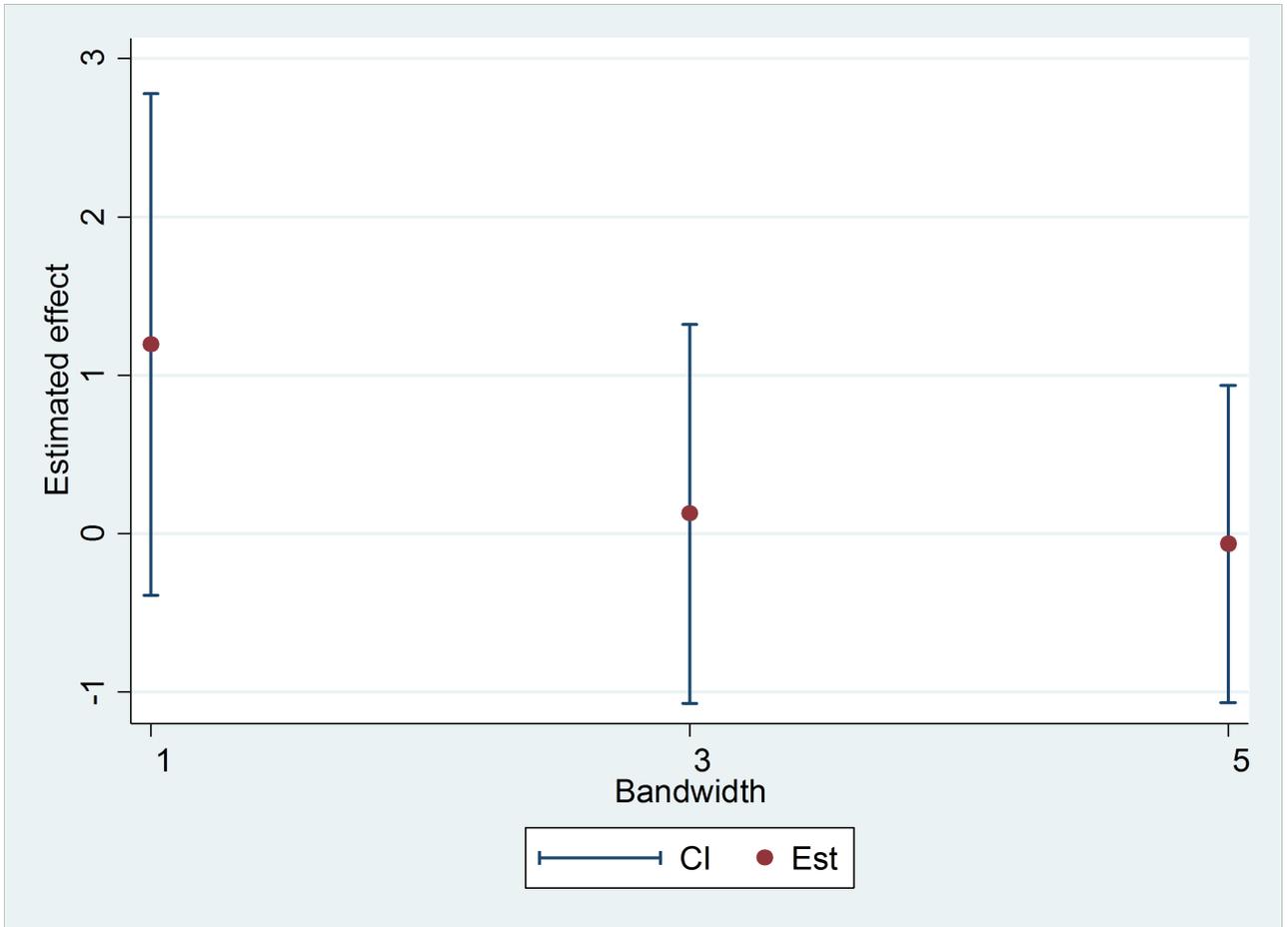


Figure 18: Candidate balance – criminality

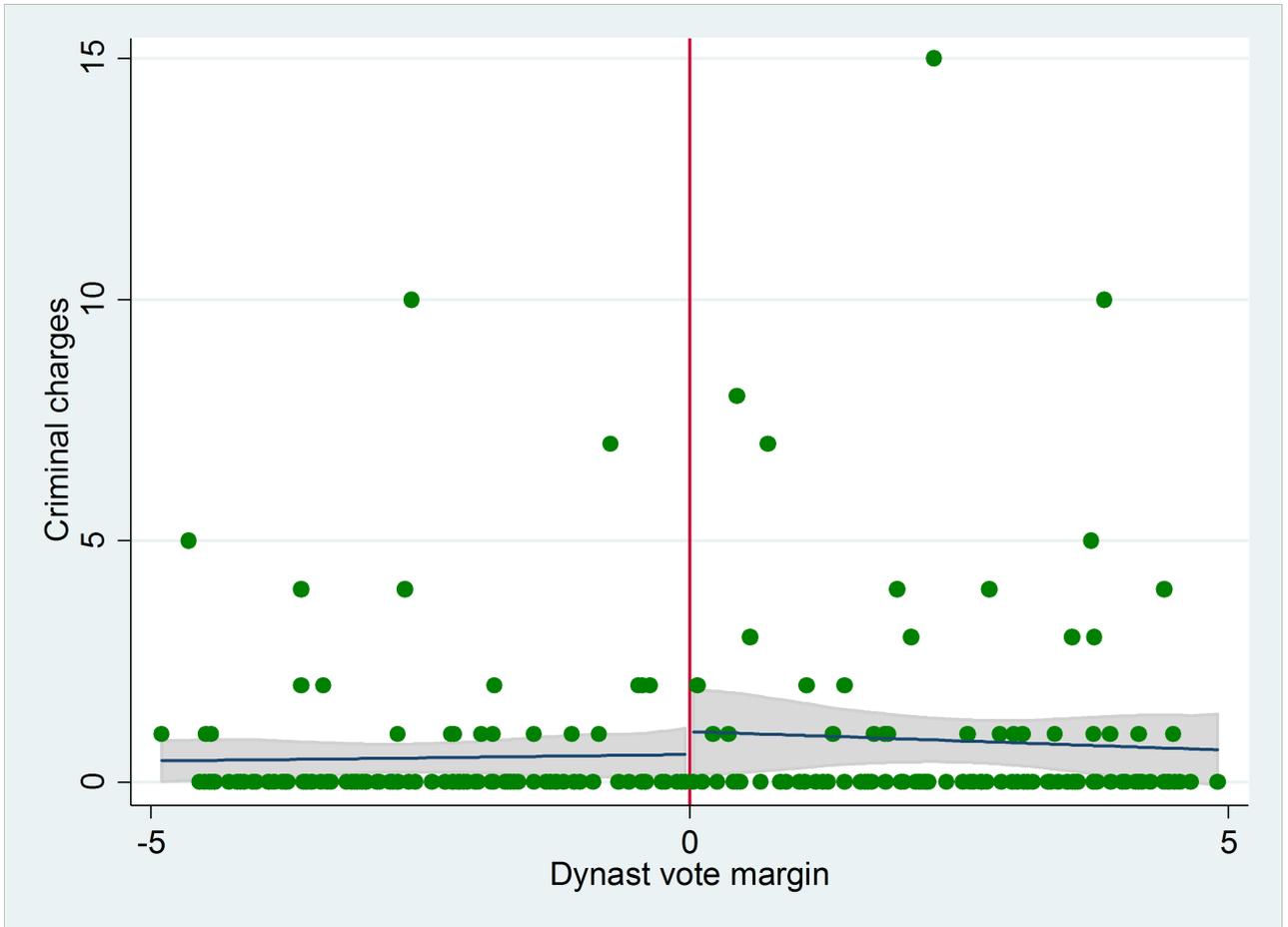


Figure 19: Candidate balance – criminality (different bandwidths)

