Political Implications of Trade Liberalization: Evidence from India*

Sebastian Jävervall[†]

Roza Khoban[‡]

Ryu Matsuura[§] Job Market Paper

December 11, 2024

Most Recent Version

Abstract

In recent decades, many developing countries have integrated into the global economy through trade reforms. However, the gains from trade liberalization have been unevenly distributed among various economic and social groups. This paper examines how adverse economic shocks induced by trade liberalization influenced voting behavior and political representation among marginalized groups in India. By using exogenous variation in regional exposure to tariff reductions from India's 1990s trade liberalization and constructing a novel dataset that links politicians to social communities, we establish causal estimates of the economic and political effects of trade reforms. We find that trade liberalization led to a relative decline in consumption and earnings growth for marginalized workers. In response, these groups increased their political engagement, resulting in higher vote shares and representation for marginalized politicians, while non-marginalized politicians experienced a corresponding decline. We show that these political effects were most pronounced in districts with a significant marginalized population share, suggesting a political backlash from marginalized groups. Furthermore, we provide evidence that a redistributive policy mitigated these political changes, in line with an economic grievances channel.

Keywords: Political Representation, Political Power, Political Backlash, Trade Liberalization JEL Classification: F13, J15, O19, P10.

^{*}We are grateful to Chris Udry, Lori Beaman, and Ameet Morjaria for their guidance and support. We thank Sam Asher, Kwok Yan Chiu, Devis Decet, Sean Higgins, Jacopo Ponticelli, Edoardo Teso, Silvia Vannutelli, Vikrant Vig, and Jin Yang as well as seminar participants at Northwestern University, Imperial College London, Colby College, 6th QMUL Economics and Finance Workshop for PhD & Post-doctoral Students, and 4th Early Career Workshop in Quantitative Political Economy at King's College London for helpful comments and feedback. We also thank Sam Asher, Paul Novosad, and Petia Topalova for sharing data on the Anthropological Survey of India and tariffs. Financial support from Global Poverty Research Lab is gratefully acknowledged.

[†]Kiel Institute for the World Economy. Email: sebastian.javervall@ifw-kiel.de

[‡]University of Zurich. Email: roza.khoban@econ.uzh.ch

[§]Northwestern University. Email: ryumatsuura@u.northwestern.edu

1 Introduction

Since 1980, many developing countries have increasingly integrated into the global economy (World Bank, 2002). Countries in Latin America, East and South Asia, and Sub-Saharan Africa implemented trade reforms during the 1980s and 1990s, leading to unprecedented global economic integration. Following these policy shifts, many developing countries experienced accelerating economic growth and began to close the gap with developed countries (Kremer, Willis and You, 2021; Patel, Sandefur and Subramanian, 2021). However, the gains from trade reforms were not necessarily distributed evenly within these countries. While neoclassical trade theory (i.e., Ricardo and Heckscher-Ohlin) suggests that trade liberalization benefits low-wage workers in developing countries, who are the locally abundant factor of production, empirical evidence indicates the opposite. Due to the rigidity of labor markets in developing countries, trade liberalization did not necessarily result in efficient labor reallocation and instead exacerbated economic inequality. Overall, the wave of trade liberalization in the 1980s and 1990s produced negative distributional consequences for low-wage workers in developing countries.

Adverse economic shocks often lead to significant shifts in voting behavior. In Western democracies, economic insecurity is associated with increased support for populist parties advocating protectionist policies (Gidron and Hall, 2017; Guiso et al., 2017; Colantone and Stanig, 2018; Autor et al., 2020; Dal Bo et al., 2023). This pattern aligns with implications of neoclassical trade theory: low-wage workers in developed countries, who face increasing import competition from developing countries due to open trade, are expected to favor protectionist policies, including import duties (Baldwin, 1989; Wood, 1995).

In developing countries, however, the dynamics are less straightforward. Trade theory suggests that low-wage workers in these economies should benefit from trade liberalization, as they possess a comparative advantage in labor-intensive production. Empirical evidence supports this expectation, with low-wage workers generally exhibiting pro-trade preferences (Gaikwad and Suryanarayan, 2023). Yet, in reality, these workers often experience negative distributional consequences from globalization, contrary to both theoretical predictions and their expectations. How, then, do these adverse economic shocks influence their political behavior, and what implications does this have for the broader political landscape in developing countries?

¹See Greenaway, Morgan and Wright (2002) for the full list of developing countries that experienced trade liberalization in the 1980s and 1990s.

²See Goldberg and Pavcnik (2007) for an analysis in a few representative developing countries. In India, Topalova (2010) finds that the 1991 trade liberalization slowed down the rate of poverty reduction in districts exposed to tariff reductions.

In this paper, we investigate how economic shocks induced by trade liberalization affected political dynamics across social groups in India. Specifically, we examine how tariff reductions impacted the economic outcomes of marginalized groups—lower castes (Scheduled Castes and Scheduled Tribes) and Muslims—compared to non-marginalized groups, and subsequently influenced the political behaviors of these groups. Marginalized individuals have historically faced severe social and economic discrimination through the systematic ranking of ethnic communities in India. In addition, rigid labor markets and low social mobility imply that marginalized workers are less able to adjust in response to adverse economic shocks.

To establish a causal link between trade liberalization and shifts in economic welfare and political power dynamics across social groups, we exploit India's trade liberalization of the 1990s. The liberalization was externally imposed, rapidly implemented, and largely unexpected, resulting in an average industrial tariff decline of about 70%. We construct a measure of district-level exposure to tariff reductions by weighting pre-reform industrial tariffs by pre-reform regional employment shares. By using variation in pre-reform tariffs, the measure exploits only the exogenous tariff reductions derived from the reform, as industries with higher pre-reform tariffs experienced larger tariff declines during the trade liberalization.

To implement our empirical strategies, we combine several sources of data. First, we use detailed candidate-level election statistics, which provide information on electoral competition and the identities of local politicians running for office. Second, we leverage data from the 1990 Indian Economic Census (EC) to measure pre-reform economic conditions. Specifically, we match the pre-reform district-level industry employment shares with industry-level tariff data to measure each district's exposure to trade liberalization. Third, to understand the economic effects of trade liberalization, we draw on economic outcomes data from the National Sample Survey (NSS) in India, specifically using data from the 43rd and 55th rounds of the NSS household surveys. Fourth, to identify the social group of each politician, we utilize information from the *People of India* (POI) Anthropological Survey launched in 1985. Given that Indian surnames are indicative of an individual's community affiliation, this dataset enables us to categorize Indian political candidates by their primary communities (i.e., jatis) and construct a novel dataset of Indian politicians with their social communities. We match approximately 63,000 surnames with 3,000 jatis, covering about 83% of all political candidates in our sample. This approach allows us to assign individuals to specific social communities, enabling the categorization of politicians into marginalized and non-marginalized groups.

We first document the economic effects of trade reforms across social groups. Our findings show that greater exposure to import competition at the district level had negative effects on consumption and total earnings for workers from marginalized groups. While exposure to tariff reductions had positive impacts on average consumption and total earnings across the economy, marginalized groups did not reap any of those benefits, exacerbating inequality between marginalized and non-marginalized groups. These adverse effects were concentrated in sectors directly impacted by trade liberalization, as changes in the economic structure primarily occurred within these sectors.

Second, we investigate the political consequences of trade liberalization, focusing on the vote shares and political representation of candidates from marginalized groups and general castes. Our findings reveal that exposure to import competition increased the vote shares of both all marginalized candidates running for office and of marginalized winning candidates while reducing those of general castes candidates. Similarly, exposure to tariff reductions increased the supply of marginalized candidates running for office and winners, suggesting that trade liberalization influenced not only the composition of candidates running for office but also political representation. This political shift was most pronounced in districts with a significant marginalized population share, indicating that marginalized voters and politicians mobilized more actively in post-liberalization elections. We interpret these results as a political backlash by marginalized groups in response to adverse economic shocks. Additionally, we find that the political backlash was concentrated in the political party with anti-globalization ideologies.

In summary, our results show that trade liberalization has significant consequences for political power dynamics across social groups and that this is a result of economic backlash in a setting where social groups are highly cemented over time and mobility across occupations is low.

To understand how adverse economic shocks to marginalized groups led to changes in their political behavior, we explore an economic grievances channel. We hypothesize that economically losing voters from marginalized groups supported candidates from their social groups, expecting that these candidates would protect the economic interests of marginalized groups. In turn, compensatory transfers for economic losses should mitigate the political changes induced by trade liberalization. Our findings indicate that a policy intervention supporting economically disadvantaged districts helped mitigate the shifts in political behavior among marginalized groups caused by exposure to import competition. These mitigating effects of the distributive policy intervention are consistent with the economic grievances channel.

Our paper closely relates to the existing literature on globalization and the rise of populism. Advanced economies have been exposed to the "China import shock" since the early 2000s, following China's accession to the World Trade Organization. Consequently, increased

exposure to import competition from China has caused significant economic shocks to labor market structures in these economies. In a canonical paper, Autor, Dorn and Hanson (2013) show that rising Chinese imports led to unemployment, lower labor force participation, and reduced wages among workers in manufacturing industries in the United States. Similar adverse economic shocks from Chinese imports have been observed in other developed countries (Malgouyres, 2017; Dauth, Findeisen and Suedekum, 2014; Dippel et al., 2018). Subsequent papers show that these trade-induced negative shocks contributed to increasing political polarization in the United States (Autor et al., 2020) and the rising support for nationalist and populist parties in Europe (Colantone and Stanig, 2018; Dippel et al., 2022; Barone and Kreuter, 2021; Caselli, Fracasso and Traverso, 2020).³ However, due to data limitations, previous work has mainly focused on advanced economies, with less attention given to developing countries. A key distinction is that labor market rigidity and other economic and social barriers may hinder socioeconomic groups from effectively adjusting to trade shocks, making the distributional consequences of trade less clear. Unlike their counterparts in advanced economies, low-wage workers in developing countries expect positive returns from trade reforms. This distinction suggests that their political responses to the distributional consequences of these reforms may differ significantly, underscoring the importance of understanding the political consequences of trade liberalization in developing countries. Our paper addresses this gap by documenting that adverse economic shocks led to a political backlash among affected social groups in developing countries. Furthermore, our findings carry important policy implications, suggesting that compensatory measures for economically disadvantaged groups could mitigate the political backlash induced by adverse economic shocks.

Our paper also contributes to the literature on the consequences of trade liberalization. Previous studies have found positive effects of market liberalization on the economy, including (i) higher firm productivity in the manufacturing sector (Sivadasan, 2009; Topalova and Khandelwal, 2011); (ii) a reduction in wage inequality (Mishra and Kumar, 2005); and (iii) a reduction in capital misallocation (Bau and Matray, 2023). However, Topalova (2010) finds that exposure to tariff reductions slowed down poverty reduction in India. Our paper makes a novel contribution to this literature by showing that much of the negative economic effects of trade were borne by individuals from marginalized communities, which had significant ramifications for the political landscape.

While the economic effects of trade liberalization have been widely documented, the political effects remain underexplored. Recent studies on the political consequences of trade liberalization tend to focus on the demand side of the political market, such as voters'

³See Guriev and Papaioannou (2022) for a comprehensive review.

preferences and voting behaviors (Autor et al., 2020; Dippel et al., 2022; Blanchard, Bown and Chor, 2024).⁴ We address this gap by examining how trade liberalization affected both the supply and demand sides of the political market, impacting not only voters' behavior but also political representation and selection of candidates from specific social groups.

The rest of the paper is structured as follows. Section 2 discusses the institutional and policy settings. Section 3 describes the data we use for the empirical analysis. Section 4 outlines the empirical strategy for causal identification. Section 5 presents the effects of trade liberalization on both economic and political outcomes. Section 6 provides suggestive evidence of how adverse economic shocks led to a political backlash among marginalized groups. Section 7 concludes.

2 Background

In this section, we outline the features of India's trade liberalization of the 1990s, describe the Indian political setting, and discuss the definition of marginalized groups.

2.1 India's 1990s Trade Liberalization

Prompted by a balance-of-payment crisis and as part of the International Monetary Fund (IMF) adjustment program, India abandoned its restrictive trade policies in 1991—policies that had been in place since independence—and initiated rapid and unforeseen trade liberalization. The crisis arose from a rise in macroeconomic imbalances (i.e., fiscal and balance-of-payments deficits), which increased India's vulnerability to economic shocks. Consequently, the sudden increase in oil prices due to the Gulf War in 1990, a decline in remittances from Indian workers in the Middle East, weakened demand from major trading partners, and political uncertainty all undermined investor confidence, resulting in significant capital outflows. To address its external payment problems, the Indian government requested a Stand-By Arrangement from the IMF in August 1991.

The conditions in the IMF adjustment program required India to rapidly, drastically, and unilaterally reduce its tariffs, resulting in a narrowing of tariff rate dispersion across sectors. The average tariff rate fell from approximately 80% in 1990 to 40% in 1996, with the standard deviation of tariffs decreasing by about 30% over the same period. Figure

⁴Previous research on the supply side effects of trade has focused on historical events. In specific, Puga and Trefler (2014) study the implications of increased trade during medieval Venice, while Acemoglu, Johnson and Robinson (2005) provide insights on the role of trade in Western Europe during the 16th century. We speak to these papers by providing new evidence on the political and democratic implications of trade in a modern developing country setting.

1 shows the decline in the average tariff and the standard deviation of tariffs during the liberalization. As illustrated in Appendix Figure C1, industries with the highest initial tariffs received the largest cuts, and there was substantial variation in tariff changes across industries.⁵

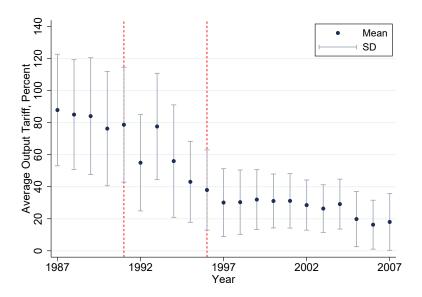


Figure 1. Average Output Tariff, 1987–2007

Notes: This figure shows the average tariff reduction and the standard deviation of tariffs at the industry (4-digit NIC) level during trade liberalization. The period between 1991 and 1996 denotes the most intensive period of tariff reductions.

Following trade liberalization, total imports, and particularly imports of intermediate inputs, saw an increase (Goldberg et al., 2010). The growth in trade volume outpaced real output, raising the ratio of India's manufacturing trade to GDP from an average of 13% in the 1980s to 19% by 1999–2000.

Because trade liberalization was prompted by external pressures from the IMF, its timing was largely unanticipated by political actors and firms in India (Varshney, 1998). Additionally, previous literature has shown that the tariff changes were uncorrelated with pre-reform firm and industry characteristics, such as productivity, size, output growth during the 1980s, and capital intensity (Topalova, 2010). Thus, trade liberalization does not appear to have been targeted toward specific industries, nor was it subject to typical political pressure, as the reform was largely unforeseen by firms and political actors in India.

⁵While tariff reductions constituted a main part of the IMF adjustment program, the program also included delicensing reforms and the relaxation of foreign direct investment (FDI) rules aimed at increasing domestic competition.

2.2 Politics in India

India is a federal democracy with largely autonomous state-level governments, which grants the states substantial administrative and legislative power. The states account for approximately 60% of total expenditures and have administrative control over numerous areas, such as public goods provision, local labor markets, and public services (Jensenius, 2015; Asher and Novosad, 2017).

Our focus is on politicians in India's state legislative assemblies, namely the Members of the Legislative Assembly (MLAs). In general, elections are held every five years and are staggered across states. These elections use a first-past-the-post system, where candidates compete in single-member legislative constituencies. The candidate who receives the most votes in a constituency wins a seat in the state parliament, and the party with the largest seat share gets the opportunity to form the state government. During the time period analyzed, India had approximately 4,110 legislative constituencies, and nearly 30,000 single-member constituency elections were contested in total. On average, each constituency includes around 130,000 individual voters and has about nine candidates running for office, with voter turnout averaging around 62%. Out of the 4,110 legislative constituencies, 14% and 12% are reserved for Scheduled Castes and Scheduled Tribes, both of which are described in the next subsection.

2.3 Marginalized Groups in India: The Caste System and Religion

India has several ethnic and religious communities that are marginalized in terms of access to socioeconomic resources and opportunities. Within Hindu society, these marginalized groups, which have historically faced severe social and economic discrimination, are defined through the Hindu caste system. Specifically, Hindu society consists of several thousand castes, or jatis, and caste membership plays a crucial role in people's identity, influencing the social, economic, and political dimensions of life in India. Jatis are closely related to kinship or lineage group, and each jati is generally associated with specific traditional occupations. Several jatis are organized into a hierarchical system known as varnas (Bühler, 1886). The four varnas are Brahmins (Priests), Kshatriyas (Warriors), Vaishyas (Merchants), and Shudras (Laborers), in descending order of hierarchy. Large sub-population groups, now referred to as Dalits or Scheduled Castes (SC), were historically excluded from the varna system. In addition to Dalits, another marginalized sub-population group in India is the Adivasi, also known as Scheduled Tribes (ST). Both SC and ST are among the most disadvantaged socioeconomic groups and receive reserved quotas in education and government employment. Although affirmative action has narrowed the socioeconomic gaps between SC/ST and other

groups over time, SC/ST communities still face economic disadvantages today (Mosse, 2018; Munshi, 2019; Asher, Novosad and Rafkin, 2024).

