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Economics of Majoritarian Identity Politics

Comments

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Formerly titled "Identity Politics, Clientelism, and Public Goods Provision: Theory and Evidence".

Economics of Majoritarian Identity Politics*

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Abstract

Majoritarian identity politics has become salient in representative democracies. Why do parties engage in identity politics and what are its consequences? We present a model of electoral competition in which parties capture voter groups based on their identity, and compete over an economic policy platform for the support of non-partisan voters. In addition, the party that caters to majoritarian interests makes a costly investment in polarizing identity. The investment provides subsequent payoffs to voters who have a preference for identity. When voter preferences over policy platforms are idiosyncratic in nature, greater investment in polarizing identity (i) increases *both* parties' rents from office; and (ii) marginalizes minority voter interests. Further, the majoritarian party substitutes away from economic policy platforms. This enhances its overall payoffs in equilibrium and decreases that of the non-majoritarian party. We discuss the implications in context of episodes of majoritarianism in India, Turkey, Brazil, and the United States.

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1 Introduction

Identity politics has recently gained traction in democracies worldwide (Besley and Persson, 2019). The election of Donald J. Trump in United States and the Brexit referendum are the most striking examples. In Europe, the success of the German AfD party or the Vox in Spain was built on appealing to the voters' preference for identity (e.g., anti-immigration sentiments). Among large non-Western democracies, the electoral success of Modi in India, Erdogan in Turkey, and Bolsonaro in Brazil further suggests that the growth of parties or leaders rooted in majoritarian identity politics is increasingly common. But what drives this form of identity politics and what are the electoral consequences remain an open question. Our paper proposes a strategic rationale for a majoritarian party (leader) to engage in identity politics. The analysis does not attribute any *a priori* taste for majoritarianism to the parties. Instead, our main innovation is to introduce investment in identity politics as a strategic choice in a political competition framework.

The rise of Narendra Modi in India succinctly illustrates the main idea of the paper. In 2014, as the leader of the center-right Bharatiya Janata Party (BJP), Modi fought the national elections on a campaign pledge of "Collective and Inclusive Development" which suggested a focus on economic development and unifying values. However, the country's economic performance faltered during the course of Modi's tenure.¹ The BJP eschewed economic agenda in the run up to 2019 elections, and embraced identity dog whistles that appealed to majoritarian instincts.² The BJP's campaign slogan for 2019 suitably transformed to a call for "Determined and Empowered India". The party manifesto focused on issues which some viewed as a veiled attack on the rights of Muslim minorities.³

The previous example suggests that parties can polarize identity to substitute for economic policies. This is because providing public goods or implementing economic reforms is costly. Moreover, voters have idiosyncratic preferences for reforms since their distributional effects are uncertain (Alesina et al., 2020). If a majoritarian party can credibly commit to identity politics and polarize society along partisan lines, it can *substitute* away from costly public policy implementation. Investing in identity dog whistles or rhetoric can vitiate society to the extent that minorities incur the cost while sections of the majority identity gain from them. This kind of *identity-policy* substitution can significantly increase political rents from office to the majoritarian party. Further, higher investments in identity politics can isolate minorities and result in a "politics of fear" (Padró i Miquel, 2007), wherein minorities fear the party that patronizes the majority identity voters. This can further reduce the bargaining power of groups that vote exclusively for a political party (Frymer, 2010).⁴

¹For example, the GDP growth rate of India dropped steeply from a high of 8.3% in 2016-17 to 4.2% by 2019-20, and the unemployment rate among the youth increased steadily to a high of 23.3% in 2019.

²"Can the World's Largest Democracy Endure Another Five Years of a Modi Government?", *TIME*, 9 May, 2019.

³See <https://www.bbc.com/news/world-asia-india-50670393>.

⁴Frymer (2010) describes this phenomena as "captured electorates".

We explain these tradeoffs through a micro-founded model of electoral competition between two office motivated parties, with subsequent redistribution of resources that is driven by identity frictions among the electorate. The electorate in our setup is sorted according to their social identity (“majority” versus “minority” identity) and party affiliation (“partisan” versus “non-partisan”). A section of majority identity voters and all of the minority identity voters vote exclusively for either of the two parties and receive clientelistic benefits in return. The remaining voters among the majority social identity are non-partisan since they vote according to parties’ economic platforms. Among non-partisans, some voters are however also receptive to majoritarian issues.

The main innovation of the setup is that one party credibly commits to polarizing the electorate along identity lines. This results in redistribution of resources away from the minorities to a section of the majority identity voters following the elections. This redistribution can be either physical appropriation of resources through organized violence — which is a common phenomenon in countries with weak institutions — or psychological costs imposed through discriminatory policies. The critical element is that investment in identity politics generates an asymmetry in redistribution payoffs which further determines the *i)* economic and clientelistic platforms of parties; *ii)* voting decisions of non-partisans; and *iii)* ex-post redistribution outcomes.

We first characterize the expected political rents that accrue to both parties. The rents to parties increase in the asymmetry in redistribution payoffs. Specifically, the majoritarian party’s investment in identity polarization increases its bargaining power with respect to the partisan supporters belonging to the majority identity. This is because the supporters expect a higher redistribution payoff if their favored party wins, which reduces their bargaining power and results in additional *identity rents* to the party. A higher asymmetry in redistribution payoffs also reduces the bargaining power of the minority identity group, which generates a form of *protection rents* for the party they support. This is because minorities fear having the majoritarian party in power and accept smaller clientelistic transfers in return. Our framework highlights two complementary channels through which identity politics marginalizes minorities: investments in identity increases the size of redistribution, and weakens their bargaining power which in turn decreases the extent of clientelism in equilibrium.

The equilibrium economic platforms of parties react differently to the asymmetry in redistribution payoffs. Interestingly, the majoritarian party moves away from economic policy platforms when its investment in identity politics increases. This is because identity based polarization provides redistribution payoffs that induces both partisans and non-partisans among the majority identity. Further, investment in identity politics increases the overall benefits from office for the majoritarian party, since both clientelism *and* economic platform decreases with the increase in asymmetry in redistribution payoffs. The expected payoff to the rival party however decreases from higher investment in identity politics. This is driven by the party’s

narrowing win prospects and its promise to provide greater economic policy platforms for electoral viability.

Since the majoritarian party increases its expected payoffs from office by investing in identity, equilibrium investments arises as an endogenous strategic choice during the electoral process. Therefore, our setup does not presuppose that parties have a taste for majoritarianism. The results instead highlight an electoral channel and a purely utilitarian rationale for investing in identity politics.

To understand what determines the extent of asymmetry in redistribution payoffs between parties, we study the majoritarian party's investment in identity politics. We find that investment declines in the existing levels of identity polarization in the society. In other words, when the existing level of polarization in the society is low, the majoritarian party invests more in identity politics. When majoritarian tendencies in the society are already high, the majoritarian party has a lower incentive to invest in identity politics. Our results provide a mechanism for why parties (or leaders) may refrain from investing in polarizing identity. Even though the underlying preferences are unchanged, an increase in polarization in the society fundamentally alters the political incentives for majoritarian parties. Consequently, they invest less in identity politics and focus instead on their economic platforms.

We finally analyze how changes in the underlying political primitives affect investment in identity politics. We show that a decline in the size of minority group increases investment by the majoritarian party. A relatively smaller minority group among the population, *ceteris paribus*, reduces the redistribution payoffs to the partisan majority group in the population. To compensate them, the majoritarian party raises investment in equilibrium. Similarly, an increase in the effectiveness of identity politics — for instance, due to institutional biases like functioning of the police force or the legal system in countries — results in higher investment. Investment in identity politics also increases when the salience of identity among non-partisans becomes more pronounced. Together, these results provide a novel channel by which identity-policy substitution ensues due to changes in relative group sizes, institutional characteristics, and diffusion of majoritarian preferences among the society.

Our work is connected to a growing literature on the causes and consequences of identity politics ([Besley and Persson, 2019](#); [Karakas and Mitra, 2021](#)). [Besley and Persson \(2019\)](#) consider a model of political competition and identity politics, in which salience of identity preferences among the population evolves dynamically. In their framework, growing popular support for identity related issues results in the formation of parties or movements around such interests, which further enhances their political salience. [Karakas and Mitra \(2021\)](#) study electoral competition in which voters share a cultural identity with a candidate, and over-reward or under-punish them for their policy choices. They capture the phenomena of cross voting in which voters vote against their ideological interests due to their strong identity affiliation. We instead focus on a static model of elections in which the majoritarian party invests in identity

politics, given an exogenous preference of voters for identity. We focus on the how investment in identity politics affects the economic policy and clientelism of parties.

The reduced clientelism due to investments in identity politics in our framework is similar in flavor to the ‘fear politics’ result in both [Ellman and Wantchekon \(2000\)](#) and [Padró i Miquel \(2007\)](#). In [Ellman and Wantchekon \(2000\)](#), parties are unable to commit to platforms and a strong party is able to instigate political unrest which imposes costs on the median voter when the other weak party wins. This creates fear among the voters and the weaker party always chooses a centrist platform that better caters to the median voter’s interests. [Padró i Miquel \(2007\)](#) alternatively studies autocratic regimes in which the fear of the other group’s autocrat pushes supporters of an autocrat to accept less and enables autocrats to extract substantial rents. In contrast, we analyze electoral competition with commitment by parties in which investment in identity politics is an endogenous choice of only one party. Further, redistribution between identity groups differs according to the party in power. This asymmetry in ex-post payoff allows one party to substitute for policy and decreases overall clientelism towards the support groups of parties.

[Desai \(2020\)](#) and [Ghosh et al. \(2019\)](#) both study how ethnic (or class) differences in a population can affect economic policies of parties. Specifically, [Desai \(2020\)](#) investigates how economic development in developing democracies and finds that economic polarization and ethnic mobilization can move in opposite directions. [Ghosh et al. \(2019\)](#) instead focus on ethnic identities and two types of public goods spending, one of which is ethnically targeted which imposes a cost on the minorities. They show that higher ethnic dominance increases ethnic public goods provision while in the case of lower ethnic dominance there is substitution towards the general public good. In contrast, party competition in our paper gives rise to subtler incentives: a higher majority identity group advantage increases identity politics because the share of spoils from redistribution is split by a bigger group. This further results in greater subsequent redistribution of resources from minority group to the majoritarians. This leads to greater divergence in economic policy platforms between the parties.

