

# How Clientelist Party Mobilization Closes the Gender Turnout Gap: Theory and Evidence from India

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## Abstract

When do women and men participate equally in the electoral process? Traditional explanations of women's political participation are essentially resource-based, stressing the importance of individual endowments with income, knowledge or education, as well as the significance of aggregate economic development and female labor force participation rates for women's turnout. Yet many developing democracies record high female turnout in the face of low levels of economic development and female employment rates; and despite large gaps in individual-level resources between men and women. Based on an in-depth investigation of India, I argue that there is a second path to women's equal electoral participation that does not rely on individual-level resources, but instead depends on clientelist mobilization in combination with household preferences over female turnout. Where households are supportive of women's participation, they can bridge the resource gap to enable female turnout even in the most unlikely of contexts, namely where women face a lack of resources and high costs to participation in public life. Household support, in turn, depends on returns to a vote. Only when returns to a vote are high enough to turn votes into assets and therefore compensate households for resources spent or social costs incurred for women's participation in public life, will households be supportive of female turnout. This requires clientelism, specifically, arrangements under which clientelist parties share valuable state resources with voters after an election, as opposed to pre-election handouts. Where clientelist mobilization is higher, households will have incentives to support female turnout, and the gender turnout gap will close. Using a novel panel dataset on the incorporation of ethnic groups into clientelist parties in two major Indian states between 1977 and 2007, I show that larger number of ethnic groups mobilized indeed leads to smaller gender turnout gaps within constituencies.

# 1 Introduction

When do women participate equally in the electoral process? Traditional theories of female political participation are fundamentally resource-based. At the micro level, these theories expect a woman's individual-level resource endowments to predict her turnout (see, for example, Schlozman et al., 1994; Brady et al., 1995; Verba et al., 1997; Burns et al., 2001); while at the macro level, they posit that higher levels of economic development (Inglehart and Norris, 2000, 2003) or female labor force participation rates (Iversen and Rosenbluth, 2006, 2010) should correlate with higher aggregate female turnout.

Yet empirical evidence on the predictive power of individual-level resources or a country's level of economic development and female employment for women's political participation is mixed at best. Research has shown that the relationship between individual-level resource endowments and political participation is not as straightforward as previously thought in the context of developing democracies. Unlike in industrialized countries, in developing countries the poor tend to vote at higher rates than rich (Kasara and Suryanarayan, 2015); and women's participation rate does not always rise with increasing resource endowments the way that men's does (Coffé and Bolzendahl, 2011; Gottlieb, 2016). Economic development and female labor force participation rates also only insufficiently explain differences in levels of women's turnout between countries, or change over time, outside of North America and Europe (Christy, 1987, p. 56; Inglehart and Norris, 2003, p. 108).

Why do traditional theories of female political participation only insufficiently explain women's turnout outside of Europe and North America? Two important structural factors might differ between the countries that were used to build these theories and those countries where the theories hold limited explanatory power: the role of the household unit and the rules of resource distribution. In the absence of well-developed welfare states, families often take on important roles in welfare improvement and risk mitigation for individuals (Thomas, 1990; Rangel, 2006; Cox and Fafchamps, 2007; Fafchamps and Quisumbing, 2007). This is particularly the case in developing countries, where the state often cannot take care

of the young, the old, the sick or the unemployed, forcing extended families to step in instead. Consequently, many decisions that have traditionally been modeled as individual-level decisions, including the choice to work, to run for office, or to turn out on election day, might be at least partially determined by households in such settings (Chhibber, 2002; Doss, 2013; Jayachandran, 2015; Gottlieb, 2016; Prillaman, 2021; Cheema et al., 2022). Secondly, clientelism, while once rampant in Europe and North America, had considerably subsided in scope by the time that women started turning out at equal rates to men in these regions. Yet clientelism is common in many South American, African and Asian democracies today, changing voters' incentives to participate considerably compared to countries with mostly programmatic distributive programs (Chandra, 2004; Stokes, 2005; Nichter, 2008; Gans-Morse et al., 2014; Stokes et al., 2014).

Based on these insights, I argue that there is a second path to women's equal political participation: one that does not rely on female resources, but instead on *household support* for women's turnout. Where households are supportive of female turnout, they can bridge the resource gap for women – by sharing information, transportation or chores, for example – thus enabling participation where individual (or aggregate levels of) resources alone would make it highly unlikely. Two conditions are necessary for this path to women's equal participation. One is an important role for the household unit in individuals' lives, where co-residence, resource pooling and risk mitigation within the family are common. Only where individuals are tightly embedded into households will families be able or willing to consider *everyone's* turnout. Where households do not matter and individuals tend to live on their own or disconnected from the extended family, there is no household to provide support.

Second, returns to a vote need to be high enough to incentivize household support. A necessary condition for high levels of household support therefore is clientelism: where state resources and services are exchanged directly for support, a vote potentially becomes an asset for the household to bargain with and free-riding options are limited. But household support is not automatic, even under clientelism. Returns to a vote should be highest

where clientelist parties rely not on one-off electoral handouts, such as alcohol, food or cash, to win over voters, but on a sizeable post-election redistribution of state resources in the form of welfare programs, jobs or government contracts. However, these types of post-election resource-sharing arrangements require that parties form some type of bond with voters in order to bridge the commitment problem inherent in clientelist exchanges. Because voters move first – by casting a ballot – parties have to send credible signals about their commitment to distribute state resources after the election. Shared ideology, as is the case in Argentina or Mexico (Stokes, 2005), or shared ethnicity, like in India or Lebanon (Chandra, 2004; Corstange, 2016), are proven ways for clientelist parties to send credible signals to targeted groups. Where more such targeted groups compete with each other for limited state resources, returns to a vote go up, and households will be more likely to support female turnout, in effect closing the gender turnout gap.

I provide evidence from India, a particularly puzzling case of gender turnout parity, that is consistent with this theory. The gender turnout gap in India closed rapidly over the past 20 years in some of the poorest, but not yet in some of the wealthier states. At the same time, female labor force participation (FLFP) rates have been *falling* in the country. In India, ethnicity is politically salient and clientelist parties purposefully incorporate some ethnic groups into their leadership, while leaving out others, to send signals about the future distribution of resources and thereby shore up enough support to win elections. My theory predicts that where more distinct ethnic groups are incorporated into political parties, and therefore competing for scarce but valuable state resources, returns to a vote increase, and so does household support for female turnout, closing the gender turnout gap. Based on a novel panel dataset on the number and types of ethnic groups incorporated into state-level party leadership of all major parties for all state elections in Madhya Pradesh and Uttar Pradesh from 1977 through 2007, I show that indeed, the number of incorporated groups went up over time. Using fixed-effects models, I find that within constituencies, a rise in the number of politically incorporated ethnic groups leads to a drop in the gender turnout gap.

This paper makes several important contributions to the literature. First, bringing attention back to the gender turnout gap is normatively important. The gender turnout gap is far from closed in many countries around the world and unequal rates of participation among the electorate pose a normative challenge for democracies, what Lijphart (1997) termed “democracy’s unresolved dilemma” (p. 1). Second, I contribute to our understanding of the effects of clientelist party competition. While the distributive effects of clientelist parties, their main strategies and their means of operation have been studied extensively, this paper draws attention to a previously overlooked aspect of clientelism, namely its potential to alter the incentive structure to include previously excluded groups into the democratic process. Third, this paper challenges the traditional view that economic development and economic participation need to *predate* women’s political participation. I instead show that under certain conditions, women’s voter turnout increases even in low-income and low-employment contexts. Fourth, my work takes into account the importance of the household as a decision-making unit, especially in the context of developing countries. By developing a framework for female turnout that depends both on the individual woman as well as the household she is embedded in, I both advance our understanding of turnout and contribute to a burgeoning literature that stresses the importance of intra-household gender relations in the study of political behavior (Chhibber, 2002; Mendelberg et al., 2014; Gottlieb, 2016; Khan, 2017; Prillaman, 2018; Cheema et al., 2022; Prillaman, 2021). Lastly, I produce novel data on ethnic incorporation in the Indian context. I hand-coded the leadership of 216 year-party observations across 20 state elections in Madhya Pradesh and Uttar Pradesh between 1977 and 2007 as well the ethnic identities of 194 individual leaders, based on extensive archival newspaper research. To my knowledge, my dataset is the first panel data on state-level party leaders and their ethnic identities in India.

This paper proceeds as follows. Section 2 lays out the theory of clientelist mobilization of household support for female turnout. Section 3 provides background on India. Next, I lay out the argument and hypotheses to be tested. Section 5 describe the data on ethnic

mobilization and how it was collected, while the next section provides descriptives. Section 7 shows results of fixed-effects regression analyses that are consistent with the theory, and rules out alternative hypotheses. The paper ends with a conclusion.

## 2 Theory

I propose a theory of clientelist party mobilization of households. Households have the potential to bridge the resource gap for women even in contexts where women face a lack of individual-level resources and high social costs for participation in public life. But households will only be supportive when returns to a vote are sufficiently high to compensate them. This, I argue, is the case when clientelist parties target potential supporters with promises of sharing valuable state resources after an election. Where a high enough number of groups are targeted by clientelist parties, the aggregate gender turnout gap will close.

### 2.1 Turnout as a Household-Level Decision

The reason, I argue, that neither individual-level nor structural theories are able to predict female turnout in many developing contexts is because they ignore the household as a decision-making unit in which individuals are embedded. Where public goods provision is low, individuals often dependent on extended families for welfare improvement, risk mitigation and the production of social status.<sup>1</sup> Yet households are not unitary actors, and some family members are more powerful than others and, therefore, more likely to have their preferences realized (Agarwal, 1997). If female agency is low, the (often male) head of household – is likely to impact a host of female behaviors and outcomes, including health care choices, the decision to work, or educational outcomes (Field et al., 2010; Doss, 2013; Jayachandran, 2015; Bernhardt et al., 2018; Bursztyrn et al., 2018; Field et al., 2019). More recently, scholarly attention has turned to the role the household might play in political

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<sup>1</sup> By contrast, welfare states make individuals less dependent on the family by providing education, health care, subsidies or old age care *outside* the household.

behaviors of women, including their public preference expression (Khan, 2017); their attendance of traditional village councils (Gottlieb, 2016; Prillaman, 2018, 2021); their voter turnout (Cheema et al., 2022), and their decision to run for office (Chhibber, 2002).

Based on this literature, I argue that in the absence of welfare states, an individual's turnout is determined not only by her own desire to either vote or abstain, but also by the head of household's preferences.<sup>2</sup>

But what determines household preferences over a family member's turnout? Rationally, households will only be inclined to support an individual's turnout when the benefits outweigh the costs. The costs of participation are often gendered, making turnout more costly for women than men. On the one hand, where women possess fewer individual-level resources, households will incur material costs when supporting female turnout (for example, in the form of transportation costs to the polling station where women are less likely to own modes of transport than men). On the other hand, the social cost of women's participation in public life is often higher than men's, particularly where the entire family's social status is tied to female behavior (Dube, 1997; Jayachandran, 2015; Bernhardt et al., 2018). For a household, female turnout is therefore more costly than male turnout, and female family members will have higher reservation prices to voting. Accordingly, at low to medium returns to a vote, households will systematically support male turnout but not female turnout, and gender turnout gaps will ensue, both at the household level and in aggregate. However, as returns to a vote go up, households will switch from opposing to supporting female turnout *even in the face of high social costs for women*.

Returns to a vote, in turn, are determined by the structure of political mobilization. Clientelism is a necessary but not sufficient condition for household support for female

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<sup>2</sup> The head of household need not to be male for this logic to hold; only to enjoy a disproportionate amount of decision-making power within the household unit. Empirically, however, heads of household are overwhelmingly male, both in India, where only around 13 percent of all households are headed by women (Table HH-7, Census 2011), and other countries (see, for example, Farré, 2013; Van Staveren and Odebode, 2007). In theory, it is also possible for several individuals to enjoy a lot of power within a household and to take decisions jointly. For simplicity's sake, however, I assume that a single individual acts as the head of household, and that the household decision equals the head of household's decision.

turnout, since free-riding options are limited under clientelism and supporters are directly rewarded for their participation. All else equal, returns to a vote therefore will be higher under clientelism than under programmatic distribution. But only certain clientelist settings lend themselves to generating the high returns to an individual vote required for household support, as I argue below.

## 2.2 Clientelist Returns to a Vote and Female Turnout

A large literature has documented that in many democracies around the world, parties and voters are linked not through programmatic ties, but clientelist linkages that trade political support for valuable resources (see, for example Stokes, 2005; Kitschelt and Wilkinson, 2007; Stokes et al., 2014). Unlike programmatic ties or even pork-barrel politics, these clientelist linkages are characterized by a “quid pro quo” exchange: politicians provide benefits only to those individuals or groups who support them politically, for example by showing up to rallies or voting for them on election day. Besides doling out rewards for supporters, clientelist parties also use the threat of or actual withdrawal of existing benefits to penalize defectors: if voters renege on the clientelist agreement, parties can withdraw existing benefits or deny future requests in retaliation (Stokes et al., 2014, p. 13; Mares and Young, 2016).

Because the exchange of support for resources does not happen simultaneously, clientelist relationships are rife with uncertainty, in that whichever party to the exchange goes first has to absorb all the risk because the one who goes second has strong incentives to renege on their commitment. If political parties distribute **electoral handouts** – such as alcohol, food or medicine – before an election in order to induce electors to vote for them, voters have incentives to simply collect rewards from all parties and vote their conscience after all (or abstain altogether) (Schaffer, 2007; Stokes et al., 2014; Björkman, 2014). By contrast, if parties rely on promises of **post-election resource sharing** – in the form of government jobs, state contracts or access to welfare programs distributed only *after* the party gains access to state resources – parties have incentives to just keep all the spoils to themselves once



the election is won, since voters have already cast their ballot and have no more bargaining chips (Chandra, 2004; Corstange, 2016). Party and voter incentives and strategies differ significantly by what type of clientelist resources are at stake.

Electoral handouts – resources distributed before an election in order to induce voters to support the party or to turn out on election day – force the party to absorb all the risk. Accordingly, parties should want to invest heavily in monitoring capabilities in order to make sure that they get “their money’s worth” on election day. Yet monitoring individual-level vote choice is empirically difficult in most electoral democracies, and enforcement mechanisms are limited once voters received handouts (Nichter, 2008; Hicken and Nathan, 2020).<sup>3</sup> Perhaps unsurprisingly then, a review of the empirical literature on clientelism found “very little evidence of enforcement” (Hicken and Nathan, 2020, p. 282).

The alternative to electoral handouts by parties are promises of post-election benefits. In this case, voters move first, casting their ballot based on promises of a future share in state resources they will receive should the party come to power, which may include jobs, infrastructure or land. Post-election resource sharing arrangements alleviate much of the monitoring problem for parties and make the conditional exchanges self-enforcing. Because the party makes the exchange conditional on its success in the polls, the party’s and voters’ incentives are now aligned, in that they both want the party to win (Gallego, 2015). Yet to ease the uncertainty inherent in the exchange and to motivate voters to move first, parties need to send credible signals to their potential supporters about their commitment to future resource sharing. The best ways for parties to send these credible signals is either through shared ideology or through shared ethnicity. In many South American countries, clientelist parties send signals to their target groups through the ideology they espouse (Stokes, 2005;

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<sup>3</sup> Some scholars argue that parties have set up elaborate networks of deeply embedded brokers that are able to overcome the monitoring problem (Stokes et al., 2014; Corstange, 2016), although the evidence on the added informational value that brokers can provide is mixed (Schneider, 2019). Alternatively, what counts might not be the *actual*, but simply the *perceived* observability of the ballot: Where people *think* that politicians can find out how they voted, they might act as if their vote choice was actually observed (Chandra, 2004; Gerber et al., 2013; Ferree and Long, 2016). Yet any improvements in safeguarding the secrecy of the ballot should, in theory, improve voters’ freedom to vote as they please with impunity (Gans-Morse et al., 2014; Mares and Young, 2016).

