Distributive Implications for Governing Party Constituencies: Evidence from Bangladesh*

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Abstract

We investigate distributive implications for governing party constituencies in Bangladesh, a young democracy where programmatic government transfers are yet to be established. Using a regression discontinuity design, we find that having a member of parliament (MP) in the governing parties leads to greater household consumption and lower poverty. We find some evidence that governing party constituencies have better access to publicly provided goods and services, such as access to electricity. However, the quantile treatment effects (QTEs) of having a government MP are notably more pronounced at the high end of consumption distribution compared to the low end. Furthermore, the largest landowners, in terms of acreage, derive the greatest benefits. Interestingly, we find no evidence suggesting that the unequal QTEs stem from a structural transformation in the local economy facilitated by enhanced infrastructure. Our findings suggest that although poor households obtain some benefits from having a government MP, wealthy households disproportionately profit from the advantages brought about by their presence.

Keywords: Distributive Politics; Clientelism; Bangladesh; Election; Elite Capture.

JEL Classification Numbers: D72, O12, I31, H42, H50, P16

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1 Introduction

Electoral incentives often have a significant impact on the allocation of public expenditure. This electorally motivated spending is particularly salient in young and developing democracies, where programmatic transfers of public resources and spending have not yet been institutionalized (Golden and Min, 2013). In the absence of institutional arrangements for the transparent and rule-based distribution of public benefits, the allocation of public resources in developing democracies is frequently guided by a mixture of pork-barrel politics and clientelistic exchanges (Hicken, 2011).

Conceptually, pork-barrel politics and clientelism are distinct. Pork-barrel politics typically involves *ad hoc* transfers or spending directed toward identifiable groups, usually in the form of local public goods, with the aim of eliciting electoral support from these groups. In contrast, clientelism involves the transfers of public resources to individuals in exchange for their electoral supports (Hicken, 2011; Stokes et al., 2013). Empirically, however, distinguishing between clientelistic distribution and pork-barrel politics can be challenging. The precise application of these concepts often depends on substantial local knowledge, as what may be categorized as pork in one context might not apply in another (Golden and Min, 2013).[1] For instance, politicians may rely on local patrons to deliver local public goods (Baldwin, 2013), while public programs aimed at poverty alleviation—typically considered important public goods—may also serve as vehicles for the clientelistic distribution of individual benefits (Diaz-Cayeros et al., 2016).

Distributive politics has efficiency and equity implications for the allocation of public resources. While the literature on distributive politics has documented the electoral distortion caused by political motives, few studies have explored whether distributive politics benefits poor people more. One may think that both pork-barrel and clientelistic distributions of public resources favor poor areas or individuals. Low-income areas

[1] While the lack of credibility among parties and politicians to make broad-based policy promises may prompt clientelistic politics (Keefer, 2007; Keefer and Vlaicu, 2007), the commitment problem for beneficiaries to deliver votes in exchange for benefits poses its own challenges for clientelistic transfers. Recent works on clientelism have highlighted the crucial roles of brokers, who intermediate the exchanges of votes and benefits between politicians and voters (Stokes et al., 2013; Ravanilla et al., 2022).

may benefit more from the same amount of public resources, and a poor person's vote may be cheaper to buy. However, special interest groups often capture a large share of pork-barrel spending, and brokers in the clientelistic exchanges—who are typically local elites—may also claim a sizable portion of resources from patrons.

This study investigates two key aspects of distributive politics. Building upon the extensive prior literature, we first examine the impact of electorally motivated public spending on the material well-being of the targeted population.[2] In particular, we assess whether targeted transfers enhance the well-being of voters on average. Secondly, we investigate distributional effect of the targeted transfers, exploring whether these transfers are pro-poor or pro-rich. In developing countries, poorer voters often appear more susceptible to resource allocation than wealthier voters (Brusco et al., 2004), suggesting that distributive politics might be pro-poor. However, while existing evidence indicates that poor voters are more likely to be approached by parties for vote buying, it is unclear that they are the primary beneficiaries of the transfers. Local elites, patrons, or brokers may capture a larger share of the benefits.[3] Even if the transfers are not specifically targeted at relatively well-off and influential voters, and instead take the form of public goods such as roads, these individuals may enjoy greater benefits, as they are likely to have resources (e.g. cars to use on the roads) needed to fully utilize these public goods.

We aim to answer these questions in the context of Bangladesh. Bangladesh is a young democracy and is often characterized by clientelism (Khan, 2013; Ahmed et al., 2024). We first ask whether households on average benefit from having a member of parliament (MP) affiliated with the governing parties. Using a regression discontinuity (RD) design, we find strong evidence that having a governing party MP increases per-capita household consumption by about 20 percent and reduces poverty rates by 12 percent. We find some, albeit weaker, evidence that having a government MP increases access to basic infrastructure such as electricity, clean drinking water, and san-

[2]For instance, see Arulampalam et al. (2009) and Albouy (2013).

[3]Politicians in new democracies might disproportionately target individuals with large social networks for vote buying (Cruz, 2019). Additionally, Schaffer and Baker (2015) use survey data from Latin America to show that politically influential voters are disproportionately given clientelistic benefits.

itary latrines. We do not find participation in social safety programs to be different in constituencies represented by a government MP.

The increase in household consumption and the reduction in poverty do not necessarily mean that electoral targeting with public spending by government MPs is pro-poor. In fact, our findings suggest the opposite. Moving beyond our initial focus on the average treatment effects, we examine the distributional effect of having a government MP by extending the RD design to examine the quantile treatment effects (QTEs) on household consumption. We find that having a government MP increases household consumption across the entire distribution, but the effects are significantly larger at the high end of the consumption distribution compared to the low end. Specifically, having a government MP increases per-capita household consumption by 36 percent at the 90th percentile, but only 21 percent at the 10th percentile. This finding aligns with Cruz (2019) and Cruz et al. (2017), which suggest that in developing world, voters with large social networks, who are often wealthier, are more likely to be targeted by politicians (Cruz et al., 2017). The QTEs on food consumption show a positive but relatively flat profile across quantiles, suggesting that transfers of in-kind grain grants and other government spending do not specifically target the most calorie-deficient households. The higher QTEs on overall household consumption at the high end of the consumption distribution are primarily driven by nonfood consumption.

Our paper contributes to several strands of literature. A substantial body of research on distributive politics investigates whether local governments' partisan alignment with upper-level governments increases intergovernmental transfers or grants allocated to local areas (e.g., Arulampalam et al. (2009); Solé-Ollé and Sorribas-Navarro (2008); Brollo and Nannicini (2012); Albouy (2013)). However, the broader consequences of political alignment remain underexplored. We contribute to this literature by investigating the distributional effects of having a government MP using microdata. Another strand of literature examines how existing socioeconomic inequality affects the allocation of public spending (e.g., Bardhan and Mookherjee (2006a); Araujo et al. (2008); Anderson et al. (2015)). Our paper contributes by documenting the causal ef-

fects in the opposite direction—showing that electorally motivated government transfers may increase economic inequality across households. This is particularly important as most studies focus on average effects, whereas our study delves into the distributional effects.[4] While there is extensive research on how politicians allocate resources, fewer studies take the next step to explore the welfare consequences of those political decisions, especially the implications for the poor. Our study demonstrates that while political decisions may lead to gains for the constituency as a whole, they can also widen the gap between the rich and poor. Given that the distributional consequences of electoral competition are central to democratic politics, this paper sheds light on the critical question: "Can democracy work for the poor?" (Pande, 2020).

In addition, a sizable body of literature exploits close elections to identify how winning candidates' identity and partisan affiliation affect local development using a regression discontinuity design. For example, Prakash et al. (2019) find that criminally accused politicians in India lower yearly growth in night-time light intensity by 24 percentage points. Asher and Novosad (2017) find that being represented by a politician from the ruling party in India leads to higher private-sector employment, higher share prices of firms, and brighter remotely sensed night lights in local areas. Similarly, Mahadevan (2019) shows that constituencies of the winning party in India had higher electricity consumption than those of the losing party but were billed less for their electricity. Malik (2019) finds that co-partisans of the ruling party in Pakistan receive more development funds, even though the distribution is supposed to be apolitical and rule-based. We contribute to this literature by focusing on a measure closely related to the well-being of local residents, i.e., household consumption, in the context of Bangladesh.

[4]In contrast to our study, which leverages micro-level data to estimate distributional impacts, most research relies aggregated data at the district or municipal level. Only a few studies use micro-level data, such as individual or household survey data (see Hsieh et al. (2011); Fafchamps and Labonne (2017); Albertus (2020)). Due to the aggregated nature of data, most of these studies overlook the heterogeneous effects across the wealth distribution. Only a few control for district or municipal averages, such as poverty rates or education levels (Boffa et al., 2021). Among these, Bardhan and Mookherjee (2006b) find significantly lower allocations of private resources and employment opportunities in poorer villages, with no observable effects of political competition or literacy. In Guatemala, Denly (2022) finds that discretionary transfers before federal elections disproportionately benefited districts with lower education levels.

Finally, emerging literature examines political favoritism related to winning candidates in local offices using close elections. Fafchamps and Labonne (2017) find that politicians' relatives in the Philippines secure better jobs. The familial association with local mayors is particularly beneficial to those who are already in an advantageous position in the labor market, such as males and the better educated. Lehne et al. (2018) also show that in India, the share of contractors with names matching those of winning politicians increased by 83 percent compared to the previous term. While our paper does not pin down the precise channels through which political favoritism operates, it contributes to the literature by documenting the distributional impacts of having a representative associated with the ruling party.

2 Background

2.1 Electoral Institutions

After gaining independence from Pakistan in 1971, Bangladesh briefly had a parliamentary democracy from 1972 to 1975.[5] In 1975, Sheikh Mujibur Rahman (Mujib), who led the founding of Bangladesh and was the prime minister at the time, imposed a one-party socialist rule. The assassination of Mujib in the same year and subsequent military coups led to a prolonged period of military dictatorships under different regimes. Democracy was not restored until 1991. Since 1991, Bangladesh has maintained the Westminster system of a unicameral parliamentary government. The prime minister of Bangladesh is the head of government and is elected by the majority of the parliament. Members of the parliament are elected by universal suffrage for a term no longer than five years. Each of the 300 electoral districts (hereafter constituencies) elects one member to the parliament under the first-past-the-post rule.[6]

[5]The institutional details in this section are based on the description provided by Tinker (2023).

[6]On top of the 300 members elected directly by the voters, Bangladesh's parliamentary system mandates 50 reserved seats for women. These seats are allocated to parties proportional to the shares of seats they won in the general election, and the parties allocate these reserved seats to their female members. However, they hold less power and have significantly less access to facilities than the directly elected MPs. In this paper, we focus on direct elections in the 300 constituencies (Source: `https://www.parliament.gov.bd/Name-and-Composition-of-Parliament`).

Two parties, the center-left Bangladesh Awami League (AL) and the center-right Bangladesh Nationalist Party (BNP), have dominated Bangladeshi politics and alternated in power since 1991. In the general election of 1991, the BNP won 140 seats and, with the support of the Jatiyo Party (JP), formed the government. The AL won 88 seats and became the opposition party. The next general election was held in February 1996, after the stipulated five-year term. However, opposition parties boycotted this election to protest the BNP's alleged electoral manipulation in a by-election (special election) two years before. Despite winning all 300 seats in the February election, the BNP backed down under pressure from the opposition through marches, demonstrations, and strikes, and agreed to hold a fresh election. The BNP invoked a constitutional amendment and handed over power to a neutral caretaker government to conduct a new parliamentary election. In June 1996, the AL won 146 of the 300 constituencies and, with the support of the JP, led a governing coalition. In 2001, the BNP returned to power by winning 193 seats in that year's general election, while the AL retained only 62 seats. The next election was due in January 2007, but was postponed by a military-backed caretaker government until 2008. In the 2008 election, the AL led a 14-party grand alliance, which together won 263 seats. The AL alone won 230 seats.[7]

We focus on the competitive elections in 1996, 2001, and 2008 that are considered to be, by and large, free and fair by domestic and international observers (Chowdhury, 2009; Jahan, 2015). These elections also have high voter turnout rates of 75%, 76%, and 87%, respectively, in contrast to merely 55% in 1991 (Ahmed and Ahmad, 2003; Chowdhury, 2009). Table 1 presents the number of seats the different parties, including smaller parties, won in the three elections. Data are from the Bangladesh Election Commission and will be described in more detail in Section 3.1.