Our work is also related to the literature on issue salience in electoral competition. [Amorós and Puy \(2013\)](#) and [Dragu and Fan \(2016\)](#) study convergence (divergence) on issues when electoral advantages of parties over issues varies. [Dickson and Scheve \(2006\)](#) argues that group-based messaging in campaigns depends on both relative sizes of social groups and the extent to which voters care about group identity. In contrast, we focus on multi-issue elections when there are partisan groups that *only* care about identity. Therefore, when the relative size of majority (identity) group increases, investment in identity politics increases; similarly, when the salience of identity among non-partisans increases it also results in increased investment in equilibrium. Both these features result in divergence on economic policies between parties.

Empirical evidence points to different inefficiencies generated by identity-based voting. For example, [Acharya et al. \(2015\)](#) and [Banerjee and Pande \(2007\)](#) show that any identity bias

among voters lowers public goods provision and quality of elected politicians in the context of Indian elections. [Tavits and Potter \(2015\)](#) find that economic inequality elicits different responses from parties in issue based electoral competition. Specifically, they find evidence for the conjecture that inequality pushes leftist parties to emphasize on redistributive issues while the right parties tend to appeal to non-economic “values-based” issues. Interestingly, our main results exhibit a similar feature. However, the underlying mechanism is very different – salience of identity pushes a majoritarian party to invest in identity politics and de-emphasize economic policy while the other party reacts to increased identity politics by promising more on the economic policy front.

The relationship between economic policy and identity politics is related closely to the literature on populism. Empirical literature so far has attributed the causes of populism to economic uncertainty ([Algan et al., 2017](#); [Guriev, 2018](#); [Guiso et al., 2020](#)) and cultural factors ([Inglehart and Norris, 2016](#)).⁵ The kind of majoritarian identity politics we model in this paper combines preferences over an economic policy with underlying redistribution incentives among social identities in the population.

2 Model

Parties, Partisan groups, and identities. Two parties $\{A, B\}$ compete to win an election by seeking support from a population of voters. Voters are divided into three groups indexed by G_i , where $i \in \{1, 2, 3\}$. Citizens belonging to the group G_1 are part of the minority identity while voters in groups $\{G_2, G_3\}$ belong to the majority identity. We assume that parties have cultivated exogenous group of voters that support them exclusively (henceforth partisan group). Party A 's partisan group is the minority identity G_1 and party B 's is the majority identity G_2 . Voters belonging to G_3 are ex-ante non-partisan (henceforth non-partisans). They are not affiliated to any party which allows them to vote for either of the two parties in the electoral process. The population share of each group is assumed to be exogenous and given by n_i . We make the following assumptions on group sizes: *i*) $n_i < \frac{1}{2}$ for groups (G_1, G_2) ; *ii*) $n_3 > \{n_1, n_2\}$. This implies that parties must rely on the support of the non-partisan voters to win elections.

Party platforms. Parties get a payoff T from winning office which they share with their respective partisan group. They do so by bargaining on the size of clientelistic transfer. The transfers to G_1 and G_2 are denoted by T_1 and T_2 respectively. These transfers, for example, could be awarding of government contracts, providing subsidies, and other forms of patronage to partisan groups in return for their electoral support. The rents from office to parties A and B is therefore $(T - T_1)$ and $(T - T_2)$ respectively. The parties compete for the non-partisan voters by announcing a policy T_3^j , where $j \in \{A, B\}$. That is, we assume that non-partisan voters care about policies that are devoid of any form of patronage or quid-pro-quo. T_3^j represents the

⁵[Morelli et al. \(2021\)](#) and [Prato and Wolton \(2018\)](#) have explored the informational channels to study populism.

economic platform of party j . This could be a reform related proposal, an economic liberalization policy, or government spending platform on infrastructure and related public goods.

The main innovation in our setup is that parties can engage in identity politics through campaign rhetoric and promises, or other forms of dog whistles. This makes majoritarian identity salient among a subsection of non-partisan voters after elections. We focus on one-sided endogenous investment in identity politics. Specifically, when party A wins there is an *exogenous* probability θ_a of the majority identity becoming salient among the non-partisans. In contrast, party B actively *invests* in triggering the majority identity with probability $\theta_b \in [0, 1]$. This probability can be interpreted as triggering of identity salience among the population that results in a higher incidence of violence against the minorities (e.g., Müller and Schwarz (2019); Romarri (2019)).

The investment technology is however costly in nature (e.g, reputational costs of engaging in identity politics). The ex-ante cost of triggering identity with probability θ_b is $c(\theta_b)$. The cost and marginal cost functions are smooth and convex, and $c(\cdot)$ satisfies Inada conditions: $c'(0) = 0$ and $c'(\theta) \rightarrow \infty$ as $\theta \rightarrow 1$. In the case that A wins, θ_a could be interpreted as the natural level of polarization in the population that could be a consequence of historical legacies or structural fissures in society. Alternatively, θ_a can be the level of polarization achieved when party B is in opposition. The investment θ_b is a strategic choice that is endogenously determined by party B . Therefore, contingent on the winning party, an environment of anti-minority sentiment is triggered among a proportion of the ex-ante non-partisans. Since party B relies on the majority identity partisan group, it is intuitive to study their incentives to trigger majoritarianism among the population. By invoking identity, party B increases the expected payoff to both G_2 and a proportion of G_3 voters. Henceforth, we use $\Delta\theta = (\theta_b - \theta_a)$ as the *identity polarization* that represents the difference in trigger probabilities between the two parties.

Identity politics results in redistribution from minorities to a fraction of the majority identity voters. Non-partisan voters in G_3 are assigned a type prior to voting. With probability λ , a non-partisan voter is an *ex-post majoritarian* which implies that they partake in redistribution. With probability $(1 - \lambda)$, a G_3 voter is a *non-majoritarian* type and does not benefit from redistribution. Each non-partisan voter learns their private type but not the type of other non-partisans. Therefore, proportion λ of G_3 voters' preferences is influenced by identity politics. We assume λ is chosen from a distribution F which has support $[\underline{\lambda}, \bar{\lambda}]$, and admits a continuous, strictly positive, and continuously differentiable density f , where $0 < \underline{\lambda}, \bar{\lambda} < 1$.

The redistribution occurs in the form of appropriation of resources through looting, confiscation of property and forcible evictions; during incidents of organized violence.⁶ Alternatively,

⁶Hindu-Muslim riots have occurred frequently in post-independence India. Muslim minorities have suffered disproportionate economic losses due to looting and forcible evictions that occur during these episodes (Mitra and Ray, 2014; Field et al., 2008). In Rwanda, the genocide in 1994 provided an opportunity to confiscate land properties (André and Platteau, 1998). Even Western democracies such as the United States and the United Kingdom in the early 20th century experienced race riots to dissuade economic competition from black minorities. For instance, see Chicago race riots and UK race riots.

redistribution could also be a non-pecuniary payoff that reinforces majoritarian identity. For example, ‘Build a wall’ campaign of Donald Trump in 2016, or ‘Citizenship Amendment Act’ of Modi’s BJP in 2019 imposed a psychological cost on minority voters and provided an identity reinforcing payoff to the majoritarian type voters.⁷ The variable δ captures the size of resources that are redistributed away from n_1 minority voters towards $(n_2 + \lambda n_3)$ share of majority voters. We assume $\delta \in [\underline{\delta}, \bar{\delta}]$ is drawn from twice differentiable continuous distribution H with strictly positive density function h and continuous support $[\underline{\delta}, \bar{\delta}]$, where $\underline{\delta}, \bar{\delta} < 1$. The unconditional expectation of the two random variables is $\mathbb{E}[\lambda] = \lambda_e$ and $\mathbb{E}[\delta] = \delta_e$.

Both the distributions of λ and δ are common knowledge. However, they are uncertain when elections take place. From the perspective of the non-partisan voters, this implies the decision to vote for either party is contingent on the expected payoffs they can accrue, which in turn depends on their type. A λ type voter cares about expected redistribution payoff and platform T_3^i , and $(1 - \lambda)$ type votes based only on the latter. The parameter λ captures *taste for majoritarianism* among non-partisan voters in the electorate. Further, the extent of redistribution when identity is triggered is also uncertain. This kind of uncertainty captures the efficiency of local institutions like the police force, courts, and other civic organizations in containing redistribution of resources away from minorities.

Payoffs. The parties, conditional on winning office, receive a payoff equal to the residual rents from bargaining, and provisioning a costly economic platform to the non-partisan group.

$$U_A = (T - T_1 - T_3^A) \quad U_B = (T - T_2 - T_3^B)$$

The payoff to voters depends on both the platforms (T_3^A, T_3^B) and the post-electoral redistribution. Without loss of generality, the aggregate income of the majority identity groups (G_2, G_3) is normalized to zero and that of the minority group is assumed to be $Y_1 = 1$, where $y_1 = \frac{1}{n_1}$ is the per capita income of a minority voter.⁸ Given that payoffs of G_1 and G_2 voters is homogeneous, we denote v_i^j as the realized payoff to G_i voter, $i \in \{1, 2\}$, under party j . Correspondingly, we denote V_i^j as the ex-ante expectation of v_i^j .

Payoff to G_1 voter under both parties:

$$v_1^A = \frac{1}{n_1} [1 + T_1 - \delta\theta_a] \quad v_1^B = \frac{1}{n_1} [1 - \delta\theta_b] \quad (1)$$

Payoff to G_2 voter under both parties:

$$v_2^A = \frac{\delta\theta_a}{n_2 + \lambda n_3} \quad v_2^B = \frac{T_2}{n_2} + \frac{\delta\theta_b}{n_2 + \lambda n_3} \quad (2)$$

⁷The Citizenship Amendment Act fast tracked immigration status of non-Muslim immigrants that arrived in India before 2014. The move was widely denounced for undermining India’s secular constitution.

⁸We don’t consider majority group income since redistribution is always one sided. Further, we abstract away from the distributional aspects of redistribution and instead focus on uniform redistribution.