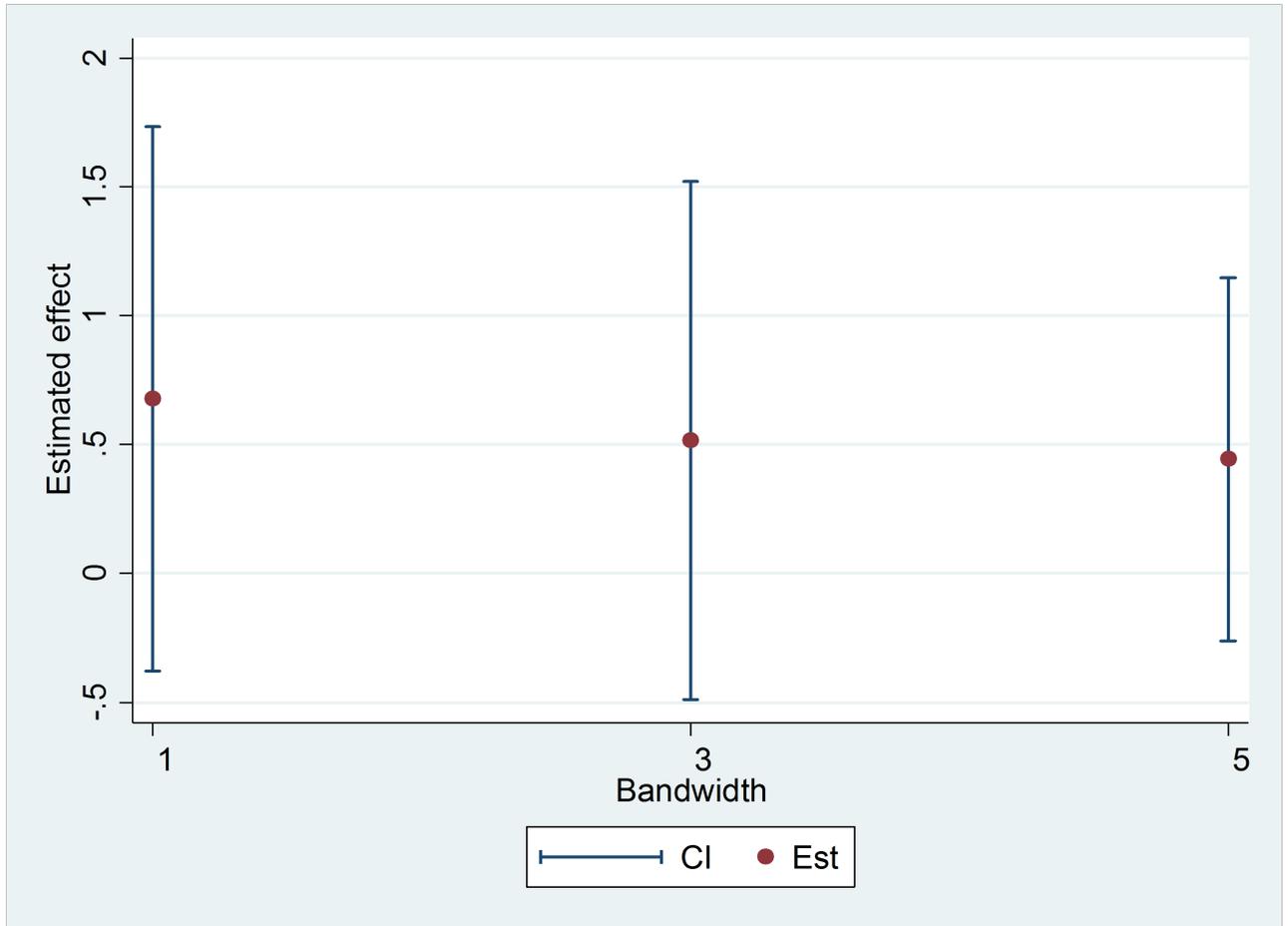


Figure 20: Candidate balance – wealth

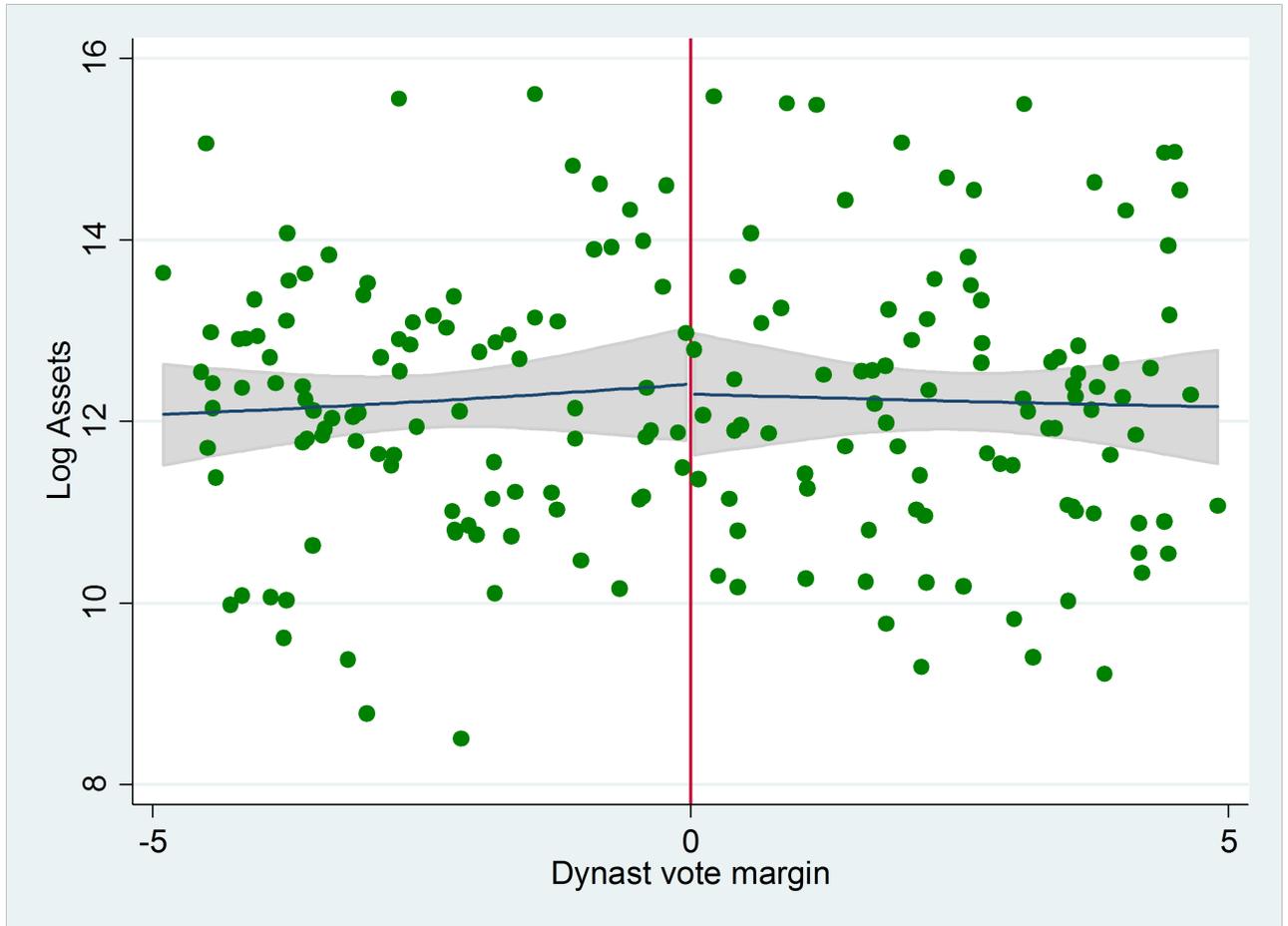


Figure 21: Candidate balance – wealth (different bandwidths)

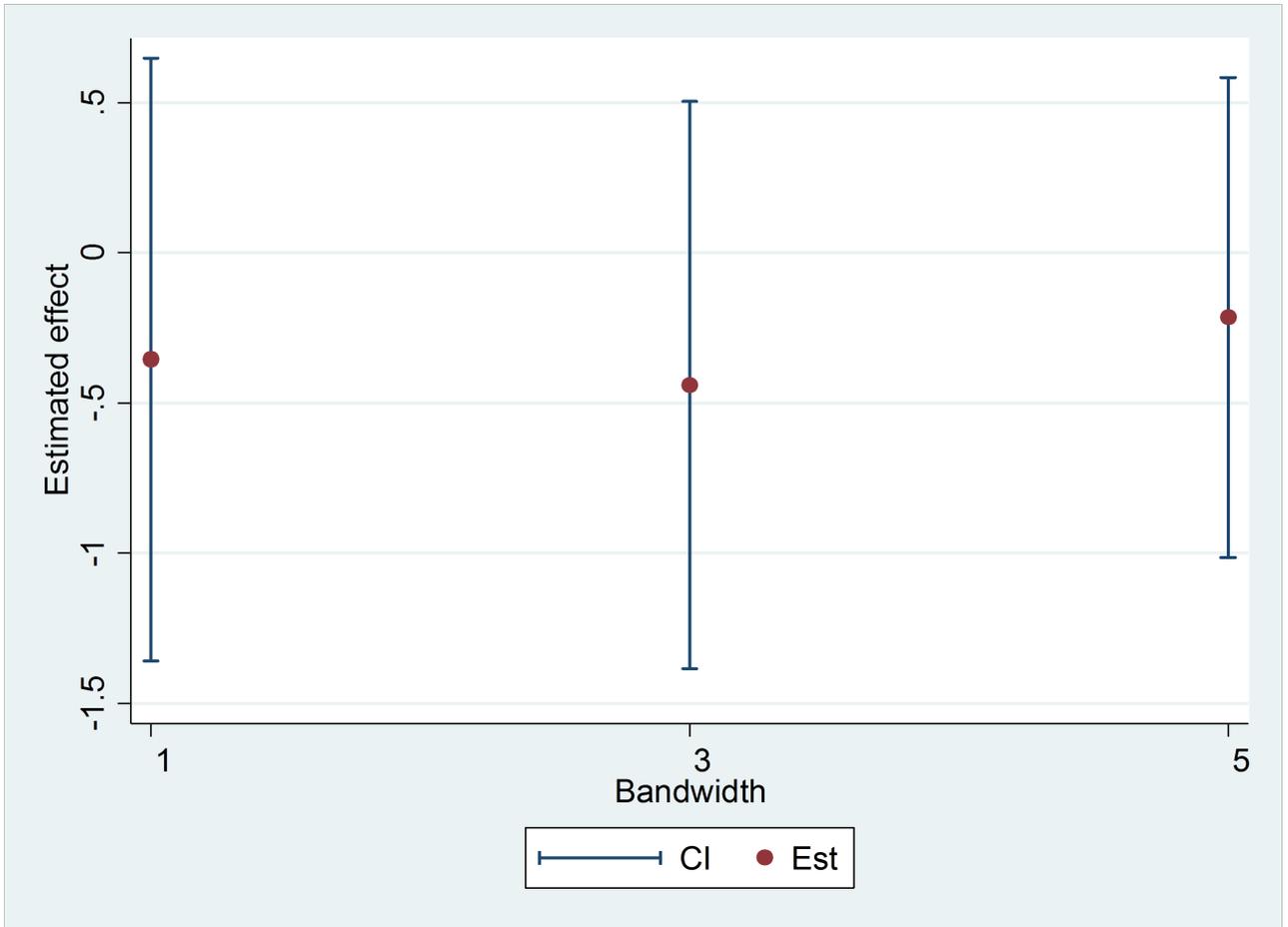


Figure 22: Mechanism – political competition (# of candidates in next election)