While India is predominantly Hindu, it is home to a diverse array of religious communities. The following religions represent the largest religious minorities in India and are granted minority status: Muslim (14.2% of the population); Christian (2.3%); Sikh (1.7%), Buddhist (0.7%), Jain (0.4%), and Parsi (0.006%) (Teater and Jenkins, 2019). Districts with a high concentration of minority population are often identified by the Government of India as relatively backward, lagging behind the national average in socioeconomic indicators and basic amenities. This correlates with lower individual welfare and economic participation. For instance, Muslims face lower educational mobility—a critical factor in future economic outcomes—and localities with a high Muslim population share have lower access to public services, even in comparison to marginalized caste groups such as SC and ST (Asher, Novosad and Rafkin, 2024; Asher et al., 2024b). Other religious minorities, such as Christians and Sikhs, have also been discriminated against and subject to violence. Thus, like SC and ST, some religious minorities in India have endured economic and political hardships due to their religious identity.

Since India is often classified as a labor-abundant country, neoclassical trade theory predicts that integration into the global economy would benefit low-wage workers, who largely overlap with SC, ST, and Muslims. This theoretical prediction suggests that these social groups would be more supportive of open trade policy than non-marginalized groups. Empirical evidence in India supports this implication: Gaikwad and Suryanarayan (2023) find that SC, ST, and Muslim individuals are more likely to support international trade than individuals from forward caste and Other Backward Castes (OBC), based on survey responses and experiments.

However, neoclassical trade theory assumes that factors are mobile across sectors, which is not necessarily the case in India, as evidenced by low spatial and labor mobility (Munshi and Rosenzweig, 2016). Given this labor market rigidity and barriers to factor reallocation, trade liberalization would not necessarily benefit low-wage workers in India (Topalova, 2010). As a result, due to the significant overlap between low-wage workers and certain social classes, SC, ST, and Muslim workers were likely to experience relative economic hardship as a consequence of trade liberalization.

3 Data

To quantify the effects of India's trade liberalization on the economic and political trajectories of different social groups, we combine several sources of data. Specifically, we compile:

(i) establishment-level data from 1990 EC of India; (ii) tariff data from Topalova and Khandelwal (2011) and UNCTAD-TRAINS (2020); (iii) households and individual-level data from the NSS; (iv) electoral data from the Election Commission of India (Jensenius and Verniers, 2017; Asher et al., 2021); and (v) jati-level data from the POI Anthropological survey. This section describes these data as well as the sample construction.

3.1 Data on Households and Firms

As our source of information on household earnings and consumption, we use the Indian NSS. The NSS is a large-scale, nationally representative household survey in India, conducted by the Ministry of Statistics and Programme Implementation (MOSPI). The survey is conducted annually and gathers data on household socioeconomic characteristics and economic outcomes from randomly selected households across the country. However, topics are rotated so that certain modules are only available in specific rounds. Since we are interested in earnings and consumption data, we specifically use the 43rd and 55th rounds of NSS data, conducted in 1987–1988 and 1999–2000, respectively, covering periods before and after trade liberalization.⁶ Importantly, the NSS data is particularly valuable for identifying each respondent's social group, including caste and religion. This enables us to examine the effect of trade liberalization on the welfare and economic activities of marginalized households.

We use 1990 EC employment data to calculate district-level employment shares for each National Industrial Classification (NIC) level prior to trade liberalization. This allows us to measure each district's exposure to tariff reductions.⁷ To ensure consistency in aggregating the data at the district level, we use the concordance provided by Asher et al. (2021). Additionally, since NIC codes in India have evolved over time, we use a harmonized classification across different NIC versions (Shric) provided by Asher et al. (2021).⁸

3.2 Tariff Data

We use tariff data from Topalova and Khandelwal (2011) and UNCTAD-TRAINS (2020), which provide information on tariff rates at the 6-digit Harmonized System (HS) level across our sample period (1987–2007). To match tariffs with the Shric industry-level classification used in our EC data, we first aggregate tariffs to the 4-digit NIC 1998 level, using the concor-

⁶We are unable to use 38th and 50th rounds of NSS data as they do not contain district identifiers.

⁷Districts are the administrative units under the states or union territories. Each district contains 10 constituencies on average, and no constituencies cross the district borders.

⁸Specifically, NIC codes have passed through several versions, and Shric is a harmonization of NIC 1987, NIC 2004, and NIC 2008.

dance by Debroy and Santhanam (1993).⁹ We then apply the industrial concordance data from the Socioeconomic High-resolution Rural-Urban Geographic database (Asher et al., 2021) to harmonize NIC codes across various versions (NIC 1987, NIC 2004, and NIC 2008), allowing us to compute Shric-level tariff rates over the years.

Finally, we match the yearly Shric-level tariff rates with the district-level 1990 EC data, which includes the employment share of each Shric. We then compute the average tariff rates across all Shrics in each district, weighted by each Shric's employment share. This weighted average defines the measure of district-level exposure to tariff rates (see Section 4).

3.3 Electoral Data

We use data on politicians' characteristics and electoral performance from the Election Commission of India (Jensenius and Verniers, 2017; Asher et al., 2021). The data date back to 1974 and include information on candidates for India's state legislative assemblies. Our sample covers elections up to 2007, the last election year before the delimitation of state legislative assembly constituencies. Crucially, the data contains district and constituency identifiers, which allow us to match electoral data with district-level exposure to tariff reductions.

3.3.1 Linking Politicians to Social Groups

The electoral data provides candidate-level information but does not include details about candidates' social group affiliations. To analyze the effects of trade reforms on the political representation of marginalized groups, we create a novel mapping that identifies the social group of political candidates.

Specifically, we link politicians' data to social groups using surnames, as Indian surnames typically indicate a person's social group (i.e., jati) (Fisman, Paravisini and Vig, 2017). To map surnames to jatis, we use the POI survey, which documents characteristics of main communities (jatis) in India. The POI data contains information on typical surnames and group names for each jati, allowing us to construct a surname-jati mapping. Since the names of all political candidates are recorded in the Election Commission data, this surname-jati mapping enables us to identify the jati affiliation of each politician. ¹⁰

⁹The concordance by Debroy and Santhanam (1993) maps the 6-digit HS (1988) classification to the 3-digit NIC-1987 industries. We use concordance tables provided by the Government of India's Ministry of Statistics and Programme Implementation to map the 3-digit NIC-87 industries to the 4-digit NIC-98 industries.

¹⁰See Appendix A for more details on how we extract politicians' surnames, correct for the inconsistency of spelling, and implement the matching process.

After identifying the *jati* of each politician, we classify them into specific *varnas* and religious groups to better understand their social affiliations. Specifically, we assign each politician to the following social groups: (i) general castes and OBC, (ii) SC, (iii) ST, (iv) Muslim, and (v) other religious minorities. In our main analysis, we classify SC, ST, and Muslims as *marginalized groups*.¹¹

Appendix Figure C6 shows the distribution of politicians across social groups by election year. As illustrated in the figure, general castes are overrepresented in politics, with an average share of around 70%. In contrast, marginalized groups and religious minorities together make up approximately 30%. These proportions are relatively stable over time, though there is some variation in individual years.

4 Empirical Strategy

4.1 Local Exposure to Trade Liberalization

Our goal is to quantify the local-level exposure to tariff reductions. Building on Topalova (2010), we define exposure in district j as

$$ICE_j \equiv \sum_k \omega_{kj} \tau_{k,87}$$
, where $\omega_{kj} \equiv \frac{\text{Workers}_{kj,90}}{\text{Total Workers}_{j,90}}$.

 ω_{kj} thus captures the pre-reform (1990) employment share of industry k in district j, and $\tau_{k,87}$ is the tariff rate of industry k in 1987. ICE_j denotes the Import Competition Exposure of district j. Intuitively speaking, the measure is a weighted sum of pre-reform tariff rates across sectors, capturing the extent to which district j was exposed to competition with cheaper foreign products due to tariff reductions. Since industries with higher pre-reform tariff rates experienced larger tariff reductions (see Appendix Figure C1), higher values of exposure mean greater exposure to tariff reductions.

To identify the effects of exposure to tariff reductions on economic and political outcomes, we leverage differential exposures to tariff reductions across local labor markets induced by trade liberalization. Panel (a) of Figure 2 shows the evolution of district-level tariff reductions during the liberalization. Panel (b) visualizes district-level exposure, ICE_j . There

¹¹We aggregate general castes and OBC mainly because the data before 1993 did not record general castes and OBC separately, which prevents us from tracking OBC over the time period around trade liberalization.

¹²Alternatively, we can use the actual change in tariff rate throughout the trade liberalization, instead of the pre-reform tariff rate, to construct the measure. We define the alternative local exposure measure as follows: $ICE'_j \equiv -\sum_k \omega_{jk}(\tau_{k,96} - \tau_{k,91})$, where $\tau_{k,91}$ and $\tau_{k,96}$ are the tariff rates of industry k in 1991 and 1996.

is significant variation in exposure to tariff reductions across districts, even within individual states. 13

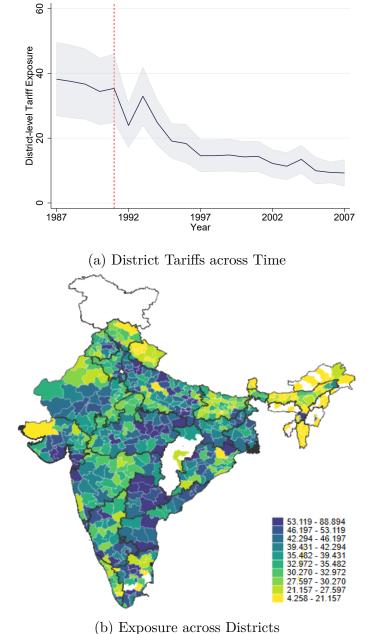


Figure 2. Tariff Reductions and District Exposure

Notes: This figure shows the district-level exposure to tariff reductions. Panel (a) illustrates the average district-level tariff decline over trade liberalization. Panel (b) shows exposure to tariff reductions at the district level. Districts with lighter colors experienced lower exposure to import competition, while districts with darker colors experienced higher exposure to import competition. White areas indicate missing data.

 $^{^{13}}$ Appendix Figure C2 shows the relationship between baseline exposure and the subsequent change in exposure at the district level.

4.2 Regression Specifications

To understand how exposure to tariff reductions affected the economic outcomes of marginalized workers and the political power dynamics of marginalized groups in a district, we use the 1991 trade liberalization as an exogenous shock. As described in Section 2, this trade liberalization was externally imposed, and its timing was unanticipated by domestic political and corporate actors. We specifically exploit the exogenous nature and timing of the trade liberalization, geographic variation in exposure intensity, and the variation in the timing of state legislative assembly elections.

We first estimate the effects of exposure to tariff reductions on economic outcomes of marginalized versus non-marginalized workers by running the following regression specification:

$$y_{ijt} = \alpha + \gamma_1 ICE_j \times Post_t$$

$$+ Marg_{ijt} \times [\gamma_2 + \gamma_3 ICE_j + \gamma_4 Post_t + \gamma_5 ICE_j \times Post_t]$$

$$+ \delta \mathbf{X}_{ijt} + \eta_j + \lambda_{st} + \epsilon_{ijt},$$

$$(1)$$

where the outcome variable y_{ijt} is an economic outcome of individual i in district j in year t, $Post_t = \mathbb{1}(t > 1991)$ is a post-liberalization indicator, and $Marg_{ijt}$ is an indicator for whether individual i belongs to the marginalized groups (i.e., SC, ST, or Muslims). For ease of interpretation, we standardize ICE_j to mean 0 and standard deviation 1. We control for individual-level socioeconomic characteristics, district fixed effects, and state-year fixed effects. The coefficients of main interest are γ_1 and γ_5 . The former estimates the effects of exposure to tariff reduction on the overall economic outcomes while the latter estimates the effects on the economic outcomes specific for marginalized workers.

Our second main objective is to estimate the effects of increased trade exposure on voters' preferences and political representation across different social groups. Our baseline regression specification is

$$y_{it} = \alpha + \beta ICE_i \times Post_{st} + \delta \mathbf{X}_{it} + \eta_i + \lambda_{st} + \epsilon_{it}, \tag{2}$$

where the outcome variable y_{jt} is a political outcome of district j in year t, and $Post_{st}$ is a post-liberalization indicator that varies by state due to the staggering of elections.¹⁴ The underlying assumption is that, in the absence of trade liberalization, the outcomes of districts more exposed to import competition would have followed the same trajectory as those of

¹⁴Appendix Table D1 provides an overview of the timing of state elections around the start of the liberalization.

districts less exposed to import competition. The specification includes controls for district characteristics, district fixed effects, and state-year fixed effects. Thus, we compare election outcomes within the same state and year. The coefficient of interest, β , estimates the effects of increased exposure to tariff reductions on political outcomes.

5 Results

5.1 Trade Liberalization and Economic Performance

We start by examining the impact of trade liberalization on the economic welfare of marginalized versus non-marginalized groups. Specifically, we analyze changes in consumption and earnings to assess the welfare effects. Appendix Table D2 reports summary statistics for the sample of individuals in NSS for 1988 and 2000.

5.1.1 Consumption and Earnings

We first estimate equation 1 using NSS household survey data. Table 1 presents the effects of trade liberalization on household-level monthly per-capita consumption. Our primary focus is on the coefficient estimate of the triple interaction term, $Post_t \times Marg_{ijt} \times ICE_j$, which captures the differential impact of trade liberalization on marginalized relative to non-marginalized individuals. The results for the full NSS sample in columns (1) and (2) reveal a small, statistically insignificant negative effect of exposure to tariff reductions on marginalized individuals. However, when focusing on individuals employed in sectors directly affected by trade liberalization, ¹⁵ we find a strong negative and statistically significant effect. This indicates that the consumption growth of marginalized individuals was approximately 4.6% lower than that of non-marginalized groups from 1988 to 2000, as shown by the estimates in columns (3) and (4). This suggests that the economic effects were most pronounced in industries heavily exposed to trade liberalization, where changes in economic structure primarily occurred.

Next, we examine household-level weekly per-capita earnings, as presented in Table 2. The results for the full NSS sample in columns (1) and (2) indicate only a small negative effect on marginalized workers. However, within sectors heavily impacted by trade liberalization, earnings for marginalized individuals grew more slowly than those of their non-marginalized counterparts. The coefficient estimates on the triple interaction term in columns (3) and

¹⁵The sectors considered particularly exposed to trade liberalization in the NSS data are: (i) manufacturing, (ii) mining and quarrying, and (iii) construction.

Table 1. Effect of Tariff Reduction Exposure on Individual Consumption

	ln MPCE								
	All Se	ectors	Exposed	Sectors					
	(1)	(2)	(3)	(4)					
$ICE \times Post$	0.006 (0.014)	0.011 (0.014)	0.008 (0.017)	0.001 (0.016)					
ICE \times Post \times Marg.	-0.006 (0.011)	-0.004 (0.010)	-0.045^{**} (0.021)	-0.046^{**} (0.020)					
Outcome Mean	5.985	5.985	6.074	6.074					
Observations	193,947	193,947	29,096	29,096					
Districts	412	412	409	409					
District FE	Yes	Yes	Yes	Yes					
Year FE	Yes	No	Yes	No					
State-Year FE	No	Yes	No	Yes					
Controls	Yes	Yes	Yes	Yes					

Notes: Outcome variable is the natural logarithm of the household-level monthly per-capita consumption from two rounds of NSS household surveys. ICE is standardized to mean 0 and standard deviation 1. In columns (1) and (2), we use all individuals in NSS household surveys. In columns (3) and (4), we select the subsample of workers in sectors exposed to trade liberalization: (i) manufacturing, (ii) mining and quarrying, and (iii) construction. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend. We also control for industry fixed effects. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

(4) suggest that the earnings growth of marginalized workers was approximately 7.3% lower than that of non-marginalized individuals.

These results highlight that while trade liberalization boosted average consumption and earnings, the gains were unequally distributed, favoring non-marginalized workers—contrary to the expectations of marginalized groups noted in Gaikwad and Suryanarayan (2023). Overall, the findings indicate that marginalized groups experienced limited economic benefits, or even setbacks, as a result of trade reforms. These results align with the findings of Topalova (2010), which shows that districts exposed to trade liberalization experienced a slower decline in poverty, with effects more pronounced among households at the bottom of the income distribution. Since the economic and social classes largely overlap in India, the slower poverty decline induced by trade liberalization appears to have harmed marginalized groups (Duraisamy and Duraisamy, 2017).