Since the non-partisan voter is of two types, we denote their respective payoffs as $v_{k,\lambda}^j$ and $v_{k,1-\lambda}^j$, where $j \in \{A, B\}$.

$$v_{k,\lambda}^A = \frac{T_3^A}{n_3} + \frac{\delta\theta_a}{n_2 + \lambda n_3} \quad v_{k,1-\lambda}^A = \frac{T_3^A}{n_3} \quad (3)$$

$$v_{k,\lambda}^B = \frac{T_3^B}{n_3} + \frac{\delta\theta_b}{n_2 + \lambda n_3} + \mu + \epsilon_i \quad v_{k,1-\lambda}^B = \frac{T_3^B}{n_3} + \mu + \epsilon_i \quad (4)$$

As before, $V_{k,\lambda}^j$ and $V_{k,1-\lambda}^j$ denote the ex-ante expected payoff to a non-partisan voter. Notice that the realized payoff to a λ type voter depends on both the economic policy (e.g., public goods spending) and the redistribution from identity investments. In contrast, the $(1 - \lambda)$ type voter is only concerned with economic policy and does not share a preference for identity politics. The preferences of non-partisans are subject to further random shocks (μ, ϵ_i) . ϵ_i is the idiosyncratic individual ‘policy shock’ to voter i and is uniformly distributed on $[-\frac{1}{2\psi}, \frac{1}{2\psi}]$. The parameter ψ captures the relative volatility of the proposed economic platforms to the voter. For example, some voters may evaluate the relative benefits of the platform T_3^B favorably, while some others may view it unfavorably. It is then natural to expect that the policy platforms vary in their purported benefits to voters. μ is the aggregate preference shock that captures the changes in fortune of a party during election campaigns (Bernhardt et al., 2020). The interpretation is that a positive aggregate shock implies a shift (e.g., in valence) which is favorable to party B , and vice-versa for a negative shock. We assume that μ is uniformly distributed on $[-\frac{1}{2\sigma}, \frac{1}{2\sigma}]$. The distributions of both the random shocks are assumed to be common knowledge.

Assumption 1. $\frac{n_2}{n_3} < \frac{\lambda}{3}$

Assumption 2. $n_1 > \delta_e$

Assumption 3. $\frac{\sigma}{n_3} < \frac{\psi}{(1+\psi)}$

The assumptions imply that (i) size of the partisan majority group is sufficiently small compared to the non-partisan voters; (ii) size of the partisan minority group is sufficiently large compared to the expected size of redistribution; and (iii) the aggregate preference shock is bounded compared to the individual idiosyncratic policy shocks. Together, these assumptions guarantee interior solutions to the equilibrium of the game.

Timing. The electoral competition game with ex-post identity trigger proceeds as follows:

1. Party B invests in identity trigger $\theta_b \in [0, 1]$ at cost $c(\theta_b)$.
2. Parties simultaneously announce the economic policy (T_3^A, T_3^B) and transfers (T_1, T_2) .
3. λ is chosen according to F and non-partisan voters are independently assigned the majoritarian type with probability λ . Simultaneously (μ, ϵ_i) are realized and observed by the voters.

4. G_3 group voters choose between A and B ; the winning party w implements its platform.
5. After the elections, δ is realized according to distribution H
6. Resources are redistributed according to identity trigger $\theta_w \in \{\theta_a, \theta_b\}$ and realized (λ, δ) .
7. Payoffs are realized.

Discussion of the setup

The setup of the model relies on *three* premises. *First*, there are two exogenous partisan groups that implicitly bargain with parties over clientelistic transfers. *Second*, there is one sided investment in identity politics that results in subsequent redistribution — economic or otherwise — from minorities to majoritarian voters. *Third*, there is uncertainty about relative popularity of parties and non-partisan voter’s preferences for economic platforms.

Political scientist Paul Frymer (2010) has comprehensively examined the phenomena of partisan voting in United States politics. In United States, since the Civil Rights Act of 1964, African-American voters have overwhelmingly sided with the Democratic party. The conservative *Christian Right*, consisting of religious evangelical Protestants and Roman Catholics, decisively support the Republican party in elections. Analogously in the Indian political landscape, Muslims have traditionally supported the center-left Congress party (Ticku, 2015). The upper-caste Hindus have on the other hand sided with the RSS ideology (Jaffrelot, 1999), which is aligned with the right-wing Bharatiya Janta Party (BJP).

The bargaining process captures *cultivated clientelism* by the parties. Clientelistic transfers to the partisan groups could take the form of direct discriminatory spending (Bardhan and Mookherjee, 2012), public sector jobs (Calvo and Murillo, 2004), or government contracts (Lehne et al., 2018) that in turn directly benefit members of the respective groups. Additionally the transfers could be identity reinforcing spending (e.g., building religious institutions, promoting cultural practices), or they could provide direct pecuniary benefits in the form of government jobs and other contracts (see, e.g., Lehne et al. (2018)).

Our model focuses on one-sided identity investments. Only party B exploits identity fissures in society and *actively* engages in identity politics. This feature of active investments in identity politics is in line with the recent empirical evidence on right-wing hate crimes in Italian municipalities (Romarri, 2019) and US presidential campaign (Müller and Schwarz, 2019). However when the other party wins there is an exogenous probability of identity politics playing out. This could be a historical legacy effect (e.g., Acharya et al. (2016) and Jha (2013)). Alternatively, θ_a might be interpreted as the probability of identity politics when B is the opposition party. That is, it represents the magnitude of pre-existing societal differences that may trigger conflict and redistribution of resources between groups despite B losing the elections.⁹

⁹For example, Wilkinson (2006) observes that riots in India occur even under center-left regimes except with

We model candidates' uncertainty about voter's preferences in a manner similar to [Bernhardt et al. \(2007\)](#) and [Groseclose \(2001\)](#). The aggregate shock could be interpreted in two possible ways. They could be a valence shock in favor of B — and in favor of A when the shock is negative — during the course of a political campaign ([Bernhardt et al., 2020](#)), or a consequence of negative advertising during electoral campaigns ([Polborn and David, 2004](#)).

The political process we describe consists of two phases: *i*) pre-election campaign and voting phase, and *ii*) post-election identity trigger and redistribution phase. This captures the idea that in election campaigns parties often use identity (e.g., religious, or racial) dog whistles to garner support. Further, such majoritarian political rhetoric precedes formal announcement of platforms which are carried out via official party manifestos. Non-partisan voters discover their true preference for identity politics by attending election rallies and through interacting on social media platforms like Facebook or Twitter (see, e.g. [Gerbaudo et al., 2019](#)). In the post-election phase, minorities bear a costly redistribution which is also influenced by the political climate and local institutional arrangements.¹⁰

3 Equilibrium

The game can be divided into three sequential episodes: (1) investment by party B ; (2) (simultaneous) economic platform selection by parties and bargaining between parties and groups; (3) voting by G_3 voters. We solve the game backwards.

Voting

At the time of announcing platforms (T_3^A, T_3^B) the non-partisan voter is of two types: λ or $(1 - \lambda)$. Let s_A^λ and $s_A^{1-\lambda}$ be the share of λ and $(1 - \lambda)$ type voters voting for party A . It follows that $s_B^\lambda = 1 - s_A^\lambda$ and $s_B^{1-\lambda} = 1 - s_A^{1-\lambda}$. The $(1 - \lambda)$ type votes for A if,

$$\mu + \epsilon_i \leq \frac{1}{n_3} (T_3^A - T_3^B) \tag{5}$$

The probability that a $(1 - \lambda)$ type votes for party A is,

$$\Pr \left(\epsilon_i \leq \left[\frac{1}{n_3} (T_3^A - T_3^B) - \mu \right] \right)$$

lesser frequency compared to when the center-right party is in power.

¹⁰In United States, for example, the costs are non-pecuniary. Republican party is more likely to pursue a “law and order first” approach when in power, which leads to higher incidences of police brutality against minorities (see “Is Trump’s Call For ‘Law And Order’ A Coded Racial Message?”, *NPR*, 28 July, 2016).

The expected share of $(1 - \lambda)$ voters for party A is,

$$s_A^{1-\lambda} = n_3 \cdot \int_{\underline{\lambda}}^{\bar{\lambda}} (1 - \lambda) \cdot \Pr \left(\epsilon_i \leq \left[\frac{1}{n_3} (T_3^A - T_3^B) - \mu \right] \right) f(\lambda) d\lambda$$

$$s_A^{1-\lambda} = n_3 (1 - \lambda_e) \cdot \left[\psi \cdot \left(\frac{1}{n_3} (T_3^A - T_3^B) - \mu \right) + \frac{1}{2} \right] \quad (6)$$

Similarly, the λ type non-partisan voter chooses A if,

$$\mu + \epsilon_i \leq \frac{1}{n_3} (T_3^A - T_3^B) + (V_3^A - V_3^B) \quad (7)$$

Notice that (V_3^A, V_3^B) are both expectations of post-election redistribution payoff under party A and B respectively. This captures the idea that some of the non-partisan voters realize their preference for identity payoffs at the end of the campaigning process, but do not precisely observe the extent of redistribution payoffs under either parties. The probability that a λ type voter votes for party A is therefore,

$$\Pr \left(\epsilon_i \leq \left[\frac{1}{n_3} (T_3^A - T_3^B) + (V_3^A - V_3^B) - \mu \right] \right)$$

The expected share of λ voters is,

$$s_A^\lambda = n_3 \cdot \mathbb{E}_\lambda \left[\lambda \Pr \left(\epsilon_i \leq \left[\frac{1}{n_3} (T_3^A - T_3^B) + (V_3^A - V_3^B) - \mu \right] \right) \right]$$

The difference in expected redistribution payoff is,

$$(V_3^A - V_3^B) = -\mathbb{E}_{\lambda, \delta} \left[\frac{\Delta \theta \delta}{(n_2 + \lambda n_3)} \right]$$

By law of iterated expectations,

$$\mathbb{E}_\lambda \left[\lambda \cdot (V_3^A - V_3^B) \right] = -\mathbb{E}_\lambda \left[\lambda \cdot \mathbb{E}_{\lambda, \delta} \left[\frac{\Delta \theta \delta}{(n_2 + \lambda n_3)} \right] \right] = -\mathbb{E}_{\lambda, \delta} \left[\frac{\Delta \theta \delta \lambda}{(n_2 + \lambda n_3)} \right]$$

We define $\chi'(\underline{\lambda}, \bar{\lambda})$ and $\chi(\underline{\lambda}, \bar{\lambda})$ as the expected share of G_2 and G_3 voters who are of majoritarian type. Specifically,

$$\chi'(\underline{\lambda}, \bar{\lambda}) \equiv \chi' = \int_{\underline{\lambda}}^{\bar{\lambda}} \left[\frac{n_2}{(n_2 + \lambda n_3)} \right] f(\lambda) d\lambda \quad \chi(\underline{\lambda}, \bar{\lambda}) \equiv \chi = \int_{\underline{\lambda}}^{\bar{\lambda}} \left[\frac{\lambda n_3}{(n_2 + \lambda n_3)} \right] f(\lambda) d\lambda$$

$$s_A^\lambda = n_3 \lambda_e \cdot \left[\psi \cdot \left(\frac{1}{n_3} (T_3^A - T_3^B) - \mu \right) + \frac{1}{2} \right] - \psi \Delta \theta \delta_e \cdot \chi \quad (8)$$