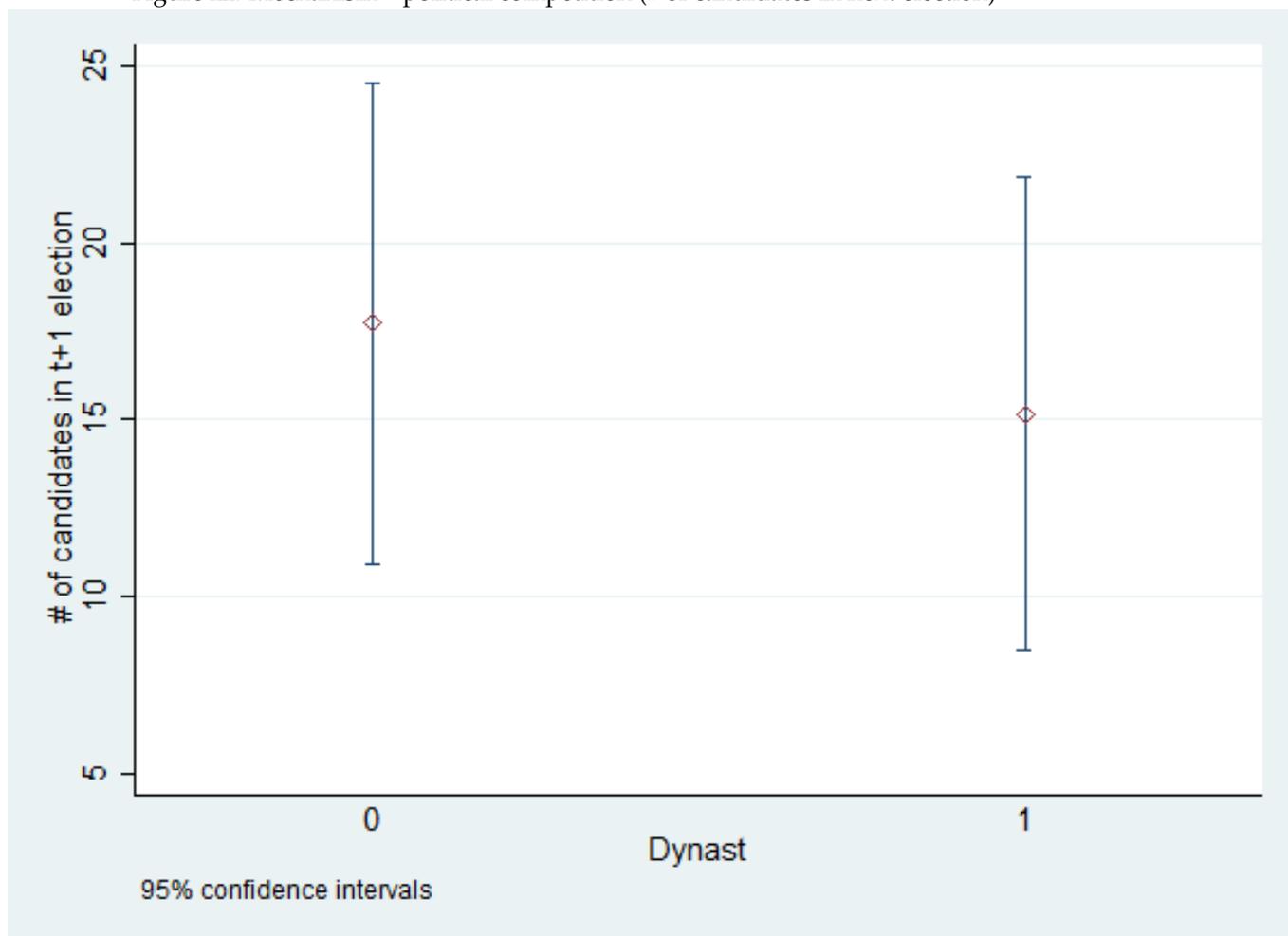


Figure 23: Mechanism – political competition (vote margin in next election)

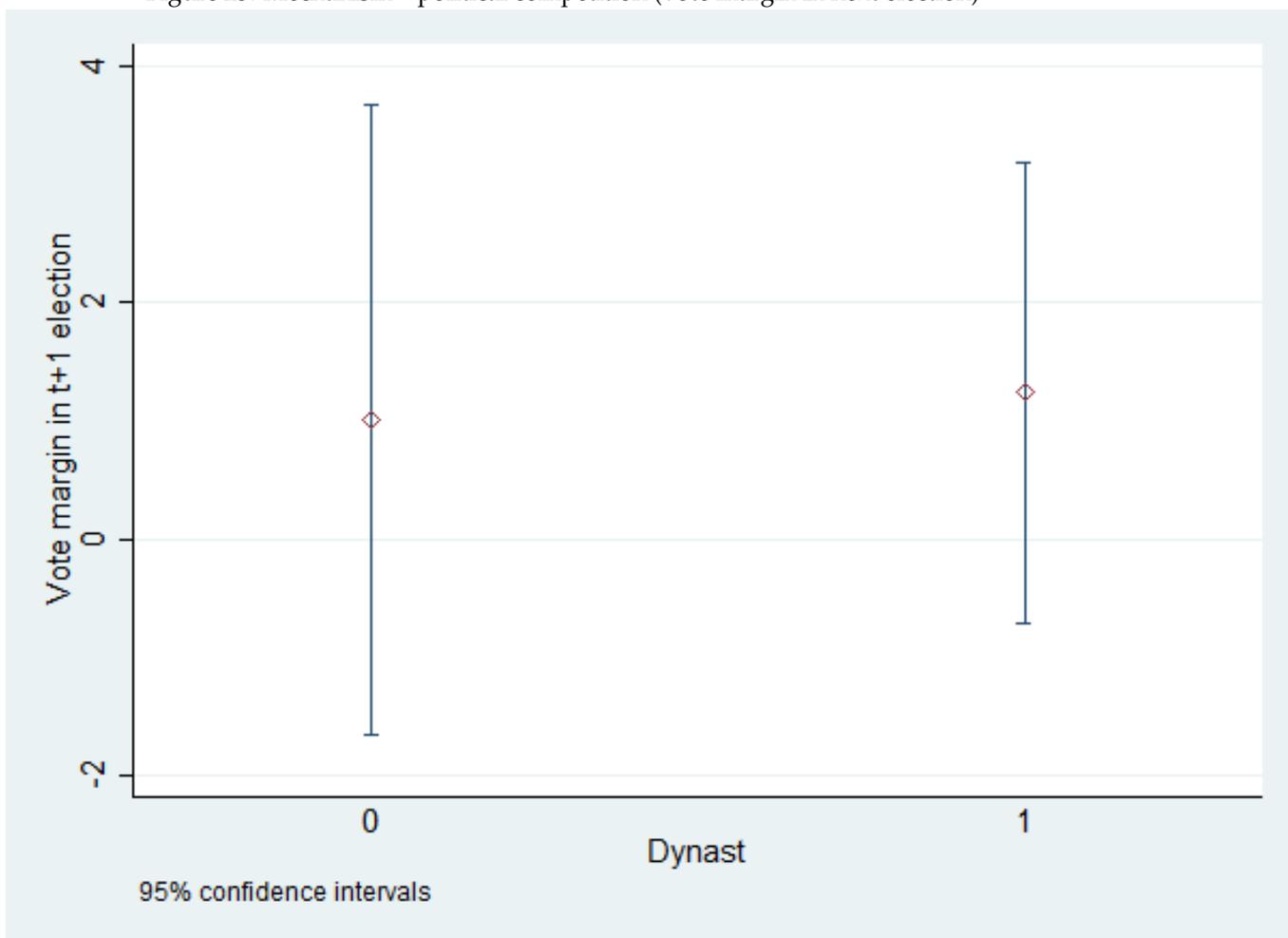


Figure 24: Mechanism – rent seeking (asset gain between election cycles)