Table 1 shows that the AL and the BNP alternated in power with large swings in the number of seats they won. However, compared to swings in seat shares in the parliament, the changes in national vote shares the two major parties received were modest. Figure 1 shows that despite a large increase in the number of seats won by the

[7]Source: Bangaldesh Election Commission. `http://www.ecs.gov.bd/`

BNP in 2001, the BNP's national vote share increased by only 9 percentage points, from 33.6% to 42.7%. The AL's national vote share, far from dropping, increased slightly by 2.8 percentage points, from 37.4% in 1996 to 40.2% in 2001. Vote shares gained by the two dominant parties increased at the expense of candidates from smaller parties.

In the 2008 election, the nationwide vote share of the incumbent BNP experienced a drop from 42.7% to 33.5%. The national vote share of AL increased from 40.2% in 2001 to 48.8% in 2008. However, compared to the AL's surge by 56 percentage points in seat shares in the parliament, the change in AL's vote share is rather modest.

Bangladesh's majoritarian electoral system allows for large swings of partisan control in the parliament in the face of modest changes in partisan popularity. Swing constituencies are therefore pivotal for the major parties to gain power. Electoral incentives that favor swing districts in a majoritarian system have been well documented theoretically and empirically (see, e.g., Strömberg, 2008; Banful, 2011).

2.2 Distributive Politics

Bangladesh has a unitary political system with a unicameral parliament and is fiscally highly centralized. Each MP is entitled to propose the allocation of 150 million Taka (about 2.5 million U.S. dollars) as developmental grants for his or her constituency during the MP's parliamentary term (Ahmed, 2012). The grants can be used for infrastructure and development work in the MP's constituency, along with various social, educational, and religious activities. The proposed use of these grants, however, is subject to the approval of the Local Government Engineering Department (LGED) under the Ministry of Local Government, Rural Development and Cooperatives. The LGED also monitors the implementation of the approved developmental projects (Ahmed, 2015).

Despite the potential benefits of using development funds, the effectiveness of these grants can be limited by issues of transparency and accountability, as funds may be diverted for an MP's personal or political gain rather than for public benefit. By interviewing more than 600 local residents about 140 MPs in 2012, Transparency Interna-

tional reported that more than 70% of MPs operated their own businesses, and 89% of these businessmen obtained contracts for development projects in their constituencies. Also, more than 70% of respondents complained that MPs influence local public administration and misuse development funds (Akram, 2012).

In addition to development grants, MPs in Bangladesh can request discretionary grants. Each MP is entitled to a discretionary grant of 100,000 Taka per year, which they can spend at their discretion to meet urgent requirements or to support small-scale local initiatives (Ahmed, 2012). These grants are intended to provide quick responses to local issues, such as emergency repairs, community events, or minor infrastructure improvements.

3 Data and Empirical Strategy

3.1 Data Description

We use data from various sources. Our main data source is the Household Income and Expenditure Survey (HIES) of Bangladesh. The HIES is designed by the Bangladesh Bureau of Statistics (BBS) to be comparable over time. We use 2000, 2005, and 2010 rounds for measures of household consumption, access to publicly provided goods, and demographics. We also use demographics from the 1995 round of the HIES for placebo tests.

In addition, we collect information on the Bangladesh National Parliamentary Elections (candidate's name, party affiliations, vote shares, and contested constituencies) from the Election Commission of Bangladesh's website and the Statistical Pocketbook by the BBS. National elections in Bangladesh are usually held every five years, except for the 2008 election, which was conducted seven years after the previous election. Election results for the three years (1996, 2001, and 2008) are used in the analysis. We match the election results from 1996 to HIES 2000, results from 2001 to HIES 2005, and results from 2008 to HIES 2010 via subdistricts identified in the HIES. Each constituency consists of one or more subdistricts (known as upazilas or thanas), and one

subdistrict may belong to more than one constituency. Subdistricts consist of several unions, which are the smallest rural administrative units in Bangladesh. For a small number of subdistricts that belong to more than one constituency, we match the subdistrict to the constituency that contains a larger share of the unions.

We also merge election results from 2001 and 2008 to subdistrict poverty rates in 2005 and 2010. The Bangladesh government sets two poverty lines. The higher one defines the poverty rate, and the lower one defines the extreme poverty rate. Subdistrict-level poverty rates for the years 2005 and 2010 are estimated by the BBS in collaboration with the World Bank and World Food Program; poverty rates for 2000 are not available.

The HIES is a nationally representative survey, but it does not cover all constituencies. Therefore, the number of constituencies in each wave is fewer than 300, which is the total number of constituencies and therefore, we have an unbalanced panel. Table 2 shows the number of households in each wave and provides summary statistics for the key variables used in the empirical analysis. For instance, Bangladesh is young: the average age in our sample is 26.8 years in 2005. The literacy rate has been low but is rising. Because of the low literacy rate, ballot papers in Bangladesh typically use graphic symbols such as a boat (AL) and paddy sheaf (BNP) to indicate the candidates' affiliated parties.

Table 2 reports the mean and standard deviation of per-capita household consumption by year. The figures are in 2010 dollars, after adjusting for inflation using CPI data from the IMF. Household consumption refers to total household nondurable spending, including food and nonfood consumption. Both food and nonfood consumption include goods and services that are purchased, produced domestically, or received as gifts or in-kind wages.

Overall food and nonfood consumption adjusted for inflation has increased slightly over time. We also consider participation in social safety programs, access to clean drinking water, improved sanitation, and electricity. The Bangladesh government only started to set up social safety nets and welfare programs in recent years; before 2005, the HIES did not ask questions about program participation. In 2005, only 15% of house-

holds had at least one member who participated in any such programs. Participation increased to 24.5% in 2010. Programmatic redistribution programs are not supposed to target geographically concentrated voters. In practice, however, access to these programs through government agencies may be susceptible to clientelistic influence from local politicians, as Weitz-Shapiro (2012) finds in Argentina.

The lack of clean drinking water and inadequate sanitation are leading causes of mortality and disease in less-developed countries. The complementarity between clean drinking water sources and improved sanitation, together with the positive epidemiological externalities of clean water sources and improved sanitation, suggest that governments play a significant role in basic public health infrastructure (Duflo et al., 2015). Tube wells have been a low-cost way to obtain clean water, but the groundwater is often contaminated by naturally occurring arsenic, continuous exposure to which is harmful. Given the spatial variation of arsenic contamination within a village, a simple test-and-label process could ensure clean drinking water (Bennear et al., 2013). Since the late 1990s, the Bangladesh government initiated a mass program to test millions of tube wells throughout the country. We consider piped water and arsenic-tested tube wells as sources of clean drinking water (other sources of drinking water include ponds, rivers, waterfalls, and non-arsenic-tested tube wells). Our summary statistics show that less than 60% of the sample households have access to clean drinking water.

The National Sanitation Strategy (Local Government Division, 2005) set out the policy for investing in and subsidizing in public sanitation infrastructure. Choudhury and Hossain (2006) find that the majority of households set up sanitary latrines after receiving sanitary materials from the government (61%) or the non-profit organization BRAC (21%). Therefore, government intervention is an important driver for access to improved sanitation. We create an indicator for access to improved sanitation using information based on the types of latrine households use. Out of the six types of latrines used by households, a flush toilet, stable (pacca) water-sealed latrine, and pit latrine are considered to be improved sanitation, while an unstable (kacha) permanent latrine, temporary latrine, and open defecation are not. The use of improved sanitation has

increased from 32% to 52% between 1995 and 2010.

Similarly, the share of households that are connected to electricity shows a marked increase from only 28.4% in 1995 to 57.5% in 2010, although a large proportion of households still live without electricity. Finally, both poverty and extreme poverty rates have decreased by roughly 10 percentage points between 2005 and 2010.

3.2 Regression Discontinuity Design

To estimate the effects of having a parliamentary representative in the governing coalition on household consumption, poverty, and access to government-provided goods and services, we use a regression discontinuity (RD) design. A simple regression of outcome measures on the indicator of having an MP in the governing coalition may provide biased estimates. The error term in the regression may be correlated with both time-invariant and time-varying factors that determine household outcomes. For example, places with different socioeconomic conditions may support different parties, and hence have different likelihoods of having an MP in the governing coalition. However, those economic conditions may also affect the allocation of government spending and confound estimates of the causal impacts of having a government MP.

Close elections provide quasi-experimental variation for identification via the RD design. As long as there are some unpredicted random components that determine the vote shares of candidates in an election, the treatment status in sufficiently close elections is assigned as-if random (Lee, 2008). The RD design exploits this quasi-experimental variation. The treatment of interest is whether the representative of an electoral district (or constituency) belongs to the governing coalition. We estimate the following equation:

$$Y_{ijt} = \alpha + \beta G_{jt} + f(M_{jt}) + \mu_t + \epsilon_{ijt}, \tag{1}$$

where i indicates household, j indicates constituency, and t indicates year of the HIES wave. Y_{ijt} is the outcome variable of interest, such as per-capita household consumption. G_{jt} is an indicator variable equal to one if, as a result of the previous election,

constituency j has a representative affiliated with the governing coalition at time t. M_{jt} is the margin of victory of the candidate in the governing coalition, i.e., the vote share of the governing coalition candidate over the most popular non-coalition candidate in the same race. If M_{jt} is positive, $G_{jt} = 1$ and constituency j would have a representative in the governing coalition; if M_{jt} is negative, $G_{jt} = 0$ and constituency j would not have a government MP. $f(M_{jt})$ is a function of the running variable M_{jt}. In our preferable specification, we estimate $f(M_{jt})$ nonparametrically using estimators from Calonico et al. (2014), which select the optimal bandwidth by minimizing the means squared errors, adjust for asymptotic biases, and provide robust inference. We also report estimates from specifications in which $f(M_{jt})$ is linear or quadratic. Throughout this paper, standard errors are clustered by constituency. μ_t is a survey year fixed effect to capture the different levels of the outcome variable over time. ϵ_{ijt} is an error term, and α and β are the coefficients to be estimated.

In Appendix 1, we provide several tests for identification assumptions proposed by Cattaneo et al. (2017) and McCrary (2008). We also provide balancing tests and placebo tests, by matching the outcome with future election results. All tests further validate our results. Additionally, given our empirical strategies rely on the subset of data on close elections, our estimates are the local average treatment effect (LATE). We discuss the implications of focusing on close elections in Section 6.3.

4 Average Treatment Effects of Having a Government MP

4.1 Household Consumption and Poverty

Due to domestic production of food and inaccurate reporting of income, it is well known that household consumption is a better measure of economic well-being than income (Deaton, 1997; Banerjee and Duflo, 2007). To investigate how having a government MP affects material well-being, we focus on per-capita household consumption.

Table 3 reports the coefficient estimates of the binary variable that indicates a governing party constituency. In the first row, the outcome variable is the annual per-capita household consumption in 2010 dollars; in the second row, the outcome variable is the log per-capita household consumption. Column (1) reports estimates from our preferred specification using local linear regressions and robust standard errors from Calonico et al. (2014). Having a government MP increases household consumption by $72, or 20% (18.4 log points). Both estimates are statistically significant at the 5% level.

For comparison, we also report estimates from parametric specifications in Columns (2) to (5). In Column (2), the running variable is controlled through two linear terms: one for values to the left of the zero cutoff and another for values to the right. In Column (3), the running variable is similarly controlled by two quadratic terms. For both dollar and log values of consumption, the quadratic specifications give slightly higher estimates than the local linear regressions, while the linear specifications give lower estimates. The quadratic specification suggests 23.7% (21.3 log points) increase in consumption while the linear specification suggests an 11% increase.[8]

Although the balancing tests in Appendix 1 show that pre-existing differences in household consumption between government constituencies and non-government constituencies are small, statistically insignificant, and are not always positive, one may be concerned that the differences affect our estimation in the finite sample. In Columns (4) and (5), we add constituency fixed effects to the linear and quadratic specifications. These specifications are very taxing for estimation as they rely on within-constituency variation as well as close elections for identification. However, estimates from these specifications are similar to those obtained from our preferred nonparametric specification and remain statistically significant. In particular, the quadratic specifications also provide estimates close to the nonparametric estimates. Given the caveats of Gelman and Imbens (2017), we refrain from using high-order polynomials for the running variable.