Nichter, 2008; Gans-Morse et al., 2014). In Argentina, for example, the Peronist ideology of labor-friendly populism sends credible signals to working class voters that they can expect to benefit most from a Peronist win. In other settings, such as South Asia and the Middle East, clientelist parties target voters through shared ethnicity (Chandra, 2004; Corstange, 2016). In India, for example, the ethnic composition of a party’s leadership sends signals to the population about the future distribution of resources, where co-ethnics of leaders will expect the most access to state resources (Chandra, 2004, 2009). Shared ideology or shared ethnicity send credible signals to target groups because both are difficult to change: altering a party’s ideology or replacing a party’s leaders with individuals belonging to different ethnic groups are slow (and usually costly) processes.<sup>4</sup>

One-off electoral handouts are unlikely to generate high returns to a vote. Because of the uncertainty and lack of enforcement mechanisms, parties have to target a smaller amount of resources at more people in order to generate the votes they need (Hicken and Nathan, 2020). Unsurprisingly, then, the monetary value of electoral handouts is often small.<sup>5</sup> By contrast, post-election resource sharing makes payment conditional on the party winning, and provides parties with more fine-grained, low-cost information about whom to target. This is because detecting supporters after votes are cast is often easier than doing so beforehand, for example, through ethnic heuristics or networks, or through fine-grained electoral results published at the polling-station level.<sup>6</sup> This creates less wastage in resource distribution

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<sup>4</sup> Besides material benefits, shared ideology or shared ethnicity with voters may additionally provide psychological benefits to members of the targeted groups as well. Voters who are strongly ideologically aligned with a party, for example, should receive higher payoffs from “their party” winning than the ideologically opposed opposition, as they can now expect (non-distributive) policies to be enacted that align with their preferences (Stokes, 2005; Dunning and Stokes, 2007; Cox, 2010; Stokes et al., 2014; Gans-Morse et al., 2014). Similarly, shared ethnicity with a party can provide psychological benefits to co-ethnics, such as status increases that might accrue to a group from having a co-ethnic in power, or the identity affirmation that voters might experience from voting for a co-ethnic (Chandra, 2004; Witsoe, 2011b; Chauchard, 2014).

<sup>5</sup> For example, Björkman (2014) reports that each “social worker” – i.e. political broker – in a Mumbai municipal election had to organize 50 supporters for a gathering on a budget of Rs 200 per person, “to be distributed (or not) by the worker as he or she saw fit” (p. 623). Rs 200 at the time would have been less than the median urban daily wage in India, and not much higher than the average daily wage of casual workers country-wide (which includes much poorer rural areas) (ILO Decent Work Team for South Asia, 2018).

<sup>6</sup> Electoral results at the polling-station level are available in settings as diverse as Ghana (Ichino and Nathan, 2013), Colombia (Rueda, 2017) and India.

than reliance on pre-election handouts.

Post-election resource sharing arrangements, therefore, are most likely to produce the kinds of high returns to a vote that incentivize household support for female turnout. Households that have hopes of gaining access to valuable state resources will support both male and female participation, eliminating the gender turnout gap at the household level. At the macro level, the gender turnout gap should therefore close where a large enough share of the population is targeted by clientelist parties for post-election resource sharing arrangements.

### 3 The Case: India

For almost 60 years after Independence, up until 2004, India witnessed a relatively stable gender turnout gap, with men turning out at between 8 and 11 percentage-points higher rates than women in national parliamentary elections (Figure 1).<sup>7</sup> Beginning with the 2009 General Election, the gender gap started narrowing rapidly, effectively closing in the 2019 elections.

Figure 1: Turnout by Gender in Indian General Elections

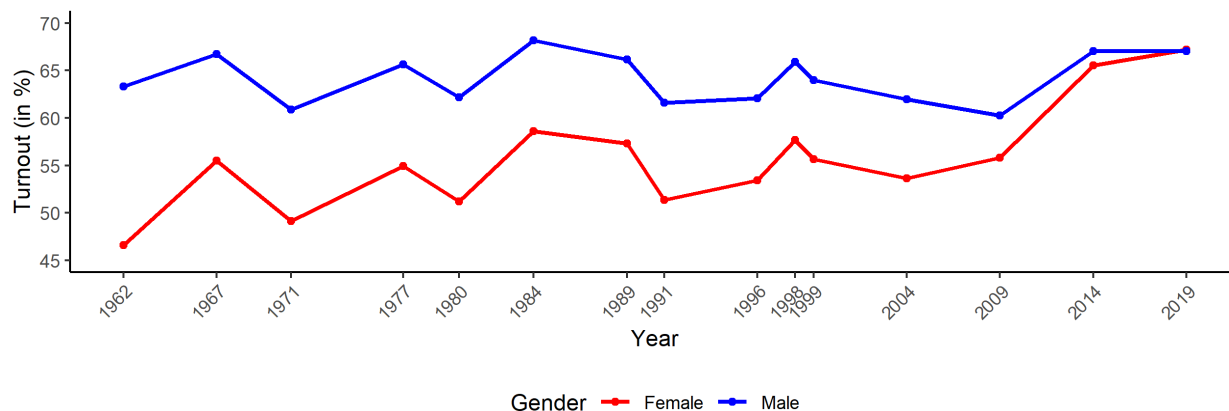


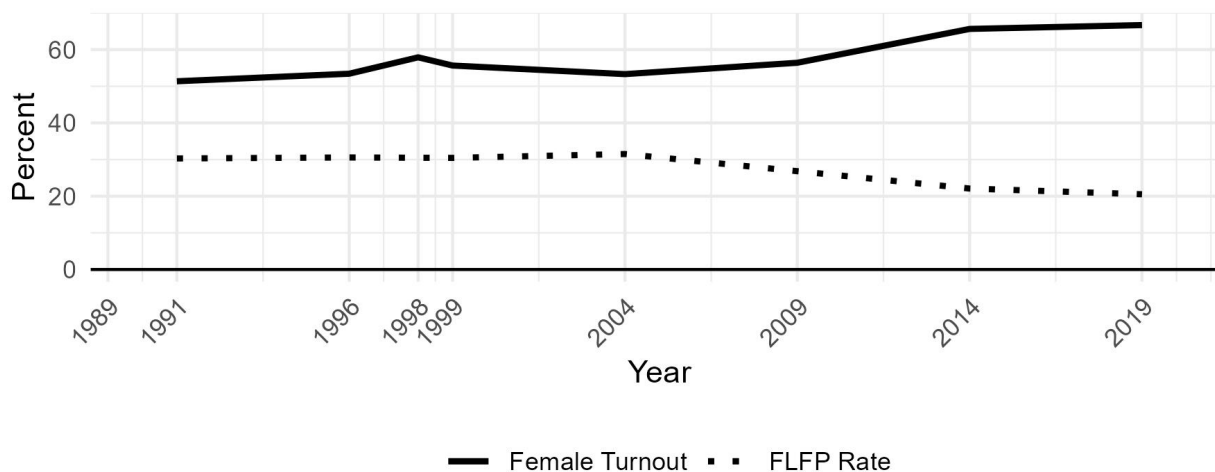
Figure 1 shows male (blue) and female (red) turnout in percent for all elections since

<sup>7</sup> India is a parliamentary democracy, electing its national parliament, called *Lok Sabha*, in a massive election effort every 5 years. National elections are also called *General Elections*, as opposed to state-level *Assembly Elections* for state legislatures (institutions that are called *Legislative Assemblies*).

1962.<sup>8</sup> Several aspects of the graph are noteworthy: first, male turnout has stayed remarkably stable over the past 60 years, essentially moving around the 64 percent mark. Second, until 2004, male and female turnout moved basically in unison, just at different levels (with women averaging almost 10 percentage-point lower turnout than men). Third, the closing of the gender turnout gap in India is fundamentally driven by women voting at higher rates, not by male turnout shrinking.

However, national aggregates mask considerable variation across space and time within India. Importantly, some of the least developed states in India, such as Uttar Pradesh and Bihar, reached turnout parity relatively early, while some of India’s economic powerhouses, including Maharashtra and Gujarat, still record men voting at higher rates than women. At the same time, women’s labor force participation rates have been *falling* over the same period that female turnout has been rising (see Figure 2).

Figure 2: Female Labor Force Participation and Turnout in India



Instead of economic growth of women’s employment, I argue that it is household support for female turnout that has driven up women’s electoral participation in India over the past 20 years. In the absence of effective public goods provision, households play important roles in individuals’ lives in India, setting the stage for households affecting individual – and par-

<sup>8</sup> Data on the gender turnout gap is only available starting in 1962, even though India held elections in the 1950s as well.

ticularly female – participation. A wide array of research, from sociology and anthropology to economics and political science, has shown that the household plays an important role in individuals’ lives in India. Particularly in the absence of state institutions that can take care of the young, the old, the sick, the widowed or the unemployed, extended families are individuals’ best bet at improving welfare and safeguarding against risks, by pooling labor and resources, and sharing responsibilities. This, however, means that other family members get a say in decisions that are commonly thought to be individual choices in political science, from how much education a person should get, to whether or not she should work, to whom to vote for on election day. Household control is often particularly stark for women, who are disadvantaged by patrilineal, patri-virilocal rules of kinship and village endogamy in marriage, which puts men in charge of resources and property and disconnects women from their natal family upon marriage (see, for example, Das, 1976; Srinivas, 1977; Dube, 1997; Chhibber, 2002; Bernhardt et al., 2018). Consequently, women in India are much more likely to participate in *any* political activity when they have their household’s support to do so and, conversely, much less likely to partake when their households show opposition (Datta et al., 1998; Chhibber, 2002; Goyal, 2020; Prillaman, 2021).<sup>9</sup>

An original survey I conducted in the North Indian state of Uttar Pradesh around the 2022 elections confirms the impact that households have on women’s turnout in India. Uttar Pradesh is one of the least developed states in India (NITI Aayog, 2021), yet female turnout has been rising over the past 20 years. I interviewed registered female voters as well as the individual they identified as the head of their household between 14 and 3 days before election day. A follow-up visit then verified whether respondents had voted by checking for the electoral ink with which voters’ fingers are marked upon casting a ballot in India.<sup>10</sup> In the 574 households for which I have data, 99 percent of heads of households were male.

I found that women, on average, had very low endowments with the resources traditionally

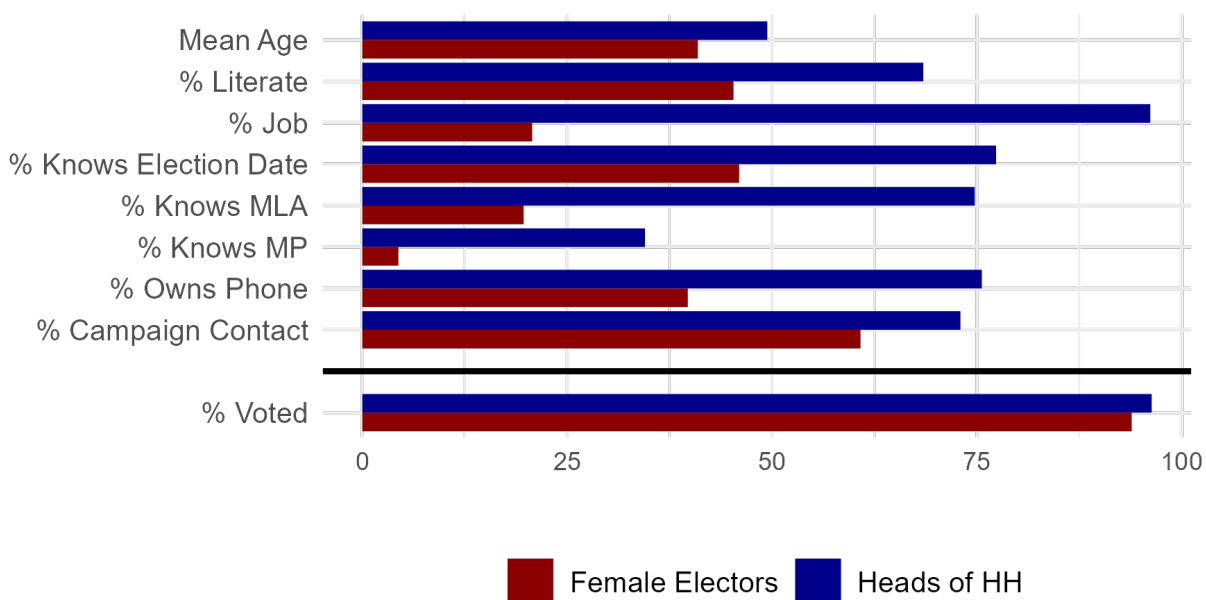
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<sup>9</sup> Although the literature also has many examples of women who defy family expectations and persevere in their political activity in the face of coercion and even physical violence (see, for example Joshi, 1998; Brulé, 2020).

<sup>10</sup> Follow-up visits were conducted within days of the election, and before results were announced.

associated with electoral participation, including income, education, political knowledge and campaign contacts. Less than 30 percent of women worked, less than half had ever received formal schooling, and only about 20 percent knew the name of their representative in the state assembly, while 60 percent recalled any party workers visiting. The male head of household's resource endowments, by contrast, were much higher: On average, men possessed between 50 percent and 300 percent more resources than women (see Figure 3). Yet, female turnout and male turnout were basically at par (and extraordinarily high).

Figure 3: Individual-Level Resource Endowments and Turnout, by gender

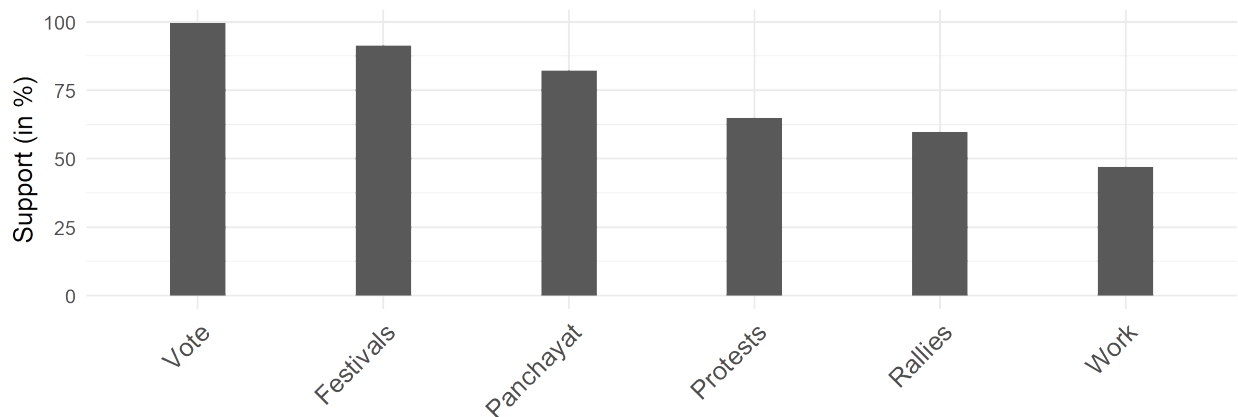


Source: Author's Survey, 2022

These findings are in direct contradiction to traditional theories of female participation, which would predict much lower female turnout than male turnout given the gendered differences in resources. Results are, however, compatible with my theory of household-mediated turnout: If households value votes highly enough, they might be bridging the resource gap for women, enabling female turnout even though women on their own would lack the resources to participate. Indeed, I find evidence that households value votes highly, and that they are overwhelmingly supportive of female turnout. The majority of men said it is very

important to them that their favorite party wins, and believes that every vote matters in an election (see Appendix Table A.2). In line with this high significance of the vote for the household, support for female turnout among heads of household was extraordinarily high: more than 99 percent of heads of household said it is appropriate for women to vote in an election. This assessment stands in stark contrast to household opinion on other forms of political participation. Only 82 percent of men said it is appropriate for women to participate in village council meetings, and only 60 percent indicated support for women partaking in political rallies. Less than 50 percent were supportive of women gaining paid employment. Figure 4 visualizes this.