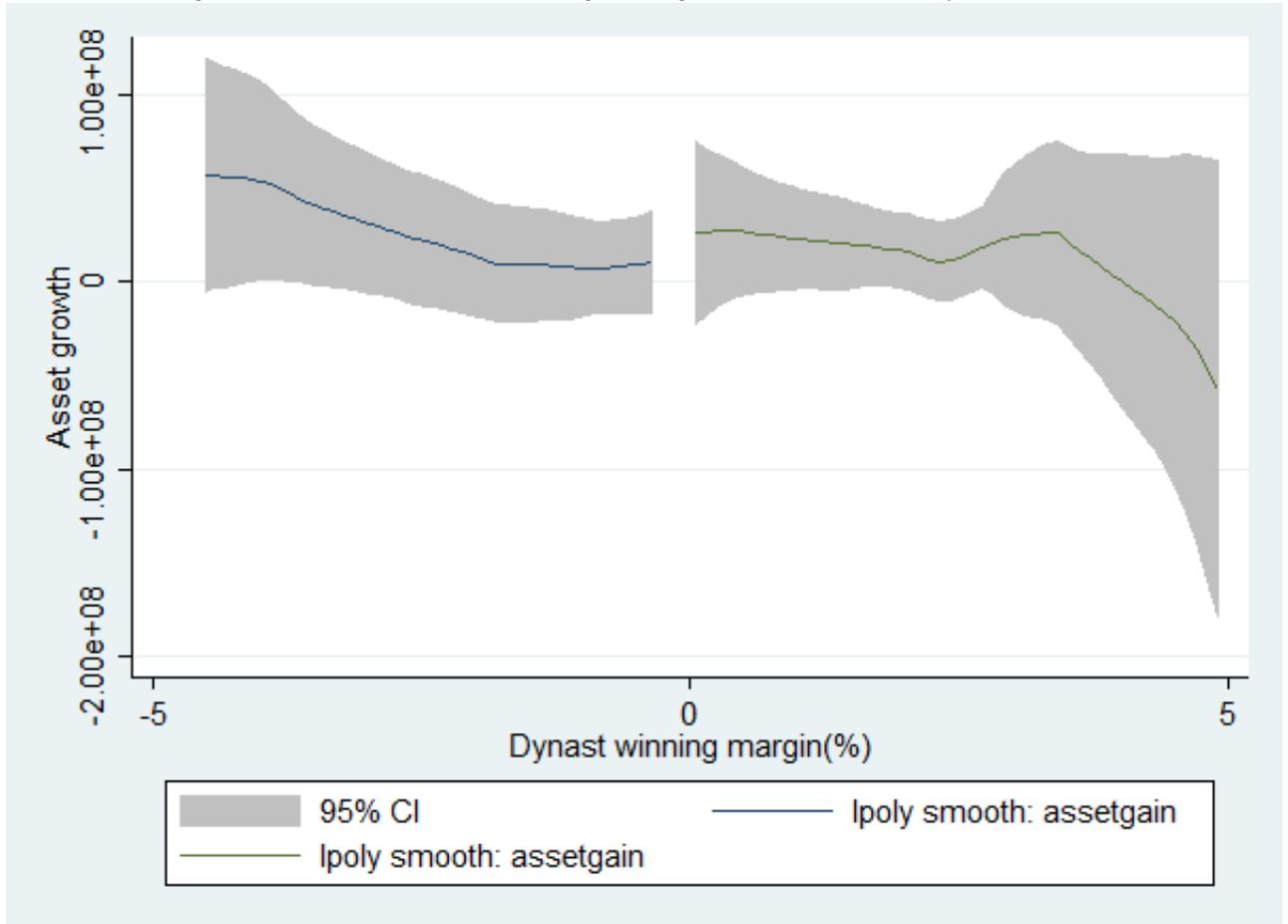


Figure 25: Mechanisms – politician effort (attendance in Parliament)

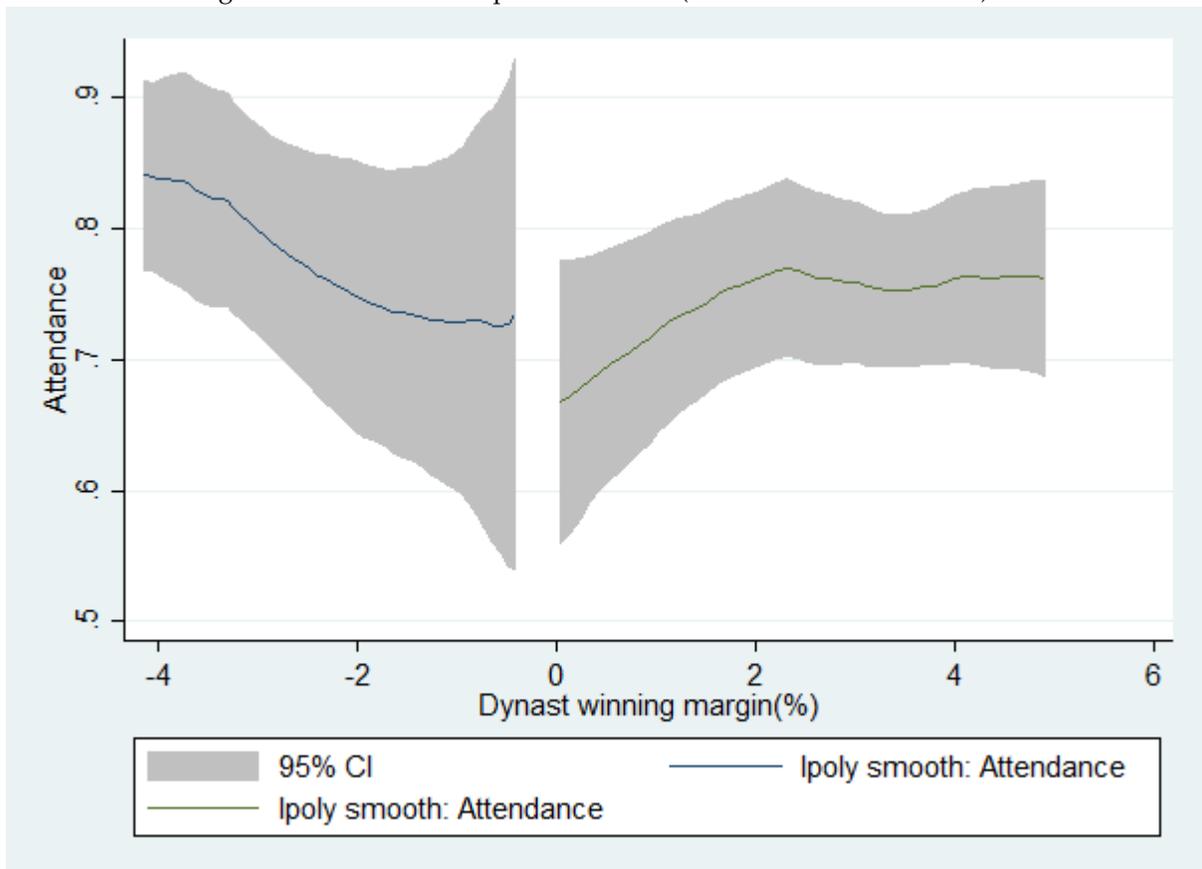


Figure 26: Mechanisms – politician effort (questions asked in Parliament)

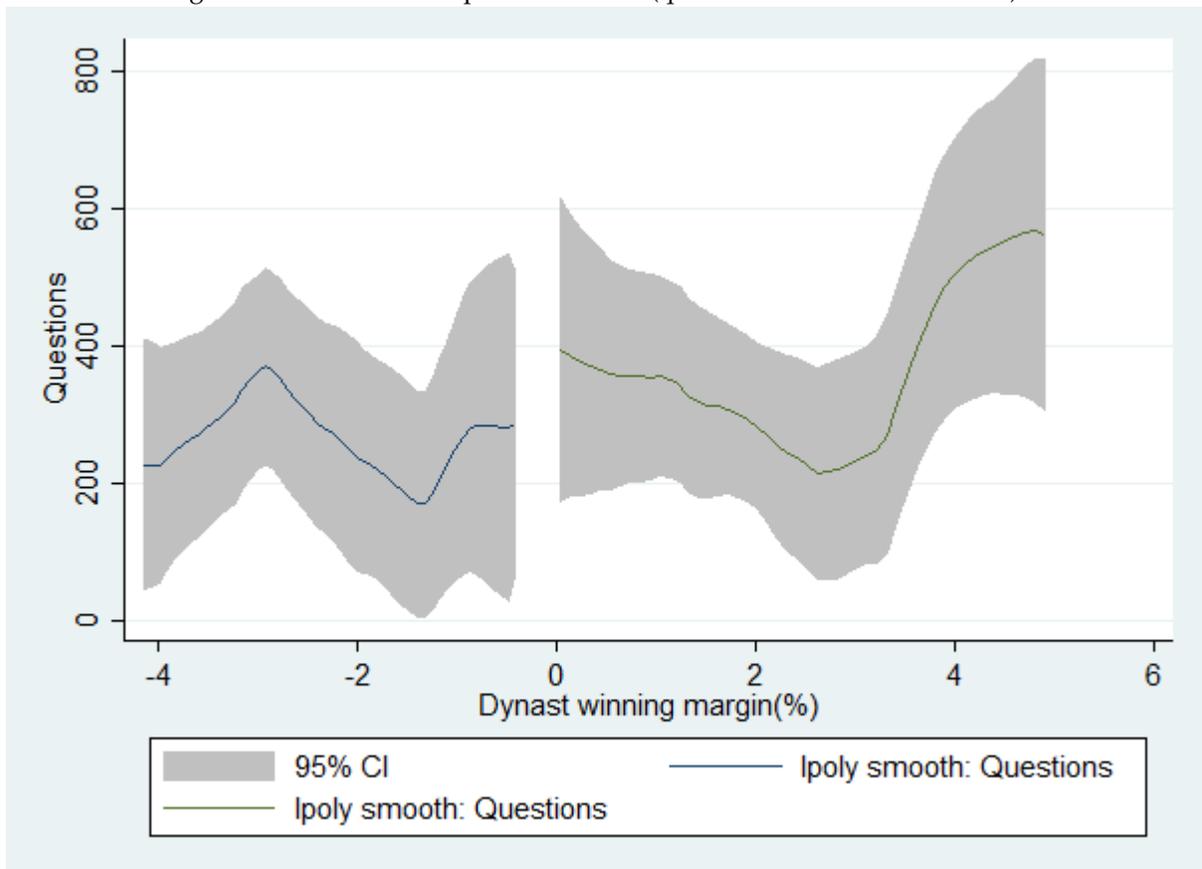


Figure 27: Mechanisms – politician effort (participation in parliamentary debates)

