Identity Focus in Political Campaigns *

Sourav Bhattacharya† and Ravi Ashok Satpute‡

September 2025

Abstract

In democracies, voters care both about their identities and the quality of candidates. We study a model of electoral campaigning where candidates choose between stressing identity or providing information about quality through programmatic politics. Quality revelation depends on the *profile* of campaign rhetoric: more information is revealed about a candidate's quality if the rival also focuses on quality, presumably because there is a public discussion about candidate quality. In this setting, we get a threshold strategy: high-quality types engage in programmatic politics while low-quality types focus on identity. The moderate types face a tradeoff: engaging in identity politics leads to higher votes from own group but involves pooling with low types, while focusing on quality allows the candidate to pool with the high types, conditional on imperfect revelation. Our model predicts majoritarianism: not only does the majority candidate have a bigger direct benefit from exploiting identity, but identity politics has the *strategic substitutability* property: if the rival engages in identity politics more frequently, the moderate types can pool with the better quality types by focusing on programmatic rhetoric.

Keywords: Identity Politics, Political Campaigns, Vote Shares

JEL Classification Codes: D72, D73

*The authors thank Sukanta Bhattacharya for valuable comments. All errors that remain are the authors' responsibility.

†Economics Group, Indian Institute of Management Calcutta; Email: sourav@iimcal.ac.in

‡Economics Group, Indian Institute of Management Calcutta; Email: satputerafp21@email.iimcal.ac.in

1 Introduction

Majoritarianism is on the rise. In several countries across the world, political parties have appealed to the identity of the majority with significant electoral success. Appeals to majority identity are typically based on nationalism, hyphenated with the dimension along which the majority is constructed: religion in India, Sri Lanka, Myanmar, Türkiye; ethnicity in Russia, Poland, Hungary, and race in the United States.

While the dominant party in these countries has played up the majority identity, the opposition has sometimes responded with its own identity politics based on a minority ethnicity and at other times de-stressed identity, employing broad policy promises, governance plank, or issue-based appeals instead. For instance, the Democratic Party in the United States has an electoral strategy based on programmatic politics and building a coalition of minorities like Blacks and Hispanics. In India, the main opposition parties engage in programmatic or issue-based politics.

Identity politics, especially majoritarian identity politics, is seen to be undemocratic, but there is a sense in which it is inefficient too (Akerlof and Kranton, 2000). Identity cues appeal to emotion and suppress or replace rational comparison between candidates based on information about their suitability for office. There is a small literature showing that identity appeals crowd out issue-based or informative decision-making (Bassi et al., 2011). Recent evidence also suggests that strong partisan and identity attachments can even lead voters to sacrifice democratic principles in favor of in-group candidates (Svolik, 2019, Graham and Svolik, 2020). This indicates that identity politics has the potential to distort candidate selection.

In this paper, we provide a model to analyze the choice of campaign rhetoric between identity politics and broad-based programmatic politics when there are two parties, one representing the majority and the other, the minority. Voters care both about their group identity as well as policies and the issue positions of the candidates on non-identity issues. While the identity rhetoric directly increases support of own group members, it provides no information on policy positions. The programmatic plank indicates the candidate's positions and likely policies if they were to hold office. In this sense, this strategy provides information about the candidate's quality or suitability for office. Faced with this tradeoff, a candidate engages in identity politics if their quality is below a threshold.

Our interest lies in comparing the incentives of the majority and minority party candidates to engage in identity politics and the consequent implications on candidate selection. The quality threshold at which a candidate gives a measure of the ex-ante likelihood that they will employ identity politics.

Our model predicts majoritarianism, i.e., the majority candidate has a higher quality threshold below which they engage in identity politics. As the population share of the majority increases, the majority candidate becomes more and more likely to engage in identity politics, while the minority candidate becomes progressively more likely to use the programmatic plank. For large enough majorities, one candidate engages in majoritarian rhetoric and the other in programmatic rhetoric, irrespective of their own qualities. The majority candidate derives a larger benefit from harvesting identity simply because the relevant group size is larger. In addition to this "direct effect", there is also a strategic effect driving majoritarianism. We find that identity politics working through information jamming (or more technically, the threshold of indifference between identity politics and programmatic politics) has the property of strategic substitutability.