Figure 4: Household Support for Types of Women’s Participation



But when and why would households be supportive of female turnout today, closing the gender turnout gap that persisted for decades? The answer, I argue, lies in changes to clientelist returns to a vote.

## 4 Argument & Hypotheses

According to my theory, households will support female turnout even where women lack the individual resources to participate if and when returns to a vote are high enough. This should be most likely the case where households are targeted with promises of post-election

resource sharing arrangements by parties: the prospect of preferential access to government jobs, state-sponsored education or free health care after an election turns votes into potential household assets, incentivizing families to bridge the resource gap for women and shoulder the social costs of female political participation. Overall, then, the gender gap should be smaller – and eventually close – where a large enough share of the population is targeted with valuable clientelist rewards in the form of access to state resources.

Clientelism is prevalent in many parts of India (Chandra, 2004; Wilkinson, 2007, 2014; Bussell, 2019). While parties use both pre-electoral handouts and post-election resource sharing arrangements, the former have often been found to be ineffective in shoring up electoral support (Björkman, 2014; Chauchard, 2018). Instead, post-election resource sharing arrangements – the promise by clientelist parties to share some of the valuable state resources they will have access to after an election – have been successful mobilization strategies. In the absence of strong or credible ideology, Indian parties form linkages with voters mainly through shared ethnicity: Parties target voters from certain ethnic groups by incorporating co-ethnics into leadership positions; co-ethnics of the political leaders will have the highest expectation of gaining clientelist rewards after an election, and will therefore be most likely to vote for the party (Chandra, 2004, 2009).<sup>11</sup> Coalition governments are common, both at the national and the state level, and have allowed even tiny parties to parlay their minute share of seats into ministerial posts and important offices. India’s first-past-the-post system and increasingly tight margins of victory mean that even if a party does not win a seat, it can still affect other parties’ win or loss as long as it commands the support of even just few thousand voters, allowing it to extract concessions (Chandra (2004); Chandra and García-Ponce, 2019, p. 380). Indeed, there is ample empirical evidence of co-ethnic favoritism by party leaders in the distribution of state jobs, government contracts, police protection or development investments in India (see, for example, Palshikar, 1994; Pai and Singh, 1997;

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<sup>11</sup> The identity of party leaders matters more than the identity of individual legislators in this context, since Indian parties are highly centralized and control over resources is exercised by small team of strategic decision-makers (Chandra, 2004; Chandra and García-Ponce, 2019).



Pai, 2004; Michelutti, 2007; Witsoe, 2009, 2011a; Gundimeda, 2013; Michelutti and Heath, 2013).

Clientelist parties in India have targeted groups along a number of ethnic dimensions, including caste, religion, or tribe (Chandra, 2004). The number and types of ethnic groups incorporated into the leadership of mainstream political parties has expanded over the years, with considerable temporal and spatial variation. Immediately post-independence, the leadership of most political parties in India were dominated by a small elite of upper-caste Hindus, particularly Brahmins, but also other locally dominant castes such as Rajputs (Jaffrelot, 2003; Witsoe, 2009). Over time, more ethnic groups were incorporated into political parties, particularly when their socioeconomic status rose and they were locally numerous.<sup>12</sup> However, the timing and extent of the incorporation of new groups varied across states. Maharashtra in the West and Tamil Nadu in the South, for example, were the sites of early and important social empowerment movements for subaltern groups. Accordingly, members of the Scheduled Castes, or Dalits,<sup>13</sup> as well as members of the Other Backward Classes (OBCs)<sup>14</sup> were incorporated into the leadership of important political parties in these states earlier than across North Indian states (Zelliot, 1970; Jaffrelot, 2003, p. 153-166; Ahuja, 2019).

If my theory is correct, there should be a straightforward relationship between the number

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<sup>12</sup> That was the case, for example, for Dalits, who were meaningfully incorporated into mainstream political parties once constitutionally mandated affirmative action led to the emergence of an educated, high-income elite (Chandra, 2004), or for Yadavs, who were politically incorporated once the Green Revolution improved the economic standing of this traditionally farming caste group (Jaffrelot, 2003; Witsoe, 2016).

<sup>13</sup> Members of the Scheduled Castes, also called Dalits, have historically been severely marginalized. Thought to be outside the traditional caste hierarchy, Dalits were treated as “unclean” and polluting to caste Hindus, and consequently pushed into frowned-upon and unsafe professions, such as scavenging and the disposal of animal cadavers, and spatial segregation within villages and towns (see, for example, Pande, 2003; Chandra, 2004; Dube, 2005). Dalits comprise about 16 percent of the total population in India. Scheduled Castes are listed in special schedules of the Indian constitution, and enjoy special protections and affirmative action, including political reservations in national and state parliaments, government jobs and educational institutions.

<sup>14</sup> OBCs describes members of groups that are not upper-caste, but still members of the “clean” castes in the traditional Indian caste system. They rank between the upper castes and middle castes on the one hand, and the Scheduled Castes (or Dalits) on the other. There are no exact numbers, but estimates put their share of the population at around 50 percent. While the official term is Other Backward Classes, membership is actually defined for caste groups, not based on income. Accordingly, groups belonging to the OBCs may vary widely on socioeconomic indicators and the social status they have traditionally held.

of groups that are incorporated into clientelist parties' leadership and the gender turnout gap. Each group that has a co-ethnic in a leadership position will receive credible signals about post-election resource sharing by that party. Incorporated groups, therefore, should expect high returns to a vote, and consequently be most likely to support female turnout. By contrast, groups that are not incorporated into any party ("unincorporated voters") have no party with co-ethnics in leadership in the running. No party can make a credible commitment to share resources after the election to these groups, and voters will likely discount any such promises as cheap talk. These groups should therefore be less likely to support female turnout beyond the participation rates that women's individual resources allow.<sup>15</sup> Therefore, the higher the number of groups that are incorporated into ethnic clientelist parties, the higher the share of the population that supports female turnout and, ultimately, the smaller the gender turnout gap.

*Hypothesis 1: The gender turnout gap will be smaller where more ethnic groups are incorporated into clientelist parties.*

However, whenever several distinct ethnic groups share in a party's leadership, dispute about the relative size of the pie is possible, if not inevitable. For example, only one individual can become Chief Minister, the highest office in the state government; accordingly, only one group's members can receive the material and psychological benefits that go along with that. Which group gets which share in the spoils might therefore not be clear to voters before an election. Uncertainty should be particularly pronounced for traditionally subaltern groups, who might fear that traditional status hierarchies will replicate within parties, giving traditionally dominant groups the lion's share of resources and leaving historically marginalized groups with a smaller share (Chandra and García-Ponce, 2019). Consequently, parties that form broad ethnic coalitions might be sending weaker signals than those who draw their leadership from a single ethnic group or ethnic category. I term *narrow parties*

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<sup>15</sup> To be clear, I am not arguing that unincorporated groups have any incentives to *constrain* women's voting either. But because returns to a vote are low for these groups, they have little incentive to bridge the resource gap for women to enable their participation beyond levels predicted by individual-level resources.

those that rely on a single ethnic group or ethnic subcategory; while *broad parties* are those that diversify their leadership both within a given year and/or over time. Parties have potentially countervailing incentives when deciding how narrow or broad a coalition to form: they want to be as broad as necessary to win elections; but as narrow as possible to maximize rent extraction (Chandra, 2004). This leads me to the second hypothesis:

*Hypothesis 2: The gender turnout gap will be smaller where more narrow parties compete.*

## 5 Data

In order to test my theory, I assembled a novel panel data set that codes, for two major North Indian states and all Assembly elections between 1977 and 2007, the composition and ethnic identity of the state-level leadership of major parties, and combines this with electoral and census data. To my knowledge, this is the first data set with longitudinal data on parties' state leadership across all major parties in more than one state.<sup>16</sup>

### 5.1 Data on Incorporated Ethnic Groups

Information on the leadership structure and ethnic composition of parties is hand-coded, based mostly on research in newspaper archives of English-language Indian dailies, including *The Times of India*, *The Hindustan Times*, and *The Hindu* from 1977 through 2007 and, where available, on secondary literature on parties.

My theory relies on being able to identify first, parties' leadership; and second the salient ethnic groups that party leaders belong to. I follow Chandra and García-Ponce (2019)'s lead in coding the state-level leadership of parties as well as their ethnic identities. State-level leadership here means the small team of individuals who take strategic decisions for a party,

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<sup>16</sup> Chandra (2004) traced the composition of the BSP's leadership over time across several states; while Chandra and García-Ponce (2019) coded state-level leaders for all parties and states for the state elections held between 1977 and 1980. I build on this work by coding both leadership positions and ethnicity for all major parties, similar to Chandra and García-Ponce (2019), while tracing cross-party changes over time in multiple states like Chandra (2004) did.

including on the nomination of candidates, electoral alliances and government formation. For each state election year, I tried to identify all strategic decision makers based on historical newspaper articles as well as secondary sources, where available. These key leaders usually include the holder of the highest office in the party's state unit (which is most often the president, but for some parties is the general secretary of the state unit); the official candidate for the post of Chief Minister, if the party has named one; and any sitting Chief Minister, if the party has one. These are formal power holders: their formal position grants them influence on important strategic decisions for the party. But key leaders can also include individuals whose formal positions in and of themselves do not grant exuberant power, but who nevertheless influence key decisions within the state-level party ahead of elections. These informal power holders may wield just as much influence as official office holders, and might just as visibly be associated with a party. For example, in the Madhya Pradesh state unit of the Bharatiya Janata Party (BJP) in the 1993, two former Chief Ministers, Sunderlal Patwa and Kailash Chandra Joshi, were important strategic decision makers: both heavily affected the selection of candidates, for example, with Joshi trying to get as many as 90 of his supporters nominated; and they each tried to have a supporter elected as state unit president (with Patwa coming out on top). They were also constantly mentioned in newspaper articles and tipped as potential candidates for the post of Chief Minister, should the party win. However, neither held the office of state unit president; and neither was put forth as an official candidate for Chief Minister. Formally, then, Patwa and Joshi held no power; but informally, they affected many important strategic decisions for the Madhya Pradesh BJP.

After identifying all state leaders, I coded each decision maker's salient ethnic identities for each year, where *salient* refers to identities that were discussed – implicitly or explicitly – in newspaper articles at the time of the election. Explicit mentions of a salient ethnic identity include any direct references to the leader's identity in newspaper articles preceding the election, such as the leader belonging “to X community” or the leader being “an X.” An example of an explicit mention would be the *Times of India* calling Charan Singh “the

most eminent Jat” in Indian politics.<sup>17</sup> Implicit mentions include those where a leader’s ethnic identity is obvious from their name *and* the identity group is being discussed in the context of a party and/or election. For example, Mulayam Singh Yadav belongs to the Yadav caste, which is obvious based on his name; newspapers will therefore be less likely to identify him as “a Yadav” or “a member of the Yadav caste,” since it is implied in the Indian context. However, not every time a name contains a caste identifier that identity is automatically salient; I only count the identity as salient if newspapers *also* discuss the caste group explicitly. For example, if newspapers identify “the Yadavs” as an important electorate for Mulayam Singh Yadav’s party, then I will consider the Yadav identity salient even if he himself is not identified as “a Yadav” explicitly.<sup>18</sup>

Because of the sheer number of parties contesting elections in some years, and the very limited vote share many of them attain, I limit my analysis to all parties that came at least second in at least one constituency in a given state. I code all those parties for whom I was unable to identify a distinct state-level leader and/or that leader’s ethnic identity as not having a salient ethnic identity, and therefore not sending strong signals about clientelist resource distribution to co-ethnics. Since both state-level leadership as well as the salience and classification of ethnic identities can change over time, the coding for the same party, or even the same individual might vary between elections. Appendix 8 provides a more detailed discussion of the coding, including the rules I followed for identifying state-level leaders and their ethnic identities, as well as examples of coded parties and leaders.

Data on party leadership and ethnic groups is currently limited to two major North Indian states, namely Uttar Pradesh and Madhya Pradesh. Between 1977 and 2007, Madhya Pradesh held 7 and Uttar Pradesh 9 elections (see Appendix Table A.2). I coded a total of 216 year-party observations for their leadership, and 194 individual politicians for their ethnic identity.

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<sup>17</sup> *The Times of India*, February 6, 1969, “BKD well placed in West U.P.”

<sup>18</sup> *The Times of India*, January 8, 1991, “BJP striding ahead in U.P.”

## 5.2 Other Data

Most election-related data are collected from official election reports published by the Election Commission of India (ECI). I scraped election reports to collect the number of registered electors by gender and the number of voters who turned out by gender to calculate turnout by gender as well as the gender turnout gap. Some electoral results, including vote shares for each candidate/party and measures of electoral competition, come from the Trivedi Centre for Political Data’s Lok Dhaba database (Agarwal et al., 2021), which in turn was collected from ECI reports.

Most covariates that might be important for the analysis, including variables related to female labor force participation (FLFP), female literacy and economic development, come from the decennial Indian census. I use village-to-constituency assignment keys that were created by Sam Asher and Paul Novosad at the Development Data Lab as part of the Socioeconomic High-Resolution Rural-Urban Geographic Dataset on India (SHRUG) (Asher et al., 2019, 2021) to merge census and electoral data.<sup>19</sup>

## 5.3 Variables and Measurement

**Dependent Variable.** My main dependent variable is the **gender turnout gap**, which is the difference between male and female turnout rates (male turnout - female turnout), in percentage points.

**Independent Variables.** Based on the party and ethnicity coding described above, I construct several independent variables. First, I calculate the **number of incorporated groups** at the constituency level. To do this, I first identify, for each state-election year, the distinct ethnic groups represented in each party’s leadership. Then, for each constituency, I calculate the number of all distinct groups represented across all parties that compete in said constituency.<sup>20</sup> Second, I identify **narrow parties**, that is, those parties where the entire

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<sup>19</sup> I would like to thank Paul Novosad who generously shared these linking keys with me for the purpose of this research.

<sup>20</sup> In an ideal world, I would like to measure not just the number of ethnic groups that are incorporated,

leadership belongs to a single ethnic group or category. For the most part, that includes parties that are so small or so centralized that only a single individual takes all strategic decisions for the party; but it also applies to those parties with several leaders that all belong to the same group.