[8]Note that the estimates may seem large. Although not directly comparable, some studies investigating the effects of partisan alignment on government grants also show sizeable results. For example, Solé-Ollé and Sorribas-Navarro (2008) show that municipalities aligned with upper-tier grantor governments received over 40% more grants than those that are unaligned.

Furthermore, in Figure 2, we provide visual evidence that having a government MP increases household consumption. We plot different measures of per-capita household consumption against the governing party's margin of victory. Each circle represents the average of households in a bin spanning 0.02 vote-share margins. In the top-left subplot, household consumption per capita is measured in 2010 dollars; in the top-right subplot, per-capita consumption takes log values. In both subplots, household consumption is considerably higher just to the right-hand side of the election threshold zero than just to the left-hand side of the threshold.

For a low-income country such as Bangladesh, food consumption on average accounts for more than half of total household consumption, and many poor households suffer malnutrition. We decompose the household consumption into food and nonfood consumption to see how having a government MP affects these two categories of consumption. In the bottom left subplot of Figure 2, we show log per-capita household food consumption against the margin of victory of the governing party candidates; in the bottom right subplot, we plot the log per-capita household nonfood consumption. Discrete increases are visible in both plots as the circles move rightward across the electoral cutoff for having a government MP. The increase appears to be larger for nonfood consumption; indeed, the nonparametric RD estimates suggest that having a government MP increases food consumption by about 11%, but increases nonfood consumption by about 30%. Moreover, the estimate is statistically significant at the 1% level for nonfood consumption but only significant at the 10% level for food consumption.

As shown in Columns (2) to (5), the parametric estimates are qualitatively similar to the nonparametric estimates, but are more precisely estimated. Again, the quadratic specifications provide estimates close to the nonparametric ones, and having a government MP increases nonfood consumption more than food consumption.[9]

Having a government MP also reduces poverty rates. Figure 3 plots the poverty

[9]We also run the main regression on household consumption for each election year to check whether our finding is due to the party alignment or due to a specific party behavior since the two parties alternated in power in every election. The non-parametric estimates are positive but imprecisely estimated for the first two waves (2000 and 2005), and negative, small, and imprecisely estimated for the last wave (2010). The parametric estimates are all positive and mostly statistically significant at the conventional level. Thus, there is no clear evidence that our finding is driven by a specific party behavior.

rates against the governing party's margin of victory. The subplot on the left plots poverty rates set by the upper poverty line. The subplot on the right plots extreme poverty rates, which are set using the lower poverty line. Patterns from both the subplots are similar: there is a sharp drop in poverty rates as one moves from the left-hand side of the cutoff to the right-hand side of the cutoff. The nonparametric RD estimates reported in Table 4 suggest that having a government MP reduces the poverty rate by about 12 percentage points. The reduction in the extreme poverty rate is slightly lower, at about 10 percentage points. Both estimates are statistically significant at the 1% level.

4.2 Publicly Provided Goods and Services

Transfers from the national government to the constituencies can take many forms. In addition to local development projects, food-for-work grants, and poverty-relief food grants, MPs may also increase the publicly provided goods and services to their constituencies. In this section, we investigate whether having a government MP increases households' participation in social safety programs and access to basic infrastructures such as clean drinking water, sanitary latrines, and electricity.

In Figure 4, we first provide four RD graphs, one for each outcome variable. From top left to bottom right, the subplots show safety net program participation, access to clean drinking water, access to improved sanitation, and electricity. It appears that having a government MP has some positive impacts on access to improved sanitation and electricity. However, these RD graphs are noisier than those for household consumption.

To formally estimate the effects of having a government MP on publicly provided goods, we report the estimated coefficients of the binary variable that indicates whether a constituency's MP belongs to the governing coalition in Table 5, which is similar to Table 3 in structure. In Column (1), we report the nonparametric RD estimates. In Columns (2) to (5), we report estimates using parametric assumptions for how the running variable affects the outcome variables.

In the top row, the outcome variable is a binary variable that indicates whether the

household has a member participating in any social safety programs. The RD estimate suggests that having a government MP has a positive but statistically insignificant impact on program participation. The imprecision of the estimate may be because program participation is only surveyed in the last two waves of HIES. The availability of, and hence participation in, social safety programs was very limited before 2005. The parametric estimates from Columns (2), (4), and (5) in the first rows are positive, but are only statistically significant at the 5% level in Column (4), where the running variable enters in linear terms and constituency fixed effects are included. If a government MP transfers more payments to the patronage networks that support him or her, program participation rate may not increase. Estimates in the top row suggest that the extensive margin of social safety programs is not the primary channel through which a government MP reduces poverty and increases consumption.

We also do not find that having a government MP has a statistically significant impact on household access to clean drinking water; the RD-estimated impact is positive but imprecise. A potential reason for the lack of statistical precision may be the nonparametric estimation. In Columns (2) to (5) of Table 5, we also report parametric estimates similar to those reported in Table 3. The estimated effect on access to clean drinking water becomes statistically significant at the 5% level in the linear and quadratic specifications without constituency fixed effects. With a standard error of 0.093, the quadratic estimate suggests that having a government MP increases a household's probability of access to clean drinking water by 19 percentage points. Estimates from specifications with constituency fixed effects are positive but not statistically significant.

For access to improved sanitation, the nonparametric estimate suggests that a government MP has a positive but statistically insignificant effect. With one exception, parametric estimates provide similar estimates: positive but not precisely estimated. In Column (3), the quadratic specification without constituency fixed effects, the estimated effect on access to improved sanitation is 15.6 percentage points and significant at the 5% level.

For access to electricity, the nonparametric estimate is also positive but statistically insignificant. Three out of four parametric estimates, however, are significant at the 1% level, and one is significant at the 10% level. The estimated effect varies from 8.7 to 21.1 log points, depending on the specification.

These findings are consistent with a survey that found that respondents are substantially more satisfied with government MPs than other MPs in fulfilling electoral promises, representing the constituencies in the parliament, and promoting local development initiatives (Akram, 2012). However, it appears that government MPs are more likely to increase the provision of goods that are easier to target and more privately consumed. While access to clean drinking water, particularly water delivered by the arsenic-tested tube wells, is a local public good, the benefits may not be immediate or apparent. Ahmad et al. (2005) find low willingness to pay for arsenic-free drinking water in rural Bangladesh. Although the collective use of sanitary latrines is a public good, because improved sanitation has positive externalities (Duflo et al., 2015), subsidized sanitary latrines are typically installed inside a household and hence are primarily private goods. Access to electricity at the village level is a public good; however, access to electricity inside a house is a private good. A government MP may help with overcoming the bureaucratic red tape, which is a common barrier in connecting to electricity.

5 Distributional Effects on Household Consumption

The average treatment effect presented so far can be explained by several channels such as political favoritism and efficient reallocation of government funds. For instance, a politician aligned with the central government may have a higher likelihood of having their plans approved by the LGED, and this would benefit politically aligned constituencies. Also, there can be a complementarity between a government MP and the allocation of resources by the government because they communicate better and have greater alignment in ideology. We further investigate the distributional implications of

governing party constituencies by examining the quantile treatment effect of having a government MP.

5.1 Quantile Treatment Effects from an RD Design

If poor voters are the main group targeted in the electorally motivated transfers, then having a government MP improves economic well-being at the low end of the consumption distribution. In contrast, if a few patrons and local elites extract most of the rents from electoral transfers, then having a government MP may not have strong positive effects throughout the consumption distribution. Moreover, if affluent households share the rents with less-affluent households but benefit the most from having a government MP, this may shift the consumption distribution up, but more so at high quantiles than elsewhere. Again, we focus on household consumption as our measure of living standards and economic well-being. Taking advantage of the HIES microdata, we extend our RD design to examine quantile treatment effects on consumption. We do so by estimating a set of conditional quantile regressions based on the following specification:

$$Q_\tau(Y_{ijt}) = \alpha_\tau + \delta_\tau G_{jt} + f_\tau(M_{jt}) + \mu_{\tau,t}, \tag{2}$$

where G_{jt} and M_{jt} are defined as before, i.e., a binary variable that indicates a governing party constituency and the margin of victory, respectively; $f_\tau(M_{jt})$ is a function of the running variable M_{jt}; $\mu_{\tau,t}$ is a year fixed effect; Y_{ijt} is the log per-capita annual consumption of household i in constituency j during year t; and $Q_\tau(Y_{ijt})$ is the τ-quantile of Y_{ijt} conditional on G_{jt}, M_{jt}, and t:

$$Q_\tau(Y_{ijt}) = \inf\{y : \Pr(Y_{ijt} < y | G_{jt},\ M_{jt},\ t) = \tau\},\ \text{for } \tau \in (0,1).$$

The coefficients α_τ and δ_τ, the function $f_\tau(\cdot)$, and year fixed effects $\mu_{\tau,t}$ are all quantile-specific; hence the subscript τ.

A quantile treatment effect (QTE) is the difference in the outcome variable between

the treated group and the control group at the τ-quantile. In our RD design, the key coefficient δ_τ captures the QTE for the τ-quantile. In the framework of heterogeneous treatment effects introduced by Imbens and Angrist (1994) and extended to the QTEs by Abadie et al. (2002) and Frandsen et al. (2012), δ_τ captures the local QTE for the τ-quantile at $M_{jt} = 0$.

To estimate the QTEs on household consumption, we offer three specifications. First, we estimate the conditional quantile model of Koenker and Bassett (1978). Given that previous results suggest that specifications that control for quadratic running variables yield estimates similar to nonparametric RD estimates, we use two quadratic polynomials for the running variable, with one on each side of the cutoff zero. Using linear specifications gives qualitatively similar results, which are not reported for brevity.

Second, we estimate the QTEs of government MP using a two-step estimator. In our setting, treatment status varies at a group level and we have microlevel data. To estimate conditional mean equations, least-squares estimators remain consistent in the presence of classical measurement errors in the left-hand-side variables or group-level unobservables uncorrelated with the right-hand-side observables. This feature does not carry over to the standard quantile regression estimator of Koenker and Bassett (1978).

An alternative estimator of QTEs on household consumption is a two-step grouped quantile IV estimator proposed by Chetverikov et al. (2016). Since we are interested in unconditional QTEs, the first step of the grouped IV quantile estimator reduces to calculating the quantiles within each group—i.e., a constituency-year—in our setting. In the second step, because we extend the RD design to the quantile setting, selection into treatment is exogenous conditional on the running variable. Therefore, the 2SLS in the second step is reduced to OLS. This two-step estimator yields a consistent estimate, even in the presence of group-level unobservables or classical measurement errors of the left-hand-side variable (Chetverikov et al., 2016). We use the two-step estimator with two specifications. In the first specification, we control for the running

variable using two quadratic terms as before, in the second (OLS) step. In the second specification, we use a nonparametric estimator in the second step and run local linear regression on both sides of the cutoff—namely, the Calonico et al. (2014) estimator similar to those adopted previously.

5.2 Quantile Treatment Effects on Household Consumption

In Figure 5, we plot the estimates of δ_τ, for $\tau = 0.05, 0.10, \cdots, 0.95$ using blue solid lines. Gray dashed lines indicate the 95% confidence intervals of the associated QTEs estimates, which are based on standard errors robust to clustering by constituency. For the Koenker and Bassett (1978) estimates in the first row, we calculate the bootstrap standard errors by re-sampling constituencies for 250 repetitions. For the two-step estimates, standard errors are the usual cluster-robust standard errors from the second step.

Subplots in the top row report QTEs from the traditional Koenker and Bassett (1978) estimator. Subplots in the middle report QTEs using the two-step estimator and a quadratic specification for the running variable in the second step. Subplots in the bottom row report QTEs using the two-step estimator, in which the second step is nonparametric. Subplots in the first column show QTEs on total household consumption measured by log household consumption per capita. Subplots in the middle column plot the QTEs on the food consumption measured by log per-capita food consumption. Subplots in the right column plot the QTEs on the nonfood consumption, in which the outcome variable is log per-capita nonfood consumption.