5.1.2 Robustness

To test the robustness of our findings on economic outcomes, we test alternative definitions of our exposure measure. Specifically, we use the alternative specification of the exposure measure variable. Appendix Tables D5 and D6 present estimates of the same outcome variables in Tables 1 and 2, but using the alternative exposure measure that reflects the actual

Table 2. Effect of Tariff Reduction Exposure on Individual Earnings

	ln Earnings								
	All Se	ectors	Exposed	l Sectors					
	(1)	(2)	(3)	(4)					
$ICE \times Post$	0.092	0.094**	0.136	0.206**					
ICE \times Post \times Marg.	(0.064) -0.046 (0.038)	$(0.042) \\ -0.027 \\ (0.037)$	$(0.105) \\ -0.073 \\ (0.095)$	(0.096) -0.073 (0.094)					
Outcome Mean	2.168	2.168	3.044	3.044					
Observations	193,947	193,947	29,096	29,096					
Districts	412	412	409	409					
District FE	Yes	Yes	Yes	Yes					
Year FE	Yes	No	Yes	No					
State-Year FE	No	Yes	No	Yes					
Controls	Yes	Yes	Yes	Yes					

Notes: Outcome variable is the natural logarithm of the household-level weekly per-capita earnings from two rounds of NSS household surveys. ICE is standardized to mean 0 and standard deviation 1. In columns (1) and (2), we use all individuals in NSS household surveys. In columns (3) and (4), we select the subsample of workers in sectors exposed to trade liberalization: (i) manufacturing, (ii) mining and quarrying, and (iii) construction. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend. We also control for industry fixed effects. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

change in tariff rates. The overall results display very similar patterns: trade liberalization did not lead to growth in consumption or earnings for marginalized workers. These findings mitigate the concerns that our results on the economic impacts of trade liberalization for marginalized groups are driven by a particular definition of the exposure measure.

Another concern is whether our definition of marginalized groups in India might influence the findings. As explained in Section 3, we classify SC, ST, and Muslim as marginalized groups. However, other religious minorities have also faced economic and social marginalization. For instance, 505 cases of persecution of Christians were reported to the United Christian Forum in 2021 (Minj, 2022). Similarly, Sikhs have been targeted in communal violence, notably during the 1984 anti-Sikh riots, following the assassination of Indira Gandhi by her Sikh bodyguards. Government reports estimated that 2,733 Sikhs were killed in Delhi between October and November 1984. Thus, in the robustness exercises, we include Christians and Sikhs in the marginalized group category and re-estimate equation 1. Appendix Tables D7 and D8 show the coefficient estimates of equation 1 using the alternative definition of marginalized groups. The coefficient estimates are very similar to those reported in Tables 1 and 2 across all specifications. These results further mitigate concerns that our main findings on the economic impacts of trade liberalization on marginalized groups are driven by a specific definition of these groups.

5.2 Political Consequences of Trade Liberalization

In the previous subsection, we establish that trade liberalization had adverse economic effects on marginalized individuals. To further understand how these economic shocks affected the political behavior of marginalized groups, we present reduced-form results on how exposure to tariff reductions influenced voting behavior and political representation among these groups.

Appendix Table D4 and Figure C6 show the descriptive statistics for political outcome variables and yearly time series of candidate shares from each social group in the analysis, respectively. To estimate the effects of trade liberalization on political outcomes, we examine the following variables: (i) district-level vote share of candidates from marginalized groups or general castes; (ii) vote share of winners from marginalized groups or general castes; (iii) share of candidates from marginalized groups or general castes; (iv) share of winners from marginalized groups or general castes. The descriptive statistics indicate that general caste politicians are slightly overrepresented, given the population shares of general castes and OBC of approximately 65%.

5.2.1 Voter Preferences and Political Representation

We analyze how exposure to tariff reductions affected political dynamics in post-liberalization elections. We estimate equation 2 using data from the Election Commission of India. Table 3 presents estimates for district-level vote shares of both all candidates and winning candidates from marginalized groups and general castes. The coefficient estimates in columns (1) and (2) suggest that exposure to tariff reductions increased the vote shares of marginalized candidates. In contrast, the coefficient estimates in columns (3) and (4) indicate that trade liberalization led to a reduction in the vote shares of candidates from general castes. The magnitude of the coefficients suggests that one standard deviation increase in exposure to tariff reductions led to an 8.9% increase in vote shares for all candidates from marginalized groups and a 5.5% decrease for general castes candidates. Similarly, the coefficient estimates from columns (5) to (8) indicate that exposure to tariff reductions also increased (decreased) the vote shares of winning candidates from marginalized groups (general castes). Notably, the coefficient estimates are larger for winners compared to all candidates, even though the mean values of outcome variables are similar across both samples. This suggests that the changes in vote shares were more pronounced for winning candidates than for all candidates.

To evaluate the identifying assumption underpinning these estimates, we conduct an event study analysis, presented in Figure 3. We specifically run the following event study

Table 3. Vote Shares of All and Winning Candidates

Candidates Sample:		All (Candidates		Winning Candidates				
Social Group:	Marginalized		General		Marginalized		General		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
$ICE \times Post$	0.024** (0.010)	0.025** (0.011)	-0.031^{***} (0.011)	-0.036^{***} (0.012)	0.040*** (0.015)	0.040** (0.018)	-0.042^{***} (0.015)	-0.048^{***} (0.017)	
Outcome Mean Observations Districts District FE	0.281 2,459 412 Yes	0.281 2,459 412 Yes	0.660 2,459 412 Yes	0.660 2,459 412 Yes	0.275 2,459 412 Yes	0.275 2,459 412 Yes	0.668 2,459 412 Yes	0.668 2,459 412 Yes	
Year FE State-Year FE Controls	Yes No Yes	No Yes Yes	Yes No Yes	No Yes Yes	Yes No Yes	No Yes Yes	Yes No Yes	No Yes Yes	

Notes: Outcome variables are the vote shares of all political candidates from marginalized groups or general castes (Columns 1 to 4) and those of only winning political candidates from marginalized groups or general castes (Columns 5 to 8) in the district for each election. ICE is standardized to mean 0 and standard deviation 1. Controls are the total number of votes, the share of reserved constituencies in the districts, the district-level 1990 total employment, and the district-level 1990 manufacturing sector employment share. District-level employment variables are interacted with the linear time trend in all specifications. The analysis excludes constituencies reserved for SC and ST. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

specification with control variables and state-year fixed effects:

$$y_{jt} = \alpha + \sum_{l=-3, l \neq -1}^{3} \beta_l ICE_j \times D_{j,t-l} + \delta \mathbf{X}_{jt} + \eta_j + \lambda_{st} + \epsilon_{jt},$$
(3)

where $D_{j,t-l}$ is an indicator variable for election period l, meaning that the district j was exposed to tariff reforms l periods relative to the beginning of trade liberalization. Each subgraph thus presents estimates of β_l . The outcome variables shown in Figure 3 are the vote shares of all or winning candidates from marginalized groups and general castes. Both panels indicate that the coefficient estimates before trade liberalization are not statistically significantly different from zero, suggesting the absence of significant pre-trends. These insignificant coefficient estimates support the assumption that, in the absence of trade liberalization, districts exposed to tariff reductions would have followed similar paths as non-exposed districts. The evolution of the coefficient estimates in the post-liberalization periods indicates that the effects of trade reforms on vote shares became apparent in elections immediately following liberalization and remained stable over time. Notably, the effects persisted over a substantial period post-liberalization (three election terms ≈ 15 years on average).

Table 4 details how the composition of all candidates and winning candidates changed following trade liberalization. To compute the district-level shares of candidates from marginalized groups and general castes, we divide the number of all (winning) candidates from marginalized groups or general castes by the total number of all (winning) candidates in

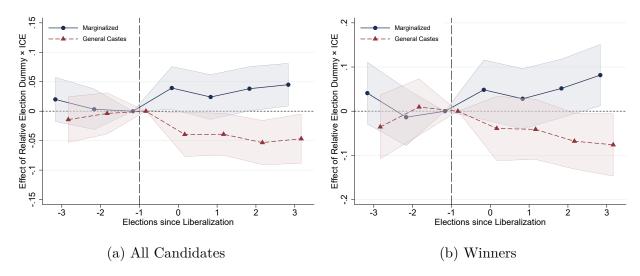


Figure 3. Event Study: Vote Shares of All and Winning Candidates

Notes: Each subfigure shows the coefficient estimates from the event study specifications. Relative election "0" indicates the first post-liberalization election after 1991 (i.e., the beginning of trade liberalization). The outcome variables are the vote shares of all or winning candidates from marginalized groups or general castes. 95% confidence intervals are used for inference. Standard errors are clustered at the district level.

each district. The coefficient estimates in columns (1) and (2) suggest that exposure to tariff reductions led to an increase in the shares of candidates from marginalized groups. Conversely, the coefficient estimates in columns (3) and (4) indicate a decrease in the shares of candidates from general castes in post-liberalization elections in exposed districts. Similarly, columns (5) and (8) show that changes in candidate composition, as well as voting patterns, translated into shifts in political selection: one standard deviation increase in exposure to tariff reductions led to a 13.5% increase (5.8% decrease) in the shares of winning candidates from marginalized groups (general castes) in post-liberalization elections. Once again, coefficient estimates are larger for winners than for all candidates, underscoring that trade liberalization had a greater impact on political selection than on the overall pool of candidates.

Figure 4 presents estimates from the event study specification, including control variables and state-year fixed effects. The outcome variables are the shares of all candidates or winning candidates from marginalized groups and general castes. The coefficient estimates for pre-liberalization elections indicate no significant pre-trends, supporting the validity of our identifying assumptions. Similar to the results on vote shares, the effects of trade reforms on the candidates' shares emerged in the elections immediately following trade liberalization and remained stable over time.

Since the supply and demand sides of politics are determined simultaneously, we cannot definitively ascertain whether changes in voters' preferences led to changes in political se-

Table 4. Candidates Shares of All and Winning Candidates

Candidates Sample:		All C	andidates		Winning Candidates						
Social Group:	Marginalized		General		Margi	nalized	General				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)			
$\overline{\text{ICE} \times \text{Post}}$	0.013* (0.007)	0.013* (0.007)	-0.017^{**} (0.008)	-0.016^{**} (0.008)	0.036** (0.015)	0.037** (0.018)	-0.034^{**} (0.016)	-0.039^{**} (0.018)			
Outcome Mean Observations Districts District FE Year FE	0.297 2,459 412 Yes Yes	0.297 2,459 412 Yes No	0.645 2,459 412 Yes Yes	0.645 2,459 412 Yes No	0.275 2,459 412 Yes Yes	0.275 2,459 412 Yes No	0.668 2,459 412 Yes Yes	0.668 2,459 412 Yes No			
State-Year FE Controls	No Yes	Yes Yes	No Yes	Yes Yes	No Yes	Yes Yes	No Yes	Yes Yes			

Notes: Outcome variables are the shares of all political candidates from marginalized groups or general castes (Columns 1 to 4) and those of only winning political candidates from marginalized groups or general castes (Columns 5 and 8) in the district for each election. ICE is standardized to mean 0 and standard deviation 1. Controls are the total number of votes, the share of reserved constituencies in the districts, the district-level 1990 total employment, and the district-level 1990 manufacturing sector employment share. District-level employment variables are interacted with the linear time trend in all specifications. The analysis excludes constituencies reserved for SC and ST. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

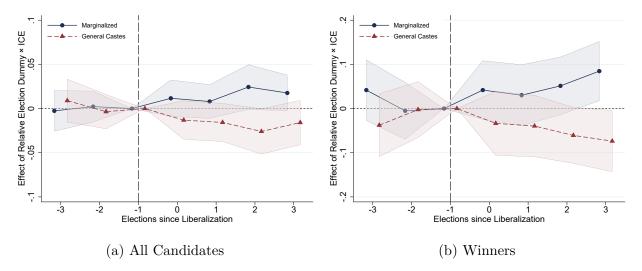


Figure 4. Event Study: Shares of All and Winning Candidates

Notes: Each subfigure shows the coefficient estimates from the event study specifications. Relative election "0" indicates the first post-liberalization election after 1991 (i.e., the beginning of trade liberalization). The outcome variables are the shares of all or winning candidates from marginalized groups or general castes. 95% confidence intervals are used for inference. Standard errors are clustered at the district level.

lection or vice versa. However, taken together, these results suggest that exposure to tariff reductions shifted voters' preferences toward marginalized candidates, thereby increasing the political selection and representation of marginalized groups.

5.2.2 Robustness

To ensure that the results on the political impacts of trade liberalization are not driven by a particular regression specification, we conduct additional robustness checks. First, we use an alternative exposure measure that utilizes the actual change in tariff rates during liberalization rather than the baseline tariff rates. Thus, we estimate equation 2 by replacing ICE_j with $ICE'_j \equiv -\sum_k \omega_{jk} (\tau_{k,96} - \tau_{k,91})$. Appendix Tables D9 and D10 present estimates for the same outcome variables in Tables 3 and 4, but with this alternative exposure measure specification. The coefficient estimates are qualitatively consistent with those in the main results presented in Tables 3 and 4 across all specifications and are statistically significant in most cases. These estimates suggest that exposure to tariff reductions increased (decreased) the vote shares and candidate shares of both all and winning candidates from marginalized groups (general castes) in post-liberalization elections. Therefore, these results mitigate concerns that the findings on political outcomes are sensitive to the specification of the exposure measure variable.

Another concern is whether the definition of marginalized groups in India could affect our findings on political outcomes. Following the robustness exercises in the economic outcomes subsection, we include Christians and Sikhs in the marginalized group category and reestimate equation 2. Appendix Tables D11 and D12 display the coefficient estimates of equation 2 with this the alternative definition of marginalized groups. Here, the coefficient estimates are statistically significant across all specifications and align with those in the main results. Thus, these findings confirm that the main political outcome results are robust to various definitions of marginalized groups.

Lastly, we estimate equation 2 at different units than the district level. We start with the *constituency*-level analysis, where we maintain the district-level exposure measure to tariff reductions, but the outcome variables are measured at the constituency level instead of the district level. We thus run the following regression specification:

$$y_{cjt} = \alpha + \beta ICE_j \times Post_{st} + \delta \mathbf{X}_{cjt} + \eta_j + \lambda_{st} + \epsilon_{cjt}, \tag{4}$$

where c denotes the constituency. When analyzing the vote shares of candidates from marginalized groups or general castes, we consider the following outcome variables: (i) the vote shares of candidates from marginalized groups or general castes among all votes in the constituency; and (ii) the vote shares of winning candidates in the constituency if they belong

¹⁶Since no constituencies in India cross the district boundaries, the exposure to tariff reductions of constituency c is exactly the same as that of district j, in which the constituency c is located.

to marginalized groups or general castes.¹⁷ Appendix Table D13 presents the coefficient estimates from equation 4. The estimates are qualitatively consistent across all specifications with the main results reported in Table 3 and are statistically significant in most cases. These results suggest that exposure to tariff reductions led to a rise (decline) in the vote shares of all and winning candidates from marginalized groups (general castes), even at the constituency level.

Regarding the shares of candidates from marginalized groups or general castes, we consider the following outcome variables: (i) the shares of candidates from marginalized groups or general castes among all the candidates in the constituency; and (ii) an indicator for constituencies where the winning candidate is from marginalized groups or general castes. Appendix Table D14 presents the coefficient estimates from equation 4. Although we lose some statistical precision for the latter outcome variables, all coefficient estimates are qualitatively consistent with the main results reported in Table 4. These estimates suggest that the shares and presence of both all and winning candidates from marginalized groups (general castes) increased (decreased) in post-liberalization elections in exposed constituencies.

We also analyze political outcomes at the candidate level, using different regression specifications depending on the outcome of interest. When analyzing vote shares of all and winning candidates from marginalized groups or general castes, we run the regression specification of in equation 1, where the outcome variables are vote shares of candidates, and we include interactions between a post-liberalization indicator, an indicator for marginalized or general castes candidates, and the exposure to tariff reductions as a treatment variable. In contrast, when investigating whether all candidates or winners belong to marginalized groups or general castes, we run a regression specification similar to the equation 4 at the candidate level, where the outcome variables are indicators for marginalized or general castes candidates.

Appendix Table D15 displays the coefficient estimates for vote shares of all and winning candidates from marginalized groups or general castes. Although the estimates lose some statistical precision, the results suggest a similar shift in voting patterns for candidates from marginalized groups or general castes, as reported in Table 3. Similarly, Appendix Table D16 presents the coefficient estimates for indicators for all and winning candidates from marginalized groups or general castes. Again, the coefficient estimates are qualitatively consistent across all specifications with the results in Table 4.

These results at both the constituency- and candidate-level address concerns that the main findings on political outcomes may be influenced by the choice of analysis unit. Over-

 $^{^{17}}$ This variable is set to zero if the winning candidate does not belong to marginalized groups or general castes.

all, the changes in political outcomes for marginalized groups and general castes in postliberalization elections are robust across different formulations of the treatment variable, definitions of marginalized groups, and units of analysis.