**Covariates.** The literature proposes several predictors of the gender turnout gap that any complete model should take into account. The first is **economic development**, where higher economic development should correlate with smaller gender turnout gaps. I use three different measures of economic development, based on census data, in my analysis: first, the share of the population living in areas classified as **urban** by the census; second, the share of **men working in agriculture**; and third, the share of male workers who are only **marginal workers**, i.e., who worked less than 6 out of the past 12 months.<sup>21</sup> Another predictor of the gender turnout gap found in the literature is female labor force participation (FLFP). I collected data on the **FLFP rate**, or the share of women who are engaged in any kind of work for cash or kind. The third predictor of the gender turnout gap based on the literature is female education. I use **female literacy** as a measure of a minimal level of education that might make women more likely to participate politically. The Indian census counts as literate anyone aged 7 or older who can read and write in any language, independent of formal education.<sup>22</sup>

## 6 Descriptives

My dataset contains information for all state-level elections between 1977 and 2007 in Uttar Pradesh and Madhya Pradesh, two major neighboring states in North and Central India.

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but their proportion in the population. However, the Indian census (as well as representative surveys) do not publish fine-grained information on the strength of ethnic groups besides the constitutionally protected categories of Dalits and Adivasis. Even data on the size of religious groups is available only at the district level, not the village level. Other caste data is not available at all. (The last time the Indian census collected detailed caste information was in 1931.)

<sup>21</sup> The perhaps most straightforward measure of economic development, GDP per capita, is only available at the state level, and not at the constituency level.

<sup>22</sup> See Appendix for further details.

At the time of the last census in 2011, Uttar Pradesh had a population of almost 200 million, while Madhya Pradesh was home to more than 72 million people. Together, they account for about 22.5 percent of India’s total population. Each state elects their *Legislative Assembly* (state assembly) every five years; Uttar Pradesh’s state legislature has 403 seats, while Madhya Pradesh’s has 230.

These two states are similar in many respects, making them well-suited for a comparison. For one, they are similar in regard to socioeconomic development, in that they are both among the poorest and least developed states in the country. Madhya Pradesh and Uttar Pradesh are roughly comparable in terms of State Gross Domestic Product (GSDP) per capita, measured in INR, as well as female literacy rates over the period of my analysis. However, Madhya Pradesh has consistently outperformed Uttar Pradesh in terms of female labor force participation rates, with Madhya Pradesh’s FLFP rates ranging about 10 percentage points higher than Uttar Pradesh’s (see Appendix Figure A.3). In addition, the ethnic makeup of both states is comparable in that both have similar shares of traditional elite and historically subaltern groups.<sup>23</sup>

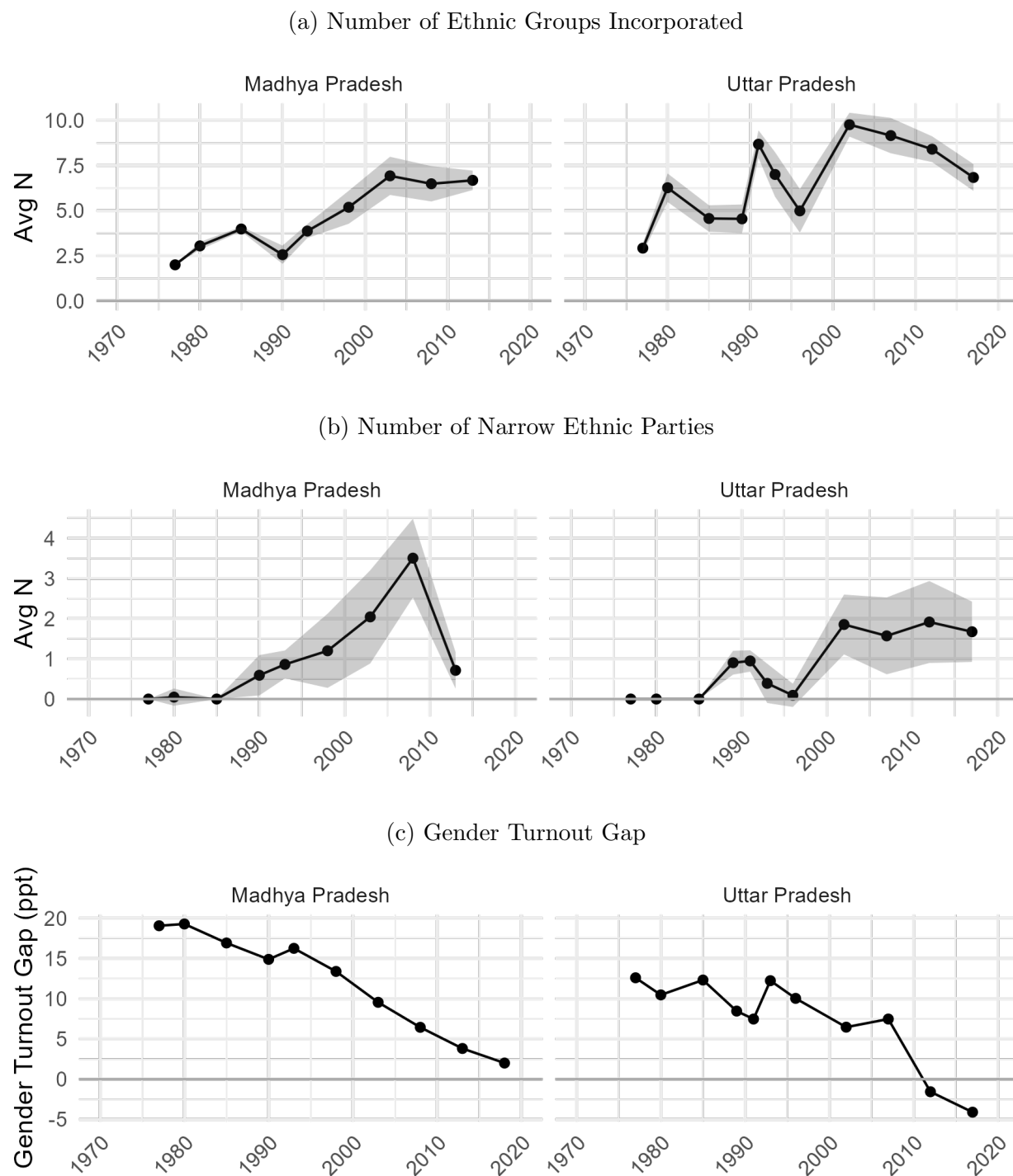
Importantly for my analysis, however, these two states differ in one important point, namely in the structure of political mobilization, and specifically the timing of incorporation of different ethnic groups. Uttar Pradesh has seen more ethnic groups incorporated earlier, with subaltern groups being incorporated as early as the 1980s. This political incorporation has come with a proliferation of small, *narrow parties* that mainly incorporate one ethnic group or category. By contrast, Madhya Pradesh has a relatively stable two-party system, and both parties were dominated much longer by traditional elites before starting to incorporate more subaltern groups only in the 2000s. Because not all parties run in all constituencies, in each election year there is *within-state* variation in the number of ethnic

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<sup>23</sup> Based on the 2012 India Human Development Survey, about 18 percent of the population in both states identifies as belonging to the forward castes, or upper castes. About 40 percent of the population in Madhya Pradesh and a little over 38 percent in Uttar Pradesh are members of the Other Backward Classes. According to the last census, around 16 percent of Madhya Pradesh’s population and 20 percent of Uttar Pradesh’s population belong to the Scheduled Castes.



Figure 5: Ethnic Incorporation and the Gender Turnout Gap in Madhya Pradesh and Uttar Pradesh



groups incorporated in contesting parties at the constituency-level as well (represented by the bands around the average in Figure 5). In line with my theory, Uttar Pradesh has

witnessed smaller gender turnout gaps, and closed the gap earlier, than Madhya Pradesh.

## 7 Analysis

To test the hypotheses, I estimate the following model

$$\Delta Y_{it} = \alpha + \beta \Delta X_{it} + \gamma \Delta Z_{it} + ACFE + \epsilon, \quad (1)$$

where  $\Delta Y_{it}$  is the election-on-election change in the gender turnout gap in constituency  $i$  at time  $t$ ;  $\Delta X_{it}$  is the election-on-election change in the independent variable of interest in constituency  $i$  at time  $t$ ;  $\Delta Z_{it}$  is change in a vector of covariates; and  $ACFE$  are AC-level fixed effects. Note that for all independent variables related to ethnic parties,  $X_i$  is actually measured *before* the election, that is, before  $Y_{it}$  is measured. I therefore do not lag these independent variables further, as they already precede the dependent variable. I conduct the analysis at the constituency level, rather than at the state level, because there is cross-constituency variation in the number of groups represented (since not all parties run in all constituencies).

### 7.1 Results

Hypothesis 1 states that the gender turnout gap will be smaller where the number of incorporated groups is higher. To test this hypothesis, I regress the election-on-election change in the gender turnout gap on change in the number of distinct groups incorporated into parties that compete in any given constituency. Table 1 presents results. I estimate 3 different models: Column (1) shows results for a simple fixed-effects model for the most expansive AC-level data, spanning all elections from 1977 through 2007; column (2) restricts the analysis to the years for which I have covariates at the constituency level, i.e., 1991 through 2007; and column (3) adds AC-level covariates to the analysis for the limited panel (1991-2007). All models include AC-level fixed effects. Throughout, the coefficient on my independent

variable of interest, change in the number of ethnic groups incorporated, is negative and statistically significant at the .01-level. In the model with covariates (column (3)), an increase in the number of incorporated groups by 1 from one election to the next is associated with almost half a percentage point drop in the gender turnout gap in a constituency. These findings are compatible with Hypothesis 1: An increase in the number of distinct ethnic groups incorporated into clientelist parties *before elections* is associated with a drop in the gender turnout gap in an election at the constituency level.

Table 1: FE Regression Results Incorporated Groups

	<i>Dependent variable:</i>		
	$\Delta$ Gender Turnout Gap		
	1977-2007	1991-2007	1991-2007
	(1)	(2)	(3)
$\Delta$ N Groups Incorporated	−0.300*** (0.085)	−0.314*** (0.119)	−0.435*** (0.133)
$\Delta$ Share Urban			0.122 (0.096)
$\Delta$ Gender Gap LFP			0.407*** (0.143)
$\Delta$ Gender Gap Literacy			−0.052 (0.303)
Constituency FEs	✓	✓	✓
Observations	4,532	1,958	1,498
R <sup>2</sup>	0.006	0.007	0.029
Adjusted R <sup>2</sup>	−0.153	−0.298	−0.406
F Statistic	22.377***	11.280***	7.705***

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Clustered robust standard errors in parentheses.

In the full model (column (3)), a 1-percentage-point increase in the gender gap in LFP is also associated with a .4-percentage-point increase in the gender turnout gap. This is in line with traditional theories of female political participation that posit higher female employment leads to higher turnout among women. The fact that the coefficient on incorporated groups is still statistically significant suggests that clientelist mobilization can be an additional driver

of female turnout, particularly when women's employment is low overall, as is the case in India.

Table 2: FE Regression Results Narrow Parties

	<i>Dependent variable:</i>		
	$\Delta$ Gender Turnout Gap		
	1977-2007	1991-2007	1991-2007
	(1)	(2)	(3)
$\Delta$ N Narrow Parties	-1.190*** (0.152)	-1.072*** (0.189)	-0.830*** (0.202)
$\Delta$ Share Urban			0.129 (0.095)
$\Delta$ Gender Gap LFP			0.473*** (0.130)
$\Delta$ Gender Gap Literacy			0.135 (0.270)
Constituency FEs	✓	✓	✓
Observations	4,532	1,958	1,498
R <sup>2</sup>	0.010	0.012	0.025
Adjusted R <sup>2</sup>	-0.148	-0.292	-0.411
F Statistic	41.401***	18.266***	6.709***

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Clustered robust standard errors in parentheses.

Next, Hypothesis 2 posits that the gender turnout gap will be smaller where more narrow parties compete, i.e., those that draw their entire leadership from a single ethnic group or ethnic category. As before, I estimate a fixed-effects model that regresses change in the gender turnout gap on change in the independent variable, i.e., the number of narrow parties. Table 2 shows results, for the simple model on the full panel from 1977 to 2007 (column (1)), the simple model on the truncated panel from 1991 to 2007 (column (2)), and the full model on the truncated panel (column (3)). Growth in the number of narrow parties indeed is associated with a closing of the gender turnout gap. In the simple model, the addition of 1 narrow ethnic party in an AC between from one election to the next is associated with a reduction in the gender turnout gap of almost 2 percentage points (column (1)). This

results is statistically significant at the .01 level. In the full model that includes covariates, an increase by 1 in the number of narrow parties means a decrease in the gender turnout gap of .8 percentage points; the result is statistically significant at the .01 level. An increase between elections in the number of narrow parties, in which the distribution of resources and status improvements should be most straightforward, therefore seems to lead to a closing of the gender turnout gap, in line with Hypothesis 2.

As expected, both the number of ethnic groups incorporated and the number of narrow parties affects the gender turnout gap by improving female turnout relatively more than male turnout. As Appendix Table ?? shows, an election-on-election increase of 1 in the number of incorporated ethnic groups is associated with an almost 1-percentage-point rise in female turnout (column (1)), but only a .4-percentage-point growth in male turnout at the constituency level (column (3)). An election-on-election increase in the number of narrow ethnic parties by 1 corresponds to a more than 1-percentage-point improvement in female turnout (column (2)), but has no statistically significant correlation with male turnout (column (4)).

## 7.2 Robustness Checks

Because I used Uttar Pradesh as an in-depth case study while developing my theory, I perform all tests on the pure out-of-sample data as well, i.e., for Madhya Pradesh alone.<sup>24</sup> Results are qualitatively unchanged: coefficients are statistically significant and substantially large throughout these specifications as well (Appendix Tables A.4 and A.5).

Results are also not driven by the choice of covariates, the time frame under investigation, or the level of analysis. Using alternative covariate specifications at the constituency does not change results. Substituting the share of marginal workers among all male workers as a measure of economic development, or using female labor force participation rates and

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<sup>24</sup> Uttar Pradesh is where much of my field research happened, and where I conducted the main household survey; it is also the state that most heavily informed my theory, and the first state for which I coded party leadership.

female literacy instead of the gender gap in employment and literacy does not alter the main findings: the coefficient of interest is still negative, statistically significant and substantially large (Appendix Tables [A.6](#) and [A.7](#)).

To ensure that results are not driven by the time frame under investigation, I also run all tests using a district-level panel, which spans all elections from 1981 through 2011 and provides more census-based covariates. This panel therefore slightly expands the time frame under investigation. It also includes more measures of economic performance. I run two distinct models, one using share of the population classified as urban and another using the share of the population that is engaged in non-farm work – i.e., that works neither as agricultural laborers nor as cultivators – to proxy for the level of economic development in a district. The results, shown in Appendix Tables [A.8](#) and [A.9](#), are similar to the main analysis. The coefficient of interest is still signed as expected and statistically significant across all specifications. The district-level analysis reveals an interesting finding with regard to economic development though: while a higher share of the district population being classified as urban corresponds to smaller gender turnout gaps, a higher share of non-farm employment *independent of urban status* actually is correlated with *higher* gender turnout gaps. This makes sense in the context of my theory: highly urbanized localities are less likely to see high levels of clientelism (Wilkinson, 2007). My own work, as well as the IHDS and other surveys, also show that women’s individual-level resource endowments are higher in highly urban settings than in more rural settings. In urban localities, therefore, turnout should more likely be an individual-level decision, and the gender gap in resource endowments should be smaller, leading to smaller gender gaps in turnout. By contrast, in rural localities, where clientelism is likely to be more prevalent, turnout is more likely to be a household-level decision, with households potentially bridging the resource gap for women. However, higher economic development makes households less dependent on the state, and therefore should make them less likely to support female turnout, leading to *larger* gender turnout gaps where economic development is higher.