The substitutability arises from the idea that the rival engaging in identity politics allows a candidate to make untested claims about their own quality and avoid a debate. Even if the voter discounts these claims and proxies the candidate with the average quality above the threshold, it benefits the candidate types whose quality is close to the threshold. Therefore, a rise in the rival threshold increases the benefit from programmatic politics close to the threshold and forces the threshold down.

The substitution thesis relies on the idea that the extent of information revealed through campaign messages depends not only on individual messages but on the message profile (Bhattacharya, 2016). We posit that if an agent adopts the programmatic plank, the voters learn more about his/her policies if the other agent also adopts the programmatic plank. If the other agent uses identity rhetoric, then the voters do not get the benefit of comparing the programs, and/or there is less of a debate about candidate policies. We simply assume that if an agent engages in programmatic politics, voters learn his quality with certainty if the rival also does the same, and only with a probability if the rival engages in identity rhetoric.

When a candidate engages in identity politics, no information is directly revealed about his quality. The voter learns that the quality lies below the relevant threshold and uses the average quality below the threshold as a proxy. When a candidate engages in programmatic politics, the quality is revealed if the rival also focuses on his program. However, if the rival employs identity politics, the quality is not revealed with some probability. In this scenario, the voter infers from the observed strategy choice that the quality is above the threshold and, in the absence of any other information, uses the average quality above the threshold as a proxy.

Thus, each candidate faces a tradeoff between exploiting identity motivation of co-ethnics while pooling with the low quality types on the one hand, and revealing own quality with some probability and pooling with the high quality types with the remaining probability on the other.

The threshold type is indifferent between the two rhetorical strategies. The source of strategic substitability is a particular incentive specific to "moderate types," which includes the threshold type. If, for some reason, the rival employs identity politics with a higher probability, the probability of non-revelation following the adoption of programmatic politics increases. The threshold type benefits from such non-revelation since it is then pooled with all quality types above the threshold. As the threshold type's benefit from programmatic politics goes up, the cut-off is driven down; therefore, more frequent adoption of identity politics by the rival induces a more frequent adoption of programmatic politics. Note that we would not have this result if we had assumed that the programmatic plank reveals the quality with certainty irrespective of the rival campaign plank.

Information-jamming via identity politics distorts candidate selection, by which we mean the choice of the candidate with the better quality. By dint of numbers, such mistakes will often favor the majority candidate. We are assured of the correct choice when the majority candidate is engaged in programmatic politics. If the minority candidate is also engaged in programmatic politics, then the choice is made by voters entirely on the basis of quality. If the minority candidate is engaged in identity politics, then his quality is revealed to be lower than that of the majority candidate anyway. We will get electoral mistakes when the majority candidate engages in identity politics, and some information is suppressed.

The point of our paper is not that identity politics is necessarily a strategic substitute. Depending on the channel through which identity politics works, it may be a substitute or a complement. Any model where common identity functions as a mode of voter mobilization can generate complementarity: One group mobilizing more agents will often force the other group to mobilize more ("ethnic outbidding", Chandra (2005)). Studies like Eifert et al. (2010), Chandra (2007), which look into electoral competition between ethnic coalitions, can be read in this light. There is another literature on redistributive conflict between groups that models political competition as a contest where the ratio of group sizes becomes an important determinant of political effort and win probabilities. In such models, effort is a strategic substitute for the smaller group and a strategic complement for the larger group. In this vein, Mitra and Ray (2014) studies Hindu Muslim conflict in India and shows that there is an escalation of violence in districts where Muslim per capita expenditures increase, but there is no such effect when Hindu per capita spending increases. In our model, the information jamming channel ensures that identity politics is a strategic substitute both for the minority and the majority.