5.2.3 Political Backlash from Marginalized Groups

To investigate the drivers of this political shift, we examine whether marginalized voters—who experienced economic setbacks from trade liberalization—were responsible for changes in vote preferences and political representation. Since individual voting behavior cannot be directly observed, we instead split the sample of districts based on the population share of marginalized groups in 1991. This allows us to assess whether districts with a higher share of marginalized populations experienced more significant changes in political outcomes. We run the following triple-difference regression specification:

$$y_{jt} = \alpha + \theta_1 NonMarg_j \times ICE_j \times Post_{st} + Marg_j \times [\theta_2 Post_{st} + \theta_3 ICE_j \times Post_{st}]$$

+ $\delta \mathbf{X}_{jt} + \eta_j + \lambda_{st} + \epsilon_{jt},$ (5)

where $NonMarg_j$ and $Marg_j$ are indicators for district j whose pre-liberalization population share of marginalized groups is below and above the national median, respectively. The coefficients of interest are θ_1 and θ_3 , which indicate whether the political shift was driven by districts with a marginalized population share below or above the median.

Tables 5 and 6 display the coefficient estimates for equation 5, where the outcome variables are the vote shares and candidate shares of political representatives from marginalized groups or general castes, respectively. Across all specifications in both tables, the coefficient estimates on the triple-interaction term with the above-median district indicator are statistically significant and larger than those with the below-median district indicator. These estimates suggest that changes in political outcomes for marginalized groups and general castes were concentrated in districts where marginalized groups represented a larger portion of the population. The results provide suggestive evidence that marginalized voters were more inclined to support candidates from their groups in the exposed districts, indicating that adverse economic shocks led to political backlash among marginalized voters. Furthermore, a significant increase in the shares of marginalized candidates in above-median districts suggests that marginalized politicians responded to the shift in voter demand.

Notably, some districts in the main sample lack information on pre-reform population demographic, as reflected by the lower number of observations in Tables 5 and 6 compared to Tables 3 and 4. We ensure that the observed changes in voting patterns and political representation for marginalized groups and general castes hold in this selected subsample,

Table 5. Vote Shares of All and Winning Candidates by Marginalized Population

Candidates Sample:		All C	andidates		Winning Candidates			
Social Group:	Margi	Marginalized		General		nalized	Gei	neral
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$ICE \times Post \times Non-Marg. Dist.$	0.007 (0.013)	0.006 (0.013)	-0.014 (0.013)	-0.017 (0.013)	0.030 (0.019)	0.027 (0.020)	-0.035^* (0.019)	-0.037^* (0.021)
ICE \times Post \times Marg. Dist.	0.042*** (0.014)	0.044*** (0.014)	-0.045^{***} (0.015)	-0.050^{***} (0.016)	0.052*** (0.020)	$0.057^{**} (0.023)$	-0.051^{**} (0.021)	-0.061^{***} (0.023)
Outcome Mean Observations Districts	0.295 2,247 378	0.295 2,247 378	0.647 $2,247$ 378	0.647 $2,247$ 378	0.290 2,247 378	0.290 2,247 378	0.653 2,247 378	0.653 $2,247$ 378
District FE Year FE State-Year FE	Yes Yes No	Yes No Yes	Yes Yes No	Yes No Yes	Yes Yes No	Yes No Yes	Yes Yes No	Yes No Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Outcome variables are the vote shares of all political candidates from marginalized groups or general castes (Columns 1 to 4) and those of only winning political candidates from marginalized groups or general castes (Columns 5 to 8) in the district for each election. ICE is standardized to mean 0 and standard deviation 1. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend, in all specifications. The analysis excludes constituencies reserved for SC and ST. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

Table 6. Candidates Shares of All and Winning Candidates by Marginalized Population

	All Candidates				Winning Candidates				
Margin	Marginalized		General		nalized	Gen	ieral		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
0.009 (0.008)	0.010 (0.008)	-0.011 (0.009)	-0.010 (0.008)	0.023 (0.018)	0.021 (0.020)	-0.021 (0.019)	-0.023 (0.021)		
0.016^* (0.009)	$0.016* \\ (0.009)$	-0.022^{**} (0.010)	-0.022^{**} (0.010)	0.050** (0.020)	0.055** (0.023)	-0.048** (0.021)	-0.056** (0.024)		
0.312 2,247	0.312 2,247	0.630 2,247	0.630 2,247	0.290 2,247	0.290 2,247	0.653 2,247	0.653 2,247		
$\frac{378}{\text{Yes}}$	$\frac{378}{\text{Yes}}$	378 Yes	Yes	$\frac{378}{\text{Yes}}$	$\frac{378}{\text{Yes}}$	Yes	378 Yes		
Yes No	No Yes	Yes No	No Yes	Yes No	No Yes	Yes No	No Yes Yes		
	(1) 0.009 (0.008) 0.016* (0.009) 0.312 2,247 378 Yes Yes	(1) (2) 0.009 0.010 (0.008) (0.008) 0.016* 0.016* (0.009) (0.009) 0.312 0.312 2,247 2,247 378 378 Yes Yes Yes No No Yes	(1) (2) (3) 0.009 0.010 -0.011 (0.008) (0.008) (0.009) 0.016* 0.016* -0.022** (0.009) (0.009) (0.010) 0.312 0.312 0.630 2,247 2,247 2,247 378 378 378 Yes Yes Yes No Yes No No Yes No		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		

Notes: Outcome variables are the shares of all political candidates from marginalized groups or general castes (Columns 1 to 4) and those of only winning political candidates from marginalized groups or general castes (Columns 5 to 8) in the district for each election. ICE is standardized to mean 0 and standard deviation 1. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend, in all specifications. The analysis excludes constituencies reserved for SC and ST. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

as presented in Appendix Tables D17 and D18. The estimates indicate that the increase (decrease) in the vote shares and candidate shares for marginalized groups (general caste) in post-liberalization elections persists in districts exposed to import competition, even within this subsample. Thus, we confirm that the results in Tables 5 and 6 are not driven by the selection of this specific subsample.

5.2.4 Party Affiliations and Political Ideologies

To better understand the political backlash among voters and politicians from marginalized groups, we investigate how party affiliations interacted with changes in political outcomes for these groups and general castes. Specifically, we assess whether shifts in voter preferences and political representation were associated with the political ideologies of major national parties or smaller, caste- and religion-focused parties. We re-estimate equation 2, with the outcome variables now being the vote shares and shares of all or winning candidates from marginalized groups or general castes in the Indian National Congress (INC), Bharatiya Janata Party (BJP), or parties with agendas focused on low-caste and Muslim communities (hereafter, LC/M parties).¹⁸ INC and BJP have been the two major political parties, especially since the 1990s, and the INC was part of the coalition government at the national level in 1991. Historically, INC has been the primary choice among religious minorities in India, while BJP's main voter base has been upper-caste groups, reflecting a clear division in candidates and supporter bases for these national parties (Neha Sahgal et al., 2021).

Appendix Table D19 shows the coefficient estimates for vote shares of all or winning political candidates from marginalized groups or general castes in INC, BJP, or LC/M parties. The estimates for marginalized groups (odd columns) suggest that the increase in vote shares of marginalized candidates was concentrated in the two major parties, INC and BJP. Furthermore, the magnitude of the coefficient estimates indicates that the BJP played a more significant role in the increase in vote shares for marginalized candidates than the INC. Conversely, there is little evidence of an increase in vote shares for marginalized candidates in LC/M parties, despite their agendas. Estimates for general castes (even columns) are imprecisely estimated, suggesting no clear pattern regarding which parties contributed to the decline in vote shares for general castes candidates.

Appendix Table D20 displays the coefficient estimates for the shares of all or winning political candidates from marginalized groups or general castes in INC, BJP, or LC/M parties. Similarly, the estimates for marginalized groups (odd columns) indicate that INC and BJP largely drove the increase in the candidate shares for marginalized groups, especially among winners, rather than LC/M parties. Estimates for general castes (even columns) do not show a clear pattern regarding which parties contributed to the reduction in candidate shares for general castes candidates.

Why are the political effects on marginalized groups concentrated in major political

¹⁸Aneja and Ritadhi (2022) compiles a list of political parties with policy agendas centered on improving the social and economic status of low-castes. In addition to these low-caste parties, we classify the following as pro-Muslim parties: All India Majlis-e-Ittehadul Muslimeen, All India Trinamool Congress, Rashtriya Janata Dal, Indian Union Muslim League, and Peoples Democratic Party.

parties, particularly the BJP? One potential explanation is that BJP's anti-globalization stance resonated strongly with marginalized groups, who faced economic setbacks from trade liberalization. However, anti-incumbency sentiment may have contributed to the success of BJP candidates as well. To distinguish these channels, we separately examine political outcomes for candidates with and without incumbency status. If anti-incumbency sentiment were solely responsible for the concentration of political effects on marginalized groups in the BJP, we would expect significant results only for BJP candidates without incumbency status. Appendix Tables D21 and D22 show the separate coefficient estimates for candidates with and without incumbency. Across all specifications, the estimates are similar between Panels A and B, suggesting that candidates without incumbency status did not solely drive the increase in vote shares and candidate shares for marginalized groups. These results imply that anti-globalization rhetoric, rather than anti-incumbency sentiment alone, played a crucial role in this political shift.

6 Discussion

Our findings provide critical insights into how economic shocks from trade liberalization influenced political dynamics, especially in developing countries marked by considerable economic inequality and socioeconomic heterogeneity. The results demonstrate that marginalized groups, who bore the brunt of economic disruptions, reacted by altering their political behavior. Their increased support for candidates from their social groups likely stemmed from expectations of economic protection and advocacy.

6.1 Economic Grievances Mechanism

Why did adverse economic shocks lead to political mobilization among voters and politicians from marginalized groups? We specifically investigate economic grievances as a key mechanism. The hypothesis posits that voters from marginalized groups who experienced economic setbacks increasingly supported candidates from their social groups with the expectation that these candidates would address their economic concerns. In turn, this implies that compensatory transfers to offset these economic losses endured by marginalized groups would mitigate the shift in voter preferences and political representation driven by economic grievances. Although we lack individual voting data to test this hypothesis directly, we can examine whether policy interventions that benefit marginalized groups would influence the political outcomes triggered by trade liberalization.

In particular, we study the backward district program launched in 1994. The Govern-

ment of India identified 123 backward districts out of 360 districts in 14 states based on an industrial development score. Districts scoring below a threshold of 500 were classified as backward, with only a few exceptions. These backward districts received preferential tax treatment, where firms located within these backward districts were exempted from tax for five years and then received tax cuts for an additional five years.

Given the stark difference between backward and non-backward districts, we cannot simply compare changes in political outcomes resulting from trade liberalization across these districts. To address this, we employ a difference-in-discontinuity design, following Hasan, Jiang and Rafols (2021) and Grembi, Nannicini and Troiano (2016). Specifically, we compare the evolution of political outcomes induced by exposure to tariff reductions in districts with scores just above and below the threshold of 500. We thus run the following difference-in-discontinuity regression specification:

$$y_{jt} = \alpha + \mu_1 ICE_j \times Post_{st} + Backward_j \times [\mu_2 Post_{st} + \mu_3 ICE_j \times Post_{st}]$$

+ $\delta \mathbf{X}_{jt} + \eta_j + \lambda_{st} + \epsilon_{jt} \quad \forall \ Score_j \in (246, 754),$ (6)

where $Backward_j$ is an indicator for whether district j is identified as backward. The coefficients of interest are μ_1 and μ_3 , which inform about how the assignment of backward districts affected the changes in political outcomes caused by trade liberalization. To compare similar districts, we restrict our sample to a score bandwidth of 254, following the optimal bandwidth selection method proposed by Calonico, Cattaneo and Titiunik (2014). Thus, we select districts with scores between 246 and 754.

The identifying assumptions are the continuity of observable and unobservable characteristics at the policy cutoff and the absence of manipulation in district scores. First, we examine whether districts within this bandwidth had similar pre-reform characteristics. Appendix Table D23 presents results on pre-reform characteristics across districts. The *p*-values indicate that backward and non-backward districts within the bandwidth did not differ significantly in these baseline characteristics. We also investigate potential bunching of district scores around the policy cutoff. Appendix Figure C9 displays the density distribution of district scores, showing no clear evidence of score manipulation. These results support the validity of our identifying assumptions.

Table 7 shows the coefficient estimates for equation 6, where the outcome variables are vote shares of candidates from marginalized groups or general castes. In most specifications, the estimates on the interaction between the post-liberalization indicator and import competition exposure measure are statistically significant and qualitatively consistent with those reported in Table 3. In contrast, the sign of the estimates on the triple-interaction term is

opposite to that on the double-interaction term. Although mostly statistically insignificant, these estimates suggest that the assignment of backward districts had a mitigating effect on the changes in the voting patterns induced by exposure to tariff reductions. We also test whether the sum of these two coefficient estimates is significantly different from zero. The *p*-values across most specifications imply that exposure to import competition did not necessarily increase (decrease) in the vote shares of all and winning candidates from marginalized groups (general castes) in backward districts.

Table 7. Vote Shares of All and Winning Candidates and Backward District Program

Candidates Sample:		All Ca	ndidates		Winning Candidates				
Social Group:	Marginalized		Gene	General		nalized	General		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
$ICE \times Post$	0.076** (0.024)	0.078** (0.027)	-0.081** (0.030)	-0.081^* (0.033)	0.070* (0.035)	0.082 (0.042)	-0.068 (0.035)	-0.071 (0.044)	
ICE × Post × Backward Dist.	-0.052^* (0.027)	-0.051 (0.028)	0.051 (0.031)	0.043 (0.034)	-0.033 (0.042)	-0.048 (0.046)	0.033 (0.041)	0.038 (0.046)	
<i>p</i> -value	0.195	0.138	0.109	0.057	0.219	0.315	0.224	0.315	
Outcome Mean	0.307	0.307	0.646	0.646	0.310	0.310	0.645	0.645	
Observations	834	834	834	834	834	834	834	834	
Districts	140	140	140	140	140	140	140	140	
District FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Year FE	Yes	No	Yes	No	Yes	No	Yes	No	
State-Year FE	No	Yes	No	Yes	No	Yes	No	Yes	
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

Notes: Outcome variables are the vote shares of all political candidates from marginalized groups or general castes (Columns 1 to 4) and those of only winning political candidates from marginalized groups or general castes (Columns 5 to 8) in the district for each election. ICE is standardized to mean 0 and standard deviation 1. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend, in all specifications. The analysis excludes constituencies reserved for SC and ST. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

Table 8 presents the coefficient estimates for equation 6, where the outcome variables are the shares of political candidates from marginalized groups or general castes. Again, the estimates on the double-interaction term are qualitatively consistent with those reported in Table 4, though with less statistical precision. In contrast, the sign of the estimates on the triple-interaction term is opposite to that of the double-interaction term in most specifications, particularly in the sample of winning candidates. The *p*-values across most specifications suggest that we do not necessarily observe an increase (decrease) in the shares of all and winning candidates from marginalized groups (general castes) in backward districts in response to adverse economic shocks.

Given that the subsample in Tables 7 and 8 differs considerably from the main analysis sample, we verify that the primary effects of trade liberalization on political outcomes remain consistent within this subsample, as presented in Appendix Tables D24 and D25.

Table 8. Candidates Shares of All and Winning Candidates and Backward District Program

Candidates Sample:		All Car	ndidates		Winning Candidates			
Social Group:	Margin	Marginalized		General		nalized	General	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$ICE \times Post$	0.008 (0.012)	0.008 (0.013)	-0.011 (0.015)	-0.013 (0.016)	0.061 (0.033)	0.074 (0.040)	-0.057 (0.033)	-0.061 (0.042)
ICE × Post × Backward Dist.	0.003 (0.014)	0.012 (0.014)	0.002 (0.017)	-0.004 (0.017)	-0.036 (0.040)	-0.048 (0.044)	0.034 (0.038)	0.036 (0.044)
<i>p</i> -value	0.366	0.079	0.523	0.186	0.421	0.472	0.456	0.497
Outcome Mean	0.318	0.318	0.637	0.637	0.311	0.311	0.643	0.643
Observations	834	834	834	834	834	834	834	834
Districts	140	140	140	140	140	140	140	140
District FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	No	Yes	No	Yes	No	Yes	No
State-Year FE	No	Yes	No	Yes	No	Yes	No	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Outcome variables are the shares of all political candidates from marginalized groups or general castes (Columns 1 to 4) and those of only winning political candidates from marginalized groups or general castes (Columns 5 to 8) in the district for each election. ICE is standardized to mean 0 and standard deviation 1. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend, in all specifications. The analysis excludes constituencies reserved for SC and ST. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

The coefficient estimates indicate an increase (decrease) in the vote shares and candidate shares for marginalized groups (general caste) in post-liberalization elections within districts exposed to import competition. Therefore, we confirm that the results in Tables 7 and 8 are not driven by the selection of this specific subsample.