If we look at the top row of subplots, for the bottom half of the household consumption distribution, the QTEs are fairly stable and significant at the 5% level. Having an MP in the governing coalition increases the median, as well as other quantiles below 0.5, of per-capita household consumption by about 25%. For the 0.05 quantile, QTEs of having an MP in the governing coalition are slightly lower. However, as one moves above the median, the QTEs increase with the quantile τ. The 0.9 and 0.95 quantiles of per-capita household consumption are about 40% to 50% higher in government con-

stituencies than elsewhere. Estimated QTEs for the quantiles above 0.5 are all significant at the 5% level.

Profiles of QTEs on household consumption from the two-step estimators similarly have an upward gradient as one moves from low to high quantiles. The QTE estimates from the first subplot in the second row are steadily increasing. The QTE estimates from the first subplot in the last row are quite stable from the 0.05 quantile to the 0.80 quantile, but they increase as they move above the 0.80 quantile. The QTE profiles from different specifications suggest that while the low end of consumption distribution benefits from having a government MP, the high end increases more than the low end. The increase in household consumption in the governing party constituencies is primarily driven by nonfood consumption. Throughout the three specifications, the profiles of QTEs on food consumption are fairly flat and only slightly upward sloping. In our sample, food consumption accounts for about 60% of household consumption.

The QTEs on nonfood consumption are considerably higher than those on food consumption. For food consumption, QTEs in the bottom half of the distribution are always positive and mostly significant at the 5% level. The QTEs on nonfood consumption are always positive and significant at the 5% level. From the 10^{th} to the 50^{th} percentiles, the QTEs on both food and nonfood consumption are fairly stable. However, QTEs on nonfood consumption increase as we move above the 50^{th} percentile. At the 90^{th} percentile, being a governing party constituency increases per-capita household nonfood consumption by more than 50%. Since the average treatment period is about four years, annualized QTEs on nonfood consumption are more than 10%. In Appendix 2, we formally test several hypotheses that compare the QTEs of different quantiles and report the p-values of these tests.

5.3 Heterogeneous Effects on Consumption by Land Ownership

While we find that having a government MP shifts up the consumption distribution at the high end significantly more than at the low end, it does not necessarily mean that rich households benefit more than poor households. The QTE at the τ-quantile is not

equivalent to the treatment effect on households whose potential consumption is at the τ-quantile unless a household's rank in the consumption distribution is invariant to the treatment status. In other words, it is possible that the counterfactual poor benefit so much from having a government MP that they become the rich and are richer than the counterfactual rich.

To address this possibility, we investigate whether land ownership affects the extent to which households benefit from having a government MP. Despite the growth of the garment industry in recent years, Bangladesh is still a predominantly rural country; two-thirds of the population still live in rural areas, where land is the economic basis for income generation. However, about 60% of households in our sample are landless. Even among landowners, the distribution of land ownership is highly skewed and concentrated. Large landowners hire landless laborers, arrange to sharecrop, provide credit, mediate local disputes, and provide some local public goods. These economic and social relationships well position large landowners to be local patrons who could broker for political parties (Anderson et al., 2015).

Moreover, land ownership evolves slowly. This is partially attributed to the lack of clear property rights sponsored by the state, which is common in developing countries. While a government MP might affect land ownership in his constituency, these changes are likely slow and gradual. To mitigate the concern of reverse causality, we divide landowners into four quartiles based on the size of their land holdings.

We estimate a model in which the treatment indicator interacts with the four landownership indicators Q_x, for $x = 1, \cdots, 4$, where Q_4 indicates the largest landowners. Landowners in the top quartile on average own 4 acres of cultivable land. For comparison, the median cultivated area per farm household is 0.9 acres. We limit our sample to rural areas in these estimations, whose results are reported in Table 6.

In Columns (1) and (2), land ownership quartiles are defined based on all landowners in our sample throughout the sample period. Each quartile consists of roughly 10% of households because about 60% of the rural population are landless. In Columns (3) and (4), we define landownership quartiles using ownership within the constituency

of the households.

Landless households are the benchmark category. The first row of Table 6 shows that landless households benefit from having a government MP. The quadratic specification suggests that their consumption increases by about 14%, while the linear specification indicates a 6% increase. In all specifications, we find that landowners enjoy significantly greater consumption than landless households, and households owning more land consume more.

In all four specifications, the estimated coefficients of the interaction terms monotonically increase from Q_1 to Q_4, suggesting that larger landowners enjoy a greater consumption boost from having a government MP. However, only estimates for the top quartile of landowners interacting with the treatment indicator are statistically significant. With a linear running variable, top-quartile landowners enjoy a 7.5% greater boost in consumption from the treatment than the landless. The estimate with a quadratic running variable is similar, but only significant at the 10% level. These estimates are from specifications using national landownership distribution to define ownership quartile.

Using local landownership to define quartile indicators, estimates for the interaction terms between the treatment indicator and the top landownership indicator are larger at about 0.1 and statistically significant at the 1% level. From the quadratic specification, landless households' consumption increases by 14 log points, while top-quartile landowners enjoy 24 log points. The larger and more precise estimates of the Q_4 interaction term in Columns (3) and (4) suggest that the local measure of the largest landowners is a more precise proxy for a household's position in a patronage network from which one could extract rents from the state.

Moreover, in both specifications, the differences between the coefficients of GovMP $\times$ Q_4 and GovMP $\times$ Q_x, for $x = 1, 2$, are statistically significant at the 5% level. However, the difference between the coefficients of GovMP $\times$ Q_4 and GovMP $\times$ Q_3 is not statistically significant. Interestingly, smaller landowners—those in the first quartile of land ownership by acre—benefit slightly less than the landless. If smallholders do not rent

land from large landowners and have no patron-client relationships with landowners, then clientelistic transfers may be less likely to be offered to them than to landless clients. However, the Q_1 interaction term is not statistically significant at any conventional level.

Finally, in Bangladesh, one may expect that incumbent party candidates may enjoy substantial electoral advantages, given that a government MP increases consumption and reduces poverty substantially in his or her constituency. However, those at the top of the consumption distribution also benefit the most from having a government MP. In fact, we find a lack of evidence for incumbency advantages. The results and discussions appear in Appendix 3.

6 Mechanism

6.1 Income Effects

Our results suggest that having a government MP increases household expenditure, with a more pronounced effect at the higher end of the consumption distribution and among large landowners. A plausible explanation is that the presence of a government MP boosts household incomes within the constituency, with the effect being more significant for wealthier households. We refer to this as the income effect, distinguishing between earned and unearned income.

Suppose that having a government MP enhances development opportunities by, for example, building more roads, increasing infrastructure investment, or facilitating business openings. As the local economy grows, households earn more in the labor market, and businesses enjoy higher profits. However, some households benefit from the economic expansion more than others. For instance, as the non-agricultural sectors develop, better-educated households may experience higher demand for their skills or adapt more easily to the changing environment. In the presence of financial constraints, capital owners may be better positioned to capture emerging economic opportunities. Consequently, inequality may rise as the local economy undergoes a potential struc-

tural transformation, following the initial trajectory of Kuznets' inverted U-shaped relationship between income and inequality (Kuznets, 1955; Ahluwalia, 1976; Anand and Kanbur, 1993). We may also refer to the effect on earned income as Kuznets growth.

The extra income may not be earned but simply be rents or unproductive transfers facilitated by the government MP. The distribution of these rents could disproportionately favor local elites with familial ties to government officials (Fafchamps and Labonne, 2017). Local elites and political brokers may capture a larger share of the funds allocated to a particular constituency. In other words, the extra unearned incomes are rents and transfers that benefit the wealthy more than the poor.

It is important to note that these channels are not mutually exclusive and often occur simultaneously. Government spending on infrastructure can provide opportunities for rents. Lehne et al. (2018) find that the share of contractors with names matching those of marginally elected politicians is 83% higher than that of contractors with names matching marginally defeated politicians. This finding highlights the potential co-occurrence of infrastructure spending and rent distribution to families connected to elected officials. Corruption in infrastructure spending may also be significant in Bangladesh, as reflected by its ranking of 147th out of 180 countries in the 2021 Corruption Perception Index by Transparency International.

In this context, we examine whether the higher consumption in constituencies with government MPs is likely driven by increased earned income and broader economic growth in those areas. In particular, we focus on the growth of non-agricultural sectors as an indicator of potential structural transformation.

If the positive impact of having a government MP leads to Kuznets growth, we would expect to see non-agricultural sectors thriving in constituencies with a government MP. Using our benchmark RD specification, we compare government constituencies to non-government constituencies to assess whether (i) non-agricultural enterprises operated by households in government constituencies generated higher revenue, and (ii) household heads were more likely to be employed by a non-agricultural enterprise.

Using household revenue from non-agricultural enterprises as the dependent variable, Column (1) in Table 7 reports that households in government constituencies earned 71.3 thousand Taka more in revenue from their non-agricultural enterprises. The estimate is statistically significant at the 1% level and substantial, compared to a mean of 121.7 thousand Taka.

However, the distribution of revenue from non-agricultural enterprises is highly skewed to the right, with many households reporting zero revenue. Therefore, we are concerned that the regression in Column (1) may be mis-specified. Acknowledging the issues raised by Chen and Roth (2023) regarding log-like transformations such as $log(1 + Y)$ or $arcsinh(Y)$, we first examine the extensive margin of operating a non-agricultural enterprise, measured by having positive revenue from a non-agricultural enterprise.

In Column (2) of Table 7, the point estimate indicates a statistically insignificant increase of 1.3% in the likelihood that a household operates a non-agricultural enterprise. For comparison, about 27% of households operate a non-agricultural enterprise. While it is important to note that not all of these households operate high-productivity enterprises in manufacturing or modern services, we find no evidence of a widespread increase in the operation of non-agricultural enterprises in government constituencies.

Next, we examine the log revenue of the non-agricultural enterprises as the dependent variable. By construction, the result reported in Column (3) uses a sample of households with positive non-agricultural revenue. Considering the general challenges in disentangling the extensive margin and intensive margin (Chen and Roth, 2023; Lee, 2009), this specification shows the intensive margin impacts of having a government MP on revenue of non-agricultural enterprises. Conditional on having positive revenue, revenue from non-agricultural enterprises increases by 0.409 log points, or about 51%. The estimate is statistically significant at the 1% level. Assuming that the effect on the extensive margin was approximately zero or very small, and there were limited entries and exits in non-agricultural enterprises, the estimate suggests that existing non-agricultural enterprises experienced large revenue increases a few

years after electing a government MP. Because new firms or family enterprises tend to be smaller compared to existing enterprises (Rijkers et al., 2014), the impacts on the revenue of existing enterprises may be underestimated if there is a small number of new entries.

In Column (4), we estimate the impact of having a government MP on the probability of employment in a non-agricultural enterprise. The point estimate is positive but small and statistically insignificant. Since new and young enterprises generate a disproportionate share of new jobs, this finding is consistent with no sizable net entries into the non-agricultural sector.

Overall, we find no evidence of a widespread increase in household engagements in non-agricultural enterprises. The increase in revenue from non-agricultural enterprises along the intensive margin in the government constituencies potentially reflects either (i) incumbent enterprises becoming more productive or (ii) existing enterprises enjoying greater rents. Again, these two channels are not necessarily mutually exclusive. To further distinguish between them, we examine passive incomes received by households in the last two columns of Table 7.

Column (5) reports a specification where the dependent variable is a binary indicator for whether the household receives any passive income from land, property, or dividends. Similar to the extensive margin of non-agricultural enterprise engagement, there is a positive but small increase in the likelihood of a household receiving passive income. In contrast, the log passive income, as shown in Column (6), experienced a sizable increase. With an effect size of 0.447 log points, having a government MP is associated with a 56.3% increase in passive income, which is statistically significant at the 5% level.

It is worth noting that the coefficient estimate for log passive income is larger than the coefficient estimate for log non-agricultural revenue in Column (3). If the shocks to the local economy due to having a government MP trigger a development process that enhances the long-term profitability of enterprises, one might expect some of the increased revenue and profits to be reinvested back into the business. Conversely, if

the profitability of non-agricultural enterprises is driven by temporary shocks such as increased demand for these enterprises or rising asset prices of land and capital used in local production, then much of the higher profitability is likely to be distributed as passive income to capital owners.