The fact that a minority group may respond to majoritarian identity politics with a focus on corruption, on economic and social programs aimed at the general public, is again not new in the literature. It has been suggested that minority groups engage in programmatic appeals if they are small or diffused, or if the identity issue is dominated by the majority (Chandra (2007)). However, this position assumes that minorities choose issue appeals as they are constrained to do so due to the lack of scale that the majority identity provides. Our position is that the rival engaging in identity politics itself allows space and creates incentives for programmatic politics. Our argument is therefore one of issue choice rather than strength of mobilization.

2 Literature Review

Our paper connects majorly three overlapping literatures: (i) formal and behavioral theories of identity, (ii) political economy of campaign strategies (programmatic vs. identity/clientelist appeals), and (iii) information-revelation models of electoral competition, and identifies a novel mechanism (information-jamming via identity rhetoric) that produces systematic identity bias in candidate selection.

The foundational work of Akerlof and Kranton (2000) incorporates identity into individual utility, providing the microfoundations for models where co-ethnic or co-religious rhetoric alters political choice. Shayo (2009) extends this framework to redistributive politics, showing how group attachments shape class conflict and voting. Experimental and psychological studies corroborate these mechanisms: Bassi et al. (2011) shows that even assigned identities can overwhelm payoff-relevant information in voting. Similarly, Jenke and Huettel (2016, 2020) argues that “positions and social identities compete to determine voter preferences”, further demonstrating that identity cues can outweigh policy considerations in shaping vote choice. Together, these findings underscore the persistent psychological influence of identity-based appeals in electoral behavior. Dickson and Scheve (2006) presents a theoretical model for political speech and electoral competition in which social-identity concerns drive platform divergence even when policy is orthogonal to identity cleavages.

Our model builds on these insights by treating identity campaigning as both a direct payoff to co-group voters and an informational externality that reduces the informativeness of programmatic campaigns. This complements evidence that identity heuristics are especially influential in low-information environments (Bassi et al., 2011). Our model dynamics also connect to the broader literature on populism, which conceptualizes how politicians strategically emphasize identity-based or anti-elite rhetoric over programmatic appeals (Acemoglu et al., 2013a).

The comparative politics literature emphasizes the strategic choice between programmatic and non-programmatic linkages, such as clientelism and identity rhetoric. Kitschelt and Wilkinson (2007) and Stokes et al. (2013) emphasize how institutions shape the choice between programmatic and non-programmatic linkages. Bardhan and Mookherjee (2018) provides a formal theory of clientelistic versus programmatic politics, while Sarkar (2018) shows how distributive politics works through public signals of partisan solidarity. These perspectives motivate our framework in which identity appeals act not merely as substitutes for programmatic appeals but also as informationally distortive signals.

Another important strand of literature studies campaign rhetoric shaping voter beliefs: Harrington, Jr. and Hess (1996), Polborn and Yi (2006), and Bhattacharya (2016) analyze the equilibrium effects of positive and negative campaigning. Empirical studies show that trailing candidates disproportionately rely on negative campaigning (Haynes and Rhine, 1998, Lau and Pomper, 2002). A related body of work studies issue ownership and selective issue choice, highlighting candidates' incentives to emphasize issues where they hold an advantage (Budge and Farlie, 1983, Iyengar et al., 1987, Carmines and Stimson, 1989, Petrocik, 1996, Green and Hobolt, 2008, Egorov, 2015).

Our model incorporates these insights by assuming that the informativeness of programmatic appeals depends on both candidates' campaign themes. Essentially, when both candidates choose programmatic appeals, the quality of both candidates is revealed; however, when only one candidate chooses programmatic appeal while the other chooses identity-based appeal, the quality information is imperfectly revealed. Hence, an identity-focused campaign by one candidate actively distorts the information environment, affecting the revelation of the rival's quality information via programmatic appeal. Our paper thus introduces a novel externality that extends the electoral campaign rhetoric perspective.