Finally, I use data at the state level for all elections from 1977 through 2017, expanding the time frame under consideration even further. Even at the state level, and using State Gross Domestic Product as an alternative measure of economic development, the relationship between the number of ethnic groups incorporated and the gender turnout gap holds. Appendix Table A.10 shows that results are qualitatively unchanged, with an increase in the number of incorporated groups leading to a decrease in the gender turnout gap within states.

### 7.3 Alternative Explanations

I consider two alternative explanations for the closing of the gender turnout gap proposed by recent research on India, namely reservations for women in local government and male labor migration. Reservations for women in institutions of local governance have shown to dramatically increase women’s political participation at the town and ward level (see, for example, Chattopadhyay and Duflo, 2004; Beaman et al., 2009; Deininger et al., 2011; Parthasarathy et al., 2019; Brulé, 2020). There is also evidence to suggest that higher female representation in local councils, and particularly in the position of council president, might entice women to vote in higher numbers in local elections (Brulé, 2020; Goyal, 2020). Could the introduction of quotas at the local level have had a bottom-up mobilization effect on women that spilled over into state and national elections over time? I argue that there are two reasons why quotas *cannot* convincingly explain the phenomenon of rising female turnout. First, because quotas are randomly assigned within states, they cannot explain within-state regional variation in the timing and extent of the closing of the gender turnout gap that are empirically evident.<sup>25</sup> Second, because quotas were made mandatory across all of India in 1993. As Brulé (2020) documents, most states took action immediately, holding the first elections under the new rules within two to three years (p. 135). Yet, despite

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<sup>25</sup> See Appendix Figure A.4 visualizes spatial patterns in the closing of the gender turnout gap in Uttar Pradesh, where the gender turnout gap started closing much earlier, and diminished much more rapidly, in the eastern part of the state than in the western part.

having introduced local-level quotas at nearly the same time and to the exact same extent, states registered very different trajectories in the gender turnout gap in state elections (see Appendix Figure A.5).

Another potential explanation for the closing of the gender turnout gap suggested by the literature on India is male-only labor migration. Prior research has found that migration might affect turnout in India: because migrants often do not transfer their voter registration to their new location, they would need to travel to their original home locality to vote; not all migrants can or want to do that (Carswell and De Neve, 2014; Kumar and Banerjee, 2017; Gaikwad and Nellis, 2021). Because semi-permanent labor migration in India is mostly male – with young men migrating for work, while their wives and children stay in their home village or town (Tumbe, 2018) – this is likely to particularly depress men’s voter participation compared to women’s. If women, in the absence of men, take over some of the tasks traditionally performed by male household members, such as agricultural work (Pattnaik et al., 2018) or approaching bureaucrats in order to access government schemes (Kumar, 2021), they might also “step in” as voters, to replace the male vote that the household is (temporarily) missing but that still might be required to access state benefits in a highly clientelist setting.

I test this using district-level data on the absence (or surplus) of married men relative to married women.<sup>26</sup> As Table 3 shows, an increase in the share of male outmigration in a district actually corresponds to a *rise* in the gender turnout gap (columns (1) and (2)). That means that as more men leave the district for temporary work in other places, the gender gap in turnout becomes larger, i.e., men’s advantage in turnout grows. This relationship is, in fact, driven by a reduction in female turnout when men leave: a 1-percentage-point election-on-election increase in the share of married men migrating away is associated with

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<sup>26</sup> The census collects data on all *currently married* individuals, i.e., those who currently have a living spouse and are not separated or divorced. Any difference in the number of married women and married men suggests a temporary absence of one spouse. Because women are more likely to stay back in origin communities while men are the ones migrating for employment, I use the share of missing (or excess) married men relative to the number of married women to capture temporary migration patterns. The data is at the 1991-district level, and available from 1991 through 2011.



a reduction in female turnout of about 2.4 percentage points in the simple model (column (3)) and 1.9 percentage points in the model with covariates (column (4)). By contrast, when looking at only male turnout, I find no statistically significant correlation. Male labor migration, then, does not seem to be driving the closing of the gender turnout gap.<sup>27</sup>

Table 3: FE Regression Results, District-Level Migration

	<i>Dependent variable:</i>					
	$\Delta$ Gender Turnout Gap		$\Delta$ Female Turnout		$\Delta$ Male Turnout	
	(1)	(2)	(3)	(4)	(5)	(6)
$\Delta$ Male Outmigration	1.724*** (0.494)	1.019** (0.514)	-2.439*** (0.840)	-1.906** (0.830)	-0.714 (0.834)	-0.887 (0.857)
$\Delta$ Share Urban		0.002 (0.002)		0.0005 (0.002)		0.002*** (0.001)
$\Delta$ Gender Gap LFP		0.003* (0.002)		-0.003 (0.002)		0.0003 (0.002)
$\Delta$ Gender Gap Literacy		0.008*** (0.002)		-0.005** (0.002)		0.003 (0.002)
District FEs	✓	✓	✓	✓	✓	✓
Observations	298	298	298	298	298	298
R <sup>2</sup>	0.029	0.105	0.037	0.057	0.003	0.011
Adjusted R <sup>2</sup>	-0.353	-0.265	-0.343	-0.333	-0.391	-0.399
F Statistic	6.459**	6.182***	8.117***	3.202**	0.578	0.564

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Clustered robust standard errors in parentheses.

## 8 Conclusion

When do women participate equally in the electoral process? Many developing countries register high female turnout rates, at par with or above those of men, despite low levels of economic development, low female labor force participation rates and large gender disparities in individual-level resources. While the traditional literature on women's political participa-

<sup>27</sup> This finding makes sense given that research suggests that while the *absolute number* of labor migrants has increased in India over the past two decades, the *relative share* of labor migrants provided by different regions in India has been relatively stable since the early 20th century (Tumbe, 2018).

tion is essentially resource-based, I argue that there is a second path to closing the gender turnout gap: one that relies on household support to enable women to turn out, and therefore requires high returns to a vote. I argue that even in the absence of individual resources – such as income, education or political knowledge – women can participate at equal rates to men, under two conditions: when households matter for individual behavior, and when returns to a vote are high. Where households play an important role in individuals’ lives as sites of welfare improvement, risk mitigation and social status generation, they can affect a host of behaviors traditionally modeled as individual-level decisions. Supportive households can bridge the resource gap for women and enable female political participation even in the absence of individual-level resources and in the face of high social costs to women’s participation in public life. But only when returns to a vote are very high will households be supportive of women voting. By contrast, where returns to a vote are low and the costs of women’s participation high, households are likely to restrict female turnout.

But when will returns to a vote be high enough to generate household support? Clientelism, I argue, can produce these high returns to an individual vote, although not all clientelist settings are equally conducive to it. Only where parties share sizeable cuts of state resources with supporters after elections – as opposed to doling out pre-election handouts – will returns to a vote for supporters be high enough to produce household support for female turnout. However, these post-election resources sharing arrangements require voters to move first – by casting a ballot – and then trust that parties will not renege on the clientelist exchange. To ease this commitment problem, clientelist parties try to build bonds with targeted voters: they aim to send credible signals about the future distribution of resources to their targeted voters, through either shared ideology, as in Argentina; or shared ethnicity, like in India. Returns to a vote are high for all groups targeted by clientelist parties under these post-election resource sharing arrangements, eliciting household support for female turnout. Where a large enough share of the population is targeted in such a way, the gender turnout gap will close.

My dissertation focuses on India, a “hard case” for gender turnout parity, where some of the poorest, but not the wealthiest, states closed the gender turnout gap, while female labor force participation rates have been falling. I assembled a novel panel dataset that codes the number and types of ethnic groups incorporated into political parties in two large North Indian states between 1977 and 2007. In India, ethnicity is politically salient, and parties send signals to voters about the future distribution of state resources by incorporating co-ethnics into their leadership ranks. The number and type of ethnic groups incorporated into ethnic parties, therefore, should say something about the extent of clientelist mobilization: where more groups are incorporated into clientelist parties, more groups receive signals about the post-election distribution of state benefits and, therefore, perceive returns to a vote to be high. Consequently, more groups should support female turnout in elections, and the gender turnout gap should close.

Indeed, using fixed-effects regressions I find that within constituencies, an election-on-election increase in the number of distinct ethnic groups incorporated into parties correlates with a drop in the gender turnout gap. This finding, to my knowledge, is the first quantitative evidence that links clientelist mobilization, in the form of ethnic incorporation into clientelist parties, and participation rates. Observers of Indian politics have noted that incorporation of previously under-represented groups in Indian parties have gone up; and that overall turnout levels have been rising (see, for example, Yadav, 2000). However, there previously was no data on the extent of clientelist mobilization (ethnic incorporation) across space and time. More importantly, the link between clientelist mobilization and increases in female turnout in particular were not hypothesized before.

My dissertation therefore identifies a second path to closing the gender turnout gap that does not depend on women’s resources, or aggregate levels of development and female labor force participation rates. Women can, if they have their household’s support, participate even in the absence of resources traditionally associated with turnout. However, this raises important questions about women’s agency in voting. If households support female turnout

instrumentally, because the value of a vote is high, does that mean that women are mere puppets in the electoral process, used by men to amplify their voices? Or, conversely, do women exercise agency over their vote once they reach the polling station, given that the ballot is secret? In related work, I investigate women's agency in vote choice using original surveys and survey experiments. My research suggests that women are far from mere mouthpieces of their households, and that, contrary to expectations based on the literature, young women in particular are more likely to express agency over their own vote choice. This might hint at a type of socialization effect for young women who came of age at a time when women and men voted at equal rates. It also suggests that the closing of the gender turnout gap in India has led to an actual, substantial political empowerment of previously excluded citizens.