To ensure that our results are not sensitive to a specific bandwidth choice, we explore an alternative set of bandwidths. Appendix Tables D26 and D27 present the estimates using different bandwidths. While statistical precision varies significantly across specifications due to the lack of power, we observe qualitatively similar results across different bandwidth choices: the backward district program had a mitigating effect on the political backlash among marginalized voters and politicians induced by exposure to import competition.

Overall, these results suggest that the treatment provided to backward districts alleviated the magnitude of the changes in political outcomes caused by trade liberalization. Although we cannot directly test the economic grievances hypothesis with individual voter data, the findings in Tables 7 and 8 imply that compensatory transfers to offset trade shocks could help mitigate political backlash in response to adverse economic shocks.

7 Conclusions

In recent decades, economic integration driven by globalization has impacted both economic and political structures in developing countries. While the previous literature has extensively studied the economic effects of trade liberalization and economic integration, there is limited evidence on the political consequences of these trade reforms, particularly in developing countries. In this paper, we leverage India's 1990s trade liberalization to study how exposure to tariff reductions affected the economic outcomes and political behaviors of marginalized groups.

We provide empirical evidence that marginalized groups, who faced economic setbacks due to increased import competition, significantly altered their political behavior. Our analysis demonstrates that while trade reforms were beneficial to the overall economy, they had disproportionate and often negative effects on marginalized communities, leading to reduced consumption and earnings among these groups. These economic grievances translated into political backlash, increasing support and representation for politicians from marginalized groups while diminishing representation for non-marginalized groups. Furthermore, we show that compensatory transfers to economically backward districts alleviated this shift in voter preferences and political representation triggered by trade reforms.

Our findings have several important implications. First, they highlight the need for policymakers to carefully consider the distributional consequences of trade liberalization. While open trade policies can drive economic growth, they may exacerbate inequalities, potentially leading to social and political unrest if not managed carefully. To mitigate these adverse effects, our results underscore the importance of implementing targeted policy interventions, such as social safety nets and economic support programs for affected communities. The backward district program, which offered tax incentives and economic aid to underdeveloped areas, provides a compelling example of how redistributive policies can alleviate the negative social and political impacts of globalization.

Moreover, our study reveals that backlash against economic shocks was not limited to marginalized-focused parties but also influenced major political movements. This suggests that economic grievances can drive shifts in voter alignment, even within well-established political parties. Policymakers must recognize the role of inclusive political representation in addressing the needs of marginalized populations. By ensuring that these groups have a voice in decision-making processes, governments can promote social cohesion and reduce the risk of long-term political fragmentation.

Our results also have broader implications for the global debate on trade and inequality. The long-lasting nature of political effects, observed over multiple election cycles, underscores the enduring consequences of economic shocks. This finding calls for a reevaluation of trade policies in developing economies, where social structures are often rigid, and labor mobility is low. Future trade agreements should be designed with a focus on equity, ensuring that economic integration does not come at the cost of social stability.

In conclusion, while trade liberalization can generate substantial economic gains, it is crucial to address its unequal impacts through proactive and inclusive policies. By learning from the experience of India's trade reforms, governments can better navigate the challenges of globalization, fostering both economic growth and social stability. Our study adds to the growing body of literature advocating for policies that protect vulnerable populations and promote equitable development, ensuring that globalization's benefits are shared broadly and fairly.

References

- Acemoglu, Daron, Simon Johnson, and James Robinson. 2005. "The Rise of Europe: Atlantic Trade, Institutional Change, and Economic Growth." *American Economic Review*, 95(3): 546–579.
- Aneja, Abhay, and S.K. Ritadhi. 2022. "Can Political Parties Improve Minority Wellbeing? Evidence from India's "Silent Revolution"." Journal of Development Economics, 158.
- Asher, Sam, Aditi Bhowmick, Maurizio Bussolo, and Paul Novosad. 2024a. "Cultural Capital and Access to Opportunity: Evidence from Subcaste Norms in India." Working Paper.
- **Asher, Sam, and Paul Novosad.** 2017. "Politics and Local Economic Growth: Evidence from India." *American Economic Journal: Applied Economics*, 9(1): 229–73.
- Asher, Sam, Kritarth Jha, Paul Novosad, Anjali Adukia, and Brandon Tan. 2024b. "Residential Segregation and Unequal Access to Local Public Services in India: Evidence from 1.5m Neighborhoods." Working Paper.
- Asher, Sam, Paul Novosad, and Charlie Rafkin. 2024. "Intergenerational Mobility in India: New Measures and Estimates across Time and Social Groups." *American Economic Journal: Applied Economics*, 16(2): 66–98.
- Asher, Sam, Tobias Lunt, Ryu Matsuura, and Paul Novosad. 2021. "Development Research at High Geographic Resolution: An Analysis of Night-Lights, Firms, and Poverty in India Using the SHRUG Open Data Platform." World Bank Economic Review, 35(4): 845–871.
- Autor, David, David Dorn, Gordon Hanson, and Kaveh Majlesi. 2020. "Importing Political Polarization? The Electoral Consequences of Rising Trade Exposure." *American Economic Review*, 110(10): 3139–83.

- Autor, David H., David Dorn, and Gordon H. Hanson. 2013. "The China Syndrome: Local Labor Market Effects of Import Competition in the United States." *American Economic Review*, 103(6): 2121–68.
- Baldwin, Robert E. 1989. "The Political Economy of Trade Policy." *Journal of Economic Perspectives*, 3(4): 119–135.
- Barone, Guglielmo, and Helena Kreuter. 2021. "Low-Wage Import Competition and Populist Backlash: The Case of Italy." European Journal of Political Economy, 67.
- **Bau, Natalie, and Adrien Matray.** 2023. "Misallocation and Capital Market Integration: Evidence From India." *Econometrica*, 91(1): 67–106.
- Blanchard, Emily J, Chad P. Bown, and Davin Chor. 2024. "Did Trump's Trade War Impact the 2018 Election?" *Journal of International Economics*, 148.
- Böken, Johannes, Lucie Gadenne, Tushar Nandi, and Marta Santamaria. 2023. "Community Networks and Trade." Working Paper.
- **Bühler, George.** 1886. Sacred Books of the East: The Laws of Manu. Oxford, UK:Clarendon Press.
- Calonico, Sebastian, Matias D. Cattaneo, and Rocío Titiunik. 2014. "Robust Non-parametric Confidence Intervals for Regression-Discontinuity Designs." *Econometrica*, 82(6): 2295–2326.
- Caselli, Mauro, Andrea Fracasso, and Silvio Traverso. 2020. "Globalization, Robotization, and Electoral Outcomes: Evidence from Spatial Regressions for Italy." *American Journal of Political Science*, 61: 86–111.
- Cassan, Guilhem, Daniel Keniston, and Tatjana Kleineberg. 2022. "A Division of Laborers: Identity and Efficiency in India." NBER Working Paper 28462.
- Colantone, Italo, and Piero Stanig. 2018. "The Trade Origins of Economic Nationalism: Import Competition and Voting Behavior in Western Europe." *American Journal of Political Science*, 62(4): 936–953.
- Dal Bo, Ernesto, Frederico Finan, Olle Folke, Torsten Persson, and Johanna Rickne. 2023. "Economic and Social Outsiders but Political Insiders: Sweden's Populist Radical Right." The Review of Economic Studies, 90(2): 675–706.
- Dauth, Wolfgang, Sebastian Findeisen, and Jens Suedekum. 2014. "The Rise of the East and the Far East: German Labor Markets and Trade Integration." *Journal of the European Economic Association*, 12(6): 1643–1675.
- **Debroy**, **B.**, and **A. T. Santhanam**. 1993. "Matching Trade Codes with Industrial Codes." Foreign Trade Bulletin, 24(1): 5–27.
- Dippel, Christian, Robert Gold, Stephan Heblich, and Rodrigo Pinto. 2018. "Instrumental Variables and Causal Mechanisms: Unpacking The Effect of Trade on Workers and Voters." NBER Working Paper 23209.
- **Dippel, Christian, Robert Gold, Stephan Heblich, and Rodrigo Pinto.** 2022. "The Effect of Trade on Workers and Voters." *Economic Journal*, 132(641): 199–217.
- Duraisamy, P, and Malathy Duraisamy. 2017. "Social Identity and Wage Discrimination

- in the Indian Labour Market." Economic and Political Weekly, 52(4): 51–60.
- Fisman, Raymond, Daniel Paravisini, and Vikrant Vig. 2017. "Cultural Proximity and Loan Outcomes." *American Economic Review*, 107(2): 457–92.
- Gaikwad, Nikhar, and Pavithra Suryanarayan. 2023. "Attitudes toward Globalization in Ranked Ethnic Societies." Working Paper.
- Gidron, Noam, and Peter A. Hall. 2017. "The Politics of Social Status: Economic and Cultural Roots of the Populist Right." *British Journal of Sociology*, 68(S1): S57–S84.
- Goldberg, Pinelopi Koujianou, Amit Kumar Khandelwal, Nina Pavcnik, and Petia Topalova. 2010. "Imported Intermediate Inputs and Domestic Product Growth: Evidence from India." *Quarterly Journal of Economics*, 125(4): 1727–1767.
- Goldberg, Pinelopi Koujianou, and Nina Pavcnik. 2007. "Distributional Effects of Globalization in Developing Countries." *Journal of Economic Literature*, 45(1): 39–82.
- Greenaway, David, Wyn Morgan, and Peter Wright. 2002. "Trade Liberalisation and Growth in Developing Countries." *Journal of Development Economics*, 67(1): 229–244.
- Grembi, Veronica, Tommaso Nannicini, and Ugo Troiano. 2016. "Do Fiscal Rules Matter?" American Economic Journal: Applied Economics, 8(3): 1–30.
- Guiso, Luigi, Helios Herrera, Massimo Morelli, and Tommaso Sonno. 2017. "Demand and Supply of Populism." EIEF Working Papers Series 1703.
- Guriev, Sergei, and Elias Papaioannou. 2022. "The Political Economy of Populism." Journal of Economic Literature, 60(3): 753–832.
- Hasan, Rana, Yi Jiang, and Radine Michelle Rafols. 2021. "Place-based preferential tax policy and industrial development: Evidence from India's program on industrially backward districts." *Journal of Development Economics*, 150: 102621.
- Jensenius, Francesca R., and Gilles Verniers. 2017. "Studying Indian Politics with Large-scale Data: Indian Election Data 1961–Today." *Studies in Indian Politics*, 5(2): 269–275.
- **Jensenius, Francesca Refsum.** 2015. "Development from Representation? A Study of Quotas for the Scheduled Castes in India." *American Economic Journal: Applied Economics*, 7(3): 196–220.
- Kremer, Michael, Jack Willis, and Yang You. 2021. "Converging to Convergence." NBER Working Paper 29484.
- Malgouyres, Clément. 2017. "The Impact of Chinese Import Competition on the Local Structure of Employment and Wages: Evidence from France." *Journal of Regional Science*, 57(3): 411–41.
- McCrary, Justin. 2008. "Manipulation of the Running Variable in the Regression Discontinuity Design: A Density Test." *Journal of Econometrics*, 142: 698–714.
- Minj, Bijay Kumar. 2022. "Attacks on Christians increasing in India." United Christian Forum, New Delhi.
- Mishra, Prachi, and Utsav Kumar. 2005. "Trade Liberalization and Wage Inequality: Evidence From India." IMF Working Paper 05/20.

- Mosse, David. 2018. "Caste and development: Contemporary perspectives on a structure of discrimination and advantage." World Development, 110: 422–436.
- Munshi, Kaivan. 2019. "Caste and the Indian economy." Journal of Economic Literature, 57(4): 781–784.
- Munshi, Kaivan, and Mark Rosenzweig. 2016. "Networks and Misallocation: Insurance, Migration, and the Rural-Urban Wage Gap." American Economic Review, 106(1): 46–98.
- Neha Sahgal, BY, Jonathan Evans, Ariana Monique Salazar, Kelsey Jo Starr, Manolo Corichi, Neha Sahgal, and Associate Director. 2021. "Religion in India: Tolerance and Segregation." Pew Research Center, Washington D.C.
- Patel, Dev, Justin Sandefur, and Arvind Subramanian. 2021. "The New Era of Unconditional Convergence." *Journal of Development Economics*, 152.
- **Puga, Diego, and Daniel Trefler.** 2014. "International Trade and Institutional Change: Medieval Venice's Response to Globalization." *Quarterly Journal of Economics*, 129(2): 753–821.
- **Sivadasan, Jagadeesh.** 2009. "Barriers to Competition and Productivity: Evidence from India." B.E. Journal of Economic Analysis and Policy, 9(1).
- **Teater, Kristina M., and Laura Dudley Jenkins.** 2019. "Religious Regulation in India." Oxford Research Encyclopedia of Politics.
- **Topalova, Petia.** 2010. "Factor Immobility and Regional Impacts of Trade Liberalization: Evidence on Poverty from India." *American Economic Journal: Applied Economics*, 2(4): 1–41.
- **Topalova, Petia, and Amit Khandelwal.** 2011. "Trade Liberalization and Firm Productivity: The Case of India." *The Review of Economics and Statistics*, 93(3): 995–1009.
- **UNCTAD-TRAINS.** 2020. "Handbook of Statistics." United Nations Conference on Trade and Development, New York.
- Varshney, Ashutosh. 1998. "Mass Politics or Elite Politics? India's Economic Reforms in Comparative Perspective." *Journal of Policy Reform*, 2(4): 301.
- Wood, Adrian. 1995. "How Trade Hurt Unskilled Workers." Journal of Economic Perspectives, 9(3): 57–80.
- World Bank. 2002. "Globalization, Growth, and Poverty: Building an Inclusive World Economy." World Bank, Washington D.C.

A Data Appendix

A.1 Surname Extraction from Names of Indian Politicians

To categorize surnames into *jatis*, we need to extract the last surname segment from each candidate's entire name. The challenge, however, lies in the inconsistency of naming order across candidates. For instance, consider the politician named "Romesh Lal" who ran for office in Ranbir Singh Pora constituency of Jammu and Kashmir in 1996. Since his name is recorded as "romesh lal" in the India Election Commission Data, we can simply extract the last segment of his name as his surname (Lal). However, another politician named "Gopinath Waman Rao" ran for office in Pernem constituency of Kerala in 1989. His name is recorded as "rao gopinath waman" in the electoral data, suggesting that we cannot use the last segment of his name as his surname.

To address this challenge, we use the OpenAI API. We specifically input the name of each politician into each API and obtain the inferred surname from the input. We first take the inferred surname from the OpenAI API. If it cannot identify the surname from the full name input, we use the last segment of the candidate's name as their surname. We drop the observations without an identified surname.¹⁹ Once we identify the surname of each politician, we implement the surname-jati match using the POI survey.

A.2 Matching Indian Surnames and *Jatis*

Once we successfully extract the surname segment from the entire names of political candidates, we can implement the surname-jati match. We do so by using the data from the POI survey to identify the jatis of political candidates. However, the challenge is the inconsistency of Devanagari transliteration (i.e., transliteration from the Indic scripts to the Roman script) and variations of the same surnames. For instance, surnames "Lal" and "Lall" are considered variations of the same surname. This inconsistency of spelling in the Roman script inhibits the exact name matching between politicians' surnames data and the surname-jati key. To address this problem, we apply a fuzzy-name matching algorithm between the surname-jati key and surnames of politicians to identify jati-belonging of each politician (Cassan, Keniston and Kleineberg, 2022; Böken et al., 2023; Asher et al., 2024a). The fuzzy-name matching algorithm we employ is based on the Levenshtein edit distance algorithm, which calculates the number of edits, deletions, and insertions required to get from one name to another but is adjusted to lower the cost of certain substitutions that are common in Hindi.²⁰

¹⁹There are only 23 politicians whose surname we could not identify.

²⁰This algorithm, masala_merge, was developed by Paul Novosad: https://github.com/devdatalab/masala-merge.

Since some jatis have varying socioeconomic characteristics depending on the states they inhabit, we match the politicians' surname data with the surname-jati key in the following sequence: (1) exact and fuzzy name matching between the surnames and the key within each state; (2) using the OpenAI API to identify the jati of unmatched surnames from the previous step and matching these with the POI data within the state; (3) performing exact and fuzzy name matching across all states for any remaining unmatched surnames; (4) applying the output jatis from step 2 to any surnames still unmatched and matching them with the POI data across states. Thus, we prioritize surname-jati match within each state and then try to match the unmatched surnames with the key across the states. In order to verify the results of the fuzzy-name matching algorithm, we also employ the OpenAI API: we specifically input the fuzzily matched surnames from surnames data and the surname-jati key and ask if they are variations of the same surname.

B Breakdown of Marginalized Groups

Through the paper, we aggregate SC, ST, and Muslims into the marginalized group and treat them as one social group. In this section, we break down marginalized groups into SC, ST, and Muslim to understand which specific social groups drove the economic and political outcomes of trade liberalization.