Bargaining Outcomes

A and G_1 : The bargaining problem follows from Nash's axiomatic theory. Specifically, the outcome of the bargaining process is equivalent to maximizing the Nash product. For the minority identity group G_1 , the payoff from A and B holding office is given by [Equation 1](#). As before, let V_1^j represent the ex-ante expectation with respect to parties $j \in \{A, B\}$. For A the bargaining surplus is merely the political rents from holding office, $(T - T_1)$.

$$\max_{T_1} n_1 [V_1^A - V_1^B] \cdot [T - T_1] \quad \text{subject to } V_1^A \geq V_1^B, \quad T_1 \leq T$$

Where, from [Equation 1](#),

$$n_1 \cdot [V_1^A - V_1^B] = T_1 + \Delta \theta \delta_e$$

Substituting this and solving for T_1 gives,

$$T_1^* = \frac{T}{2} - \frac{\Delta \theta \delta_e}{2} \quad (9)$$

B and G_2 : For the G_2 group the payoff from either party holding office is given by expectation of [Equation 2](#). For party B , the surplus from holding office is $(T - T_2)$. The bargaining problem is therefore,

$$\max_{T_2} n_2 [V_2^B - V_2^A] \cdot [T - T_2] \quad \text{subject to } V_2^B \geq V_2^A, \quad T_2 \leq T$$

From [Equation 2](#),

$$n_2 [V_2^B - V_2^A] = T_2 + \frac{n_2}{(n_2 + \lambda n_3)} \cdot \Delta \theta \delta_e$$

Taking FOC with respect to T_2 and solving,

$$T_2^* = \frac{T}{2} - \frac{n_2}{(n_2 + \lambda n_3)} \cdot \frac{\Delta \theta \delta_e}{2} \quad (10)$$

Economic policy

Since parties have the support of groups that are less than half the population, they seek the support from the non-partisan voters. Parties A and B need a minimum vote share of $(0.5 - n_1)$ and $(0.5 - n_2)$ respectively to win the elections. They compete for the support of non-partisans by promising platforms (T_3^A, T_3^B) . Let p_A and p_B be the win probability of either

party respectively. We define the *political rents* to the parties as,

$$R_A = T - T_1 \quad R_B = T - T_2$$

The platform choice of the parties targeting non-partisan voters solves,

$$\max_{T_3^A} \Pi_A = p_A \cdot [R_A - T_3^A] \quad \text{subject to } R_A \geq T_3^A, \quad T_3^A \geq 0$$

$$\max_{T_3^B} \Pi_B = p_B \cdot [R_B - T_3^B] \quad \text{subject to } R_B \geq T_3^B, \quad T_3^B \geq 0$$

Proposition 1. *The unique equilibrium platforms, (T_3^{A*}, T_3^{B*}) is given by,*

$$T_3^{A*} = \frac{T}{2} + \frac{\Delta\theta\delta_e}{2} \cdot \left(1 + \frac{\chi}{3}\right) - \frac{1}{6\psi\sigma} (3\psi n_3 + \sigma(n_1 - n_2)) \quad (11)$$

$$T_3^{B*} = \frac{T}{2} - \frac{\Delta\theta\delta_e}{2} \cdot \left(\frac{\chi}{3} - \chi'\right) - \frac{1}{6\psi\sigma} (3\psi n_3 - \sigma(n_1 - n_2)) \quad (12)$$

The equilibrium platforms depend crucially on the size of the partisan groups (n_1, n_2) , and identity polarization $\Delta\theta$. As the *other* party's partisan group size increases, each party promises a higher T_3 . For example, from the perspective of party *A*, if the partisan group G_2 increases in size the residual voters required by party *B* to win a majority, given by $(0.5 - n_2)$, is smaller. This increases T_3^A in equilibrium since, *ceteris paribus*, the win probability of party *B* is increasing in the size of its vote bank. To balance this, party *A* promises a greater T_3^A .

Investment in Identity Politics

The level of investment in identity politics is critical in determining the subsequent outcomes of parties, vote banks, and non-partisan voters alike. When deciding how much to invest in identity politics, party *B* has an expected utility from the continuation game given by $W_B = \mathbb{E}_{\lambda, \delta}[U_B]$. We express both win probability (p_B) and net benefits from office (W_B) as a function of θ_b , in order to simplify the investment problem of *B*. The investment decision can be stated as:

$$\max_{\theta_b} p_B(\theta_b) \cdot W_B(\theta_b) - c(\theta_b) \quad \text{subject to } \theta_b \in [0, 1]$$

Party *B* faces a simple trade-off. $W_B(\cdot)$ is increasing in θ_b since both T_2 and T_3^B are decreasing as investment goes up. Greater θ_b however entails higher marginal costs (MC) of investment. Further, since the cost of investing is convex with $c'(0) = 0$ and $c'(1) = \infty$, there always exists an interior solution to the investment problem. By choosing higher levels of identity trigger, *B* is able to extract more rents and promise lesser public goods to the non-partisan electorate.

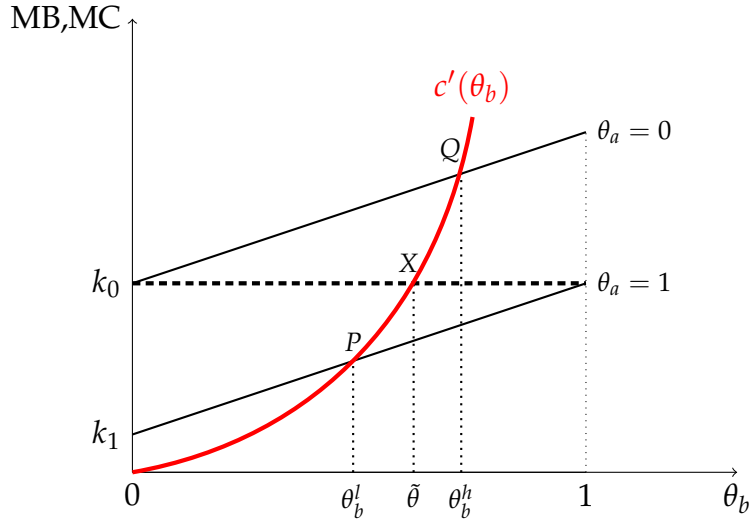


Figure 1: Equilibrium investment as a function of θ_a . The equilibrium is always between $[\theta_b^l, \theta_b^h]$ and is decreasing in θ_a . Point X corresponds with the cutoff θ_a below which there is always over-investment by party B. The set of over-investment equilibria is $(\tilde{\theta}, \theta_b^h]$.

Proposition 2. *The unique equilibrium investment in identity politics $\theta_b^* \in (0, 1)$ solves the following:*

$$\frac{\sigma}{n_3} \cdot \frac{\delta_e \chi}{18} \left[\Delta \theta \delta_e \chi + \frac{1}{\psi \sigma} (3\psi n_3 - \sigma(n_1 - n_2)) \right] = c'(\theta_b) \quad (13)$$

When choosing a higher θ_b , B incurs substantial reputational costs (e.g., negative media coverage by both domestic and international press). The equilibrium choice of θ_b depends on the underlying incentives for identity polarization. A higher investment, ceteris paribus, increases B's win probability in equilibrium. Further by committing to higher levels of identity politics party B also ensures additional ex-post payoff to majoritarian types in the non-partisan population. Consequently, this decreases T_3^B in equilibrium. Simultaneously, B's bargaining surplus also increases since it substitutes surplus from office with greater identity payoffs to its vote bank G_2 . The marginal benefit of greater investment is therefore the marginal increase in p_B and W_B . Figure 1 characterizes the equilibrium investment set as θ_a varies from 0 to 1. Notice that at k_0 , $\theta_a = \theta_b = 0$. At k_1 , $\Delta \theta = -1$ such that the marginal benefit is the lowest at this point. The marginal cost on the other hand is increasing and convex. The intersection of the two curves gives the set of investment equilibria. This corresponds with $[\theta_b^l, \theta_b^h]$ and is represented by the set of points between P and Q on the marginal cost curve.

Lemma 1. *There is an unique $\tilde{\theta}$ such that $\theta_b^* = \theta_a$. If $\theta_a < \tilde{\theta}$, there is over-investment by party B in identity trigger, i.e. $\theta_b^* > \theta_a$. If $\theta_a > \tilde{\theta}$, there is under-investment by B.*

Since the marginal costs are increasing and convex while the marginal benefits are linear in the investment there always exists a cutoff at which $\theta_b^* = \theta_a$. This follows immediately from observing in Figure 1 that the marginal benefit line moves down as θ_a increases. At k_0 the

dotted horizontal line is the set of points at which $\Delta\theta = 0$, and the marginal benefit is constant. The cutoff $\tilde{\theta}$ is precisely the value at which the MC is equal to this constant. Notice that all equilibrium investment between points X and Q correspond with $\theta_a < \tilde{\theta}$ and $\theta_b > \tilde{\theta}$.

4 Comparative Statics

Corollary 1. *Political rents to the parties, R_i , is increasing in the investment θ_b .*

When $\Delta\theta = 0$, i.e., the identity payoffs are equal under both regimes, the partisan groups get an equal share of the surplus from office, i.e., $T_1^* = T_2^* = \frac{T}{2}$. However, any increase in the investment θ_b by party B leads to a change in ex-post bargaining position of the partisan groups. The mechanism we propose predicts that if one party invests actively in stoking majoritarian identity before elections, it results in greater political rents for *both* parties. The intuition is that as $\Delta\theta$ increases, the net payoff to the minorities decreases when party B wins elections. Consequently, they are willing to accept a smaller share of surplus T in return for “protection” from party A . Simultaneously, the investment also increases the expected redistribution payoffs to G_2 if party B wins. This decreases G_2 ’s bargaining power and results in them accepting a transfer less than $\frac{T}{2}$. Further, G_2 accepts a smaller surplus in return for (relatively) higher expected identity redistribution payoff under party B .

Corollary 2. *T_3^{A*} is increasing in $\Delta\theta$ and T_3^{B*} is decreasing in $\Delta\theta$.*

There is an inverse relation between θ_b and T_3^B , i.e. party B ’s investment in majoritarian identity acts as a substitute for its economic policy. When investment increases, *ceteris paribus*, the expected redistribution payoff from electing party B also increases. This reduces the incentive of party B to promise greater T_3 . Since any increase in equilibrium investment changes the ex-ante win probabilities, the marginal benefit for party A from promising higher T_3^A is below the (constant) marginal costs. Consequently, higher investment incentivizes party A to promise greater levels of T_3 .