# Appendix A

## Additional Figures and Tables

Figure A.1: Female Literacy Rates and the Gender Turnout Gap, by State

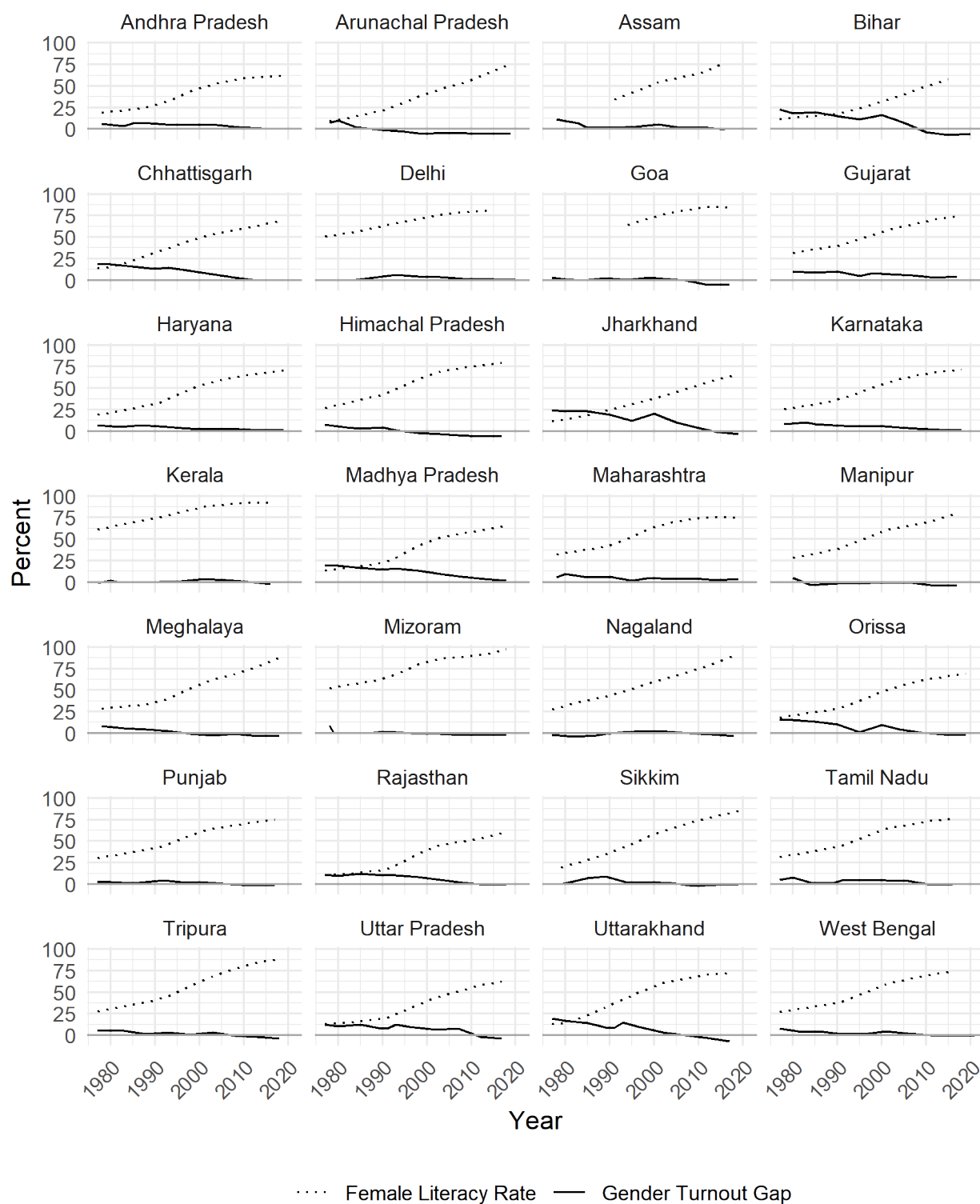


Figure A.2: Value of a Vote for Households

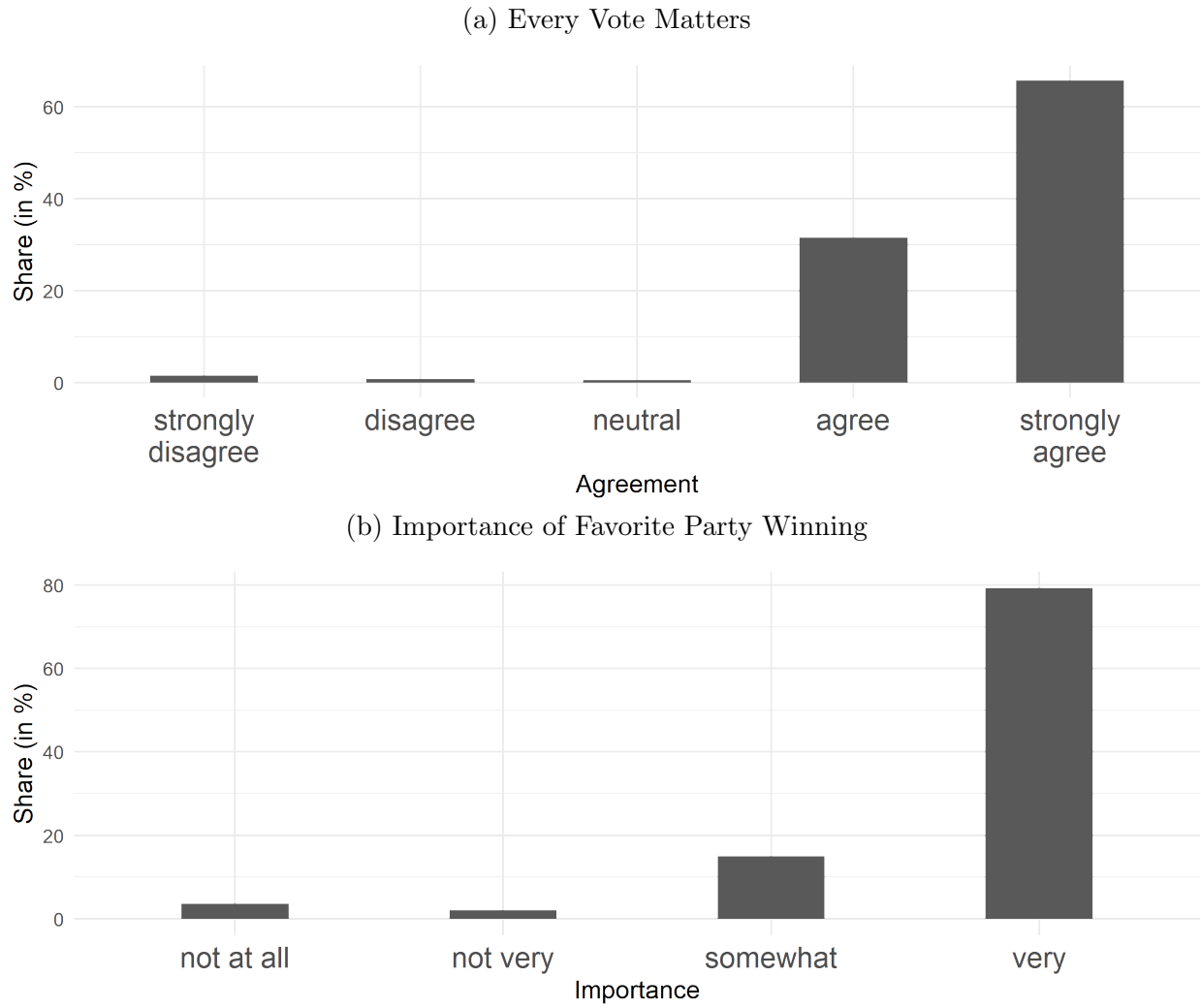


Table A.1: Turnout of Head of Household and Female Elector Within Households

Head of HH	Female Elector		Total
	Voted	Abstained	
Voted	527	26	553
Abstained	12	9	21
Total	539	35	574

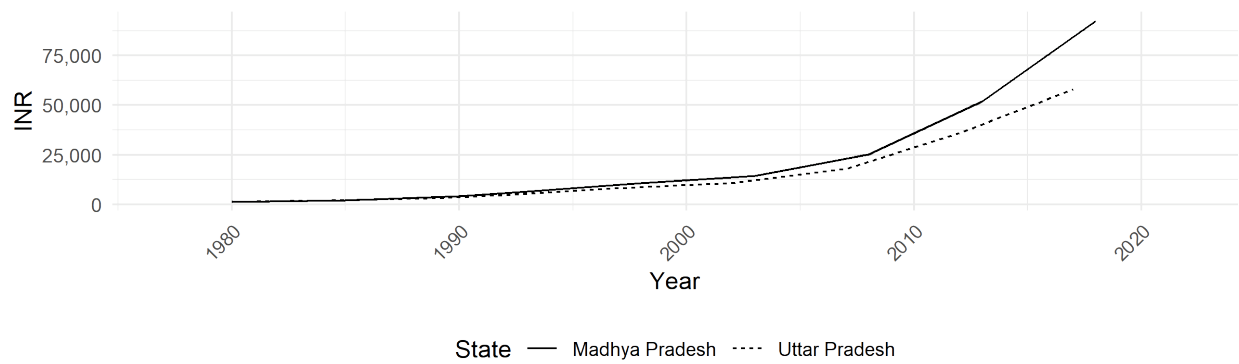
Table A.2: States and Election Years

State	Years
Madhya Pradesh	1977, 1980, 1985, 1990, 1993, 1998, 2003, 2008, 2013
Uttar Pradesh	1977, 1980, 1985, 1989, 1991, 1993, 1996, 2002, 2007, 2012, 2017

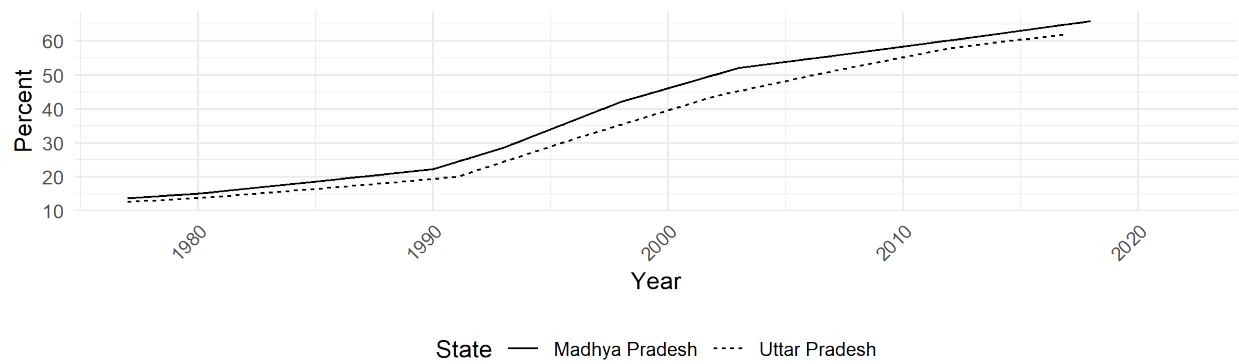


Figure A.3: Development, Literacy and FLFP Across States

(a) GSDP Per Capita



(b) Female Literacy Rates



(c) Female Labor Force Participation Rates

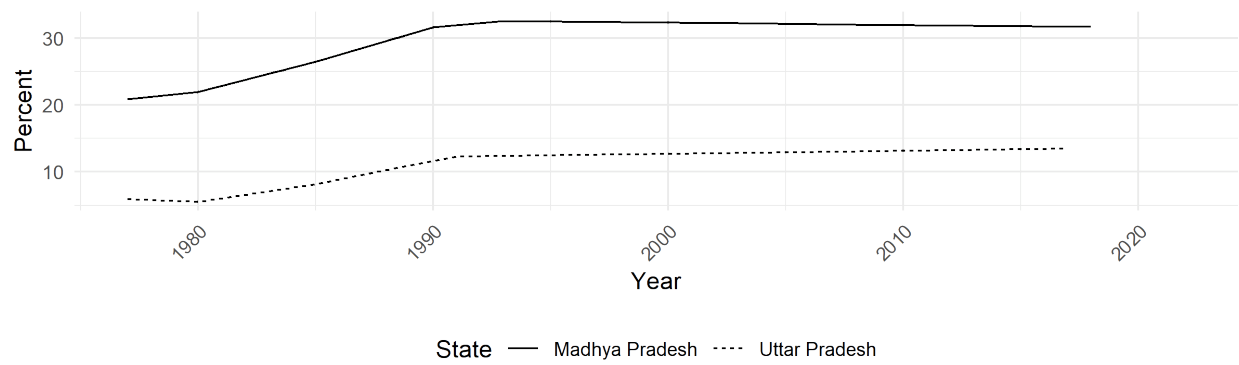


Table A.3: FE Regression Results Turnout

	<i>Dependent variable:</i>			
	$\Delta$ Female Turnout		$\Delta$ Male Turnout	
	(1)	(2)	(3)	(4)
$\Delta$ N Groups Incorporated	0.965*** (0.119)		0.424*** (0.110)	
$\Delta$ N Narrow Parties		1.098*** (0.212)		0.072 (0.194)
$\Delta$ Share Urban	1.125*** (0.157)	0.987*** (0.160)	1.059*** (0.153)	0.908*** (0.150)
$\Delta$ Female LFP	0.103 (0.148)	0.303** (0.140)		
$\Delta$ Female Literacy	-2.321*** (0.131)	-1.899*** (0.110)		
$\Delta$ Male LFP			-1.446*** (0.312)	-1.798*** (0.285)
$\Delta$ Male Literacy			-3.099*** (0.172)	-2.754*** (0.137)
Constituency FEs	✓	✓	✓	✓
Observations	1,498	1,498	1,498	1,498
R <sup>2</sup>	0.252	0.212	0.300	0.289
Adjusted R <sup>2</sup>	-0.083	-0.142	-0.014	-0.030
F Statistic	86.947***	69.339***	110.710***	104.835***

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Clustered robust standard errors in parentheses.

Table A.4: FE Regression Results Incorporated Groups, Excluding UP

	<i>Dependent variable:</i>		
	$\Delta$ Gender Turnout Gap		
	(1)	(2)	(3)
$\Delta$ N Groups Incorporated	-1.260*** (0.121)	-0.475*** (0.140)	-1.271*** (0.297)
$\Delta$ Share Urban			0.044 (0.089)
$\Delta$ Gender Gap LFP			0.030 (0.173)
$\Delta$ Gender Gap Literacy			0.553* (0.299)
AC FEs	✓	✓	✓
Observations	1,380	513	342
R <sup>2</sup>	0.109	0.033	0.240
Adjusted R <sup>2</sup>	-0.070	-0.452	-0.552
F Statistic	139.959***	11.563***	13.178***

*Note:* \*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Clustered robust standard errors in parentheses.

Table A.5: FE Regression Results Narrow Parties, Excluding UP

	<i>Dependent variable:</i>		
	$\Delta$ Gender Turnout Gap		
	(1)	(2)	(3)
Lagged $\Delta$ N Narrow Parties	-2.629*** (0.232)	-1.015*** (0.297)	-0.933** (0.383)
$\Delta$ Share Urban			0.232*** (0.074)
$\Delta$ Gender Gap LFP			-0.240 (0.195)
$\Delta$ Gender Gap Literacy			0.713** (0.316)
AC FEs	✓	✓	✓
Observations	1,380	513	342
R <sup>2</sup>	0.141	0.028	0.165
Adjusted R <sup>2</sup>	-0.031	-0.459	-0.704
F Statistic	188.589***	9.856***	8.270***

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Clustered robust standard errors in parentheses.

Table A.6: FE Regression Results Incorporated Groups, Alternative Specifications

	<i>Dependent variable:</i>	
	$\Delta$ Gender Turnout Gap	
	(1)	(2)
$\Delta$ N Groups Incorporated	−0.311** (0.158)	−0.457*** (0.143)
$\Delta$ Share Marginal Workers	−0.371** (0.152)	
$\Delta$ Gender Gap LFP	0.218* (0.131)	
$\Delta$ Gender Gap Literacy	−0.349 (0.259)	
$\Delta$ Share Urban		0.099 (0.107)
$\Delta$ Female LFP		−0.235* (0.123)
$\Delta$ Female Literacy		−0.073 (0.140)
Constituency FEs	✓	✓
Observations	1,498	1,498
R <sup>2</sup>	0.032	0.025
Adjusted R <sup>2</sup>	−0.401	−0.412
F Statistic	8.593***	6.536***

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Clustered robust standard errors in parentheses.

Table A.7: FE Regression Results Narrow Parties, Alternative Specifications

	<i>Dependent variable:</i>	
	$\Delta$ Gender Turnout Gap	
	(1)	(2)
$\Delta$ N Narrow Parties	-0.570*** (0.205)	-0.866*** (0.194)
$\Delta$ Share Marginal Workers	-0.451*** (0.125)	
$\Delta$ Gender Gap LFP	0.215* (0.130)	
$\Delta$ Gender Gap Literacy	-0.297 (0.247)	
$\Delta$ Share Urban		0.134 (0.101)
$\Delta$ Female LFP		-0.259** (0.116)
$\Delta$ Female Literacy		-0.201* (0.113)
Constituency FEs	✓	✓
Observations	1,498	1,498
R <sup>2</sup>	0.031	0.022
Adjusted R <sup>2</sup>	-0.403	-0.416
F Statistic	8.240***	5.836***

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Clustered robust standard errors in parentheses.

Table A.8: FE Regression Results Incorporated Groups, District Level

	<i>Dependent variable:</i>		
	$\Delta$ Gender Turnout Gap		
	(1)	(2)	(3)
$\Delta$ Avg N Groups Incorporated	-0.413** (0.162)	-0.386** (0.162)	-0.331** (0.163)
$\Delta$ Share Urban		-2.486** (0.991)	
$\Delta$ Share Non-Farm Employment			1.551*** (0.427)
$\Delta$ Gender Gap LFP		-0.462 (0.383)	0.562 (0.540)
$\Delta$ Gender Gap Literacy		1.492** (0.727)	0.331 (0.730)
District FEs	✓	✓	✓
Observations	543	543	543
R <sup>2</sup>	0.025	0.032	0.042
Adjusted R <sup>2</sup>	-0.152	-0.151	-0.139
F Statistic	11.589***	3.743***	4.972***

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Clustered robust standard errors in parentheses.

Table A.9: FE Regression Results Narrow Parties, District Level

	<i>Dependent variable:</i>		
	$\Delta$ Gender Turnout Gap		
	(1)	(2)	(3)
$\Delta$ Avg N Narrow Parties	-1.538*** (0.270)	-1.493*** (0.290)	-1.270*** (0.324)
$\Delta$ Share Urban		-2.210** (0.959)	
$\Delta$ Share Non-Farm Employment			1.106** (0.491)
$\Delta$ Gender Gap LFP		-0.076 (0.460)	0.590 (0.536)
$\Delta$ Gender Gap Literacy		1.086 (0.695)	0.212 (0.711)
District FEs	✓	✓	✓
Observations	543	543	543
R <sup>2</sup>	0.042	0.046	0.049
Adjusted R <sup>2</sup>	-0.131	-0.134	-0.130
F Statistic	20.305***	5.512***	5.927***

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Clustered robust standard errors in parentheses.



Table A.10: FE Regression Results, State Level

	<i>Dependent variable:</i>	
	$\Delta$ Gender Turnout Gap	
	(1)	(2)
$\Delta$ N Groups Incorporated	-0.229*** (0.080)	-0.593*** (0.128)
$\Delta$ GSDP		-8.593 (8.763)
$\Delta$ Gender Gap LFP		-0.128 (0.118)
$\Delta$ Gender Gap Literacy		-0.103 (0.791)
State FEs	✓	✓
Observations	18	16
R <sup>2</sup>	0.025	0.374
Adjusted R <sup>2</sup>	-0.105	0.061
F Statistic	0.385	1.495

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
 Clustered robust standard errors in parentheses.