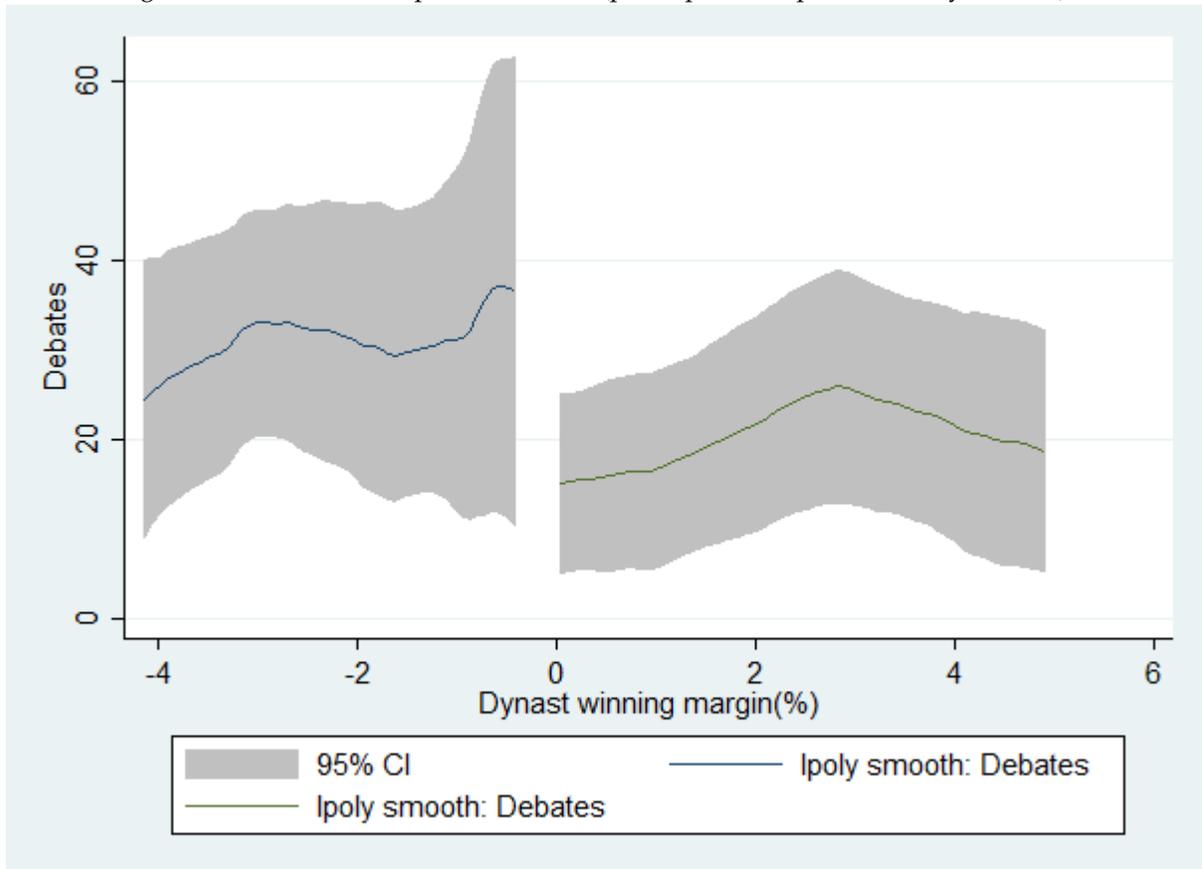


Figure 28: Mechanisms – politician effort (introduced private member bill)

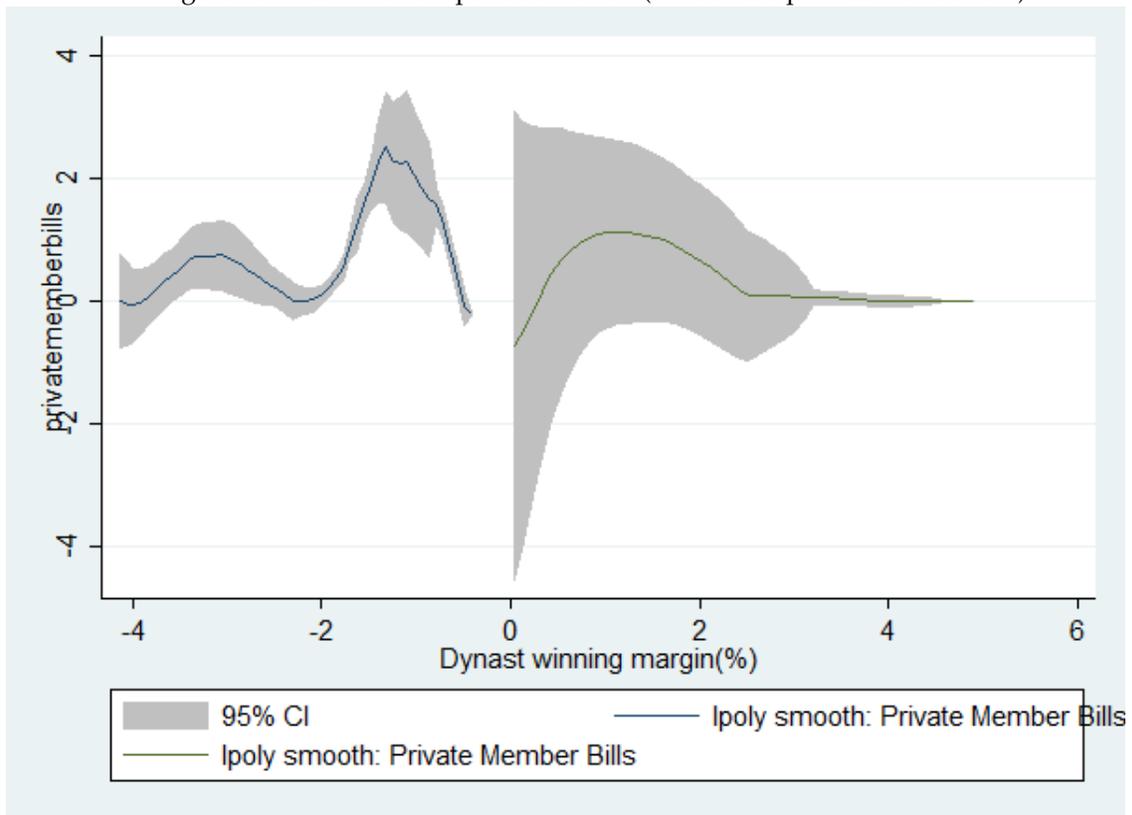


Figure 29: Parliamentary effort index

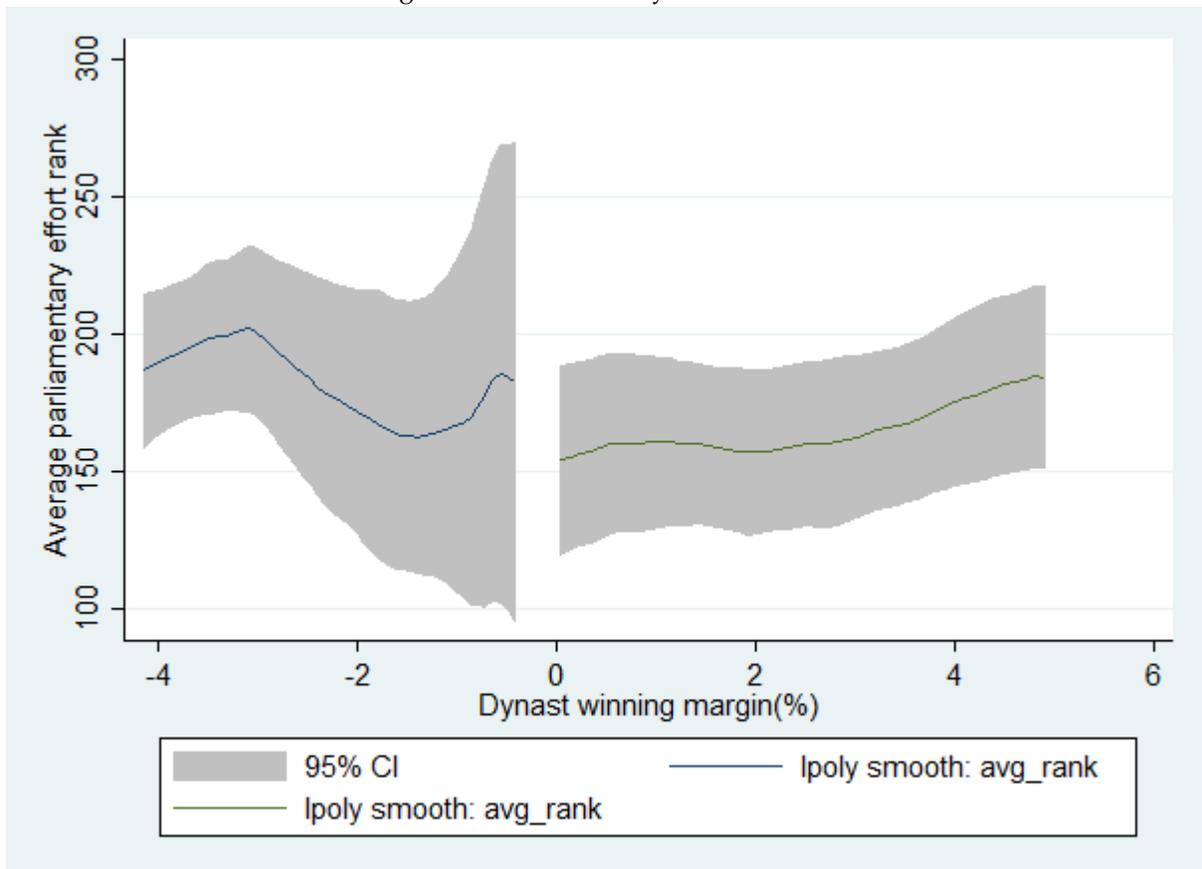


Figure 30: Do non-marginal dynasts perform well?