B.1 Trade Liberalization and Economic Performance

To understand which social groups within the marginalized groups drove the economic results, we split the indicator for marginalized individuals into three distinct subgroups: (i) SC, (ii) ST, and (iii) Muslims. Appendix Figure C5 shows coefficient estimates by social groups. Panel (a) shows that the lower consumption growth resulting from trade liberalization was primarily driven by SC and ST individuals, whereas panel (b) shows that earnings losses were predominantly driven by Muslims. However, these effects are not statistically distinguishable from each other. Overall, these results do not necessarily present the clear patterns of which social groups are the main driver of the change in economic outcomes.

B.2 Political Consequences of Trade Liberalization

To determine which subgroups within the marginalized groups influenced the political results, we divide them into (i) SC, (ii) ST, and (iii) Muslim. We then estimate the equation 2, with outcome variables being the vote shares for SC, ST, or Muslim candidates, or the share of these candidates in the district.

Appendix Figure C7 shows the coefficient estimates of the equation 2, where the outcome variables are the vote shares of candidates from marginalized groups, SC, ST, or Muslim, respectively. In the first row of each subfigure, we present the coefficient estimates from Table 3 for marginalized groups to benchmark the coefficient estimate of each subgroup. For both all candidates and winning candidates samples, the coefficient estimates for SC candidates are statistically insignificant. In contrast, the coefficient estimates for ST and Muslim candidates are significantly positive, suggesting that the exposure to tariff reductions increased the vote share of ST and Muslim candidates in the post-liberalization elections.

Similarly, Appendix Figure C8 shows the coefficient estimates of equation 2, where the outcome variables are the shares of candidates from marginalized groups, SC, ST, or Muslim, respectively. Again, we present the coefficient estimates from Table 4 for marginalized groups in the first row of each subfigure. When we investigate the share of candidates from each subgroup among all candidates, we observe the significantly positive coefficient estimate for SC candidates and insignificant estimates for ST and Muslim candidates. These estimates imply that the exposure to tariff reforms increased only the share of SC candidates among all candidates running for the elections. In contrast, when the outcome variables are the share of candidates from each subgroup among winning candidates, we only observe significantly positive coefficient estimates for Muslim winning candidates. These results indicate that Muslims primary drove the changes in political outcomes in response to trade liberalization shocks.

C Additional Figures

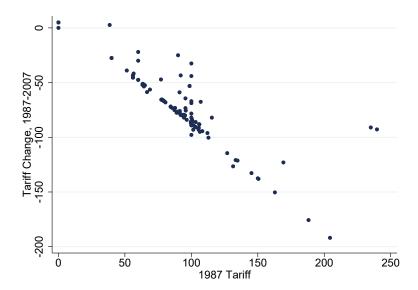


Figure C1. Pre-reform Tariff Rate and Tariff Change

Notes: This figure shows the correlation between the 1987 tariff rate and tariff changes from 1987 to 2007 across industries (4-digit NIC). Each marker corresponds to a 4-digit NIC industry.

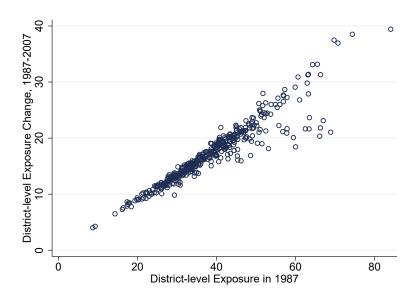


Figure C2. Baseline Exposure and Exposure Change

Notes: This figure shows the relationship between baseline (1987) exposure and exposure change between 1987 and 2007. Each marker represents a district.

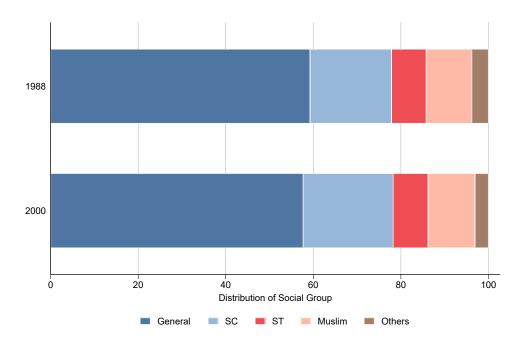


Figure C3. Group Composition in NSS

Notes: This figure shows the composition of individuals in the NSS between 1988 and 2000.

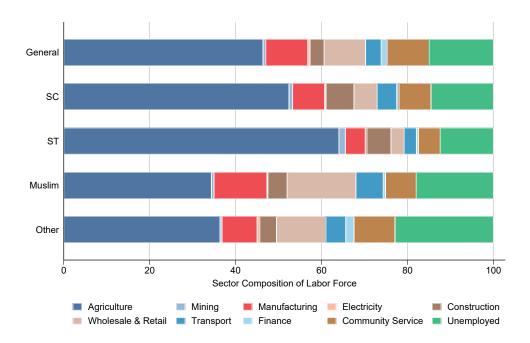


Figure C4. Sector Composition in NSS by Social Group

Notes: This figure shows the distribution of social groups across sectoral categories in the labor force as measured in the NSS.

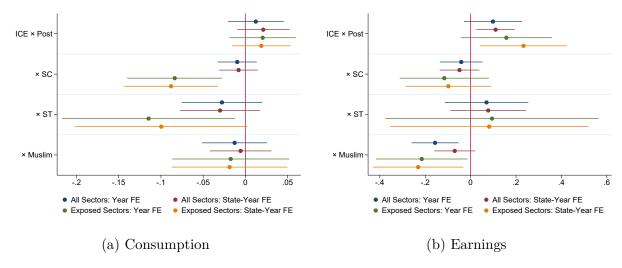


Figure C5. Effect on Consumption and Earnings by Social Group

Notes: This figure shows the effects of tariff reduction exposure on consumption (panel (a)) and earnings (panel (b)) by social group using data from the NSS, 1988–2000. The topmost coefficient is the effect for the reference category: non-marginalized individuals.

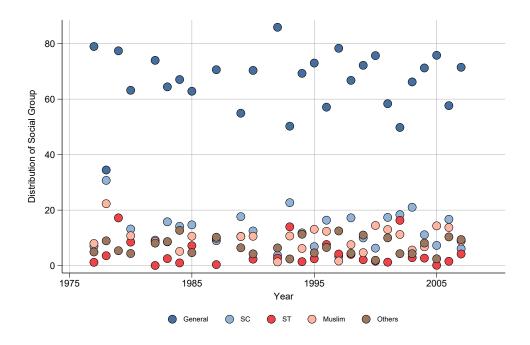
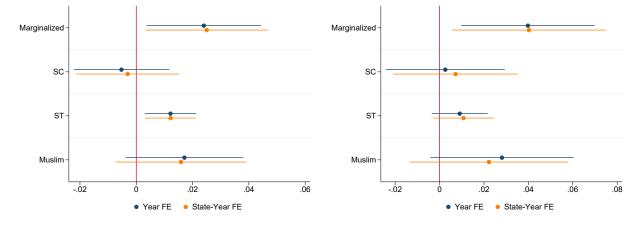


Figure C6. Distribution of Social Groups in State-level Elections

Notes: This figure shows the distribution of social groups contesting state-level political office by year.



- (a) Vote Share of All Candidates
- (b) Vote Share of Winning Candidates

Figure C7. Effect on Vote Shares of All and Winning Candidates by Social Group

Notes: Each subfigure shows the coefficient estimate of the interaction term between an indicator for post-liberalization election and the measure of import competition exposure. Outcome variables are the vote shares of all political candidates from marginalized groups, SC, ST, or Muslim and those of only winning political candidates from marginalized groups, SC, ST, or Muslim in the district for each election. Navy plots show the coefficient estimates from the regression specification only with year fixed effects while orange plots show the coefficient estimates from the regression specification with state-year fixed effects.

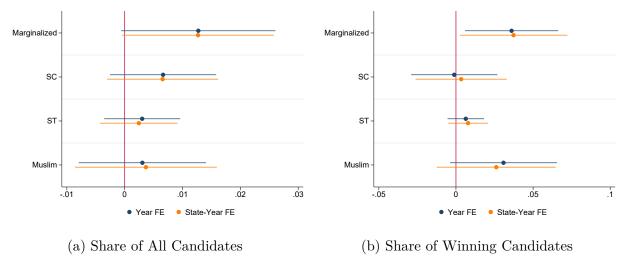


Figure C8. Effects on Shares of All and Winning Candidates by Social Groups

Notes: Each subfigure shows the coefficient estimate of the interaction term between an indicator for post-liberalization election and the measure of import competition exposure. Outcome variables are the shares of all political candidates from marginalized groups, SC, ST, or Muslim and those of only winning political candidates from marginalized groups, SC, ST, or Muslim in the district for each election. Navy plots show the coefficient estimates from the regression specification only with year fixed effects while orange plots show the coefficient estimates from the regression specification with state-year fixed effects.

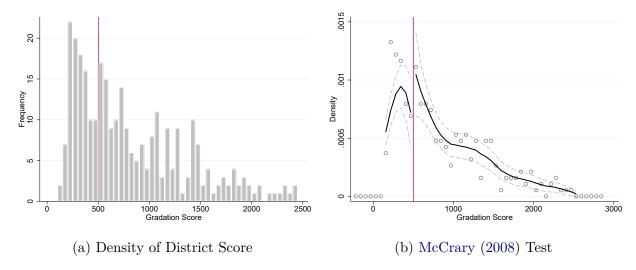


Figure C9. Density of District Gradation Scores

Notes: This figure shows the density of district scores used to identify backward districts and the McCrary (2008) test to check for a discontinuity of the density at the cutoff.

D Additional Tables

Table D1. Overview of Indian State Assembly Elections around Liberalization

			D -1-	#: El	+: D:	1 - (4)			
			Rela	tive Elec	tion Perio	oa $e(t)$			
State	$\mathrm{e}(-5)$	e(-4)	$\mathrm{e}(-3)$	e(-2)	$\mathrm{e}(-1)$	e(0)	e(1)	e(2)	e(3)
Andhra Pradesh		1978	1983	1985	1989	1994	1999	2004	2009
Arunachal Pradesh				•	1990	1995	1999	2004	2009
Assam			1978	1983	1985	1991	1996	2001	2006
Bihar		1977	1980	1985	1990	1995	2000	2005	2010
Chhattisgarh*						2003	2008	2013	2018
Delhi				•		1993	1998	2003	2008
Goa					1989	1994	1999	2002	2007
Gujarat		1975	1980	1985	1990	1995	1998	2002	2007
Haryana			1977	1982	1987	1991	1996	2000	2005
Himachal Pradesh		1977	1982	1985	1990	1993	1998	2003	2007
Jammu & Kashmir				•		1996	2002	2008	2014
Jharkhand**				•		2005	2009	2014	2019
Karnataka		1978	1983	1985	1989	1994	1999	2004	2008
Kerala		1977	1980	1982	1987	1991	1996	2001	2006
Madhya Pradesh	•	1977	1980	1985	1990	1993	1998	2003	2008
Maharashtra	•	1978	1980	1985	1990	1995	1999	2004	2009
Manipur				•	1990	1995	2000	2002	2007
Meghalaya			1978	1983	1988	1993	1998	2003	2008
Mizoram				1987	1989	1993	1998	2003	2008
Nagaland	1974	1977	1982	1987	1989	1993	1998	2003	2008
Orissa	1974	1977	1980	1985	1990	1995	2000	2004	2009
Puducherry	1974	1977	1980	1985	1990	1991	1996	2001	2006
Punjab	•		1977	1980	1985	1992	1997	2002	2007
Rajasthan	•	1977	1980	1985	1990	1993	1998	2003	2008
Sikkim			1979	1985	1989	1994	1999	2004	2009
Tamil Nadu		1977	1980	1984	1989	1991	1996	2001	2006
Tripura			1977	1983	1988	1993	1998	2003	2008
Uttar Pradesh	1974	1977	1980	1985	1989	1991	1993	1996	2002
Uttarakhand***				•		2002	2007	2012	2017
West Bengal	•	•	1977	1982	1987	1991	1996	2001	2006

Notes: This table provides an overview of state-level elections around the 1991 trade liberalization. "e(0)" denotes the first post-liberalization election. *Carved out of Madhya Pradesh; **carved out of Bihar; ***carved out of Uttar Pradesh (all in 2000).

Table D2. Descriptive Statistics: NSS Data

	Mean	S.D.	Min	Max	Obs.
Female	0.10	0.30	0.00	1.00	193,947
Age	44.38	13.96	0.00	99.00	193,947
Years Education	4.33	4.65	0.00	14.00	193,947
Urban Household	0.36	0.48	0.00	1.00	193,947
Monthly Consumption (Rs)	422.46	395.55	0.00	2731.00	193,947
Earnings (Rs)	69.86	277.36	0.00	25150.00	193,947

Notes: This table reports summary statistics for the economic outcomes used in the analysis and shows the sample of individuals in NSS for 1988 and 2000. Earnings and wages are reported in Indian rupees. Each observation is a household-head individual.

Table D3. Descriptive Statistics: Tariff Exposure

	Mean	S.D.	Min	Max	Obs.
ICE Δ ICE			8.68 -39.42	$84.08 \\ -4.02$	412 412

Notes: This table reports the district-level measures of local exposure to tariff reductions. The first measure is the weighted average of 1987 tariff rates in each district, where the weight is the employment share of each sector. The second measure is the weighted average of the differences between 1991 and 1996 tariff rates in each district with the same weight.

Table D4. Descriptive Statistics: Political Outcomes

	Mean	S.D.	Min	Max	Obs.
Panel A. Voters' Preferences & Poli	itical Pa	rticipat	ion: Al	ll Candi	dates
Cand. Vote Share: General Caste	0.66	0.24	0.00	1.00	2,459
Cand. Vote Share: Marginalized	0.28	0.23	0.00	1.00	2,459
Cand. Share: General Caste	0.65	0.19	0.00	1.00	2,459
Cand. Share: Marginalized	0.30	0.19	0.00	1.00	2,459
Panel B. Voters' Preferences & Poli	tical Rep	presente	ation:	Winning	Candidates
Winner Vote Share: General Caste	0.67	0.32	0.00	1.00	2,459
Winner Vote Share: Marginalized	0.28	0.31	0.00	1.00	2,459
Winner Share: General Caste	0.67	0.31	0.00	1.00	2,459
Winner Share: Marginalized	0.27	0.30	0.00	1.00	$2,\!459$

Notes: This table reports summary statistics for the political outcome variables from election data between 1977 and 2007.