Furthermore, we investigate whether households with higher levels of human capital benefit more from having a government MP. Better-educated individuals may be better positioned to take advantage of industrialization and transition away from low-productivity agriculture (see, e.g., Heath and Mobarak, 2015), due to increased demand for skills. We use two proxies for a household's level of human capital: (i) an indicator of whether the household head is literate; and (ii) the years of schooling of the head. We then interact each of these measures with the presence of a government MP in two separate regressions. As reported in Table 8, none of the interaction terms are statistically significant at the 10% level.

These null effects seems to contrast with our earlier finding that wealthy households benefit from having a government MP more than poor households—despite both measures of education being strongly and positively correlated with household socioeconomic indicators such as landholding, revenue from non-agricultural enterprises, and passive income. This contrast provides additional evidence that having a government MP did not lead to a widespread increase in the demand for human capital, which, according to several growth theories, is a key driver in initiating the sustainable development process (see, e.g., Azariadis and Drazen, 1990; Galor, 2005).

We also investigate whether there are more government jobs in government constituencies. In the last two surveys where relevant questions were asked, 3.5% of respondents reported working for the government. However, we do not find that residing in a government constituency significantly increases one's chance of being employed by the government. The point estimate of having a government MP on the probability of government employment is -0.005, with a standard error of 0.014. While the estimate is not precise, we can reject that having a government MP increases one's probability by more than 1.5 percentage points. Given the low baseline likelihood of being employed

by the government, and the broadly distributed benefits of increased consumption, it is unlikely that patronage jobs from the government were the primary driver of our main results.

6.2 Consumption Complementarity

Another mechanism that we consider involves consumption complementarity related to local infrastructure. Household appliances, for instance, are not very useful without reliable electricity access, and a passenger car may have limited value or prohibitively high maintenance costs without paved roads. In the absence of complementary infrastructure, wealthy households may not consume a lot of goods even if they can afford to do so. With improved infrastructure brought by a government MP, the wealthy may purchase and consume more non-food items. Thus, even if income remains constant, a government MP may still lead to more consumption, particularly for wealthier households and primarily for non-food items.

Again, the consumption complementarity channel may operate alongside the income channels. Due to data limitations and co-occurrence of the potential channels, it is challenging to isolate specific channels. Nevertheless, we conduct several tests to shed light on the relative importance of these channels.

First, we investigate consumption complementarity with infrastructure, particularly access to electricity. Electricity connection is crucial for the consumption of electronic devices and appliances, such as refrigerators and mobile phones. We split the sample into two sub-samples based on whether households have access to electricity. We then estimate the RD specification with quadratic polynomials of the running variable within each sub-sample. If consumption complementarity with electricity predominantly drives the higher household consumption in government constituencies, we expect to see that the sub-sample with electricity access drives our main results on total household consumption and non-food consumption.

Table 9 reports the coefficient estimates of a binary variable indicating whether the household resides in a constituency represented by an MP from the governing party.

Each cell reports one estimate from one regression. Different rows represent different dependent variables, while different columns report estimates using different subsamples.

In Columns (1) and (2), we report estimates using the sub-samples of households without and with electricity access, respectively. For log per-capita household consumption, the estimated coefficients of a government MP are very close between the two sub-samples. Similarly, the estimates for log per-capita nonfood consumption are very similar across the two groups. Notably, the coefficient estimates for nonfood consumption remain large and statistically significant at the 1% or 5% levels in both subsamples. For comparison, we also estimate the effects of having a government MP on food consumption in the two sub-samples. The estimates are positive, but smaller and not statistically significant at the 5% level. Results in Columns (1) and (2) suggest that the higher consumption in government constituencies is unlikely to be predominantly driven by consumption complementarity with electricity.

However, one should be cautious in interpreting the estimates in Columns (1) and (2) as causal. As previously reported, there is some evidence that having a government MP increases household access to electricity. If this is the case, splitting a sample by an endogenous variable contaminates the causal interpretation due to household sorting and selection into different samples. If households with better economic resources, such as savings and wealth, are more likely to connect to electricity and tend to have higher consumption, then the positive selection of households out of Column (1)'s no-electricity access sample would bias the estimates downward.

To address this concern, we proceed to split the sample into a more exogenous and slow-changing variable: the rural and urban designation of an area. A similar set of estimates are reported in Columns (3) and (4) for this sample split. During our sample period, rural areas had worse access to infrastructure compared to urban areas. Specifically, 33.4% of rural households had access to electricity, while 79.4% of urban households had access. The gaps in access to other infrastructure, such as sanitary latrines, are similarly large.

In the year 2000, only 20% of rural households had access to electricity, compared to 75% of urban households. During our sample period, the increase in access to electricity was much more dramatic for rural households than for urban households. Therefore, if consumption complementarity is the primary mechanism, we would expect that our main results are driven by the rural sub-sample. However, this is not what we observed in Columns (3) and (4).

As shown in Column (4), in urban areas, having a government MP still has large and statistically significant impacts on total household consumption and nonfood consumption. Compared to rural households, the point estimates for urban households are larger for total household consumption, as well as nonfood consumption.

Moreover, we investigate the impacts of government MPs on food share of household expenditure. The Engel curve captures the stylized facts that as household consumption increases, the share of household expenditure on food declines. This relationship is typically well approximated by a linear relationship between the food share and log per-capital expenditure (Nakamura et al., 2016). If the food share decreases as urban and rural households have higher income and total consumption, and government MP leads to similar increases in household consumption, then the food share of household expenditure should be lowered by a similar amount. However, if rural households are constrained from nonfood consumption due to the lack of electricity and other complementary infrastructure, then one would expect a larger decrease in food share for rural households once these constraints are relaxed.

However, this is not what we find. For urban households, we find that having a government MP reduces the food share by 6.3 percentage points and is statistically significant at the 1% level. For rural households, the impact is still negative, but it is much smaller at 2.4 percentage points and only statistically significant at the 10% level.

In sum, while we cannot rule out that consumption complementarity played some roles, it is unlikely that the primary causal mechanism is that having a government MP increases household consumption by providing complementary infrastructure for consumption, particularly nonfood consumption.

Overall, our findings do not lend to an optimistic interpretation of how government MPs increase household consumption. Our findings in the section echo findings in the previous section that large landowners benefit most in terms of household consumption. Although we could not directly observe how rents are distributed, works such as Fafchamps and Labonne (2017) highlight the connections of local elites in distributing rents from government spending. While we could not rule out some roles in consumption complementarity in better infrastructure access or a modest degree of long-term boost to the local economy, our findings suggest that a large part of the benefits of having a government MP is captured by local well-to-dos. Though some of those rents may trickle down, the benefits obtained by poor households were relatively small compared to those obtained by wealthy households.

6.3 Beyond Close Elections

Our empirical strategy focuses on the subset of constituencies where elections are close using an RD design to identify a local average treatment effect (LATE). This LATE of having a government MP may differ from the average effect in non-close elections. Constituencies where winning candidates secure a wide margin of victory may systematically differ from those with close elections, especially if parties have varying abilities to engage in clientelistic exchanges or pork-barrel transfers. In this subsection, we investigate whether there are systematic differences between the two sets of constituencies.

For the analysis, we define close elections as those where the winner's margin of victory over the runner-up is less than 5 percentage points. In our sample, this condition is met in just under 20% of the races. By comparison, only about 7% of elections for the U.S. House of Representatives between 1976 and 2022 fall into this category.

Figure 6 presents the means of several demographic variables and access to public goods and services, comparing close constituencies with those that are not. The share of female residents and the school attendance rates are very similar between the two groups, with no statistically significant differences. Literacy rates, along with access to electricity, sanitary latrines, and social safety nets, are marginally lower in close con-

stituencies. However, households in close constituencies are more likely to have access to clean water.

Figure 7 presents the distribution of age and per-capita household consumption for constituencies with and without close elections. While constituencies with close elections tend to have slightly more young people and slightly lower per-capita consumption, the overall distribution of age and per-capita household consumption remains largely similar between close and non-close constituencies.

The modest differences between the close constituencies and others are consistent with the limited political sorting observed across constituencies in Bangladesh. In Figure 8, we plot the average per-capita consumption in each constituency against the vote share of the Awami League (AL) in the previous election. Unlike in the U.S., the correlation between affluence and voting patterns is weak in Bangladesh.[10] Geographic sorting of partisanship is also weak in Bangladesh. The vote share of AL candidates is, on average, only 1.6 percentage points lower in rural areas than in urban areas. The urban-rural difference in the AL vote share is not statistically significant at the 5% level.

While some constituencies may exhibit persistent partisan leanings, the correlation of the AL vote share between two consecutive elections within a given constituency is only 0.52. In contrast, the correlation of Republican vote shares in U.S. House elections across consecutive U.S. House elections since 2000 in the same congressional districts is 0.81. Khan (2000) has observed that the two major political parties in Bangladesh similarly represent multi-class interests.

Given the similarity of the two sets of constituencies, would the LATE estimated from our RD strategies generalize to constituencies with large margins of victory? To investigate this question, we examine several OLS specifications with indicators for close elections, having a government MP, and their interaction terms in our regression models. In Column (1) of Table 10, we focus on a single indicator of whether the household has a government MP, namely 'GovMP'. In Column (2), we focus on a single indicator of whether the household resides in a constituency with a competitive

[10]For example, see Kaplan et al. (2022) for partisan spatial sorting in the U.S.

election in the last cycle, namely 'Close'. In Column (3), we include both indicators 'GovMP' and 'Close'.

In all three specifications, the estimated coefficients for both indicators are positive but small and statistically insignificant at conventional levels. The coefficient estimate on the 'Close' indicator suggests that households in constituencies with close elections have, on average, similar consumption levels. The coefficient estimate on the 'GovMP' indicator indicates that, in the full sample, households in government constituencies also have similar consumption levels to those in non-government constituencies on average.

In Column (4), we include the interaction term of 'GovMP' and 'Close'. The coefficient on the interaction term is positive, similar in magnitude to our RD estimates, and statistically significant at the 5% level. 'Close' now also has a negative coefficient estimate that is also statistically significant at the 5% level.

From Columns (1) to (4), we control for year fixed effects. In Column (5), we add constituency fixed effects to control for time-invariant characteristics of constituencies. The coefficient estimates on 'Close' and 'GovMP' become modestly smaller in magnitude but remain statistically significant at the 10% level.

The results in Table 10 suggest that the effects of having a government MP may not be generalizable to constituencies with non-marginal elections. Moreover, it is possible that the better economic outcomes in constituencies that narrowly elected a government MP could result not only from rewards to those areas, but also from punishment, such as the withdrawal of government support in constituencies that narrowly favored the opposition. Given the polarized and antagonistic nature of partisan politics in Bangladesh (Ahmed et al., 2024), it is plausible that ruling parties may penalize constituencies that elect opposition MPs. However, comparisons between close and non-close constituencies indicate that the effects might extend beyond a small subset of closely contested elections.

7 Concluding Remarks

In this paper, we document some distributive implications of the partisan affiliation of parliamentary representatives across constituencies and within governing party constituencies. We show that having a government MP in the Bangladesh parliament increases household consumption, reduces poverty, and, to a lesser extent, improves access to electricity and basic health infrastructure. The additional public spending, however, comes with greater consumption inequality in the governing party constituencies.

The development process often features uneven growth. How the political process deals with economic inequality and mobility is therefore crucial for sustainable growth (Hirschman and Rothschild, 1973; Ray, 2010). During our sample period, Bangladesh experienced large electoral swings and frequent turnovers of governing parties. As a result, electorally motivated spending on infrastructure may benefit a considerable segment of the population since a large share of constituencies may potentially be swing constituencies and enjoy electoral targeting. However, political distortions on public finance and their effects on inequality may pose a challenge to the functioning of a democracy and a development path based on inclusive growth. Further studies may clarify the extent to which the increase in inequality is a "natural" consequence of greater governing spending on infrastructure, as compared to corruption and economic rents captured by the local elites. These issues on political accountability and distributive channels are important for the understanding of the politico-economic dynamics for sustainable development.