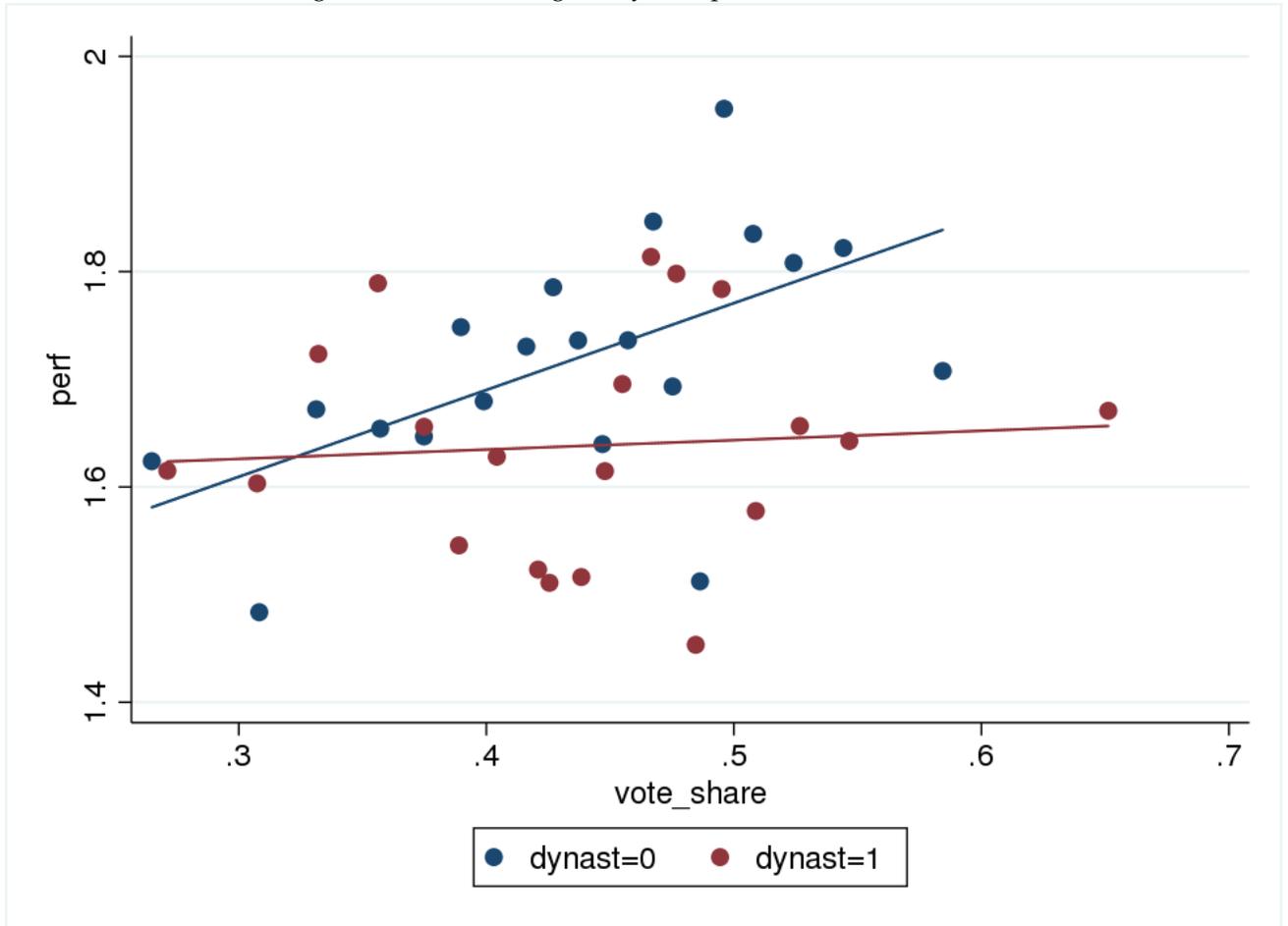


Figure 31: Do non-marginal dynasts perform well?