Figure A.4: Regional Patters in the Gender Turnout Gap in Uttar Pradesh

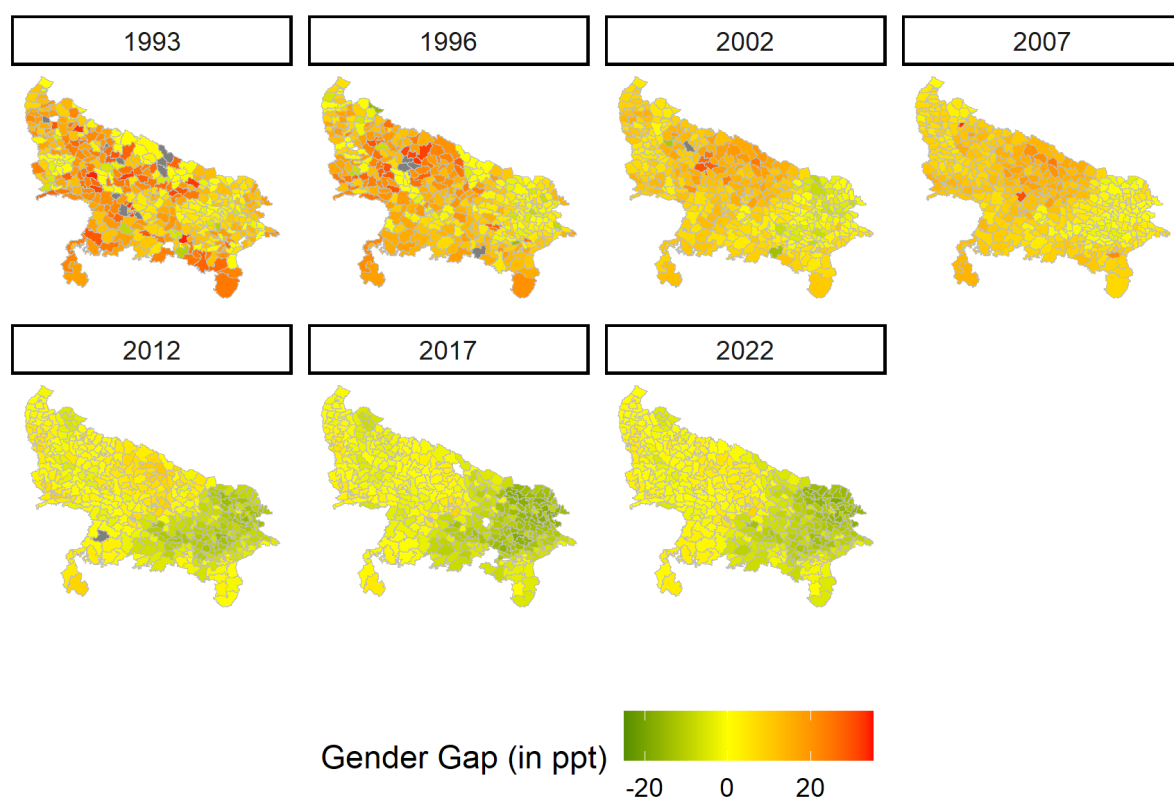
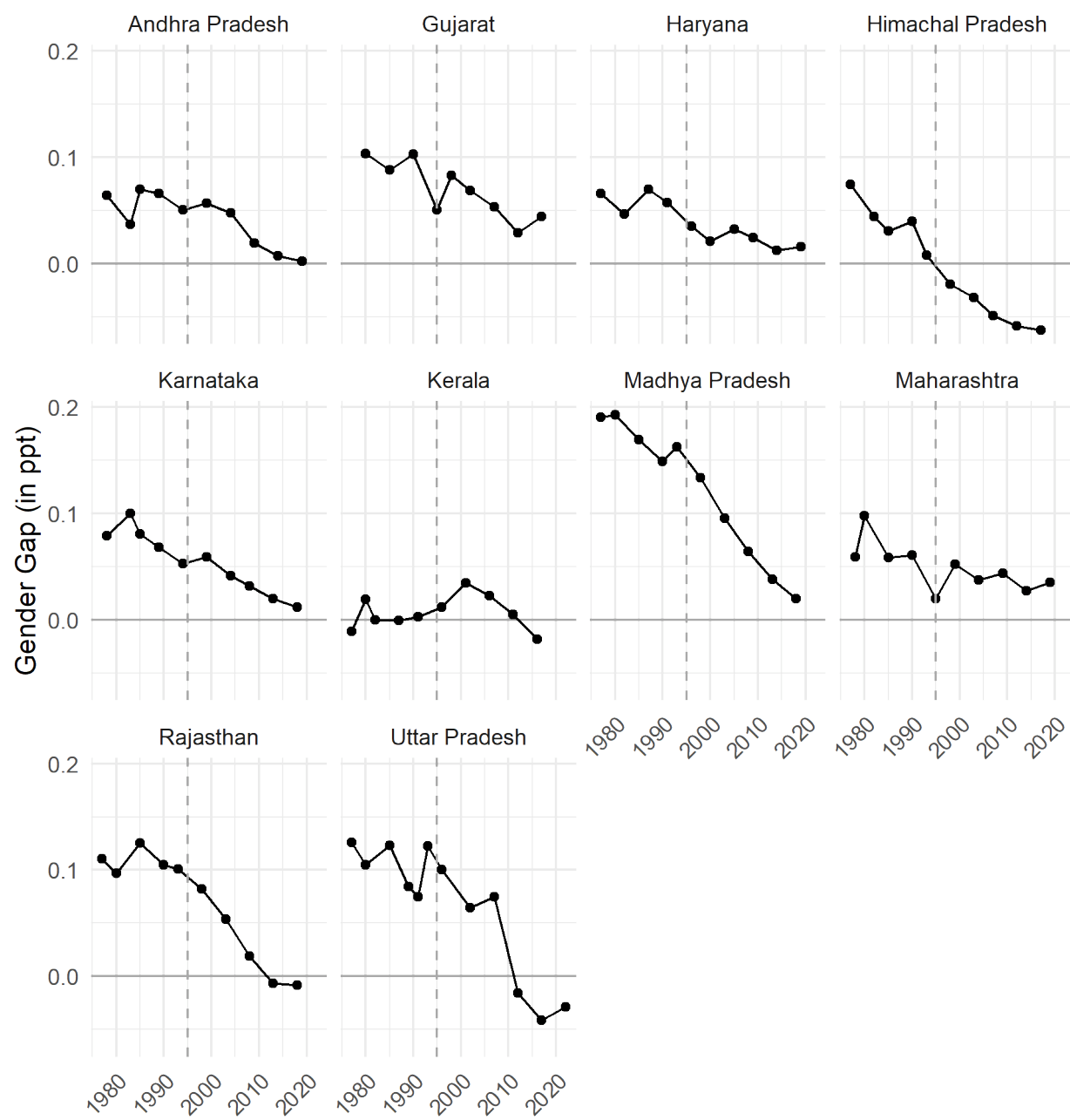


Figure A.5: Variation in the Gender Turnout Gap Across Early Adopters



## Appendix B

### Coding State-Level Party Leadership

I collected data on the state-level leadership for parties contesting all state elections between 1977 and 2017, with the goal of determining how voters at the time might have perceived the state-level leadership of each party. To that end, I built on Chandra and García-Ponce (2019)’s coding of state-level party leadership, and added the criteria of “visibility.”

Like Chandra and García-Ponce (2019), for each party in each election year, I tried to identify the key leaders – i.e. those individuals who take strategic decisions for the party at the state level. To that end, I first broadly read secondary sources about the party and newspaper articles about the party from around the time of the election<sup>28</sup> to determine the pool of “potential leaders,” i.e. those names that were mentioned frequently and might be associated with power within the party. Like Chandra and García-Ponce (2019), I then used contemporary newspaper articles to determine if an individual *actually* was involved in strategic decisions for the party, where strategic decisions include candidate nomination, campaign strategy, and pre-electoral alliances. That excludes highly visible politicians whose positions do not actually give them decision-making power, such as party speakers or those who are in the public eye merely because they are related to prominent politicians without holding power themselves. It also excludes holders of formal positions of power in highly centralized parties, where power is concentrated in the hands of a single leader and other positions exert little to no influence on party strategy. Using contemporary news sources to determine who was a decision-maker at the time of the election instead of relying on ex-post scholarly work about the party avoids the biases associated with hindsight: just because an individual *ended up* being important in a party does not mean they were at all times more powerful than others who were active in the party at the same time. Contemporary news sources provide a better picture of who took which decisions within a party ahead of each

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<sup>28</sup> My main sources were the *Times of India* and the *Hindustan Times* from 1977 through 2000, and the *Times of India* and *The Hindu* from 2000 through 2017.

election. A good example of this would be Amar Singh of the Samajwadi Party (SP): after joining the SP in 1996, he became one of eight national party secretaries, a position that in and of itself does not guarantee strategic decision-making in the highly centralized party structure of the SP. It was only through his close association with party leader Mulayam Singh Yadav that Amar Singh gained *actual* decision-making power within the SP, eventually becoming the party's second-in-command in 2004; his official title, however, had not changed during his tenure (Verma, 2004). Yet before the 1996 elections, for example, there were no indications that Amar Singh was involved in any strategic decisions for the SP (he only joined the party 4 months before the 1996 elections).

Because I care most about how voters would have *perceived* parties, I additionally check for all strategic leaders' "visibility," i.e. whether they are frequently mentioned in newspaper articles in the six months leading up to the elections. A highly influential decision-maker who remains in the shadows, after all, should not have any effect on how voters relate to a party. I therefore exclude leaders from the coding who were holders of formal or informal power, but who had fewer than 3 newspaper mentions in the 6 months ahead of an election.

I tried to code the leadership of all parties that contested a state election and came in at least second in at least one of the state's constituencies. The logic here is that such a party would have been a realistic contender for at least one seat in the state, therefore potentially exerting influence on turnout in that constituency. However, following the above coding criteria meant that I was unable to identify strategic decision-makers for several of the smaller parties I set out to code, either because there was no secondary literature on these parties that would have shed light on the leadership structure, or because there was little to no reporting about these parties in news media in the six months before the election, or – more often than not – both. For example, in the 1977 Uttar Pradesh elections, 14 different parties contested; four of them won at least 1 seat (the Janata Party, the Congress, the CPI and the CPM); and a fifth, the Muslim League, came in second in 1 of the 425 constituencies of the state. I therefore attempted to code the state-level leadership of all

five parties. However, while there are many secondary sources about the U.P. Janata Party and the Congress at the time, there are none about the CPI, CPM or Muslim League state units. An extensive reading of newspaper articles revealed that Bhika Lal was the state secretary of the CPI at the time, and indeed involved in naming CPI candidates for the state.<sup>29</sup> However, I was unable to identify any further state-level leaders for the party. In addition, I was unable to pinpoint *any* state-level leaders for both the CPM and the Muslim League in Uttar Pradesh in 1977.

However, given that the purpose of my coding is to identify the state-level leadership of parties *as voters would have perceived* said state-level leadership at the time, I would argue that not being able to identify state-level leaders also provides information. If it was hard or impossible for me to determine who the state-level leader of a small party was through extensive archival searches, I would argue that this party's leadership might have not been well-known at the time among the general public either. Consequently, the composition of the state-level leadership would have likely had little effect on voters' behavior at election time. (Instead, it seems reasonable that while specific candidates of these parties might have mattered in their respective pockets of influence, the party leadership would not have mattered enough to send strong signals to the electorate.) If a party has no hits in the newspaper archives, or newspaper articles about the party mention no state-level leaders by name, voters likely would not have had a strong association that party either.

My coding allows for several types of leaders to be included in the state-level leadership of a party: a) those who hold formal positions of power within the state-level party organization; b) leaders who hold state-level government position; c) national leaders of the party who hail from the state and are still involved in decision-making at the state level; and d) informal power holders who may not fill an official post in the party structure but still exert influence over the party's strategic decisions. The first category, state-level party office holders, usually includes the highest position in the party hierarchy at the state level. This position is

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<sup>29</sup> *The Times of India*, February 12, 1977, "Ten CPI candidates in UP named".

termed “state president” for most parties, but is designated “Pradesh Congress Committee president” for the Congress party and “state secretary” for the CPI and CPM.<sup>30</sup>

The second type of leader that might be included, holders of elected offices, always includes outgoing Chief Ministers at the time of the election. Any outgoing Chief Minister will have considerable influence on the distribution of party tickets, campaign strategy or pre-electoral alliances. If the party was in the opposition before the election, it may or may not have powerful decision-makers who hold elected office. Elected official from an opposition party that might be powerful decision-makers at the state level include any leader of the opposition in the state assembly or, less frequently, the leader of the party’s legislative group. For example, Pramod Tiwari was the leader of the Congress Legislature Party in Uttar Pradesh for more than 20 years and played an important role as a strategic decision-maker for four assembly elections.<sup>31</sup>

The third type of leaders, national leaders, usually involves either ministers at the national level or party office holders at the national level who come from the state (and often used to hold power at the state level) before moving on to the national level. These leaders “stay connected” to their home states and keep exerting influence at the state level ahead of elections, by getting tickets for their loyalists or being included in strategic committees, for instance. They might even be tipped as potential Chief Ministerial candidates. An example of this type of leader would be Murli Manohar Joshi who was deeply involved in the Uttar Pradesh state party’s affairs even after he became national general secretary and later national president of the BJP (Jaffrelo, 2003). Another example would be members of the Nehru-Gandhi family, who originally hail from Uttar Pradesh and have exerted major influence on many of the Congress party’s state election campaigns in Uttar Pradesh. Indira Gandhi, her sons Sanjay Gandhi and Rajiv Gandhi as well as her grandson Rahul Gandhi have all ran for parliament from constituencies in Uttar Pradesh in the past. (The Congress

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<sup>30</sup> However, newspaper articles might also refer to these office holders more generically as “state unit leaders” or “state unit chiefs.”

<sup>31</sup> *The Times of India*, August 30, 2012, “With Khatri, Congress tries to rise above caste”.

state unit in 1980 had actually unanimously elected Sanjay Gandhi as its leader, effectively crowning him Chief Minister, but was thwarted by then Prime Minister Indira Gandhi's opposition.<sup>32)</sup>

The last type of leaders that might be included in my coding are informal power holders, i.e. those who do not officially occupy the highest party office in the state nor an important elected office, but who nevertheless influence strategic party decisions. This mostly includes trusted aides of leaders of highly centralized parties. Formal offices within the party structure of parties such as the BSP or even the SP do not say much about the actual decision-making power an individual enjoys. Instead, proximity to the near-all-powerful main leader (Mayawati for the BSP, and Mulayam Singh Yadav for the SP) is usually a better gauge for an individual's influence on a party's strategic decision. Besides Amar Singh, who became Mulayam Singh Yadav's second-in-command within the SP<sup>33</sup>, other examples of leaders who exert influence through their proximity to the party president include BSP leader "Mayawati's right hand man Naseemuddin Siddiqui" in the 2000s.<sup>34</sup> In Tamil Nadu, Sasikala Natarajan, close friend to AIADMK leader Jayalalithaa, exerted powerful influence within the party for a while (Ananth, 2006).

Separately, I also code any chief ministerial candidate(s) a party might be projecting ahead of an election, independent of whether or not that person holds any party or elected office at the time. The post of Chief Minister is the highest and therefore, arguably, most valuable post a winning party will be able to occupy. If a party commits to a candidate for this office before the election, it sends a strong message to the electorate, and arguably that projected chief ministerial candidate will likely be most associated with a party in the minds of voters. In the vast majority of cases, the projected chief ministerial candidate was also an important decision-maker at the state level for the party. The only exception so far might have been Uma Bharti, who was projected as the Uttar Pradesh BJP's chief ministerial

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<sup>32</sup> *The Times of India*, June 7, 1980, "PM rejects UP plea for Sanjay".