We analyze an intuitive mechanism for substitution between identity politics and public policy to occur in equilibrium. A majoritarian party (leader) can appropriate higher rents from office by focusing on identity triggers, instead of carrying out economic reforms or providing greater public goods. Further, by investing in θ_b , party B credibly commits to providing identity rents to majoritarian types. This incentivizes majoritarian voters (λ types) in the G_3 group to vote for B . This enables B to substitute away from economic policies and extract ex-post political rents from their partisan group G_2 .

Corollary 3. *Investment θ_b is decreasing in θ_a .*

The intuition for over-investment in identity trigger stems from party B ’s trade-off between electoral benefits and the reputational cost of a higher investment. Specifically, party B gains

from investing in triggers since this entails a smaller T_3^B and T_2 in the subsequent stage. Therefore, B captures higher rents when it wins. On the other hand, greater investment implies A promises a higher T_3^A which in turn lowers the probability of B winning. The net marginal benefit from higher investment is the difference in these two opposing forces. When θ_a is very low the marginal benefit from investing is high. However, as θ_a increases, ceteris paribus, B 's marginal benefit is decreasing. This is because a higher θ_a reduces expected rents and increases the platform T_3^B which in turn lowers B 's expected gains from winning the elections. In order to compensate for this, B reduces equilibrium investment.

Corollary 4. θ_b^* is decreasing in relative differences of partisan group size ($n_1 - n_2$) and increasing in both average level of redistribution (δ_e) and expected share of non-partisan majoritarians (χ).

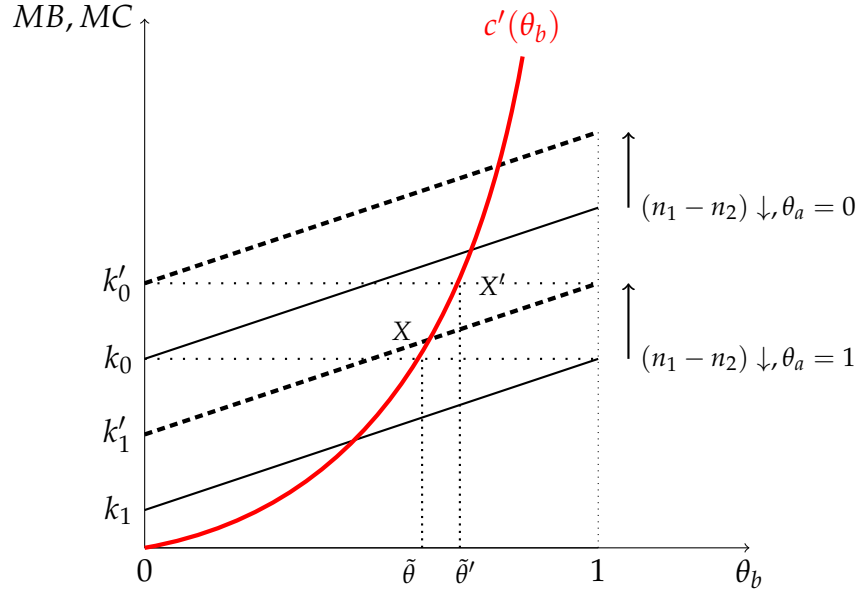
When the minority group is smaller in size party A requires a greater proportion of non-partisans to win elections. This reduces A 's winnability. On the one hand, smaller n_1 entails a higher T_3^A . On the other hand, for B , a decrease in n_1 implies it has to win over a smaller share of non-partisans, and this decreases T_3^B in equilibrium. The indirect effect is that p_B decreases marginally, but at the same time B 's payoff from office increases. Since the direct effect is stronger than the indirect effect, the marginal expected payoff increases for B . This is shown by an upward parallel shift in Figure 2a (represented by the dotted lines).

An increase in δ_e reduces the bargaining power of G_2 since they anticipate greater identity rents when party B wins. Majoritarian types also enjoy greater expected redistribution from identity politics. Therefore, the expected payoff for B in the continuation game increases. Simultaneously, when the expected share of majoritarian types increases among the non-partisan population, bargaining surplus to B reduces. B transfers more to G_2 since they expect a smaller share of the ex-post identity rents. However, as before, B decreases provision of T_3 since the relevance of getting support from non-majoritarian non-partisan voters goes down. Fixing θ_a , this shifts the marginal benefit function of B upwards. Further, the slope also shifts up since it depends on the existing levels of δ_e or χ (see Figure 2b).

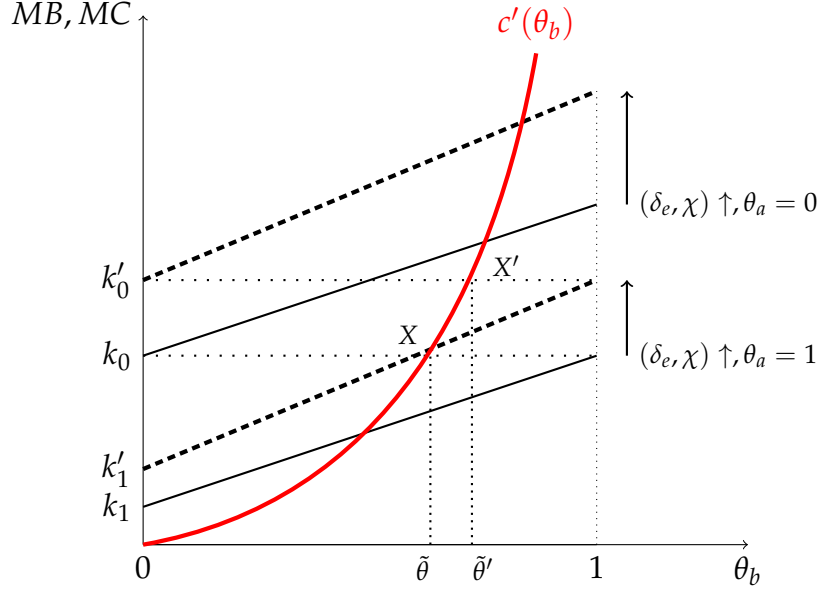
5 Optimal Identity Politics

We have thus far analyzed the endogenous investment by one party. This allows us to characterize the payoffs of parties and voters in terms of the identity polarization $\Delta\theta$. In this section, we assess the optimal identity politics when it is a direct choice variable (chosen, for example, by a social planner). In doing so, we analyze the joint ex-ante welfare of the parties (henceforth, *political class* or *PC*) and the voters (henceforth, *voting class* or *VC*). The expressions for the joint ex-ante welfare of these two classes of the population is given by,

$$U_{PC} = p_A \cdot W_A + p_B \cdot W_B = \frac{\sigma}{n_3} \left[W_A^2 + W_B^2 \right]$$



(a) $(n_1 - n_2)$ and θ_b^*



(b) (δ_e, χ) and θ_b^*

Figure 2: If n_1 decreases, it entails a parallel shift up in the MB curves. In the case of an increase in (δ_e, χ) , there is additional increase in slope apart from the upward shift in MB curves.

$$\begin{aligned}
 U_{VC} = & \underbrace{p_A \cdot (T_1 - \delta_e \theta_a) - p_B \cdot (\delta_e \theta_b)}_{\text{welfare of } G_1} + \underbrace{p_A \cdot (\delta_e (1 - \chi) \theta_a) + p_B \cdot (T_2 + \delta_e (1 - \chi) \theta_b)}_{\text{welfare of } G_2} \\
 & + \underbrace{p_A \cdot (T_3^A + \delta_e \chi \theta_a) + p_B \cdot (T_3^B + \delta_e \chi \theta_b)}_{\text{welfare of non-partisans}}
 \end{aligned} \tag{14}$$

The welfare of the political class follows from [Equation 19](#) and [Equation 20](#). In case of G_1 the ex-ante welfare is simply the difference between weighted net benefit under party A and

loss under B ; similarly, G_2 's welfare is a weighted sum of payoffs to the group when either party wins elections. Non-partisan welfare has two components. The first is the economic policy payoff and the other is the expected redistribution payoff to the majoritarians among the non-partisans. Simplifying the expression in [Equation 14](#), we get:

$$U_{VC} = p_A \cdot (T_1 + T_3^A) + p_B \cdot (T_2 + T_3^B)$$

$$U_{VC} = p_A \cdot (T - W_A) + p_B \cdot (T - W_B) \quad (15)$$

Both welfare expressions are functions of $\Delta\theta$. It is straightforward to derive the optimal identity polarization for the political and voting classes. The following proposition summarizes this.

Proposition 3. *The optimal levels of identity polarization for both the political class and voting class are equal, given by,*

$$\Delta\theta_{PC} = \Delta\theta_{VC} = \Delta\theta^* = -\frac{(n_2 - n_1)}{\delta_e \chi \psi}$$

In this equilibrium,

1. $T_1 = \frac{T}{2} + \frac{n_2 - n_1}{2\chi\psi}$, $T_2 = T_1 - \frac{n_2 - n_1}{2\psi}$
2. $T_3^A = \frac{T}{2} - \frac{n_2 - n_1}{2\chi\psi} - \frac{n_3}{2\sigma}$, $T_3^B = T_3^A + \frac{n_2 - n_1}{2\psi}$
3. $W_A = W_B = \frac{n_3}{2\sigma}$; $p_A = p_B = \frac{1}{2}$

Two key features stand out in [Proposition 3](#). *First*, citizens prefer the same levels of identity polarization as political parties. This is simply driven by the fact that since redistribution shifts payoffs from one group to the other, and one party to the other, when joint welfare is considered they cancel each other out. *Second*, as the relative differences in size of groups G_2 and G_1 , $(n_2 - n_1)$, increases, both $\Delta\theta^*$ decreases. This is due to the fact that when $(n_2 - n_1)$ increases the net benefits from office increases for party B and decreases for party A . To counterbalance this shift in payoffs, in equilibrium, the identity polarization must decrease for the political class. For the citizens, an increase in relative size entails a higher T_3^A and a lower T_3^B . As before, since T_1 , T_2 and T_3^B increase when $\Delta\theta$ decreases, it offsets the expected payoff loss from a higher $(n_2 - n_1)$. Further, an increase in the salience of identity (δ_e or χ) need not always increase equilibrium $\Delta\theta^*$. It does so only when $n_2 > n_1$. That is, relative group size advantage determines whether identity salience positively affects optimal identity polarization. Intuitively this implies that when the G_2 group is bigger in size, an increase in salience of identity results in equilibrium polarization favoring this group, and vice-versa when G_1 is bigger in size.