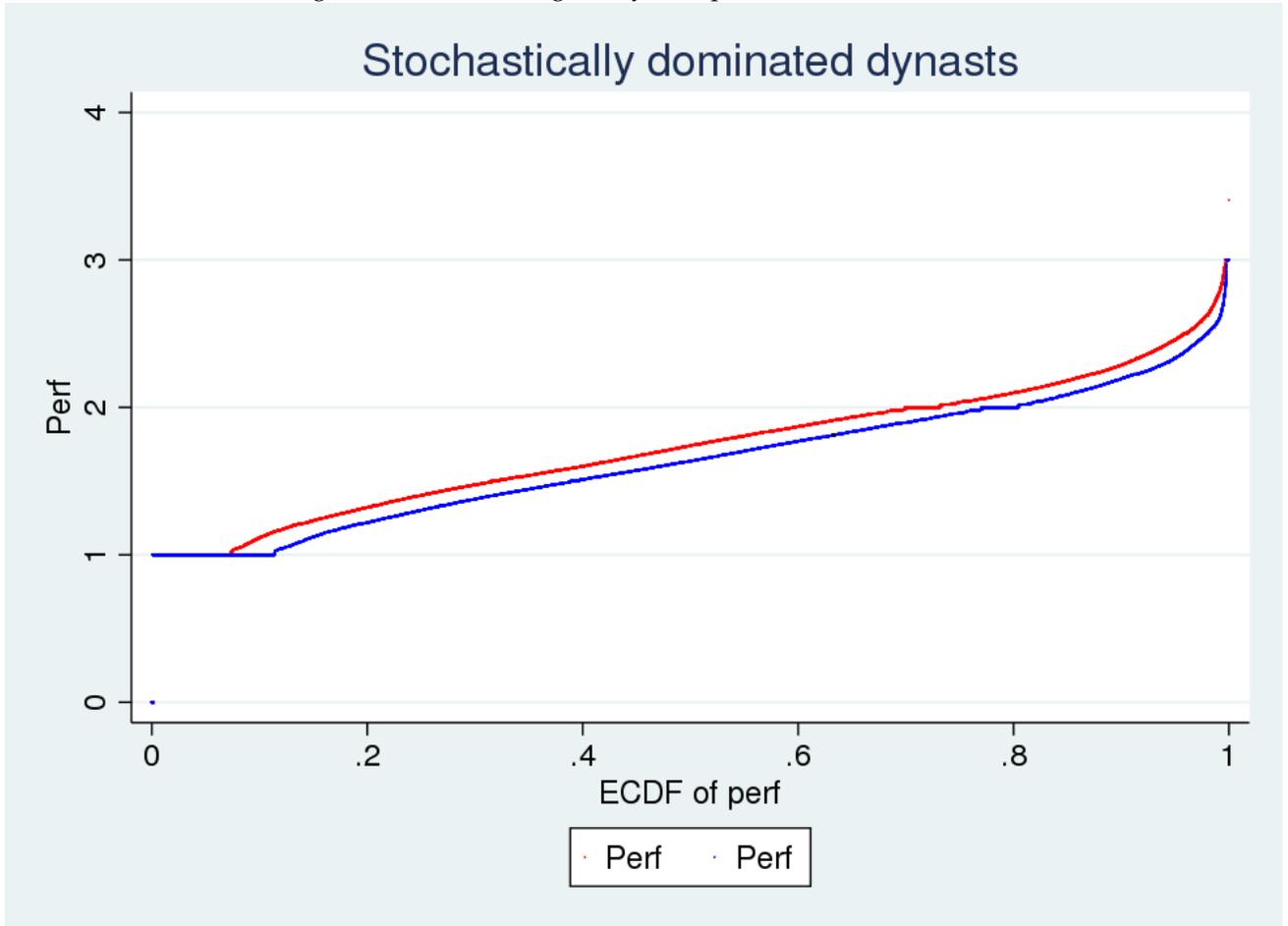


Figure 32: Dynastic performance across the distribution

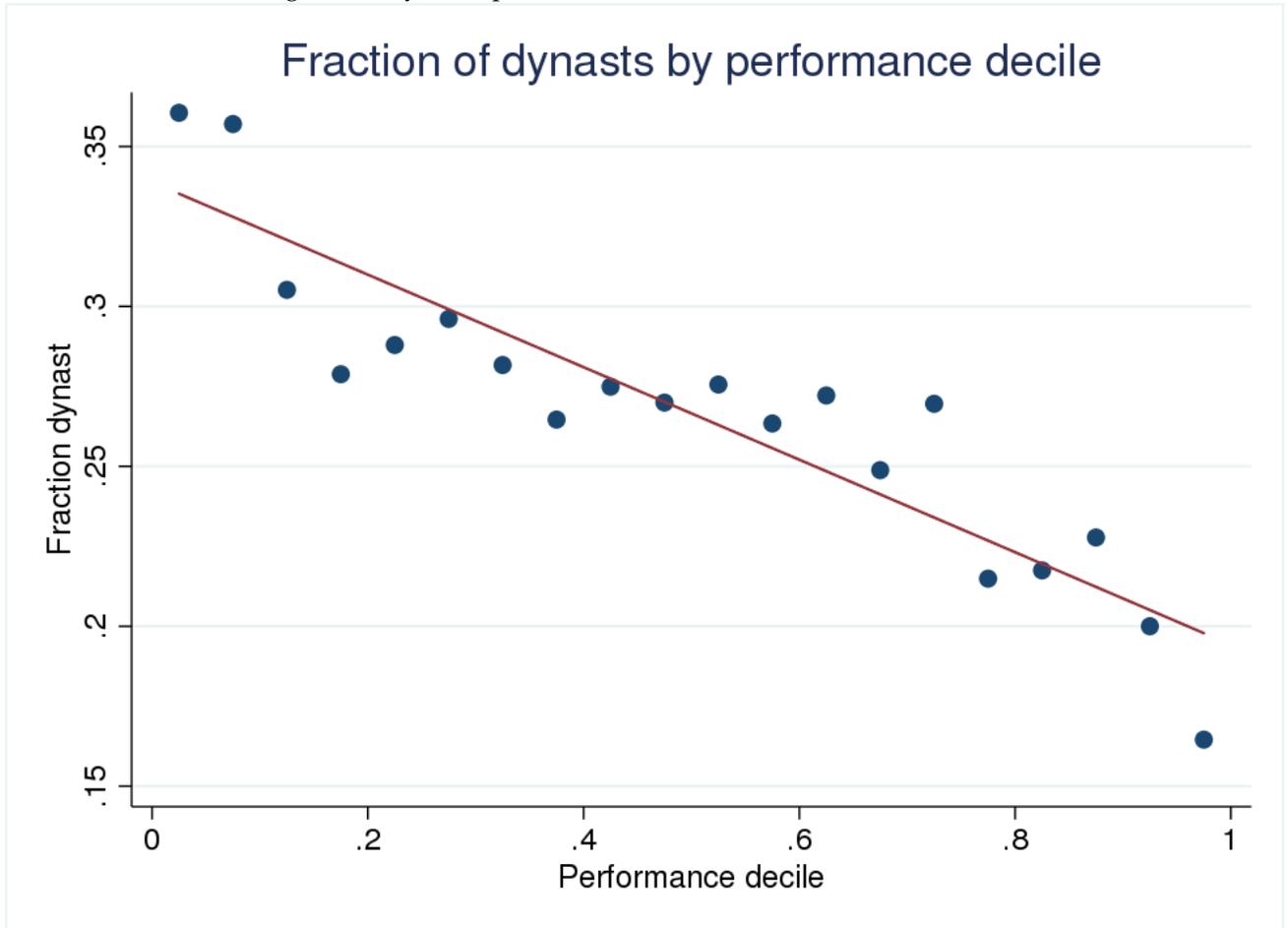


Figure 34: Dynastic performance across the distribution

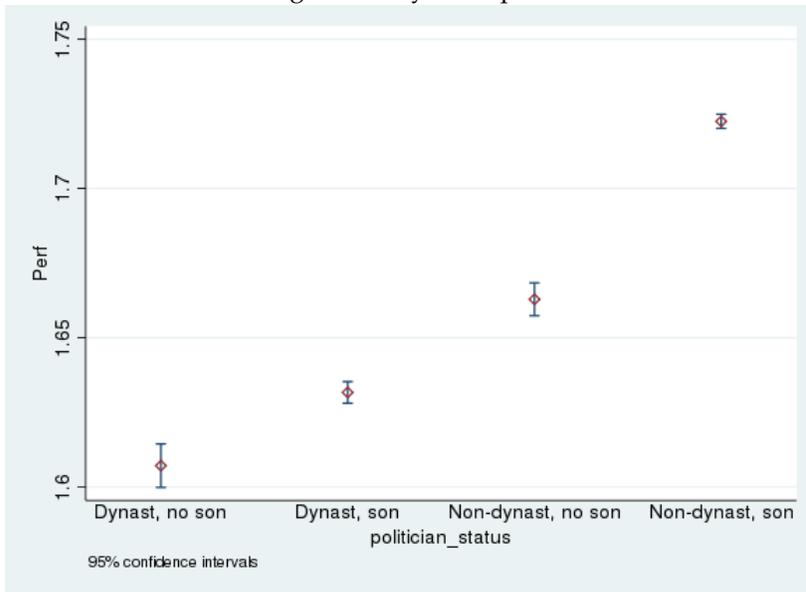


Table 1: Intergenerational mobility in Indian politics

	(1)	(2)	(3)	(4)	(5)
	Vote share	Vote share	Vote share	Vote share	Vote share
Dynast	2.438*** (0.521)				
Father's vote share		0.842*** (0.0163)	0.815*** (0.0195)	0.694*** (0.0269)	0.331*** (0.0464)
Constituency FE	Yes	No	Yes	No	Yes
Party FE	Yes	No	No	Yes	No
State*Party FE	No	No	No	No	Yes
N	12552	2102	1997	2031	1765

Standard errors, clustered by constituency, in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2: What links do dynastic descendants have with their predecessors?

	Mean
Father politician	0.78
Mother politician	0.15
Spouse politician	0.06
Same party	0.44
Same party family	0.52
Same constituency	0.49
% constituency overlap	
Same party or constituency	0.70
Same party & constituency	0.31
# of years founder was in power	
# terms founder was in power	2.66
<i>N</i>	142

Table 3: Length of dynastic rule

Sample	All	Has dynasty
Ruled by political dynasty	0.35	
Total years	47.22	51.37
Years of dynastic rule	5.47	15.83
Years of founder rule	2.56	7.39
Years of descendant rule	2.92	8.43
Fraction of years ruled by dynasty	0.11	0.30
Fraction of years ruled by founder	0.05	0.14
Fraction of years ruled by descendant	0.06	0.16
<i>N</i>	474117	163945

Table 4: Night lights summary statistics

	Average	Std dev	Percentile		
			10th	50th	90th
Night light intensity	47.25	16.60	20.00	54.00	63.00
Growth over election cycle	1.67	28.83	-7.21	0.00	10.34
Observations	9702				

Table 5: Long run net effect of dynastic rule

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Earns < 5k	Brick house	Mud house	House quality index	Has fridge	Has phone	Has vehicle	Asset index
Years dynastic rule (OLS)	0.0000100 (0.000183)	-0.000131 (0.000324)	-0.000251 (0.000230)	0.00168 (0.00144)	0.000230** (0.000113)	0.000238 (0.000168)	0.000136 (0.000210)	0.0000885 (0.000110)
Years dynastic rule (IV)	0.00143** (0.000612)	-0.00475*** (0.00120)	0.00181** (0.000748)	-0.0198*** (0.00571)	-0.000333 (0.000347)	-0.00203*** (0.000741)	-0.00211*** (0.000702)	-0.00110*** (0.000399)
Years founder rule	-0.0215 (0.0153)	0.0806** (0.0375)	-0.0322 (0.0204)	0.443** (0.199)	0.0108 (0.00839)	0.0300 (0.0218)	0.0350* (0.0195)	0.0107 (0.00931)
Years descendant rule	0.0235 (0.0179)	-0.115* (0.0641)	0.0407 (0.0295)	-0.484* (0.291)	-0.0119 (0.00992)	-0.0452 (0.0318)	-0.0459 (0.0286)	-0.0264 (0.0165)
N	353738	353738	353738	353652	353738	353738	353738	353738

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 6: RD balance regression

	(1)	(2)	(3)
	Education	Criminal charges	Log Assets
Dynast	-0.114	0.421	-0.627
	(0.582)	(0.582)	(0.567)
Observations	140	210	195

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 7: Baseline results – night time lights growth

Night time lights growth			
	IK bandwidth (4.14)	50% IK	200% IK
Dynast	-6.649*	-6.572	-5.811*
	(3.464)	(4.701)	(3.025)
Observations	134		

Standard errors, clustered at the constituency level, are in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 8: Baseline results

Depvar: village-level night lights growth					
RD estimate	-0.426*** (0.0948)	-0.497*** (0.131)	-2.067*** (0.745)	-0.534* (0.301)	-0.217 (0.216)
Bandwidth	5%	3%	1%	5%	5%
District FE	No	No	No	Yes	No
Subdistrict FE	No	No	No	No	Yes
Observations	12375	6406	2264	12346	12271

Standard errors, clustered at the constituency level, are in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 9: RD balance – public good provision in pre-period

	Index of public goods								
	Education	Healthcare	Pub health	Comms	Transport	Financial inclusion	Welfare	Entertainment	Electricity
RD estimate	-0.00669 (0.0120)	0.0121** (0.00612)	-0.00713 (0.00555)	-0.0147 (0.0172)	0.00361 (0.0183)	-0.0168 (0.0212)	-0.00838 (0.0107)	-0.0147 (0.0184)	-0.00829 (0.00529)
Observations	17549	17549	17549	17549	17549	17549	17549	17549	17549

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 10: Impact of dynastic victory on public good provision