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Tables

Table 1: Numbers of Constituencies Won by Each Party in General Elections

Party / Year	1996	2001	2008
Bangladesh Awami League (AL)	**146**	62	**230**
Bangladesh Nationalist Party (BNP)	116	**193**	30
Independent	1	6	4
Islami Oikya Jote	1	2	
Jamat-E-Islami Bangladesh (JI)	3	17	2
Jatiya Party (JP)	32	4	27
Jatiya Samajtantrik Dal (Rab)	1		3
Islami Jatiya Oikya Front		14	
Jatiya Party (manju)		1	
Krisak Sramik Janata League		1	
Bangladesh Worker's Party			2
Liberal Democratic Party (LDP)			1
Bangladesh Jatiya Party (BJP)			1
Total	300	300	300

Notes: The 1996, 2001, and 2008 general elections were held, respectively, June 12, 1996; October 1, 2001; and December 29, 2008. The constituencies won by the largest parties after each election are indicated by bold numbers. (Source: Bangladesh Election Commission. `http://www.ecs.gov.bd/`)

Table 2: Summary Statistics

	1995	2000	2005	2010
	Households			
Age	24.247	25.768	26.823	28.435
	(9.694)	(10.195)	(10.772)	(11.987)
Literacy	0.332	0.416	0.480	0.495
	(0.325)	(0.353)	(0.356)	(0.323)
Female	0.503	0.501	0.504	0.513
	(0.185)	(0.178)	(0.180)	(0.188)
Participation in Social Safety Programs	-	-	0.151	0.245
	-	-	(0.358)	(0.430)
Access to Clean Drinking Water	-	-	0.583	0.559
	-	-	(0.493)	(0.497)
Access to Improved Sanitation	0.324	0.350	0.530	0.523
	(0.468)	(0.477)	(0.499)	(0.499)
Access to Electricity	0.284	0.371	0.459	0.575
	(0.451)	(0.483)	(0.498)	(0.494)
Per-capita Household Consumption ($)	338.0	300.7	312.5	437.5
	(297.6)	(256.2)	(256.0)	(351.0)
Per-capita Household Food Consumption ($)	187.0	159.2	166.8	233.0
	(104.9)	(84.7)	(82.4)	(123.8)
Household Size	5.239	5.160	4.904	4.525
	(2.325)	(2.193)	(2.105)	(1.876)
Number of Constituencies	242	230	258	237
Number of Households	6,979	6,479	4,786	11,787
	Subdistricts			
Poverty Rate	-	-	0.417	0.308
	-	-	(0.163)	(0.142)
Extreme Poverty Rate	-	-	0.268	0.174
	-	-	(0.142)	(0.107)
Number of Subdistricts			423	421

Notes: The upper panel reports the means and standard deviations (in parentheses) of key variables in each HIES wave as indicated by the column heading. Upper-panel statistics are at the household level, and the lower panel includes subdistrict-level poverty rates. Age is the mean age in years in a household. Female is the mean share of female in a household. Participation in Social Safety Programs is the share of residents who report that their households benefited from a social safety program. Access to Clean Drinking Water is the share of residents with access to pipe water or arsenic-tested tube-well water. Access to Improved Sanitation is the share of residents with access to sanitary latrines. Literacy is the share of household members who can read and write a letter. Per-capita (total and food) Household Consumption is an annual amount converted to 2010 U.S. dollars.

Table 3: Government MPs and Household Consumption

	(1)	(2)	(3)	(4)	(5)
Per-capita HH Consumption ($)	75.3**	45.2***	82.7***	49.3**	59.7**
	(29.4)	(16.8)	(22.0)	(20.8)	(28.8)
Per-capita HH Consumption (log)	0.184**	0.108**	0.213***	0.109***	0.154***
	(0.074)	(0.043)	(0.060)	(0.041)	(0.056)
Per-capita HH Food Consumption (log)	0.112*	0.070**	0.128***	0.063*	0.104**
	(0.061)	(0.033)	(0.046)	(0.034)	(0.045)
Per-capita HH Nonfood Consumption (log)	0.299***	0.159**	0.329***	0.168***	0.213***
	(0.101)	(0.063)	(0.088)	(0.059)	(0.080)
Running Variable	Nonparametric	Linear	Quadratic	Linear	Quadratic
Year Fixed Effect	Y	Y	Y	Y	Y
Constituency Fixed Effect				Y	Y
Number of Observations	22,969	22,969	22,969	22,969	22,969

Notes: The table above reports the coefficient estimates of an indicator variable that equals one if the household resides in a constituency represented by an MP from the governing parties, and zero otherwise. Each cell reports one estimate from one regression. From the top to bottom panels, the outcome variables are, respectively, (i) annual per-capita total household (HH) consumption in 2010 dollars; (ii) log per-capita total HH consumption; (iii) log per-capita HH food consumption; and (iv) log per-capita HH nonfood consumption. Columns represent how the running variable, the margin of victory of the governing party MP, and other control variables are modeled. In Column (1), the running variable is modeled nonparametrically using local linear regression (Calonico et al., 2014). The effective number of observations using the optimal bandwidths for the outcomes from (i) to (iv) are 13,319, 12,759, 11,489, and 13,414, respectively. In Columns (2) and (4), two separate linear terms of the running variable are included as regressors, one to the left of the cutoff and one to the right of the cutoff. In Columns (3) and (5), quadratic terms of the running variable are included. All regressions include year fixed effects. Columns (4) and (5) also include constituency fixed effects. Standard errors in parentheses are clustered by constituency.

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$.

Table 4: Government MPs and Poverty Rates

	Poverty Rate	Extreme Poverty Rate
GovMp	-0.124***	-0.104***
	(0.044)	(0.035)
Number of Subdistricts (N)	844	844

Notes: The table above reports the coefficient estimates of an indicator variable that equals one if the household resides in a constituency represented by an MP from the governing parties, and zero otherwise. The running variable is modeled nonparametrically using local linear regression (Calonico et al., 2014). In the left-hand column, the dependent variable is the subdistrict-level poverty rate; in the right-hand column, the dependent variable is the subdistrict-level extreme poverty rate. All regressions include year fixed effects. Standard errors in parentheses are clustered by constituency.
* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$.

Table 5: Government MPs and Publicly Provided Goods and Services

	(1)	(2)	(3)	(4)	(5)
Participation in Social Safety Programs	0.041	0.050*	-0.024	0.108**	0.062
	(0.060)	(0.029)	(0.039)	(0.046)	(0.061)
	$N = 15,727$	$N = 15,727$	$N = 15,727$	$N = 15,727$	$N = 15,727$
Access to Clean Drinking Water	0.080	0.150**	0.189**	0.062	0.116
	(0.133)	(0.064)	(0.093)	(0.061)	(0.086)
	$N = 16,490$	$N = 16,490$	$N = 16,490$	$N = 16,490$	$N = 16,490$
Access to Improved Sanitation	0.057	0.071	0.156**	0.057*	0.050
	(0.114)	(0.050)	(0.072)	(0.033)	(0.047)
	$N = 22,969$	$N = 22,969$	$N = 22,969$	$N = 22,969$	$N = 22,969$
Access to Electricity	0.065	0.088*	0.211***	0.087***	0.109***
	(0.081)	(0.047)	(0.064)	(0.024)	(0.032)
	$N = 22,969$	$N = 22,969$	$N = 22,969$	$N = 22,969$	$N = 22,969$
Running Variable	Nonparametric	Linear	Quadratic	Linear	Quadratic
Year Fixed Effect	Y	Y	Y	Y	Y
Constituency Fixed Effect				Y	Y

Notes: The table above reports the coefficient estimates of an indicator variable that equals one if the household resides in a constituency represented by an MP from the governing parties, and zero otherwise. Each cell reports one estimate from one regression. From top to bottom panels, the outcome variables are, respectively, (i) an indicator variable that equals one if the household participates in any social safety programs; (ii) an indicator variable that equals one if the household has access to clean drinking water; (iii) an indicator variable that equals one if the household has access sanitary latrines; and (iv) an indicator variable that equals one if the household has access to electricity. Columns represent how the running variable, the margin of victory of the governing party MP, and other control variables are modeled. In Column (1), the running variable is modeled nonparametrically using local linear regression (Calonico et al., 2014). The effective number of observations using the optimal bandwidths for the outcomes from (i) to (iv) are 4566, 6725, 8511, and 8256, respectively. In Columns (2) and (4), two separate linear terms of the running variable are included as regressors, one to the left of the cutoff and one to the right of the cutoff. In Columns (3) and (5), quadratic terms of the running variable are included. All regressions include year fixed effects. Columns (4) and (5) also include constituency fixed effects. Standard errors in parentheses are clustered by constituency.

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$.

Table 6: Government MPs and Household Consumption by Land Ownership

	(1)	(2)	(3)	(4)
GovMP	0.063*	0.146***	0.059*	0.140***
	(0.036)	(0.050)	(0.035)	(0.050)
Q_1	0.135***	0.137***	0.079***	0.081***
	(0.029)	(0.028)	(0.027)	(0.027)
Q_2	0.158***	0.161***	0.184***	0.189***
	(0.031)	(0.030)	(0.028)	(0.028)
Q_3	0.224***	0.230***	0.247***	0.254***
	(0.031)	(0.032)	(0.029)	(0.029)
Q_4	0.424***	0.432***	0.397***	0.400***
	(0.031)	(0.032)	(0.029)	(0.029)
GovMP × Q_1	-0.050	-0.052	-0.015	-0.017
	(0.035)	(0.035)	(0.033)	(0.033)
GovMP × Q_2	0.047	0.044	0.018	0.014
	(0.036)	(0.035)	(0.032)	(0.032)
GovMP × Q_3	0.056	0.051	0.046	0.038
	(0.035)	(0.036)	(0.032)	(0.032)
GovMP × Q_4	0.075**	0.066*	0.098***	0.095***
	(0.035)	(0.036)	(0.033)	(0.034)
Running Variable	Linear	Quadratic	Linear	Quadratic
Quartile Definition	National	National	Local	Local
# Observations	15,026	15,026	15,026	15,026

Notes: Each column above reports the estimates of one OLS regression, where the sample is rural households. Dependent variables are log per-capita household consumption. GovMP is an indicator variable that equals one if the household lives in a constituency of a governing party MP. Q_1 - Q_4 are binary variables that indicate, respectively, the bottom to top quartiles of cultivable land ownership in acres, conditional on the household owning a positive area of cultivable agriculture land. Q_1 - Q_4 all equal to zero for households owning no land. In Columns (1) and (2), quartiles are defined using the national distribution of land ownership. In Columns (3) and (4), quartiles are defined using the distribution of land ownership within the household's electoral district. GovMP × Q_x, for $x = 1, 2, 3, 4$, are interaction terms. In Columns (1) and (3), two separate linear terms of the running variable are included as regressors, one to the left of the cutoff and one to the right of the cutoff. In Columns (2) and (4), quadratic terms of the running variable are included. All regressions include year fixed effects. Standard errors in parentheses are clustered by constituency.

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$.

Table 7: Structural Transformation?

	Non-agricultural Enterprise				Passive Income	
	Revenue	Operating	Log Rev.	Being Employed	Any	Log Income
	(1)	(2)	(3)	(4)	(5)	(6)
GovMP	71.3***	0.013	0.409***	0.030	0.028	0.447**
	(20.1)	(0.023)	(0.151)	(0.052)	(0.031)	(0.190)
Mean of Dep. Variable	121.7	0.268	11.9	0.188	0.238	8.774
R^2	0.001	0.003	0.035	0.001	0.007	0.019
# Observations	22,969	22,969	6,148	13,033	8,138	1,935

Notes: The table above reports the coefficient estimates of an indicator variable that equals one if the household resides in a constituency represented by an MP from the governing parties, and zero otherwise. Each column reports one estimate from a regression with different dependent variables. In Column (1), the dependent variable is the revenue of non-agricultural enterprise operated by the household, measured in thousand Taka. In Column (2), the dependent variable is a binary variable indicating whether the household operates a non-agricultural enterprise. In Column (3), the dependent variable is the logarithm of the revenue of non-agricultural enterprise. In Column (4), the dependent variable is a binary variable indicating whether the household head is employed by a non-agricultural enterprise. In Column (5), the dependent variable is a binary variable indicating whether the household has any passive income. In Column (6), the dependent variable is the logarithm of the value of passive income of the households. Passive incomes include income from land, non-land property, and dividends. In all regressions, year fixed effects and quadratic terms of the running variable are included. Standard errors in parentheses are clustered by constituency.