<sup>33</sup> *The Times of India*, August 10, 2002, "Oppn pledges to take on govt unitedly"

<sup>34</sup> *The Times of India*, December 14, 2011, "A busy day for parties".



candidate in 2012, despite hailing from neighboring Madhya Pradesh and never having held a position in the UP state unit nor having been elected from a UP constituency before. It is unclear from newspaper articles how much strategic decision-making power she actually had ahead of the election.

I also code the Chief Ministers any given party put up in the past. Since the Chief Minister is the highest office at the state level, any history of incorporation of groups at that level likely will affect voters' evaluation of a party for a while into the future. For each party in each year, I checked how many Chief Ministers that party had in the previous two election cycles. India's parliamentary system allows for the head of the state government to change without new elections being held. In fact, it is not uncommon for a party to have more than one Chief Minister over the course of a single term. Independent of the duration for which they held office, I coded all individuals who a) held the office during any of the previous two terms *and* b) are still part of the party at the time of the election. The reason this second condition is necessary is the fluidity of parties and party affiliations in some Indian states during the time of my analysis: a leader might have been Chief Minister under one party's banner, but then later defected to another party. It seems implausible that voters would still associate that leader with the old party, even if the leader is now actively campaigning for the new party, usually using their status as former CM to give this campaign more weight. Take, for example, the 1977 elections in Uttar Pradesh. A total of 6 different CMs had served in the previous 2 terms under 3 different parties: Chandra Bhanu Gupta (Congress), Charan Singh (BKD), Tribhuvan Narain Singh (Congress (O)), Kamalapati Tripathi (Congress) and Hemwati Nandan Bahuguna (Congress) in the 1960-1974 term; and Bahuguna and Narayan Dutt Tiwari (Congress) during the 1974-1977 term. By the time the 1977 elections were approaching, three of these former CMs, C.B. Gupta, Charan Singh and H.N. Bahuguna, were associated with the newly formed Janata Party; and three with the Congress, T.N. Singh, Tripathi and Tiwari. I therefore coded C. B. Gupta, Charan Singh and H.N. Bahuguna as former CMs for the Janata Party; and the other three

as former CMs for the Congress. Note that coding for past Chief Ministers does not require these individuals to still be important state leaders in the given election; it merely requires that these individuals have not switched party alliances and would therefore be more likely to be associated with a different party by now. For example, in 1977, T.N. Singh is coded as a former CM for the Congress, even though he was not active in Uttar Pradesh state politics anymore but actually governor of West Bengal by that time. In the extreme case, I even code former CMs who had died by the time of an election (but had served during the previous two terms) as a party could still use their image for campaigning and voters would still likely associate that leader with the party, even after their death. That was the case for Vir Bahadur Singh, who served as Congress CM for two years in the 1985-1989 term, but passed away before the 1989 elections were held. Still, he was invoked frequently in newspaper articles, and since he never changed parties since holding the office, I still coded him as a past CM for the Congress in 1989 and 1991.

## Coding Ethnic Identity

For each leader I identified for each party, I attempted to code their most salient ethnic identity/identities. I did this in two steps: first, I coded the *nominal* ethnic identity of leaders, where I was able to determine it; and then I checked for salience at the time of each election. To determine a leader's nominal identity/identities, I consulted scholarly work on the leader and the party, as well as searched broadly in the archives. For Uttar Pradesh in particular, Jaffrelot (2003) was a great help in identifying *which* ethnic identity categories each leader might belong to. For leaders who have since passed away, obituaries and articles that reviews their impact on state politics after their death also often are good sources of information.

After determining nominal ethnic identity categories, where possible, I coded whether said categories were salient for the leader at the time of each election. I coded salience purely based on contemporary newspaper articles. Specifically, I looked for the earliest

explicit or implicit mention of each leader’s potentially relevant ethnic identity/identities in newspaper articles. If a leader’s identity was discussed in a newspaper article *before* a given election, I coded that identity as being salient for that election. Conversely, if there were no mentions of a leader’s identity before that election, I did code the identity as not being salient.

Explicit mentions of a leader’s identity are straightforward classifications of a leader as belonging to “x community” in the text of a newspaper. For example, Janata leader Charan Singh was identified as a “Jat leader” explicitly in articles dating back to the 1960s. As early as 1969, the *Times of India* wrote: “Mr. Charan Singh is the most eminent Jat on the country’s political stage;”<sup>35</sup> and five years later, he was identified as “Mr Singh who is himself a Jat” in the *Hindustan Times*.<sup>36</sup>

Implicit mentions, by contrast, are less obvious at first glance. In India, ethnic identity can often be inferred from a person’s name (and sometimes even is *part of the name*). For example, former Uttar Pradesh Chief Minister Narayan Dutt Tiwari would easily be identifiable as Brahmin to any Uttar Pradesh resident, based on his name alone. Yet neither the *Times of India* nor the *Hindustan Times* explicitly called Tiwari “Brahmin” before the 1977 elections, the first election in my dataset. In fact, the earliest mention of Tiwari’s Brahmin caste identity in the archives is from 1979,<sup>37</sup> two years after the election. Yet his Congress party was regularly associated with Brahmin dominance in the media even before that. For example, in 1970, the *Times of India* reported that the post-split Congress party headed by Indira Gandhi, herself a Brahmin, was led mostly by Brahmins in Uttar Pradesh: “the party organisation in the districts—to the extent it exists at all—is Brahmin-dominated.”<sup>38</sup> His predecessor Kamalapati Tripathi’s reign at the helm of the UP Congress was described as “Mr. Tripathi’s Brahmin leadership,”<sup>39</sup> and newspapers stated that “the

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<sup>35</sup> *The Times of India*, February 6, 1969, “BKD well placed in West U.P.”

<sup>36</sup> *The Hindustan Times*, February 15, 1974, “Charan’s Jat armour dented”.

<sup>37</sup> *The Times of India*, December 25, 1979, “N. D. Tiwari has edge over rivals in Nainital”.

<sup>38</sup> *The Times of India*, December 12, 1970, “U.P. Election Arithmetic”.

<sup>39</sup> *The Times of India*, August 22, 1970, “Mrs. Gandhi’s Problem in U.P.: The Compulsions of Caste Arithmetic.”

caste composition of the cabinet, the parliamentary board and the UPCC executive [was] heavily weighted in favour of Brahmins” in 1975.<sup>40</sup> While Tiwari’s caste identity was not *explicitly* mentioned in the news media at the time, I argue, it was *implicitly* referred to by discussing Brahmin dominance in the Congress party during Tiwari’s time as a prominent leader, while most readers of the *Times of India* or *Hindustan Times* would have been easily able to infer Tiwari’s Brahmin identity from his name as well. I therefore code Tiwari’s Brahmin identity as salient ahead of the 1977 elections (and all following elections).

Implicit mentions become even more tricky when a leader’s caste identity is part of their name. For example, most Reddys in Andhra Pradesh carry “Reddy” in their name. No matter how salient the identity is for a leader, then, journalists would likely never find it necessary to identify Chenna Reddy as “a Reddy,” the way that Charan Singh was identified as “a Jat.” At the same time, that does not mean that the Reddy identity should *automatically* be assumed to be salient for a politician, just because they carry the caste name “Reddy” in their name. As a rule, I coded the ethnic identity of those leaders who carry the caste name in their name as salient only if a) they are juxtaposed to other politicians who are explicitly identified by their caste and/or b) the caste group is discussed explicitly in the context of their party. For example, while Congress leaders in Andhra Pradesh belonging to the Reddy caste are not usually explicitly identified as “Reddys,” if they are juxtaposed with a leader identified as belonging to another caste, such as Kamma – a caste identity that cannot always be inferred from name the same way as the Reddy identity – I code the Reddy identity as salient as well. The reason is that if the Kamma leader’s caste is specifically identified, the only identity that it could be juxtaposed with, then, is the Reddy identity of the leader which is presumed common knowledge, given that it is contained in the name. Similarly, if “Reddys” as a group are discussed in the context of a Reddy leader’s party, that also is a sign that the Reddy leader’s identity would be salient (and presumed common knowledge from the name). Take, as an example, an article from 1970 that never

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<sup>40</sup> *The Times of India*, April 26, 1975, “Dissidence in U.P. Congress: Caste pressure groups.”

explicitly identifies N. Sanjiva Reddy as belonging to the Reddy caste. But the article says:

The grand alliance that Mr. Sanjiva Reddy is hoping to forge with Professor Ranga, a life-long rival, does represent something of a threat. An alliance between Professor Ranga's following among Kamma caste-men and the Reddys may be dangerous for the new Congress<sup>41</sup>

This article does both: it juxtaposes Sanjiva Reddy with a leader specifically identified as Kamma; and it references "Reddys" as a group as his traditional followers. In this case, I would code Sanjiva Reddy's caste identity as being salient. Similarly, when newspapers talk about "the Reddy-dominated Pradesh Congress" ahead of an election, I will code leaders' Reddy identity as salient.<sup>42</sup>

What then counts as a non-salient ethnic identity? I coded all those identities as not salient where a) I could not identify any state-level leaders of a party (and consequently, no identity for those leaders); b) I could not determine the ethnic identity of state-level leaders of a party *at all*, despite extensive searches in the secondary literature and newspaper archives; and/or c) I found no explicit or implicit mentions of the leader's identity in newspaper articles dated prior to the election. This last point requires that the leader's identity was neither discussed directly, nor was the leader's identity category ever discussed by a newspaper articles in the context of the leader's party. An example of the first case would be the Uttar Pradesh CPM in 1977: because I was unable to determine the name of *any* state-level leader for the party ahead of the 1977 elections, I was also unable to code any ethnic identity for the leadership.<sup>43</sup> An example of the second case, where the leader is known but their ethnic identity is not, includes Bhika Lal, state secretary of the CPI ahead of the 1977 Uttar Pradesh elections. While I was able to determine that Bhika Lal not only held a formal office within the party structure but also took strategic decisions for the party, there were no mentions of his caste or other identities in any articles in the archive. An example of the third case,

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<sup>41</sup> *The Times of India*, August 1, 1970, "New phase in Telengana".

<sup>42</sup> *The Times of India*, December 14, 1984, "Rao shaky in AP seat".

<sup>43</sup> The CPM won 1 out of 425 seats in Uttar Pradesh in 1977, and came in second in 1 more constituency.

where the leader is known and so is their identity (for example from secondary sources or obituaries) but the identity is not salient, is Puchalapalli Sundarayya, state secretary of the CPM in Andhra Pradesh in 1983 (and previously prominent national leader of the CPM). Based on Harrison (1956), his full name is Puchalapalli Sundar Rama Reddy, and he was the only prominent Reddy among the Communists in the state in the 1950s (p. 384). Yet no newspaper articles from the years when he was coded as a state-level leader for the Andhra Pradesh CPM either juxtapose him with someone whose caste identity is identified explicitly; nor reference his caste group, the Reddys, more generally in the context of his party, be it in terms of leadership, target group or otherwise. The fact that he even changed his name to make his caste affiliation less obvious further supports the claim that his caste identity was not salient at the time. I argue that for all conditions that I code as non-salient identities, the average voter would have likely not had any information about the level of a party's incorporation of co-ethnic elites, either because there was no mentionable state-level party organization, or because the identity of the leader was unknown, or because the party/leader specifically cultivated an image that did not rely on ethnic identity.

## Covariates

I use three main covariates in the analysis that the literature suggests should affect gender turnout gaps. The first is **economic development**, where higher economic development should correlate with smaller gender turnout gaps. One of the most straightforward measures of economic development, **GDP per capita**, is only available at the state level. At the Assembly Constituency level, I therefore use two measures found in the census to proxy for economic development. One is the share of the population living in areas classified as **urban** by the census. The census classifies areas as urban based on three criteria: a locality needs to have at least 5,000 inhabitants, a density of 400 people per square kilometer or more, and at least 75 percent of the male working population engaged in non-farm work to be considered urban. Urban areas, on average, record more of the markers commonly

associated with development, including higher levels of education, better health outcomes, higher incomes and more household assets.<sup>44</sup>

A second, related measure of economic development is the share of **men working in agriculture**. The classification as “urban” requires that at least three-quarter of men work outside of agriculture. Yet even within those localities classified as rural, there is variation in the share of the population that makes their living from farming. A stronger reliance on agriculture signals fewer outside options, indicating lower levels of overall development. I therefore also collected information on the percentage of all male (main) workers that is engaged in agriculture.<sup>45</sup>

A third measure that proxies for economic development is the share of male workers who are only **marginal workers**. “Marginal workers” according to the Indian census are those who worked for less than 6 out of the past 12 months, while “main workers” are those who worked for more than 6 out of the past 12 months. Marginal workers include many individuals who are engaged in seasonal work, such as harvesting or sowing; or those on short-term assignments in construction or other manual labor. Marginal workers are therefore more precarious than main workers. Especially among men, marginal work is often not a choice, but a necessity, for casual informal workers who make ends meet by going from gig to gig. The share of male workers who are marginal workers, therefore, captures a dimension of economic development that relates to the quality of employment, where a higher share of male workers in marginal work indicates that employment conditions are more precarious in a locality.<sup>46</sup>

Another predictor of the gender turnout gap found in the literature is female labor force participation (FLFP). I collected data on the **FLFP rate**, or the share of women who are engaged in any kind of work for cash or kind. Where possible, I collected data disaggregated

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<sup>44</sup> See, for example, The Indian Express, October 14, 2021, “[Household-level asset ownership: just 3% in India, Delhi on top](#)”; Mint, September 14, 2017, “[How much of India is actually urban?](#)”.

<sup>45</sup> In census nomenclature, that includes both “cultivators,” who take decisions themselves and have a personal stake in the farming activity – for example because they own or lease the land – as well as “agricultural laborers,” who merely work for cash or kind and have no personal stake in the activity.

<sup>46</sup> The NSS adopted a procedure of measuring LFP that allows for calculating the share of marginal workers.

by main or marginal work status. However, what matters might not be absolute levels of FLFP, but work rates relative to male labor force participation: if unemployment is high in general, FLFP rates will necessarily go down. However, if male employment is considered a baseline that is dependent on levels of economic development, then the difference between male and female work rates indicates the extent of women's economic agency. I therefore also calculate the **gender gap in work rates**.<sup>47</sup>

The third predictor of the gender turnout gap based on the literature is female education. I use **female literacy** as a measure of a minimal level of education that might make women more likely to participate politically. Indian elections are meant to be accessible to illiterate voters as well, with parties using symbols and colors together with party names, and candidate photos being printed alongside candidate names on ballot papers. Before casting a ballot on election day, voters are required to sign their name with an election official; however, those who cannot sign their own name are allowed to substitute a thumb print in ink instead. Yet not being able to sign their own name could, in theory, be a deterrent for women on election day; and gaining enough literacy to be able to write their name in the list might make women feel empowered enough to turn out in greater numbers. In addition, besides making the election process more accessible, basic literacy should aid women in gaining and processing political information. I calculate literacy rates based on the number of literate women provided by the census. The Indian census counts as literate anyone aged 7 or older who can read and write in any language, independent of formal education.<sup>48</sup> However, in a setting with low educational requirements for participation, maybe what matters are not overall levels of female education, but women's education *relative* to that of men as a measure of the value parents place on daughters' education relative to sons'. Where women's literacy rates approach those of men, women's empowerment should be higher and gender turnout gaps should be smaller. I therefore also calculate the **gender gap in literacy**.

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<sup>47</sup> The NSS contains data on women's LFP as well.

<sup>48</sup> The NSS adopted a procedure to measure literacy that is comparable to the Indian census.



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