	Index of public goods								
	(1) Education	(2) Healthcare	(3) Pub health	(4) Comms	(5) Transport	(6) Financial inclusion	(7) Welfare	(8) Entertainment	(9) Electricity
RD estimate	-0.00414 (0.0330)	-0.0784*** (0.0184)	-0.0283** (0.0138)	0.0173 (0.0180)	-0.117*** (0.0398)	-0.107*** (0.0231)	-0.157* (0.0952)	-0.108*** (0.0351)	-0.0465 (0.0307)
Eff. size in SD terms	N/A	0.15	0.06	N/A	0.17	0.14	0.15	0.16	N/A
Observations	3311	3311	3311	3311	3311	3311	3311	3311	3311

Standard errors, clustered at constituency level, are in parentheses. All regressions include party and district fixed effects.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 11: What issues do voters think are important? (Score 1-3)

	mean	sd
1 Agricultural loan availability	0.98	1.11
2 Electricity for Agriculture	1.13	1.16
3 Better price-realization for farm products	1.20	1.28
4 Irrigation Programmes	1.09	1.20
5 Subsidy for seeds and fertilizers	1.08	1.22
6 Accessibility of MP	1.96	0.81
7 Anti-terrorism	2.07	0.71
8 Better employment opportunities	2.33	0.76
9 Better electric supply	2.20	0.74
10 Better hospitals / Primary Healthcare Centres	2.15	0.80
11 Better Law and Order / Policing	2.16	0.78
12 Better public transport	2.26	0.79
13 Better roads	2.22	0.76
14 Better schools	2.16	0.80
15 Drinking water	2.20	0.77
16 Empowerment of Women	2.19	0.78
17 Environmental issues	2.12	0.78
18 Eradication of Corruption	2.09	0.81
19 Reservation for jobs and education	2.12	0.76
20 Security for women	2.17	0.79
21 Strong Defence/Military	2.11	0.78
22 Subsidized food distribution	2.15	0.80
23 Training for jobs	2.14	0.76
24 Trustworthiness of MP	2.09	0.80
25 Other	1.10	1.16
26 Better garbage clearance	0.57	0.99
27 Encroachment of public land / lakes etc	0.57	0.98
28 Facility for pedestrians and cyclists on roads	0.59	1.02
29 Better food prices for Consumers	0.61	1.05
30 Traffic congestion	0.59	1.03
Average Importance of issue	2.19	0.40
Observations	21531	

Table 12: What issues do rural voters think are important? (Score 1-3)

	(1)	
	mean	sd
1 Agricultural loan availability	1.37	1.10
2 Electricity for Agriculture	1.52	1.11
3 Better price-realization for farm products	1.67	1.22
4 Irrigation Programmes	1.55	1.15
5 Subsidy for seeds and fertilizers	1.53	1.20
6 Accessibility of MP	2.00	0.79
7 Anti-terrorism	2.13	0.68
8 Better employment opportunities	2.42	0.68
9 Better electric supply	2.26	0.68
10 Better hospitals / Primary Healthcare Centres	2.21	0.77
11 Better Law and Order / Policing	2.21	0.73
12 Better public transport	2.35	0.72
13 Better roads	2.30	0.70
14 Better schools	2.22	0.76
15 Drinking water	2.28	0.71
16 Empowerment of Women	2.25	0.74
17 Environmental issues	2.18	0.73
18 Eradication of Corruption	2.14	0.78
19 Reservation for jobs and education	2.18	0.71
20 Security for women	2.24	0.73
21 Strong Defence/Military	2.19	0.74
22 Subsidized food distribution	2.23	0.75
23 Training for jobs	2.22	0.71
24 Trustworthiness of MP	2.14	0.76
25 Other	0.97	1.17
26 Better garbage clearance	0.02	0.19
27 Encroachment of public land / lakes etc	0.02	0.19
28 Facility for pedestrians and cyclists on roads	0.02	0.20
29 Better food prices for Consumers	0.02	0.20
30 Traffic congestion	0.02	0.20
Imp	2.23	0.38
Observations	14539	

Table 13: What issues do urban voters think are important? (Score 1-3)

	(1)	
	mean	sd
1 Agricultural loan availability	0.09	0.42
2 Electricity for Agriculture	0.20	0.63
3 Better price-realization for farm products	0.11	0.51
4 Irrigation Programmes	0.09	0.45
5 Subsidy for seeds and fertilizers	0.09	0.46
6 Accessibility of MP	1.93	0.78
7 Anti-terrorism	2.02	0.69
8 Better employment opportunities	2.23	0.79
9 Better electric supply	2.15	0.76
10 Better hospitals / Primary Healthcare Centres	2.12	0.79
11 Better Law and Order / Policing	2.14	0.78
12 Better public transport	2.16	0.81
13 Better roads	2.14	0.76
14 Better schools	2.13	0.81
15 Drinking water	2.13	0.78
16 Empowerment of Women	2.14	0.78
17 Environmental issues	2.06	0.80
18 Eradication of Corruption	2.05	0.81
19 Reservation for jobs and education	2.07	0.76
20 Security for women	2.11	0.80
21 Strong Defence/Military	2.02	0.78
22 Subsidized food distribution	2.06	0.80
23 Training for jobs	2.05	0.76
24 Trustworthiness of MP	2.05	0.78
25 Other	1.38	1.10
26 Better garbage clearance	1.83	0.93
27 Encroachment of public land / lakes etc	1.84	0.86
28 Facility for pedestrians and cyclists on roads	1.91	0.92
29 Better food prices for Consumers	1.98	0.92
30 Traffic congestion	1.91	0.96
Imp	2.14	0.38
Observations	6390	

Table 14: Voter assessment of politician performance (Score 1-3)

	mean	sd
1 Agricultural loan availability	0.83	0.94
2 Electricity for Agriculture	0.94	1.01
3 Better price-realization for farm products	0.98	1.11
4 Irrigation Programmes	0.91	1.05
5 Subsidy for seeds and fertilizers	0.88	1.04
6 Accessibility of MP	1.52	0.70
7 Anti-terrorism	1.69	0.70
8 Better employment opportunities	1.72	0.81
9 Better electric supply	1.68	0.73
10 Better hospitals / Primary Healthcare Centres	1.60	0.75
11 Better Law and Order / Policing	1.66	0.75
12 Better public transport	1.73	0.80
13 Better roads	1.72	0.75
14 Better schools	1.67	0.77
15 Drinking water	1.70	0.75
16 Empowerment of Women	1.71	0.79
17 Environmental issues	1.65	0.75
18 Eradication of Corruption	1.60	0.76
19 Reservation for jobs and education	1.64	0.74
20 Security for women	1.68	0.79
21 Strong Defence/Military	1.66	0.75
22 Subsidized food distribution	1.66	0.78
23 Training for jobs	1.66	0.76
24 Trustworthiness of MP	1.65	0.77
25 Other	0.96	1.05
26 Better garbage clearance	0.46	0.82
27 Encroachment of public land / lakes etc	0.50	0.87
28 Facility for pedestrians and cyclists on roads	0.50	0.89
29 Better food prices for Consumers	0.49	0.87
30 Traffic congestion	0.48	0.88
Perf	1.72	0.47
Observations	21531	

Table 15: Voter assessment of politician performance

Sample	All voters	Voter different caste to MP	Voter same caste as MP
Dynast	-0.280** (0.127)	-0.375*** (0.137)	-0.149 (0.104)
Observations	16731	9410	6167

Standard errors, clustered at the constituency level, are in parentheses.

All regressions include party and state FEs and controls for constituency and respondent characteristics.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 16: Impact of dynastic victory on voter assessment of politician performance

Sample	Dependent variable: voter assessment of MP performance					
	Male	Female	Rural	Urban	Uneducated	Educated
Iwald	-0.448 (0.277)	-0.360 (0.311)	-0.488 (0.349)	-0.249 (0.233)	-0.369 (0.367)	-0.217 (0.343)
Observations	14522	6753	14539	6390	8957	3008

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 17: How do celebrities perform in elections and in office?

	(1)	(2)	(3)
	Vote share	Performance	Performance
Celebrity	0.0210 (0.0173)	-0.0834 (0.159)	
Dynast	0.0245*** (0.00778)		-0.0959* (0.0522)
Estimation	Fixed effects	RD	RD
<i>N</i>	228025	227976	227976

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 18: How do immediate family compare to other dynasts?

	(1)	(2)	(3)
	All dynasts	Son/Daughter/Wife	Other dynasts
Wins close election	-0.0959*	-0.146**	0.00388
	(0.0522)	(0.0625)	(0.0664)
<i>N</i>	227976	140978	79453

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 19: Founder incentives

	Performance	
	(1)	(2)
Has a son	0.103*** (0.041)	0.141*** (0.051)
Dynast*Has a son		-0.097* (0.050)
Controls	Yes	Yes
State FE	Yes	Yes
Party FE	Yes	Yes
<i>N</i>	108428	108428

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 20: First stage: founder level

Sample	Depvar: dummy for founded political dynasty	
	All	Only Congress party
has_son	0.0381** (0.0171)	0.0837*** (0.0322)
noofchildren	-0.000879 (0.00387)	-0.00924 (0.00652)
Year entered politics	-0.00533* (0.00274)	-0.000897 (0.00253)
Minister	0.00148 (0.0179)	0.00555 (0.0258)
Imprisoned	0.0254 (0.0357)	0.0488 (0.0550)
Union	-0.0385** (0.0169)	-0.0456* (0.0240)
Farmer issues	-0.0145 (0.0270)	-0.0413 (0.0430)
Total parliament experience	0.0116** (0.00554)	0.0257** (0.0102)
Vote share in 1st election	0.00157* (0.000814)	0.00163 (0.00126)
<i>N</i>	4573	2038

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$