6 Discussion of Results

The role of majoritarianism in democracies worldwide has been of recent interest (Gidron and Hall, 2020; Kitschelt, 2018). On one hand, parties have used identity dog whistles and a nationalistic rhetoric to mobilize support among voters of the majority identity. On the other hand, their competitors have exploited the fear of majoritarianism to garner support from minorities. Further, if resources can be redistributed from minority identity group to the majority one (e.g., Mitra and Ray, 2014), then parties that identify with the majority identity can strategically invest in identity politics whilst simultaneously competing on the policy dimension. This paper presents a micro-founded model of identity politics that is consistent with these stylized facts observed in democracies.

On bargaining power of minorities in electoral democracies We find that the presence of a majoritarian party lowers minorities' bargaining power. This is consistent with several episodes where minority voters compromise with the party in power. For example, African-American voters have overwhelmingly voted for the Democratic party since the civil rights movement in the sixties. Black voters' support for the Democratic party nominee in subsequent Presidential elections has ranged between 80% to 90% (Frymer, 2010). The marginalization of African American voters is ascribed to, among other factors, their status as a "captured" voter group. Since their policy priorities are vastly different from the majority of the population, leaders of Democratic party have downplayed their interests and instead competed for the support of the majority of the nation's voters.¹¹

The Muslim minorities in India exhibit a similar characteristic. The center-left Congress party has been associated with playing politics of "Muslim appeasement" (see, e.g. Varshney (2003)). Despite overwhelmingly voting for the Congress party, which has been in power for most of post-independence India, Muslims have remained marginalized and economically backward (Sachar, 2006).¹² Since the BJP's rise in the eighties as a party that safeguards the cultural interests of the majority Hindus, the bargaining power of Muslims has weakened further.¹³

Our stylized framework provides a political economy rationale for the marginalization of

¹¹A similar dynamic played out in the case of the Christian Right, that emerged as a staunch support base for the Republican party in the 1980s and early 1990s. It is estimated that by 1984 more than 80% of the Christian Right were voting for Ronald Reagan (Frymer, 2010). Despite of their overwhelming support for the Republican party, the party leaders downplayed their interests due to the fear of losing the support of conservative women voters on the issue of abortion.

¹²The Sachar Committee report of 2006 (p. 143) states "there is a clear and significant inverse correlation between the proportion of Muslim population and the availability of educational infrastructure...While about 82 percent of small villages with less than 10 percent Muslims have educational institutions, this proportion decreases to 69 percent in villages with a substantial Muslim population."

¹³"The Sachar Committee Report provides a comprehensive account of the disadvantaged and stigmatized conditions of the Muslim community in India. The report notes that Muslims rank slightly above the lowest caste groups in India, but significantly below other Hindus in almost all indicators of development. While there are several general programmes directed at the poor, evidence suggests that Muslims have not benefited, commensurate with the needs of the community." — *Report of the Expert Group on Diversity Index*, 2008.

Muslim minorities in India despite being allied to the Congress party. Muslim voters regard physical security as a key governance issue compared to their Hindu counterparts (Wilkinson, 2006). There is also evidence that the incidence of Hindu-Muslim riots, which disproportionately affect the Muslims, is lower in areas where Congress is in power (Nellis et al., 2016). Our model shows how the “politics of fear” can affect Muslims. The presence of a party that invests actively in identity polarization, like the BJP, contributes to the marginalization of Muslims. The fear of having a BJP government in power ensures that Muslims (a) remain a loyal voter group for the Congress party, and (b) accept lower welfare related transfers from them in return for physical protection.

Substitution between public policy and identity investments A central insight of our analysis is the identity-policy substitution: investment in identity politics substitutes for economic reforms and provision of public goods. While the example of Modi’s BJP in India highlights this substitution, our result also sheds light on other instances of majoritarianism worldwide. Consider the case of the AKP party in Turkey. Its victory “was rather a mix of Turkish nationalism and religious conservatism along with enduring hope that Erdogan will still deliver economically”.¹⁴ In a similar vein, Bolsonaro mixed identity politics with an economic reform agenda. One of his flagship reforms was the overhaul of Brazil’s pension system. However, when put “under pressure to push hard for further economic reforms”, Bolsonaro reacted by playing identity politics and moving away from the reform agenda.¹⁵ These instances encapsulate the tradeoff between implementing reforms and investing in identity politics. A promise of economic reforms simultaneously accompanies cultural, nationalistic, or religious polarization. When reform policies fail to materialize, investments in nativist sentiments seem to compensate voters and shift their expectations towards identity related benefits. Indeed, when combined with a larger share of partisan voters and majoritarians in the population, this substitution towards identity politics becomes stronger in equilibrium.

This kind of substitution has been shown to manifest itself in different forms in the empirical literature. Acharya et al. (2015) show how caste bias towards a political party increases corruption when the party is in power. Banerjee and Pande (2007) find evidence that identity based voting reduces the quality of elected politicians, which in turn hampers the provision of public goods. Alesina et al. (1999) find that ethnic fragmentation contributes to lower public goods provision in the United States cities and metro areas. Our results are unique since we show that parties can react differently to identity politics. If only one party is responsible for identity investments, then the other party’s strategic response is to compete by increasing their provision of public goods. In a normative sense, the non-partisan voters’ welfare from political competition with identity politics is therefore ambiguous.

¹⁴“Turkey is trapped in identity politics”, *Middle East Institute*, 25 June, 2018.

¹⁵“Without a strong policy agenda, some economists fear the country could slip back into recession. Bolsonaro, however, is much more comfortable playing identity politics.” — Brazil: Jair Bolsonaro pushes culture war over economic reform, *Financial Times*, 24 August, 2019.

Salience of identity politics Corollary 3 highlights the conditions under which parties invest more in identity politics. If the society is already sufficiently polarized along identity lines, a majoritarian party tends to move towards an economic agenda instead of investing further in polarizing society. Therefore, the reliance on polarizing identity may vary substantially across elections. For instance, following the Babri mosque demolition in 1992 and the subsequent communal riots in India that left more than 2,000 people dead, the BJP softened its Hindu nationalist stance and promoted a more development oriented platform (see chapter 2, CEIP, 2020). Similarly, after the anti-Muslim riots in Gujarat in 2002, the BJP under Modi shifted its agenda towards a more inclusive, development oriented platform (Bobbio, 2012).¹⁶ Even though the majoritarian party moved away from identity politics in both instances, the underlying incentives for doing so were very different. In both cases, however, the focus on economic development was preceded by years of identity polarization in society. Given the high level of polarization in the society, the BJP found it unprofitable to invest in further polarizing society along identity lines.

The literature on populism in Europe also sheds light on how the salience of identity affects investments in identity politics. For example, both Algan et al. (2017) and Guiso et al. (2017) find that preferences towards right-wing populists coincided with a preference shift towards nativism. Further, Pappas and Kriesi (2015) attribute this shift in preferences in the population to the economic downturn caused by the Great Recession of 2008. In this paper we abstract from what affects the size of majoritarians in the society. Instead, we focus on the electoral mechanism through which a change in the share of majoritarians among the non-partisan voters affects investment in identity politics. In line with empirical evidence, Corollary 4 states that the growing salience of identity incentivizes more identity politics in equilibrium.

7 Conclusion

This paper analyses the causes and consequences of majoritarian identity politics in representative democracies. We propose that investment in majoritarian identity politics can emerge from exigencies of competitive politics. We formalize the idea in a two-party political competition framework, where sections of electorate vote exclusively based on their identity. Parties reward the partisan voters through clientelistic transfers and compete for non-partisan voters by promising economic welfare.

One party triggers majoritarian identity through vitriolic campaign and dog whistles against minorities. This generates social frictions and a subsequent redistribution from minorities to a section of voters of the majority identity. Minorities fear having the majoritarian party in power, while some among the majority identity anticipate higher redistribution rewards. The

¹⁶In a related phenomenon, Paul Kagame led government in Rwanda came to power at the end of the civil war in 2003 by making reconciliation a top priority. The reconciliation effort was ostensibly in order to promote economic development and prevent any future inter-ethnic strife (Blouin and Mukand, 2019).

contrasting consequences for electing the majoritarian party diminishes the bargaining power of partisan voters and generates higher rents for both parties. The majoritarian party gains further since it can use identity polarization as a substitute for providing economic welfare to non-partisan voters that also have a taste for majoritarianism. Our framework thus underscores a purely utilitarian motive for a majoritarian party to invest in identity politics.

Our theoretical results propose a novel framework in which both clientelism and rent seeking emerge in equilibrium. This contrasts with existing literature which studies them in two different strands. The literature on clientelism focuses on direct monetary transfers ([Bardhan and Mookherjee, 2012](#)), government employment ([Calvo and Murillo, 2004](#)), and public contracts ([Lehne et al., 2018](#)). In a similar vein, several empirical papers have studied political rent seeking (see, e.g., [Avis et al., 2018](#); [Ferraz and Finan, 2011](#); [Fisman et al., 2014](#)). Our theoretical framework is agnostic about the precise nature of clientelistic transfers. We however argue that clientelism, rent seeking, and identity politics are intertwined.

Our work also has implications for future empirical research. There is evidence for political violence cycles in democracies, which is attributed to opposition groups using violence around elections to oust the incumbent ([Harish and Little, 2017](#); [Aksoy, 2014](#)). Our framework suggests that parties may use inflammatory rhetoric when the marginal benefit from such investment is high, and this can generate a cyclical pattern in identity conflicts. The link between political campaigns and violence cycles is an exciting avenue for future research. Our framework also proposes two complementary mechanisms through which the rise of majoritarian parties can result in the economic marginalization of minorities. Future research could explore whether the growth of majoritarian parties contributes to inter-group inequality in the society.