A broader work examines the link between identity, polarization, and institutions (Acemoglu and Robinson, 2005, Besley and Persson, 2019, Ticku and Venkatesh, 2025). These studies highlight how identity cleavages reinforce majoritarian advantages. There is ample evidence for the persistence of identity-biased voting across contexts: ethnicity-based in the US (Wolfinger, 1965, Parenti, 1967, PBS NewsHour, 2024, Ganuthula and Balaraman, 2025) and Africa, (Posner, 2005, Bratton and Kimenyi, 2008, Kimenyi and Shughart, 2010, Adida, 2015, Long and Gibson, 2015); language and community in the Basque autonomous region (Ansolabehere and Puy, 2016); Caste and religion based in India (Chandra, 2007, Sridharan, 2014, Ganguly, 2014, Heath et al., 2015, Vaishnav, 2025); ethno-cultural national identity in Germany (Mader et al., 2021). Another study by Eifert et al. (2010) suggests that the salience of ethnicity spikes during competitive periods; identity politics becomes contagious. In democracies, we expect people to also serve as a democratic check; however, the identity emphasis, polarization, and weaker institutions can undermine the public's ability to do so (Acemoglu et al., 2013b, Svolik, 2019, Strickler, 2018). To be more precise, voters can themselves evaluate candidates more favorably if they share the same identity (Landa and Duell, 2015, Gutiérrez-Romero, 2024). Conroy-Krutz (2013) shows that ethnic identity primes reduce—but do not fully eliminate—voter responsiveness to corruption information in Uganda. A study in India by Banerjee et al. (2010) shows that while "ethnic preferences respond to politician quality, priming voters on the relevance of corruption left electoral outcomes unaffected." This suggests that identity primes shift attention and bias prior beliefs.

These studies establish identity as a persistent electoral force. Our model formalizes this mechanism: identity appeals provide a numerical advantage to majority candidates while the informational-jamming effect of identity rhetoric increases the likelihood of ex-post electoral mistakes that systematically favor the majority.

Relative to the literature, our paper makes three major contributions. First, it introduces identity rhetoric as an *information-jamming device* to avoid being labeled as a poor quality, complementing it as a core voter mobilization tool (Dickson and Scheve, 2006, Bassi et al., 2011). Second, it demonstrates how majoritarian bias in candidate selection arises through both direct and strategic channels, extending models of clientelism and polarization (Bardhan and Mookherjee, 2018, Acemoglu and Robinson, 2005, Ticku and Venkatesh, 2025). Third, we contribute to the overall growing literature on the salience of identity in electoral politics.

3 Model

Consider a society with a unit mass of voters that are divided into two identity groups, A and B. Group A has a population proportion $\beta > \frac{1}{2}$ and group B has a size $1 - \beta$.[1] Hence, group A is the majority group and group B is a minority group. Voters are the same, except for their differences in the identity dimension.

There are two candidates, also named A and B, who represent groups A and B, respectively. Candidates differ on the quality dimension. We can think of quality simply as the utility that the voter would receive from the policies implemented by the candidate if she were to hold office. We denote the quality of candidate $J \in A, B$ by q_J. We assume that before the election, a candidate's quality is known only to him. The rival candidate, as well as the voters, know that quality is drawn from a uniform distribution over $[0, 1]$.

The focus of our analysis is the choice of campaign theme by the candidates. A candidate's choice is to either emphasize identity or to reveal information about his quality, i.e., his own policies and programs. We denote the chosen theme of candidate J by σ_J, which takes the value 1 if the candidate employs identity focus and 0 if he employs programmatic focus.