Table D5. Consumption with Alternative Exposure Measure

		$\ln\mathrm{MPCE}$					
	All S	ectors	Exposed Sectors				
	(1)	(2)	(3)	(4)			
Δ ICE × Post	0.008	0.011	0.007	-0.002			
	(0.013)	(0.012)	(0.015)	(0.013)			
Δ ICE × Post × Marg.	-0.008	-0.005	-0.032	-0.035^*			
	(0.011)	(0.010)	(0.020)	(0.019)			
Outcome Mean	5.985	5.985	6.074	6.074			
Observations	193,947	193,947	29,096	29,096			
Districts	412	412	409	409			
District FE	Yes	Yes	Yes	Yes			
Year FE	Yes	No	Yes	No			
State-Year FE	No	Yes	No	Yes			
Controls	Yes	Yes	Yes	Yes			

Notes: Outcome variables are the natural logarithm of the household-level monthly per-capita consumption from two rounds of NSS household surveys. Δ ICE is standardized to mean 0 and standard deviation 1. In columns (1) and (2), we use all individuals in NSS household surveys. In columns (3) and (4), we select the subsample of workers in sectors exposed to trade liberalization: (i) manufacturing, (ii) mining and quarrying, and (iii) construction. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

Table D6. Earnings with Alternative Exposure Measure

		ln Ear	nings		
	All S	ectors	Exposed Sector		
	(1)	(2)	(3)	(4)	
Δ ICE × Post	0.080	0.096***	0.163**	0.193**	
	(0.057)	(0.035)	(0.082)	(0.082)	
Δ ICE × Post × Marg.	-0.069^*	-0.044	-0.073	-0.072	
	(0.037)	(0.036)	(0.094)	(0.093)	
Outcome Mean	2.168	2.168	3.044	3.044	
Observations	193,947	193,947	29,096	29,096	
Districts	412	412	409	409	
District FE	Yes	Yes	Yes	Yes	
Year FE	Yes	No	Yes	No	
State-Year FE	No	Yes	No	Yes	
Controls	Yes	Yes	Yes	Yes	

Notes: Outcome variables are the natural logarithm of the household-level per-capita earnings from two rounds of NSS household surveys. Δ ICE is standardized to mean 0 and standard deviation 1. In columns (1) and (2), we use all individuals in NSS household surveys. In columns (3) and (4), we select the subsample of workers in sectors exposed to trade liberalization: (i) manufacturing, (ii) mining and quarrying, and (iii) construction. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

Table D7. Consumption with Alternative Marginalized Groups

		ln I	MPCE	
	All S	ectors	Exposed	l Sectors
	(1)	(2)	(3)	(4)
$\overline{\text{ICE} \times \text{Post}}$	0.005	0.011	0.007	0.001
	(0.014)	(0.014)	(0.017)	(0.016)
ICE \times Post \times Marg.	-0.004	-0.002	-0.042**	-0.045**
	(0.011)	(0.010)	(0.020)	(0.019)
Outcome Mean	5.985	5.985	6.074	6.074
Observations	193,947	193,947	29,096	29,096
Districts	412	412	409	409
District FE	Yes	Yes	Yes	Yes
Year FE	Yes	No	Yes	No
State-Year FE	No	Yes	No	Yes
Controls	Yes	Yes	Yes	Yes

Notes: Outcome variables are the natural logarithm of the household-level monthly per-capita consumption from two rounds of NSS household surveys. ICE is standardized to mean 0 and standard deviation 1. In columns (1) and (2), we use all individuals in NSS household surveys. In columns (3) and (4), we select the subsample of workers in sectors exposed to trade liberalization: (i) manufacturing, (ii) mining and quarrying, and (iii) construction. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

Table D8. Earnings with Alternative Marginalized Groups

		ln Earnings						
	All Se	ectors	Exposed Sectors					
	(1)	(2)	(3)	(4)				
$ICE \times Post$	0.096	0.091**	0.148	0.206**				
	(0.065)	(0.043)	(0.104)	(0.096)				
$ICE \times Post \times Marg.$	-0.037	-0.009	-0.091	-0.068				
	(0.035)	(0.036)	(0.090)	(0.091)				
Outcome Mean	2.168	2.168	3.044	3.044				
Observations	193,947	193,947	29,096	29,096				
Districts	412	412	409	409				
District FE	Yes	Yes	Yes	Yes				
Year FE	Yes	No	Yes	No				
State-Year FE	No	Yes	No	Yes				
Controls	Yes	Yes	Yes	Yes				

Notes: Outcome variables are the natural logarithm of the household-level per-capita earnings from two rounds of NSS household surveys. ICE is standardized to mean 0 and standard deviation 1. In columns (1) and (2), we use all individuals in NSS household surveys. In columns (3) and (4), we select the subsample of workers in sectors exposed to trade liberalization: (i) manufacturing, (ii) mining and quarrying, and (iii) construction. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

Table D9. Vote Shares of Candidates with Alternative Exposure Measure

Candidates Sample:		All (Candidates			Winning Candidates			
Social Group:	Marginalized		Gen	neral	Marginalized		General		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
$- \text{Post} \times \Delta \text{ ICE (std.)}$	0.021** (0.010)	0.021** (0.010)	-0.026^{***} (0.009)	-0.026^{***} (0.010)	0.032** (0.015)	0.032* (0.016)	-0.032^{**} (0.014)	-0.033^{**} (0.015)	
Outcome Mean Observations	0.312 2.459	0.312 2.459	$0.660 \\ 2.459$	0.660 2.459	$0.305 \\ 2,459$	$0.305 \\ 2.459$	0.668 2.459	0.668 $2,459$	
Districts	412	412	412	412	412	412	412	412	
District FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Year FE	Yes	No	Yes	No	Yes	No	Yes	No	
State-Year FE	No	Yes	No	Yes	No	Yes	No	Yes	
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

Notes: Outcome variables are the vote shares of all political candidates from marginalized groups or general castes (Columns 1 to 4) and those of only winning political candidates from marginalized groups or general castes (Columns 5 to 8) in the district for each election. Δ ICE is standardized to mean 0 and standard deviation 1. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend, in all specifications. The analysis excludes constituencies reserved for SC and ST. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

Table D10. Shares of Candidates with Alternative Exposure Measure

						1			
Candidates Sample:		All Ca	andidates			Winning	Candidates	General (8) 4* -0.024 4) (0.016) 8 0.668	
Social Group:	Margin	Marginalized		eral	Margin	nalized	Gen	eral	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Δ ICE × Post	0.013** (0.006)	0.012* (0.006)	-0.016^{**} (0.007)	-0.013^* (0.007)	0.028** (0.014)	0.026 (0.016)	-0.024^* (0.014)		
Outcome Mean Observations Districts District FE Year FE	0.297 2,459 412 Yes Yes	0.297 2,459 412 Yes No	0.645 2,459 412 Yes Yes	0.645 2,459 412 Yes No	0.275 2,459 412 Yes Yes	0.275 2,459 412 Yes No	0.668 2,459 412 Yes Yes	2,459 412 Yes No	
State-Year FE Controls	$ \text{No} \\ \text{Yes} $	$\begin{array}{c} { m Yes} \\ { m Yes} \end{array}$	No Yes	$\begin{array}{c} { m Yes} \\ { m Yes} \end{array}$	$ \text{No} \\ \text{Yes} $	Yes Yes	No Yes	$\begin{array}{c} { m Yes} \\ { m Yes} \end{array}$	

Notes: Outcome variables are the shares of all political candidates from marginalized groups or general castes (Columns 1 to 4) and those of only winning political candidates from marginalized groups or general castes (Columns 5 to 8) in the district for each election. Δ *ICE* is standardized to mean 0 and standard deviation 1. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend, in all specifications. The analysis excludes constituencies reserved for SC and ST. Standard errors are clustered by districts.

*** = 1% significance, ** = 5%, * = 10%.

Table D11. Vote Shares of Candidates with Alternative Marginalized Groups

Candidates Sample:		All (Candidates			Winning	Candidates	General (7) (8) 0.042*** -0.048*** (0.015) (0.017)		
Social Group:	Margi	nalized	Ger	neral	Margi	nalized	Gen	eral		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
$ICE \times Post$	0.028** (0.011)	0.031** (0.012)	-0.031*** (0.011)	-0.036*** (0.012)	0.043*** (0.016)	0.047*** (0.018)	-0.042^{***} (0.015)			
Outcome Mean Observations Districts	0.312 $2,459$ 412	0.312 $2,459$ 412	0.660 $2,459$ 412	0.660 $2,459$ 412	0.305 $2,459$ 412	0.305 $2,459$ 412	,	2,459		
District FE Year FE State-Year FE Controls	Yes Yes No Yes	Yes No Yes Yes	Yes Yes No Yes	Yes No Yes Yes	Yes Yes No Yes	Yes No Yes Yes	Yes Yes No Yes	Yes No Yes Yes		

Notes: Outcome variables are the vote shares of all political candidates from marginalized groups or general castes (Columns 1 to 4) and those of only winning political candidates from marginalized groups or general castes (Columns 5 to 8) in the district for each election. ICE is standardized to mean 0 and standard deviation 1. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend, in all specifications. The analysis excludes constituencies reserved for SC and ST. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

Table D12. Shares of Candidates with Alternative Marginalized Groups

Candidates Sample:		All C	andidates		Winning Candidates			
Social Group:	Margi	nalized	General Margina		nalized	Gen	eral	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$ICE \times Post$	0.014* (0.007)	0.014* (0.007)	-0.017^{**} (0.008)	-0.016^{**} (0.008)	0.038** (0.016)	0.042** (0.018)	-0.034^{**} (0.016)	-0.039^{**} (0.018)
Outcome Mean	0.327	0.327	0.645	0.645	0.305	0.305	0.668	0.668
Observations	2,459	2,459	2,459	2,459	2,459	2,459	2,459	2,459
Districts	412	412	412	412	412	412	412	412
District FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	No	Yes	No	Yes	No	Yes	No
State-Year FE	No	Yes	No	Yes	No	Yes	No	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Outcome variables are the shares of all political candidates from marginalized groups or general castes (Columns 1 to 4) and those of only winning political candidates from marginalized groups or general castes (Columns 5 to 8) in the district for each election. ICE is standardized to mean 0 and standard deviation 1. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend, in all specifications. The analysis excludes constituencies reserved for SC and ST. Standard errors are clustered by districts.

*** = 1% significance, ** = 5%, * = 10%.

Table D13. Vote Shares of Candidates at Constituency-Level

Candidates Sample:		All (Candidates		7	Winning (Candidates	5
Social Group:	Margin	nalized	Gen	neral	Margin	nalized	General	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$ICE \times Post$	0.022** (0.010)	0.020* (0.011)	-0.028^{***} (0.010)	-0.030^{***} (0.011)	0.015** (0.007)	0.010 (0.008)	-0.012 (0.008)	-0.014 (0.009)
Outcome Mean Observations Districts	0.260 $14,809$ 412	0.260 $14,809$ 412	0.669 $14,809$ 412	0.669 $14,809$ 412	0.116 $11,712$ 412	0.116 $11,712$ 412	0.324 $11,712$ 412	0.324 $11,712$ 412
District FE Year FE State-Year FE	Yes Yes No	Yes No Yes	Yes Yes No	Yes No Yes	Yes Yes No	Yes No Yes	Yes Yes No	Yes No Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Outcome variables are the vote shares of all political candidates from marginalized groups or general castes (Columns 1 to 4) and those of only winning political candidates from marginalized groups or general castes (Columns 5 to 8) in the constituency for each election. ICE is standardized to mean 0 and standard deviation 1. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend, in all specifications. The analysis excludes constituencies reserved for SC and ST. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

Table D14. Shares of Candidates at Constituency-Level

Candidates Sample:		All C	Candidates		Winning Candidates					
Social Group:	Margi	nalized	Gen	eral	Margin	nalized	General			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
$\overline{\text{ICE} \times \text{Post}}$	0.014** (0.006)	0.012** (0.006)	-0.018*** (0.006)	$-0.015** \ (0.006)$	0.017 (0.012)	0.019 (0.013)	-0.009 (0.013)	-0.005 (0.014)		
Outcome Mean Observations Districts	0.272 $14,813$ 412	0.272 $14,813$ 412	0.659 $14,813$ 412	0.659 $14,813$ 412	0.202 $14,813$ 412	0.202 $14,813$ 412	0.532 $14,813$ 412	0.532 $14,813$ 412		
District FE Year FE	Yes Yes	Yes No	Yes Yes	Yes No	Yes Yes	Yes No	Yes Yes	Yes No		
State-Year FE Controls	No Yes	Yes Yes	No Yes	Yes Yes	No Yes	Yes Yes	No Yes	Yes Yes		

Notes: Outcome variables are the shares of all political candidates from marginalized groups or general castes (Columns 1 to 4) and those of only winning political candidates from marginalized groups or general castes (Columns 5 to 8) in the constituency for each election. ICE is standardized to mean 0 and standard deviation 1. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend, in all specifications. The analysis excludes constituencies reserved for SC and ST. Standard errors are clustered by districts.

**** = 1% significance, *** = 5%, * = 10%.

Table D15. Vote Shares of Candidates at Candidate-Level

Candidates Sample		All Can	didates			Winning	Candidates	
Social Group:	Margir	nalized	Gen	eral	Margin	nalized	Gene	eral
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$\overline{\text{ICE} \times \text{Post}}$	0.000 (0.002)	0.001 (0.001)	0.003* (0.002)	0.002 (0.001)	-0.001 (0.004)	-0.005 (0.004)	0.009** (0.004)	0.001 (0.004)
ICE \times Post \times Marg.	0.005*** (0.002)	0.003 (0.002)			0.012^{**} (0.005)	0.008^* (0.005)		
$ICE \times Post \times Gen.$			-0.002 (0.002)	$0.000 \\ (0.002)$			-0.011^{**} (0.005)	-0.007 (0.004)
Outcome Mean	0.105	0.105	0.105	0.105	0.476	0.476	0.476	0.476
Observations	110,950	110,950	110,950	110,950	11,669	11,669	11,669	11,669
Districts	412	412	412	412	412	412	412	412
District FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	No	Yes	No	Yes	No	Yes	No
State-Year FE	No	Yes	No	Yes	No	Yes	No	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Outcome variables are the vote shares of all political candidates from marginalized groups or general castes (Columns 1 to 4) and those of only winning candidates from marginalized groups or general castes (Columns 5 to 8) for each election. ICE is standardized to mean 0 and standard deviation 1. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend, in all specifications. The analysis excludes constituencies reserved for SC and ST. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

Table D16. Shares of Candidates at Candidate-Level

Candidates Sample		All Ca	andidates		,	Winning (Candidate	S	
Social Group:	Margin	nalized	Gen	neral	Margin	nalized	General		
	(1) (2)			(4)	(5)	(6)	(7)	(8)	
$ICE \times Post$	0.010** (0.005)	0.009* (0.005)	-0.013^{**} (0.005)	-0.013^{**} (0.005)	0.009 (0.014)	0.013 (0.015)	-0.009 (0.014)	-0.017 (0.016)	
Outcome Mean Observations	0.302 $110,957$	0.302 $110,957$	0.641 $110,957$	0.641 $110,957$	0.255 $11,673$	0.255 $11,673$	0.672 $11,673$	0.672 $11,673$	
Districts	412	412	412	412	412	412	412	412	
District FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Year FE	Yes	No	Yes	No	Yes	No	Yes	No	
State-Year FE	No	Yes	No	Yes	No	Yes	No	Yes	
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

Notes: Outcome variables are the indicators for political candidates from marginalized groups or general castes (Columns 1 to 4) and for winning candidates from marginalized groups or general castes (Columns 5 to 8) for each election. ICE is standardized to mean 0 and standard deviation 1. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend, in all specifications. The analysis excludes constituencies reserved for SC and ST. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

Table D17. Vote Shares of Candidates in Subsample with Population Demographics

Candidates Sample:		All (Candidates		Winning Candidates					
Social Group:	Margi	nalized	Ger	neral	Margir	nalized	Ger	neral		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
$ICE \times Post$	0.024** (0.011)	0.025** (0.012)	-0.030*** (0.011)	-0.035^{***} (0.012)	0.041*** (0.016)	0.043** (0.019)	-0.044^{***} (0.016)	-0.051^{***} (0.018)		
Outcome Mean Observations	$0.295 \\ 2,247$	$0.295 \\ 2,247$	$0.647 \\ 2,247$	$0.647 \\ 2,247$	$0.290 \\ 2,247$	$0.290 \\ 2,247$	0.653 $2,247$	$0.653 \\ 2,247$		
Districts District FE Year FE	378 Yes Yes	378 Yes No	378 Yes Yes	378 Yes No	378 Yes Yes	378 Yes No	378 Yes Yes	378 Yes No		
State-Year FE Controls	$ \text{No} \\ \text{Yes} $	$\begin{array}{c} { m Yes} \\ { m Yes} \end{array}$	No Yes	Yes Yes	$_{ m Yes}^{ m No}$	$\frac{\text{Yes}}{\text{Yes}}$	No Yes	$\begin{array}{c} { m Yes} \\ { m Yes} \end{array}$		

Notes: Outcome variables are vote shares for all political candidates from marginalized groups or general castes (Columns 1 to 4) and for winning candidates from marginalized groups or general castes (Columns 5 to 8) for each election. ICE is standardized to mean 0 and standard deviation 1. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend, in all specifications. The analysis excludes constituencies reserved for SC and ST. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

Table D18. Shares of Candidates in Subsample with Population Demographics

Candidates Sample:		All C	andidates		Winning Candidates					
Social Group:	Margi	nalized	Gen	neral	Margi	nalized	Gen	eral		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
$ICE \times Post$	0.012* (0.007)	0.012* (0.007)	-0.016^{**} (0.008)	-0.016^{**} (0.008)	0.037** (0.016)	0.040** (0.019)	-0.036^{**} (0.016)	-0.042^{**} (0.019)		
Outcome Mean	0.312	0.312	0.630	0.630	0.290	0.290	0.653	0.653		
Observations	2,247	2,247	2,247	$2,\!247$	2,247	2,247	2,247	2,247		
Districts	378	378	378	378	378	378	378	378		
District FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Year FE	Yes	No	Yes	No	Yes	No	Yes	No		
State-Year FE	No	Yes	No	Yes	No	Yes	No	Yes		
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		

Notes: Outcome variables are the shares of all political candidates from marginalized groups or general castes (Columns 1 to 4) and for winning candidates from marginalized groups or general castes (Columns 5 to 8) for each election. ICE is standardized to mean 0 and standard deviation 1. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend, in all specifications. The analysis excludes constituencies reserved for SC and ST. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