References

- ACHARYA, A., M. BLACKWELL, AND M. SEN (2016): "The political legacy of American slavery," *The Journal of Politics*, 78, 621–641.
- ACHARYA, A., J. E. ROEMER, AND R. SOMANATHAN (2015): "Caste, corruption and political competition in India," *Research in Economics*, 69, 336–352.
- AKSOY, D. (2014): "Elections and the timing of terrorist attacks," *The Journal of Politics*, 76, 899–913.
- ALESINA, A., R. BAQIR, AND W. EASTERLY (1999): "Public goods and ethnic divisions," *The Quarterly Journal of Economics*, 114, 1243–1284.
- ALESINA, A. F., D. FURCERI, J. D. OSTRY, C. PAPAGEORGIOU, AND D. P. QUINN (2020): "Structural Reforms and Elections: Evidence from a World-Wide New Dataset," Tech. rep., National Bureau of Economic Research.
- ALGAN, Y., S. GURIEV, E. PAPAIOANNOU, AND E. PASSARI (2017): "The European trust crisis and the rise of populism," *Brookings Papers on Economic Activity*, 2017, 309–400.
- AMORÓS, P. AND M. S. PUY (2013): "Issue convergence or issue divergence in a political campaign?" *Public Choice*, 155, 355–371.
- ANDRÉ, C. AND J.-P. PLATTEAU (1998): "Land relations under unbearable stress: Rwanda caught in the Malthusian trap," *Journal of Economic Behavior & Organization*, 34, 1–47.
- AVIS, E., C. FERRAZ, AND F. FINAN (2018): "Do government audits reduce corruption? Estimating the impacts of exposing corrupt politicians," *Journal of Political Economy*, 126, 1912–1964.
- BANERJEE, A. V. AND R. PANDE (2007): "Parochial politics: Ethnic preferences and politician corruption," *Vol.*
- BARDHAN, P. AND D. MOOKHERJEE (2012): *Political clientelism and capture: Theory and evidence from West Bengal, India*, 2012/97, WIDER Working Paper.
- BERNHARDT, D., P. BUISSERET, AND S. HIDIR (2020): "The Race to the Base," *American Economic Review*, 110, 922–42.
- BERNHARDT, D., J. DUGGAN, AND F. SQUINTANI (2007): "Electoral competition with privately-informed candidates," *Games and Economic Behavior*, 58, 1–29.
- BESLEY, T. AND T. PERSSON (2019): "The Rise of Identity Politics," Tech. rep., Mimeo.
- BLOUIN, A. AND S. W. MUKAND (2019): "Erasing ethnicity? Propaganda, nation building, and identity in Rwanda," *Journal of Political Economy*, 127, 1008–1062.

- BOBBIO, T. (2012): "Making Gujarat vibrant: Hindutva, development and the rise of subnationalism in India," *Third World Quarterly*, 33, 657–672.
- CALVO, E. AND M. V. MURILLO (2004): "Who delivers? Partisan clients in the Argentine electoral market," *American journal of political science*, 48, 742–757.
- CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE (2020): *Political Polarization in South and Southeast Asia: Old Divisions, New Dangers*.
- DESAI, Z. (2020): "A Theory of Electoral Competition in Developing Democracies," Tech. rep., Mimeo.
- DICKSON, E. S. AND K. SCHEVE (2006): "Social identity, political speech, and electoral competition," *Journal of Theoretical Politics*, 18, 5–39.
- DRAGU, T. AND X. FAN (2016): "An agenda-setting theory of electoral competition," *The Journal of Politics*, 78, 1170–1183.
- ELLMAN, M. AND L. WANTCHEKON (2000): "Electoral competition under the threat of political unrest," *The Quarterly journal of economics*, 115, 499–531.
- FERRAZ, C. AND F. FINAN (2011): "Electoral accountability and corruption: Evidence from the audits of local governments," *American Economic Review*, 101, 1274–1311.
- FIELD, E., M. LEVINSON, R. PANDE, AND S. VISARIA (2008): "Segregation, rent control, and riots: The economics of religious conflict in an Indian city," *American Economic Review*, 98, 505–10.
- FISMAN, R., F. SCHULZ, AND V. VIG (2014): "The private returns to public office," *Journal of Political Economy*, 122, 806–862.
- FRYMER, P. (2010): *Uneasy alliances: Race and party competition in America*, vol. 114, Princeton University Press.
- GERBAUDO, P., F. MAROGNA, AND C. ALZETTA (2019): "When "Positive Posting" Attracts Voters: User Engagement and Emotions in the 2017 UK Election Campaign on Facebook," *Social Media+ Society*, 5, 2056305119881695.
- GHOSH, S., A. MITRA, ET AL. (2019): "Ethnic Identities, Public Spending and Political Regimes," Tech. rep., School of Economics, University of Kent.
- GIDRON, N. AND P. A. HALL (2020): "Populism as a problem of social integration," *Comparative Political Studies*, 53, 1027–1059.
- GROSECLOSE, T. (2001): "A model of candidate location when one candidate has a valence advantage," *American Journal of Political Science*, 862–886.

- GUIO, L., H. HERRERA, M. MORELLI, AND T. SONNO (2020): "Economic insecurity and the demand of populism in Europe," *Einaudi Institute for Economics and Finance*.
- GUIO, L., H. HERRERA, M. MORELLI, T. SONNO, ET AL. (2017): *Demand and supply of populism*, Centre for Economic Policy Research London, UK.
- GURIEV, S. (2018): "Economic drivers of populism," in *AEA Papers and Proceedings*, vol. 108, 200–203.
- HARISH, S. AND A. T. LITTLE (2017): "The political violence cycle," *American Political Science Review*, 111, 237–255.
- INGLEHART, R. F. AND P. NORRIS (2016): "Trump, Brexit, and the rise of populism: Economic have-nots and cultural backlash," .
- JAFFRELOT, C. (1999): *The Hindu nationalist movement and Indian politics: 1925 to the 1990s: strategies of identity-building, implantation and mobilisation (with special reference to Central India)*, Penguin Books India.
- JHA, S. (2013): "Trade, institutions, and ethnic tolerance: Evidence from South Asia," *American political Science review*, 107, 806–832.
- KARAKAS, L. D. AND D. MITRA (2021): "Electoral competition in the presence of identity politics," *Journal of Theoretical Politics*, 33, 169–197.
- KITSCHOLT, H. (2018): "Party systems and radical right-wing parties," *The Oxford handbook of the radical right*, 166.
- LEHNE, J., J. N. SHAPIRO, AND O. V. EYNDE (2018): "Building connections: Political corruption and road construction in India," *Journal of Development Economics*, 131, 62–78.
- MITRA, A. AND D. RAY (2014): "Implications of an economic theory of conflict: Hindu-Muslim violence in India," *Journal of Political Economy*, 122, 719–765.
- MORELLI, M., A. NICOLÒ, AND P. ROBERTI (2021): "A Commitment Theory of Populism," .
- MÜLLER, K. AND C. SCHWARZ (2019): "From hashtag to hate crime: Twitter and anti-minority sentiment," *Available at SSRN 3149103*.
- NELLIS, G., M. WEAVER, S. ROSENZWEIG, ET AL. (2016): "Do parties matter for ethnic violence? Evidence from India," *Quarterly Journal of Political Science*, 11, 249–277.
- PADRÓ I MIQUEL, G. (2007): "The control of politicians in divided societies: The politics of fear," *The Review of Economic Studies*, 74, 1259–1274.

- PAPPAS, T. S. AND H. KRIESI (2015): "Populism and crisis: A fuzzy relationship," *European populism in the shadow of the great recession*, 303–325.
- POLBORN, M. K. AND T. Y. DAVID (2004): "A rational choice model of informative positive and negative campaigning," *Quarterly Journal of Political Science*, 1, 351–372.
- PRATO, C. AND S. WOLTON (2018): "Rational ignorance, populism, and reform," *European Journal of Political Economy*, 55, 119–135.
- ROMARRI, A. (2019): "Do far-right mayors increase the probability of hate crimes? Evidence from Italy," *Evidence From Italy* (December 19, 2019).
- SACHAR, R. (2006): "Sachar Committee Report," *Government of India*.
- TAVITS, M. AND J. D. POTTER (2015): "The effect of inequality and social identity on party strategies," *American Journal of Political Science*, 59, 744–758.
- TICKU, R. (2015): "Riot Rewards? Study of BJP's Electoral Performance and Hindu Muslim Riots," IHEID Working Papers HEIDWP19-2015, Economics Section, The Graduate Institute of International Studies.
- VARSHNEY, A. (2003): *Ethnic conflict and civic life: Hindus and Muslims in India*, Yale University Press.
- WILKINSON, S. I. (2006): *Votes and violence: Electoral competition and ethnic riots in India*, Cambridge University Press.

A Proofs

A.1 Proof of Proposition 1

From Equation 6 and Equation 8, we compute the respective win probabilities of the parties. The total vote share of party A is,

$$s_A = s_A^\lambda + s_A^{1-\lambda} = n_3 \cdot \left[\psi \cdot \left(\frac{1}{n_3} (T_3^A - T_3^B) - \mu \right) + \frac{1}{2} \right] - \psi \Delta \theta \delta_e \cdot \chi$$

The win probability of party A is,

$$\begin{aligned} p_A &= \Pr[s_A \geq (0.5 - n_1)] \\ p_A &= \Pr \left[\mu \leq \frac{1}{n_3} (T_3^A - T_3^B) - \frac{1}{n_3} \Delta \theta \delta_e \cdot \chi + \frac{1}{2\psi n_3} (n_1 - n_2) \right] \\ p_A &= \frac{1}{2} + \frac{\sigma}{n_3} \left[\frac{1}{2\psi} (n_1 - n_2) + (T_3^A - T_3^B) - \Delta \theta \delta_e \cdot \chi \right] \\ \Phi(T_3^A, T_3^B) &= (T_3^A - T_3^B) - \Delta \theta \delta_e \cdot \chi \\ p_A &= \frac{1}{2} + \frac{\sigma}{n_3} \left[\frac{1}{2\psi} (n_1 - n_2) + \Phi(T_3^A, T_3^B) \right] \end{aligned} \quad (16)$$

Analogously, the win probability of party B is,

$$p_B = \frac{1}{2} - \frac{\sigma}{n_3} \left[\frac{1}{2\psi} (n_1 - n_2) + \Phi(T_3^A, T_3^B) \right] \quad (17)$$

The platform choice T_3^A solves,

$$\max_{T_3^A} \Pi_A = p_A \cdot [R_A - T_3^A] \quad \text{subject to } R_A \geq T_3^A, \quad T_3^A \geq 0$$

The Lagrangian for the optimization problem is,

$$\mathcal{L} = p_A [R_A - T_3^A] + \Lambda_A [R_A - T_3^A] + \zeta_A T_3^A \quad (18)$$

The Kuhn-Tucker conditions are,

$$\frac{\partial \mathcal{L}}{\partial T_3^A} = \frac{\sigma}{n_3} [R_A - T_3^A] - p_A - \Lambda_A + \zeta_A = 0$$

$$T_3^A = R_A \quad \text{or} \quad \Lambda_A = 0$$

$$T_3^A = 0 \quad \text{or} \quad \zeta_A = 0$$

The latter two are the complementary slackness conditions. We proceed to show that to guarantee a maximum, it must be that $\Lambda_A = 0$ and $T_3^A < R_A$, and, $\zeta_A = 0$ and $T_3^A > 0$. We show this by contradiction.