3.1 Voter utilities

The payoff of *each* voter in group J is written as U_J if candidate J (the ingroup candidate) is elected and U_{-J} if candidate $-J$ (the outgroup candidate) is elected, and these are given by

$$U_J = q_J + a\sigma_J + \varepsilon_J \tag{1}$$
$$U_{-J} = q_{-J} - b\sigma_{-J} + \varepsilon_{-J} \tag{2}$$

There are three elements to the voter's utility from a candidate. The first element is the policy utility, which is the same as the quality of the candidate. The second element is the identity utility, which is the psychological payoff from identity being promoted. If the

[1] For notational purposes, we shall sometimes refer to the population size of group J as β_J. Then we have $\beta_A = \beta$.

ingroup candidate focuses on identity, then there is an additional utility gain of $a > 0$ from the ingroup candidate getting elected. On the other hand, if the candidate of the rival group stresses identity and gets elected, then the voter gets a negative payoff of $b > 0$, with $b < a$. One can think of the positive utility from the co-ethnic as an identity boost and negative utility if the rival identity is promoted as a backlash (Akerlof and Kranton, 2000, Shayo, 2009, Bassi et al., 2011, Jenke and Huettel, 2020). Notice that this is a per-voter utility shock, which ensures that the benefit from identity politics is larger for the majority candidate A than for the minority candidate B. The third element is the valence term, which is typically modeled as a random variable drawn after the campaign choice is made (Rogoff, 1987, Harrington, Jr. and Hess, 1996). We consider this as an idiosyncratic shock that may benefit either candidate. We normalize this shock as $\varepsilon = \varepsilon_A - \varepsilon_B$, i.e., the net valence utility in favor of candidate A. We assume that the realized value of the relative valence utility is drawn from a uniform distribution over $\left[-\frac{1}{2\phi}, \frac{1}{2\phi}\right]$. In addition to these, there is a "common shock" δ for which the realized value is the same for every individual. This is again a net utility in favor of A and drawn from a uniform distribution over $\left[-\frac{1}{2}, \frac{1}{2}\right]$.

Notice that identity politics gives each ingroup voter a "bump" and each outgroup voter a "shock". This creates a two-way advantage for the majority candidate A. As the majority increases, the gain in votes from A-voters becomes larger and the loss in votes from B-voters becomes smaller as candidate A engages in identity politics. On the other hand, as candidate B engages in identity politics, the gain in votes from group B becomes smaller and the loss in votes from group A becomes larger as the population becomes larger. We assume that the majority does not become so large that the backlash overpowers the vote gain when the minority candidate engages in identity politics.

We denote the aggregate identity utility created in the society when candidate $J \in \{A, B\}$ engages in identity politics by $D_J = a\beta_J - b\beta_{-J}$. We now make two assumptions on the parameters of the model (β, a, b) in order to ensure interesting results.

Assumption 1 ***(Moderate Majority)*** *The population share of the majority must satisfy* $\frac{1}{2} < \beta < \frac{a}{a+b}$*, which implies that* $D_B > 0$.

In other words, identity politics by either party creates positive utility in the aggregate. As a consequence, we shall find that it also creates an increase in vote share for the respective party. In the absence of this assumption, the minority group will have no benefit from identity politics (other than possibly concealing information), which will make our game uninteresting.

Assumption 2 ***(Limited Net Identity Benefit)*** *The identity utility and the backlash parameter must satisfy* $a - b < \frac{1}{2}$ *which implies that* $D_A < \frac{1}{2}$.

This assumption limits the *net* identity benefit of both candidates, in particular, the majority candidate. This actually says that if the benefit to the ingroup candidate engaging in identity politics is high, then the backlash parameter must also be high; and if the backlash is low, then the ingroup identity benefit cannot be very high either. In the absence of this assumption, the majority candidate will always engage in identity politics irrespective of her quality.

The above two assumptions taken together ensure that $0 < D_B < D_A < \frac{1}{2}$, i.e., while identity politics gives both candidates a net positive benefit, the benefit cannot be so high that it swamps the incentive of very high quality types to reveal information about their quality. Both are needed for the existence of an interior equilibrium.