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$.

Table 8: Heterogeneous Treatment Effects by Education

	(1)	(2)
GovMP	0.171***	0.191***
	(0.051)	(0.046)
Literate	0.426***	
	(0.022)	
Year of Education		0.058***
		(0.003)
GovMP × Literate	0.012	
	(0.027)	
GovMP × Year of Education		-0.000
		(0.003)
R^2	0.243	0.323
# Observations	22969	22206

Notes: The dependent variable is per-capital of household income in all specifications. "GovMP" is an indicator variable that equals one if the household resides in a constituency represented by an MP from the governing parties, and zero otherwise. "Literate" is an indicator variable that equals one if the head of household can read and write and zero otherwise. "Year of Education" is the years of education of the head of household. All specification including year fixed effects, and quadratic polynomials of the running variable margin of victory in both sides of zero cutoff. Standard errors in parentheses are clustered by constituency.

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$.

Table 9: Consumption Complementarity

	(1)	(2)	(3)	(4)
	Electricity Access			
Dep. Variable \ Sample	No	Yes	Rural	Urban
Per-capita HH Consumption (log)	0.107**	0.105*	0.155***	0.214**
	(0.043)	(0.061)	(0.048)	(0.098)
Per-capita HH Food Consumption (log)	0.081*	0.044	0.111**	0.093
	(0.043)	(0.047)	(0.044)	(0.075)
Per-capita HH Nonfood Consumption (log)	0.153***	0.178**	0.219***	0.372***
	(0.057)	(0.090)	(0.068)	(0.138)
Share of HH Expenditure on Food	-0.015	-0.031*	-0.024*	-0.063***
	(0.010)	(0.016)	(0.012)	(0.020)
Number of Observations	11632	11337	15026	7943

Notes: The table above reports the coefficient estimates of an indicator variable that equals one if the household resides in a constituency represented by an MP from the governing parties, and zero otherwise. Each cell reports one estimate from one regression. Different rows/panels represent different dependent variables, while different columns report estimates using different sub-samples. In Column (1), the sample include households without electricity access. In Column (2), the sample include households with electricity access. In Column (3), the sample includes rural households. In Column (4), the sample includes urban households. From the top to bottom panels, the outcome variables are, respectively, (i) log per-capita total household (HH) consumption; (ii) log per-capita HH food consumption; (iii) log per-capita HH nonfood consumption; and (iv) the share of household expenditure on food. In all regressions, year fixed effects and quadratic terms of the running variable are included. Standard errors in parentheses are clustered by constituency.

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$.

Table 10: Competitive Constituencies, Government MP, and Consumption

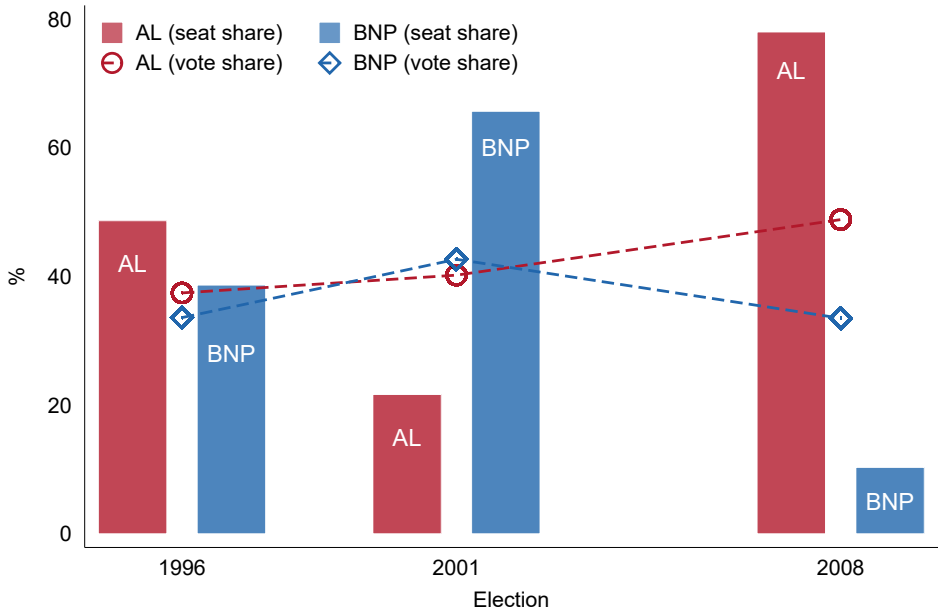
	(1)	(2)	(3)	(4)	(5)
GovMP	0.009		0.009	-0.029	0.004
	(0.029)		(0.029)	(0.031)	(0.027)
Close		0.004	0.005	-0.112**	-0.093*
		(0.036)	(0.036)	(0.055)	(0.051)
Close × GovMP				0.176**	0.127*
				(0.075)	(0.065)
Fixed Effects					
Year FE	Yes	Yes	Yes	Yes	Yes
Constituency FE	No	No	No	No	Yes
R^2	0.101	0.101	0.101	0.103	0.273
# Observations	22969	22969	22969	22969	22969

Notes: The dependent variable is per-capital of household income in all specifications. GovMP is an indicator variable that equals one if the household resides in a constituency represented by an MP from the governing parties, and zero otherwise. Close is an indicator variable that equals one if in the last election, the winner has a vote share margin of victory no larger than 5%. Standard errors in parentheses are clustered by constituency.

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$.

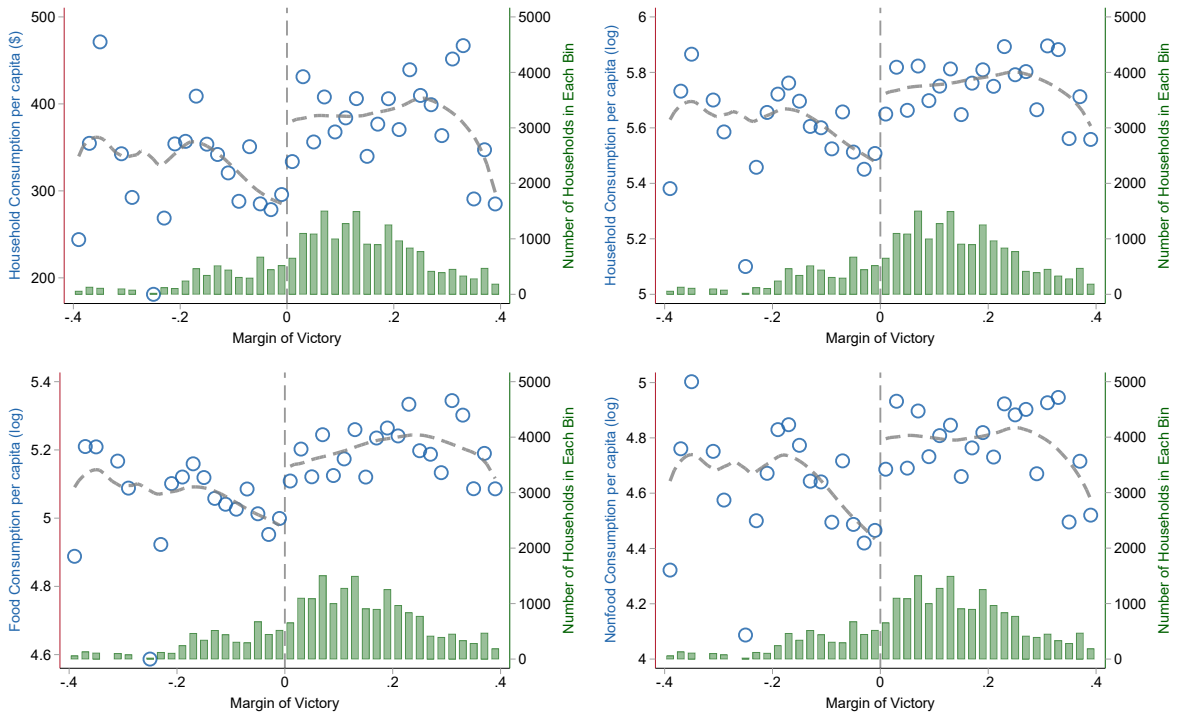
Figures

Figure 1: Parliamentary Seat Shares and National Vote Shares of Two Major Parties



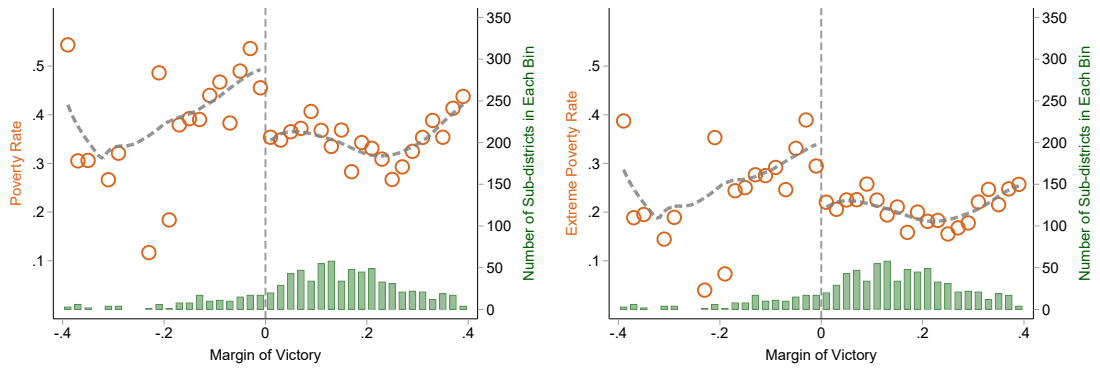
Notes: AL refers to the center-left Bangladesh Awami League. BNP indicates the center-right Bangladesh Nationalist Party.

Figure 2: Government MPs and Household Consumption



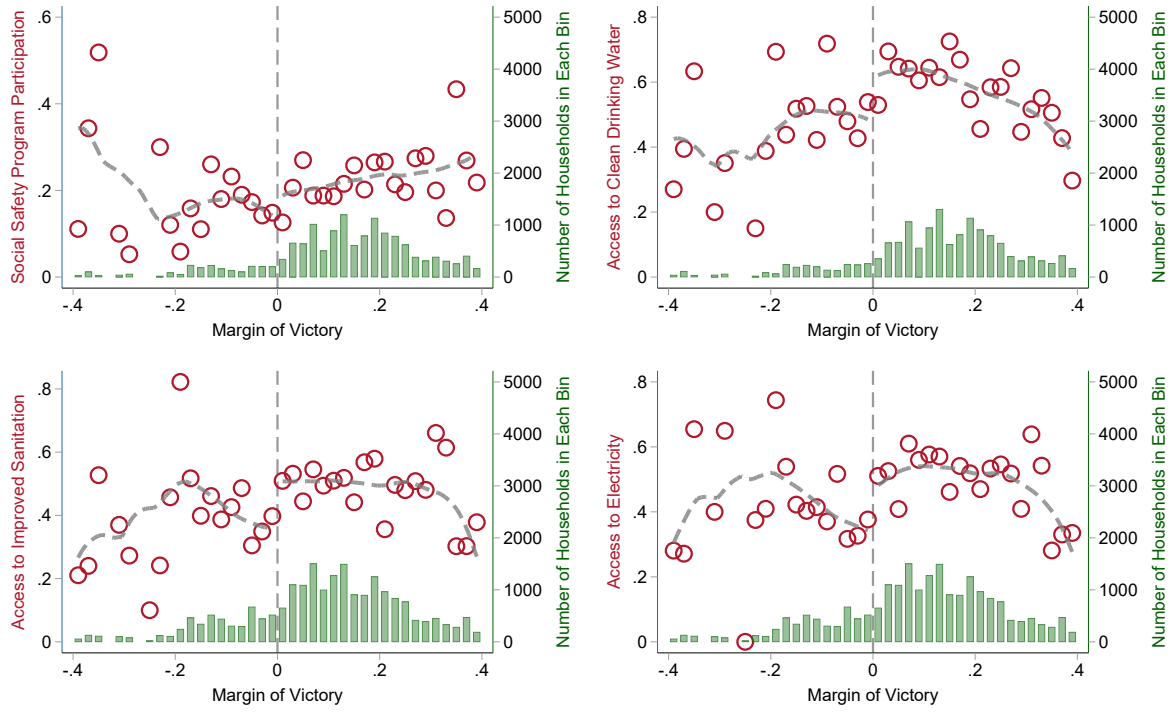
Notes: Horizontal axes represent the vote-share margins of MP candidates from the governing parties over their most popular competitors in the same electoral districts. Vertical axes of the subplots on the left indicate measures of household consumption. From top left to bottom right, the vertical axes represent per-capita annual household consumption in 2010 dollars; log per-capita total household consumption; log per-capita household food consumption; and log per-capita household nonfood consumption. Each circle is an average over districts in the margin-of-victory bin of size 0.02. Gray dashed lines are local linear fits. Green bars at the bottom of each subplot indicate the number of constituencies in each bin.