Case 1. Suppose $\Lambda_A > 0$.

In this case, complementary slackness constraint implies $T_3^A = R_A$ and the payoff to party A is 0. Clearly, given the continuity of the win-probability p_A , a small decrease in T_3^A such that $\tilde{T}_3^A = R_A - \varepsilon_l$ where $\varepsilon_l \downarrow 0$ decreases p_A but the expected payoff is greater than zero. That is,

$$\left. \frac{d [p_A \cdot (R_A - T_3^A)]}{dT_3^A} \right|_{T_3^A=R_A} = -p_A < 0$$

Therefore in equilibrium, it cannot be that $T_3^A = R_A$. By complementary slackness, it must be that $\Lambda_A = 0$, a contradiction.

Case 2. Suppose $\zeta_A > 0$.

In this case, $T_3^A = 0$ implies,

$$\begin{aligned} \left. \frac{d[p_A \cdot (R_A - T_3^A)]}{dT_3^A} \right|_{T_3^A=0} &= \frac{\sigma}{n_3} R_A - p_A|_{T_3^A=0} \\ \left. \frac{d[p_A \cdot (R_A - T_3^A)]}{dT_3^A} \right|_{T_3^A=0} &= \frac{1}{2} + \frac{\sigma}{n_3} \left[R_A + \frac{1}{2\psi} (n_1 - n_2) - T_3^B - \Delta\theta\delta_e\chi \right] > 0 \end{aligned}$$

The above inequality always holds strictly since our assumptions (specifically, Assumption 3) guarantee that the win-probabilities are well defined and such that $p_i \in [0, 1]$. Therefore, this implies that not providing any additional transfers to the non-partisans cannot be optimal. It follows that $T_3^A > 0 \implies \zeta_A = 0$, a contradiction.

Finally, we check for the second order condition to ensure that there is an unique maximum when $T_3^A \in (0, T - T_1)$.

$$\left. \frac{d^2[p_A \cdot (R_A - T_3^A)]}{dT_3^{A2}} \right|_{T_3^A \in (0, T - T_1)} = -\frac{2\sigma}{n_3} < 0$$

The maximization problem is analogous to party B . Substituting for (R_A, R_B) and solving the following equations yields the equilibrium platforms:

$$p_A = \frac{\sigma}{n_3} [R_A - T_3^A] \tag{19}$$

$$\frac{1}{2} + \frac{\sigma}{n_3} \left[\frac{1}{2\psi} (n_1 - n_2) + (T_3^A - T_3^B) - \Delta\theta\delta_e \cdot \chi \right] = \frac{\sigma}{n_3} \left[\frac{T}{2} + \frac{\Delta\theta\delta_e}{2} - T_3^A \right]$$

$$2T_3^A - T_3^B = \frac{T}{2} + \Delta\theta\delta_e \cdot \left(\chi + \frac{1}{2}\right) - \frac{1}{2\psi\sigma} (\sigma(n_1 - n_2) + \psi n_3)$$

$$p_B = \frac{\sigma}{n_3} [R_B - T_3^B] \quad (20)$$

$$\frac{1}{2} - \frac{\sigma}{n_3} \left[\frac{1}{2\psi} (n_1 - n_2) + (T_3^A - T_3^B) - \Delta\theta\delta_e \cdot \chi \right] = \frac{\sigma}{n_3} \left[\frac{T}{2} + \frac{\Delta\theta\delta_e\chi'}{2} - T_3^B \right]$$

$$2T_3^B - T_3^A = \frac{T}{2} - \Delta\theta\delta_e \cdot \left(\chi - \frac{\chi'}{2}\right) + \frac{1}{2\psi\sigma} (\sigma(n_1 - n_2) - \psi n_3)$$

$$T_3^{A*} = \frac{T}{2} + \frac{\Delta\theta\delta_e}{2} \cdot \left(1 + \frac{\chi}{3}\right) - \frac{1}{6\psi\sigma} (\sigma(n_1 - n_2) + 3\psi n_3) \quad (21)$$

$$T_3^{B*} = \frac{T}{2} + \frac{\Delta\theta\delta_e}{2} \cdot \left(\chi' - \frac{\chi}{3}\right) + \frac{1}{6\psi\sigma} (\sigma(n_1 - n_2) - 3\psi n_3) \quad (22)$$

Together, [Equation 21](#) and [Equation 22](#) define the unique equilibrium platform of the parties.
QED

A.2 Proof of Corollaries 1, 2

$$R_A = \mathbb{E}_\delta[T - T_1] = \frac{T}{2} + \frac{\Delta\theta\delta_e}{2} \quad R_B = \mathbb{E}_{\lambda,\delta}[T - T_2] = \frac{T}{2} + \frac{\Delta\theta\delta_e}{2} \cdot \chi'$$

Corollary 1 and 2 follows from above equations of the equilibrium political rents and platforms.
This completes the proof. **QED**

A.3 Proof of Proposition 2

The investment problem is defined as follows:

$$\max_{\theta_b} p_B(\theta_b) \cdot W_B(\theta_b) - c(\theta_b) \quad \text{subject to } \theta_b \in [0, 1]$$

The expected benefits from office is the net rents after provision of effort for promised platform.

$$W_B(\theta_b) = \frac{\Delta\theta\delta_e\chi}{6} - \frac{1}{6\psi\sigma} (\sigma(n_1 - n_2) - 3\psi n_3)$$

The FOC is,

$$p'_B(\theta_b) \cdot W_B(\theta_b) + p_B(\theta_b) \cdot W'_B(\theta_b) = c'(\theta_b)$$

From the FOC of platform selection problem in [Proposition 1](#),

$$p_B(\theta_b) = \frac{\sigma}{n_3} W_B(\theta_b) \implies p'_B(\theta_b) = \frac{\sigma}{n_3} W'_B(\theta_b) = \frac{\sigma}{n_3} \cdot \frac{\delta_e\chi}{6}$$

Substituting and simplifying yields,

$$\frac{\sigma}{n_3} \cdot \frac{\delta_e \chi}{18} \left[\Delta \theta \delta_e \chi + \frac{1}{\psi \sigma} (3\psi n_3 - \sigma(n_1 - n_2)) \right] = c'(\theta_b)$$

QED

A.4 Proof of Corollary 3

Applying implicit function theorem to [Equation 13](#):

$$\Psi \equiv \left(\frac{\sigma}{n_3} \cdot \frac{\delta_e \chi}{18} \right) \left[\Delta \theta \delta_e \chi + \frac{1}{\psi \sigma} (3\psi n_3 - \sigma(n_1 - n_2)) \right] - c'(\theta_b) \quad (23)$$

$$\frac{d\theta_b}{d\theta_a} = - \frac{\left(\frac{d\Psi}{d\theta_a} \right)}{\left(\frac{d\Psi}{d\theta_b} \right)}$$

Clearly, $\left(\frac{d\Psi}{d\theta_a} \right) < 0$ and, co

$$\left(\frac{d\Psi}{d\theta_b} \right) = \left(\frac{\sigma}{n_3} \cdot \frac{\delta_e^2 \chi^2}{18} \right) - c''(\theta_b)$$

Since $c''(0) > \frac{\sigma}{n_3}$ and $c''' > 0$, $\left(\frac{d\Psi}{d\theta_b} \right) < 0$. This completes the proof.

QED

A.5 Proof of Lemma 1

Substituting $\Delta \theta = 0$ in [Equation 13](#),

$$\bar{\theta} \equiv \frac{\sigma}{n_3} \cdot \frac{\delta_e \chi}{18} \left[\frac{1}{\psi \sigma} (3\psi n_3 - \sigma(n_1 - n_2)) \right] = c'(\theta_b)$$

Since we know from [Corollary 3](#) that θ_b^* decreases with θ_a , it follows immediately that for all $\theta_a > \bar{\theta}$, equilibrium investment $\theta_b^* < \bar{\theta} < \theta_a$. This completes the proof.

QED

A.6 Proof of Corollary 4

- $\frac{d\theta_b}{dn_1} < 0$ since,

$$\frac{d\Psi}{dn_1} = - \frac{\sigma \delta_e \chi}{18 \psi n_3} < 0$$

- $\frac{d\theta_b}{d\chi} > 0$ since,

$$\frac{d\Psi}{d\chi} = \frac{\sigma \delta_e^2 \chi \Delta \theta}{9 n_3} + \frac{\delta_e \chi}{18 \psi n_3} \cdot (3\psi n_3 - \sigma(n_1 - n_2))$$

$$\implies \frac{d\Psi}{d\chi} = \frac{\sigma\delta_e\chi}{18n_3} \left(2\delta_e\Delta\theta + \frac{1}{\psi\sigma} \cdot (3\psi n_3 - \sigma(n_1 - n_2)) \right) > 0$$

- $\frac{d\theta_b}{d\delta_e} > 0$ since,

$$\frac{d\Psi}{d\delta_e} = \frac{\sigma\delta_e\chi}{18n_3} \left(2\chi\Delta\theta + \frac{1}{\psi\sigma} \cdot (3\psi n_3 - \sigma(n_1 - n_2)) \right) > 0$$

A.7 Proof of Proposition 3

We know that the ex-ante expected payoffs to the parties from winning office is given by the following:

$$W_A = \frac{1}{6\psi\sigma} (3\psi n_3 - \sigma(n_2 - n_1)) - \frac{\Delta\theta\delta_e\chi}{6}$$

$$W_B = \frac{1}{6\psi\sigma} (3\psi n_3 + \sigma(n_2 - n_1)) + \frac{\Delta\theta\delta_e\chi}{6}$$

The win probabilities are respectively,

$$p_A = \frac{\sigma}{n_3} \cdot W_A \quad p_B = \frac{\sigma}{n_3} \cdot W_B$$

The joint ex-ante expected utility of the political class is therefore,

$$U_{PC} = \frac{\sigma}{n_3} [W_A^2 + W_B^2]$$

Since $\frac{dW_A}{d\Delta\theta} = -\frac{dW_B}{d\Delta\theta}$, the first order condition with respect to $\Delta\theta$ gives,

$$W_A - W_B = 0$$

Solving the above gives,

$$\Delta\theta_{PC} = -\frac{(n_2 - n_1)}{\delta_e\chi\psi} \tag{24}$$

Continuing with writing down the first order condition taking [Equation 15](#), we get,

$$2(W_A - W_B) = 0 \implies \Delta\theta_{VC} = -\frac{(n_2 - n_1)}{\delta_e\chi\psi} \tag{25}$$

This completes the proof.

QED