3.2 Information Revelation

The choice of campaign theme not only impacts the identity utility of the voters, but it also affects the information revealed about candidate quality, which is an important input for the voting decision. If a candidate chooses the identity campaign, then no information is revealed about his quality. On the other hand, when a candidate chooses the programmatic plank as the campaign theme, the amount of information revealed depends on the rival's choice. If both candidates choose to focus on their respective policies, then there is a *fruitful debate* about policies and issue positions, and we assume that the voter learns each candidate's quality[2]. On the other hand, if one candidate chooses to focus on his program and the other runs an identity-based campaign, then the debate is not coordinated on any single issue, and we have *cross-talk*. If there is cross-talk, we assume that the quality of the candidate engaging in programmatic rhetoric is revealed with probability $\alpha < 1$.

[2]A similar approach in positive-negative campaign can be found in Bhattacharya (2016)

3.3 Strategies and beliefs

Our game sequence is simple. Each candidate $J \in \{A, B\}$ simultaneously chooses campaign rhetoric from identity-focused and program-focused. Observing their campaign choices and based on the information revealed or inferred from strategies, voters vote for their preferred candidate. The candidate with the majority of votes wins the election and obtains a win payoff normalized to 1.

Since candidate quality q_J is private information, the strategy of candidate J is a function $\sigma_J(q_J)$ assigning to each quality level q_J a probability of engaging in identity politics. We assume that the prior distribution of quality is uniform over $[0, 1]$ for both candidates.

Since there are an infinite number of voters, we do not include voters formally as players in the game. Instead, we assume that each voter behaves "sincerely" in the sense of Austen-Smith and Banks (1996). In other words, each voter behaves as if she were the only voter and makes her decision accordingly. Each voter votes for the candidate that gives a higher expected utility based on the beliefs formed about the quality that gives the equilibrium strategies of the candidates.

4 Analysis

We first posit that in equilibrium, each player J must have a cut-off strategy, i.e., for each candidate J there is a threshold r_J such that he employs an identity campaign if his quality is below the threshold and a programmatic campaign if his quality is above the threshold. We assume that the candidate engages in a programmatic campaign if he is indifferent, but the assumption is immaterial, as indifference is a zero-probability event.

Lemma 1 *For each $J \in \{A, B\}$, the equilibrium strategy must be denoted by some threshold $r_J \in [0, 1]$ such that $\sigma_J(q) = 1$ if $q < r_J$ and $\sigma_J(q) = 0$ if $q \geq r_J$.*

The intuition behind the result is that given any strategy of the rival, a higher type always has a higher benefit from revelation compared to a lower type.

Given the above structure of equilibria, the following Lemma identifies the expected quality following different rhetorical strategies.

Lemma 2 *If agent J selects $\sigma_J = 1$, voters ascribe to the candidate an expected quality $\underline{e}_J = E(q_J|q_J < r_J)$. If agent J selects $\sigma_J = 0$ and his quality is not revealed, then others ascribe to the candidate an expected quality $\bar{e}_J = E(q_J|q_J \geq r_J)$.*

The above Lemma helps us identify the tradeoff from the two rhetorical strategies more clearly. We have already seen that engaging in identity politics provides a positive utility shock of D_J to candidate J, but this is balanced against a possible cost due to non-revelation of information about quality. If an agent is seen to engage in identity politics, the voter ascribes quality $\underline{e}_J$ to the candidate. This is beneficial for types below $\underline{e}_J$. For the others, (partial) revelation through programmatic politics is beneficial from the informational point of view and is traded off against the benefit of direct vote share gain through identity politics. It is clear then that above a cut-off quality r_J, candidate J finds it more beneficial to engage in programmatic politics.