Figure 3: Government MPs and Poverty Rates



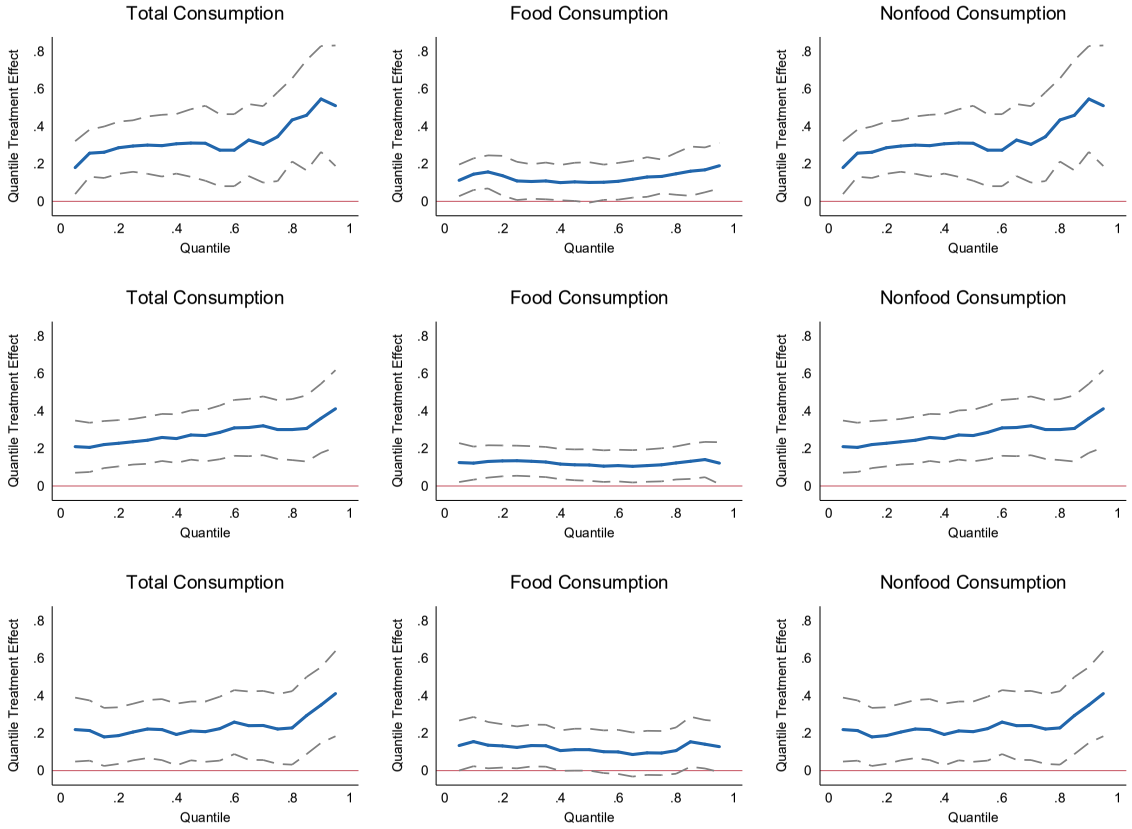
Notes: Horizontal axes represent the vote-share margins of MP candidates from the governing parties over their most popular competitors in the same electoral districts. The vertical axis of the left subplot indicates poverty rates in the subdistricts. The vertical axis of the right subplot indicates extreme poverty rates in the subdistricts. Each circle is an average over districts in the margin-of-victory bin of size 0.02. Gray dashed lines are local linear fits. Green bars at the bottom of each subplot indicate the number of subdistricts in each bin.

Figure 4: Government MPs and Publicly Provided Goods and Services



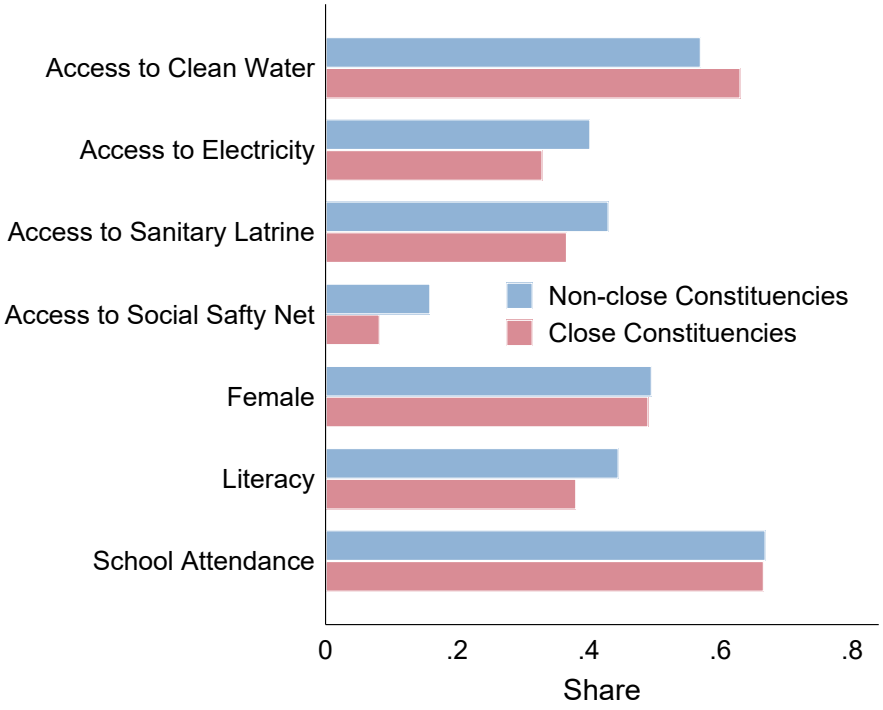
Notes: Horizontal axes represent the vote-share margins of MP candidates from the governing parties over their most popular competitors in the same electoral districts. Vertical axes in each subplot indicate the share of population access to public infrastructure. From top left to bottom right, the public goods are, respectively, social safety program participation, access to clean drinking water, access to sanitary toilets, and access to electricity. Each circle is an average over districts in the margin-of-victory bin of size 0.02. Gray dashed lines are local linear fits. Green bars at the bottom of each subplot indicate the number of households in each bin.

Figure 5: Distributional Impacts on Per-Capita Household Consumption



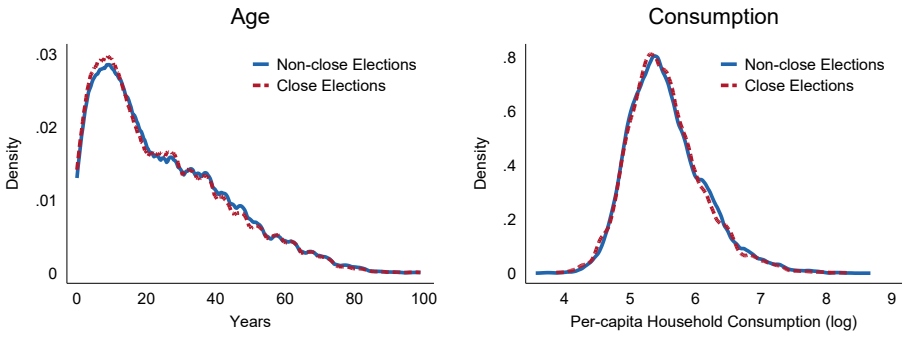
Notes: The figures above plot the estimated coefficients of a binary variable for having a representative in the governing coalition from a number of quantile regressions with varying quantiles. Dependent variables in the quantile regressions on the left, middle, and right subplots are, respectively, log per-capita household consumption, log per-capita food consumption, and log per-capita nonfood consumption. Explanatory variables include a binary variable for having a representative in the governing coalition and year indicators. The specifications in the top two rows control for the running variable with a quadratic polynomial for each side of the electoral threshold; the specifications in the bottom row control for the running variable with local linear regressions. The running variable is the margin of victory of the government party candidate. Quantiles vary from 0.05 to 0.95 and are represented by the horizontal axis. The vertical axis provides the scale for the coefficient estimates, indicated by the blue line. 95% confidence intervals, which are indicated by the dashed lines, are constructed using standard errors robust to clustering by constituency.

Figure 6: The Demographics of Close and Non-close Constituencies



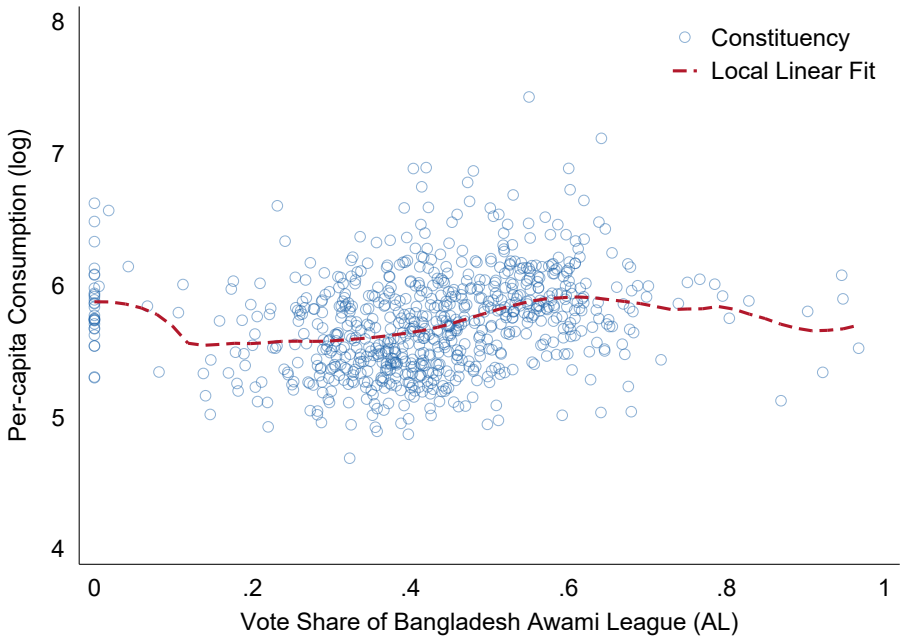
Notes: This figure plot the means of demographic variables and access to public goods and services in the constituencies with close elections and those without. Close elections are defined as where margin of victory is no more than 5 percentage points.

Figure 7: The Distribution of Age and Consumption in Close and Non-close Constituencies



Notes: The two subplots plot the kernel densities of age and per-capita consumption in two split subsamples. The left subplot is about age and the right subplot is about per-capita consumption. The blue solid line represent the kernel density of age or consumption in constituencies with non-close elections. The red dash line represent the kernel density of constituencies with close elections. Close elections are defined as where margin of victory is no more than 5 percentage points.

Figure 8: Vote Share of Awami League and Per-capita Consumption



Notes: This figure plots the average per-capita consumption in a constituency against the vote share of Awami League (AL), which formed the government after the elections in 1996 and 2008. Each circle represent a constituency in an election. The vertical axis represents the log per-capita household consumption. The horizontal represent the vote share of the AL candidate. The dash line represents the local linear fit.