53

Table D19. Vote Shares of Candidates with Political Parties

Candidates Sample:			All Can	didates			Winning Candidates						
Political Party:	itical Party: IN		INC BJP		LC/M		INC		BJP		LC/M		
Social Group:	Marg.	Gen.	Marg.	Gen.	Marg.	Gen.	Marg.	Gen.	Marg.	Gen.	Marg.	Gen.	
	$\overline{}(1)$	(2)	(3)	$\overline{}$ (4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
$ICE \times Post$	0.010** (0.005)	-0.013 (0.008)	0.016*** (0.005)	-0.000 (0.006)	0.004 (0.007)	-0.001 (0.010)	0.022** (0.010)	-0.031 (0.020)	0.035*** (0.009)	0.007 (0.013)	0.005 (0.012)	0.011 (0.015)	
Outcome Mean	0.070	0.187	0.044	0.114	0.062	0.107	0.075	0.194	0.050	0.126	0.062	0.116	
Observations	2,459	2,459	2,459	2,459	2,459	2,459	2,459	2,459	2,459	2,459	2,459	2,459	
Districts	412	412	412	412	412	412	412	412	412	412	412	412	
District FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Year FE	No	No	No	No	No	No	No	No	No	No	No	No	
State-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

Notes: Outcome variables are vote shares for all political candidates from marginalized groups or general castes (Columns 1 to 6) and for winning candidates from marginalized groups or general castes (Columns 7 to 12) for each election. Odd columns show the estimates for marginalized groups while even columns for general castes. ICE is standardized to mean 0 and standard deviation 1. INC, BJP, and LC/M denote Indian National Congress, Bharatiya Janata Party, and parties with policy agendas on low castes and Muslims, respectively. All columns show the regression estimates with state-year fixed effects. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend, in all specifications. The analysis excludes constituencies reserved for SC and ST. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

Table D20. Shares of Candidates with Political Parties

Candidates Sample:			All Car	didates			Winning Candidates						
Political Party:	IN	IC	BJP		LC	LC/M		INC		P	LC/M		
Social Group:	Marg.	Gen.	Marg.	Gen.	Marg.	Gen.	Marg.	Gen.	Marg.	Gen.	Marg.	Gen.	
	$\overline{(1)}$	(2)	(3)	$\overline{(4)}$	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
$ICE \times Post$	0.003** (0.001)	-0.001 (0.003)	0.003 (0.002)	-0.003 (0.002)	0.002 (0.004)	-0.005 (0.004)	0.022** (0.009)	-0.025 (0.020)	0.033*** (0.009)	0.007 (0.013)	0.007 (0.012)	0.011 (0.015)	
Outcome Mean	0.025	0.067	0.018	0.053	0.041	0.077	0.075	0.193	0.049	0.126	0.062	0.116	
Observations	2,459	2,459	2,459	2,459	2,459	2,459	2,459	2,459	2,459	2,459	2,459	2,459	
Districts	412	412	412	412	412	412	412	412	412	412	412	412	
District FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Year FE	No	No	No	No	No	No	No	No	No	No	No	No	
State-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

Notes: Outcome variables are the shares of all political candidates from marginalized groups or general castes (Columns 1 to 6) and for winning candidates from marginalized groups or general castes (Columns 7 to 12) for each election. Odd columns show the estimates for marginalized groups while even columns for general castes. ICE is standardized to mean 0 and standard deviation 1. INC, BJP, and LC/M denote Indian National Congress, Bharatiya Janata Party, and parties with policy agendas on low castes and Muslims, respectively. All columns show the regression estimates with state-year fixed effects. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend, in all specifications. The analysis excludes constituencies reserved for SC and ST. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

Table D21. Vote Shares of Candidates with Political Parties and Incumbency

Candidates Sample:			All Cano	didates			Winning Candidates					
Political Party:	IN	C	BJ	ΙP	LC	g/M	II	NC	В	JP	LC	S/M
Social Group:	Marg.	Gen.	Marg.	Gen.	Marg.	Gen.	Marg.	Gen.	Marg.	Gen.	Marg.	Gen.
	(1)	(2)	(3)	(4)	$\overline{}(5)$	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Panel A. Incumbent												
$ICE \times Post$	0.007*** (0.003)	-0.003 (0.006)	$0.007^{***} $ (0.003)	$0.005 \\ (0.005)$	-0.000 (0.003)	-0.000 (0.004)	$0.013^{***} $ (0.005)	0.003 (0.011)	0.016** (0.006)	$0.010 \\ (0.010)$	-0.001 (0.006)	$0.006 \\ (0.008)$
Outcome Mean	0.021	0.059	0.010	0.033	0.011	0.025	0.025	0.068	0.014	0.044	0.015	0.037
Observations	2,459	2,459	$2,\!459$	2,459	2,459	2,459	2,459	2,459	2,459	2,459	2,459	2,459
Districts	412	412	412	412	412	412	412	412	412	412	412	412
District FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	No	No	No	No	No	No	No	No	No	No	No
State-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Panel B. Non-Incum	bent											
$ICE \times Post$	$0.003 \\ (0.005)$	-0.010 (0.007)	$0.008 \\ (0.005)$	-0.006 (0.007)	$0.005 \\ (0.006)$	-0.001 (0.009)	$0.009 \\ (0.009)$	-0.034^{**} (0.014)	0.019^{**} (0.008)	-0.004 (0.014)	$0.006 \\ (0.011)$	$0.005 \\ (0.011)$
Outcome Mean	0.048	0.128	0.033	0.081	0.051	0.082	0.049	0.125	0.036	0.082	0.047	0.080
Observations	2,459	2,459	2,459	2,459	2,459	2,459	2,459	2,459	2,459	2,459	2,459	2,459
Districts	412	412	412	412	412	412	412	412	412	412	412	412
District FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	No	No	No	No	No	No	No	No	No	No	No
State-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Outcome variables are vote shares for all political candidates from marginalized groups or general castes (Columns 1 to 6) and for winning candidates from marginalized groups or general castes (Columns 7 to 12) with incumbency status (Panel A) or without (Panel B) for each election. ICE is standardized to mean 0 and standard deviation 1. Odd columns show the estimates for marginalized groups while even columns for general castes. INC, BJP, and LC/M denote Indian National Congress, Bharatiya Janata Party, and parties with policy agendas on low castes and Muslims, respectively. All columns show the regression estimates with state-year fixed effects. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend, in all specifications. The analysis excludes constituencies reserved for SC and ST. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

Table D22. Shares of Candidates with Political Parties and Incumbency

Candidates Sample:			All Car	ndidates				V	Vinning Ca	ndidates		
Political Party:	IN	1 C	В	JP	LC	/M		NC	В	ΙΡ	LC	² /M
Social Group:	Marg.	Gen.	Marg.	Gen.	Marg.	Gen.	Marg.	Gen.	Marg.	Gen.	Marg.	Gen.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Panel A. Incumbent												
$ICE \times Post$	$0.001 \\ (0.001)$	-0.001 (0.002)	0.002** (0.001)	$0.001 \\ (0.001)$	-0.000 (0.001)	-0.000 (0.002)	$0.012^{***} $ (0.004)	0.004 (0.010)	0.017*** (0.006)	0.011 (0.009)	$0.000 \\ (0.006)$	$0.005 \\ (0.008)$
Outcome Mean	0.007	0.019	0.003	0.010	0.003	0.008	0.025	0.068	0.013	0.043	0.015	0.036
Observations	2,459	2,459	2,459	2,459	2,459	$2,\!459$	2,459	2,459	2,459	2,459	2,459	2,459
Districts	412	412	412	412	412	412	412	412	412	412	412	412
District FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	No	No	No	No	No	No	No	No	No	No	No
State-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Panel B. Non-Incum	bent											
$ICE \times Post$	$0.002 \\ (0.001)$	$0.000 \\ (0.003)$	0.001 (0.002)	-0.004^* (0.002)	0.002 (0.004)	-0.005 (0.004)	0.010 (0.009)	-0.029^{**} (0.015)	0.016** (0.007)	-0.003 (0.014)	$0.007 \\ (0.011)$	$0.006 \\ (0.011)$
Outcome Mean	0.018	0.048	0.015	0.043	0.038	0.069	0.050	0.125	0.036	0.083	0.048	0.080
Observations	2,459	2,459	2,459	2,459	2,459	2,459	2,459	2,459	2,459	2,459	2,459	2,459
Districts	412	412	412	412	412	412	412	412	412	412	412	412
District FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	No	No	No	No	No	No	No	No	No	No	No
State-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Outcome variables are the shares of all political candidates from marginalized groups or general castes (Columns 1 to 6) and for winning candidates from marginalized groups or general castes (Columns 7 to 12) with incumbency status (Panel A) or without (Panel B) for each election. ICE is standardized to mean 0 and standard deviation 1. Odd columns show the estimates for marginalized groups while even columns for general castes. INC, BJP, and LC/M denote Indian National Congress, Bharatiya Janata Party, and parties with policy agendas on low castes and Muslims, respectively. All columns show the regression estimates with state-year fixed effects. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend, in all specifications. The analysis excludes constituencies reserved for SC and ST. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

Table D23. Balance of Baseline District Characteristics

	Backward Dis	trict (Treated)	Forward Distr	rict (Control)	Mean Di	fference
	Mean (1)	Obs. (2)	Mean (3)	Obs. (4)	Diff. (5)	p-value (6)
PC91 Marg. Population Share	0.356	77	0.371	63	0.015	0.463
ICE	0.056	77	0.114	63	0.058	0.708
EC90 Total Employment EC90 Manuf. Employment Share	71636.097 0.301	77 77	79942.659 0.315	63 63	$8306.561 \\ 0.014$	$0.481 \\ 0.446$

Notes: Baseline district characteristics are 1991 population share of marginalized groups, baseline exposure to import competition, 1990 total employment, and 1990 manufacturing sector employment share. Columns (1) and (3) show the mean of each district characteristic in backward districts and non-backward districts, respectively. All comparisons are made within a bandwidth of 250 points around the gradation score cutoff (500).

Table D24. Vote Shares of Candidates in Subsample within Optimal Bandwidth

Candidates Sample:		All C	andidates			Winning	Candidates	3
Social Group:	Margi	nalized	Ger	neral	Margi	nalized	General	
	(1)	(2)	(2) (3) (4)		(5)	(6)	(7)	(8)
$\overline{\text{ICE} \times \text{Post}}$	0.041* (0.016)	0.043** (0.016)	-0.048** (0.018)	-0.052^{**} (0.018)	0.050^* (0.025)	0.051 (0.029)	-0.049^* (0.024)	-0.048 (0.030)
Outcome Mean Observations	$0.307 \\ 834$	$0.307 \\ 834$	$0.646 \\ 834$	$0.646 \\ 834$	0.310 834	$0.310 \\ 834$	$0.645 \\ 834$	$0.645 \\ 834$
Districts	140	140	140	140	140	140	140	140
District FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	No	Yes	No	Yes	No	Yes	No
State-Year FE	No	Yes	No	Yes	No	Yes	No	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Outcome variables are the vote shares for all political candidates from marginalized groups or general castes (Columns 1 to 4) and for winning candidates from marginalized groups or general castes (Columns 5 to 8) for each election. ICE is standardized to mean 0 and standard deviation 1. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend, in all specifications. The analysis excludes constituencies reserved for SC and ST. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

Table D25. Shares of Candidates in Subsample within Optimal Bandwidth

Candidates Sample:		All Car	Winning Candidates						
Social Group:	Margin	nalized	Ger	neral	Margin	nalized	General		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
$ICE \times Post$	0.012 (0.010)	0.018 (0.010)	-0.011 (0.012)	-0.017 (0.012)	0.039 (0.026)	0.042 (0.031)	-0.037 (0.026)	-0.038 (0.031)	
Outcome Mean	0.318	0.318	0.637	0.637	0.311	0.311	0.643	0.643	
Observations	834	834	834	834	834	834	834	834	
Districts	140	140	140	140	140	140	140	140	
District FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Year FE	Yes	No	Yes	No	Yes	No	Yes	No	
State-Year FE	No	Yes	No	Yes	No	Yes	No	Yes	
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

Notes: Outcome variables are the shares of all political candidates from marginalized groups or general castes (Columns 1 to 4) and for winning candidates from marginalized groups or general castes (Columns 5 to 8) for each election. ICE is standardized to mean 0 and standard deviation 1. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend, in all specifications. The analysis excludes constituencies reserved for SC and ST. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

Table D26. Vote Shares of Candidates across Different Bandwidths

Candidates Sample:	All Candidates							Winning Candidates						
Social Group:	Marginalized			General			Marginalized			General				
Bandwidth:	200	250	300	200	250	300	200	250	300	200	250	300		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		
$ICE \times Post$	0.069* (0.031)	0.078** (0.027)	0.052 (0.027)	-0.069 (0.036)	-0.081^* (0.033)	-0.065^* (0.030)	0.074 (0.054)	0.081 (0.042)	0.059 (0.040)	-0.059 (0.053)	-0.070 (0.044)	-0.064 (0.040)		
ICE × Post × Backward Dist.	-0.032 (0.034)	-0.051 (0.028)	-0.029 (0.029)	0.021 (0.039)	0.043 (0.034)	0.030 (0.032)	-0.023 (0.058)	-0.048 (0.046)	-0.020 (0.045)	0.012 (0.056)	0.037 (0.047)	0.025 (0.043)		
p-value	0.066	0.148	0.210	0.038	0.061	0.069	0.180	0.326	0.239	0.226	0.322	0.232		
Outcome Mean	0.309	0.309	0.302	0.648	0.644	0.653	0.313	0.311	0.298	0.647	0.643	0.657		
Observations Districts	$625 \\ 105$	$827 \\ 139$	$1,004 \\ 169$	$625 \\ 105$	$827 \\ 139$	$1,004 \\ 169$	$625 \\ 105$	$827 \\ 139$	$1,004 \\ 169$	$625 \\ 105$	$827 \\ 139$	$1,004 \\ 169$		
District FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Year FE	No	No	No	No	No	No	No	No	No	No	No	No		
State-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		

Notes: Outcome variables are the indicators for political candidates from marginalized groups or general castes (Columns 1 to 6) and for winning candidates from marginalized groups or general castes (Columns 7 to 12) for each election. ICE is standardized to mean 0 and standard deviation 1. We run the regression specification with a different set of bandwidth choice: 200 (Columns 1, 4, 7, and 10), 250 (Columns 2, 5, 8, and 11), and 300 (Columns 3, 6, 9, and 12). All columns show the regression estimates with state-year fixed effects. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend, in all specifications. The analysis excludes constituencies reserved for SC and ST. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.

Table D27. Shares of Candidates across Different Bandwidths

Candidates Sample:			All Car		Winning Candidates							
Social Group:	Marginalized			General			Marginalized			General		
Bandwidth:	200	250	300	200	250	300	200	250	300	200	250	300
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
$ICE \times Post$	0.016 (0.017)	0.008 (0.013)	-0.002 (0.013)	-0.018 (0.019)	-0.013 (0.016)	-0.004 (0.015)	0.069 (0.051)	0.074 (0.040)	$0.050 \\ (0.039)$	-0.050 (0.049)	-0.060 (0.042)	-0.052 (0.039)
ICE × Post × Backward Dist.	0.021 (0.017)	0.012 (0.015)	0.019 (0.014)	-0.013 (0.019)	-0.005 (0.017)	-0.010 (0.016)	-0.020 (0.055)	-0.048 (0.044)	-0.019 (0.044)	$0.006 \\ (0.052)$	0.036 (0.044)	0.022 (0.041)
p-value Outcome Mean	$0.002 \\ 0.322$	$0.074 \\ 0.319$	$0.143 \\ 0.313$	$0.038 \\ 0.636$	$0.175 \\ 0.636$	$0.275 \\ 0.643$	$0.220 \\ 0.312$	$0.479 \\ 0.313$	$0.375 \\ 0.300$	$0.289 \\ 0.647$	$0.497 \\ 0.641$	$0.390 \\ 0.656$
Observations	625	827	1,004	625	827	1,004	625	827	1,004	625	827	1,004
Districts District FE	105 Yes	139 Yes	169 Yes	105 Yes	139 Yes	169 Yes	105 Yes	139 Yes	169 Yes	105 Yes	139 Yes	169 Yes
Year FE State-Year FE	$ \begin{array}{c} \text{No} \\ \text{Yes} \end{array} $	No Yes	$ \begin{array}{c} \text{No} \\ \text{Yes} \end{array} $	$ m No \ Yes$	$egin{array}{l} ext{No} \ ext{Yes} \end{array}$	$ m No \ Yes$	No Yes	No Yes	$ \begin{array}{c} \text{No} \\ \text{Yes} \end{array} $	$ m No \ Yes$	$ m No \ Yes$	$ \text{No} \\ \text{Yes} $
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Outcome variables are the indicators for political candidates from marginalized groups or general castes (Columns 1 to 6) and for winning candidates from marginalized groups or general castes (Columns 7 to 12) for each election. ICE is standardized to mean 0 and standard deviation 1. We run the regression specification with a different set of bandwidth choice: 200 (Columns 1, 4, 7, and 10), 250 (Columns 2, 5, 8, and 11), and 300 (Columns 3, 6, 9, and 12). All columns show the regression estimates with state-year fixed effects. Controls are the district-level 1990 total employment and the district-level 1990 manufacturing sector employment share, both of which are interacted with the linear time trend, in all specifications. The analysis excludes constituencies reserved for SC and ST. Standard errors are clustered by districts. *** = 1% significance, ** = 5%, * = 10%.