However, information revelation through programmatic politics is itself imperfect and depends on the rival's campaign strategy. In particular, if the rival engages in identity politics, there is a probability $1 - \alpha$ with which no information is revealed. But observing the campaign choice, the voters ascribe to the candidate the average quality $\bar{e}_J$. This event is beneficial for types with quality in the range $(r_J, \bar{e}_J)$ but not so for the types in the range $(\bar{e}_J, 1)$. In fact, if the revelation probability α conditional on this event is low enough, programmatic politics is not very attractive for the top types as they are pooled *down* with a large probability. The following assumption ensures that the topmost quality of the minority candidate finds it worthwhile to engage in programmatic politics. Economically, this requires that cross-cutting public discussion (debate, media coverage) is not so weak that programmatic messages are always drowned out.

Assumption 3 ***(Sufficient informativeness)*** *If a candidate engages in programmatic politics and the rival engages in identity politics, his quality is revealed with probability α, where $1 > \alpha > \max\{\frac{D_A - D_B}{D_A}, \frac{1}{2}\}$.*

4.1 Equilibrium

We now proceed to find the equilibrium. As we have mentioned before, a Nash equilibrium is a pair of cut-off strategies $\{r_A, r_B\}$ which are best responses to each other. In order to find such a strategy pair, we fix an arbitrary cut-off strategy r_A for the majority candidate

A. To find the best response of the minority candidate B, we consider an arbitrary quality $q_B = q$ and compare the payoff from the two campaign strategies.

First, given the profile of campaigns, let the difference in non-valence utility between candidate B and A for a voter in group J be V_J. The total utility difference in favor of b for such a voter is $V_J - \varepsilon - \delta$. This voter votes for candidate B with probability

$$\frac{1}{2} + \phi(V_J - \delta). \tag{3}$$

Therefore, the vote share for candidate B as a function of δ is

$$\frac{1}{2} + \phi(\beta_A V_A + \beta_B V_B) - \phi\delta. \tag{4}$$

Therefore, candidate B wins with probability

$$Pr\left[\frac{1}{2} + \phi(\beta_A V_A + \beta_B V_B) - \phi\delta > \frac{1}{2}\right] \implies Pr\left[\delta < \beta_A V_A + \beta_B V_B\right], \tag{5}$$

which comes to $\frac{1}{2} + (\beta_A V_A + \beta_B V_B)$. Since we have normalized the win payoff to 1, this is also the expected payoff of candidate B. From this, we can calculate her expected payoff for each campaign strategy.

Note that there are two sources of non-valence utility as mentioned above: utility from quality (as revealed) and utility from identity. Both of these depend on the profile of campaign strategies. Let, with some abuse of notation, $\sigma_J \in \{0, 1\}$ be the chosen campaign of candidate J. Let the *revealed or inferred* policy utility from the pair of candidates (A, B) be denoted by $(\hat{q_A}, \hat{q_B})$. Notice that here, $\hat{q_J}$ can take values q_J, $\bar{e}_J$ or $\underline{e}_J$. Now, the expected payoff of candidate B based on the chosen campaigns can be written as

$$(\hat{q_B} - \hat{q_A}) + \sigma_B D_B - \sigma_A D_A. \tag{6}$$

Now we are in a position to state the expected payoff for each campaign strategy of candidate B in response to candidate A's strategy. In the proposition, we use the notation $Z(\hat{q_B}, \hat{q_A}) = \hat{q_B} - \hat{q_A}$ for convenience of exposition.

Proposition 1 *When candidate A chooses the cutoff r_A, the payoff of candidate B from revealing quality information (programmatic campaign) $\Pi_R^B(q)$, and by not revealing (identity campaign) Π_{NR}^B are given by:*

$$\begin{aligned}
\Pi_R^B(q)\mid_{r_A} &= \frac{1}{2} + \int_0^{r_A} \left[\alpha Z(q, \underline{e}_A) + (1-\alpha) Z(\bar{e}_B, \underline{e}_A) - D_A\right] \, dF(q_A) + \int_{r_A}^1 Z(q, q_A)\, dF(q_A) \\
\Pi_{NR}^B\mid_{r_A} &= \frac{1}{2} + \int_0^{r_A} \left[Z(\underline{e}_B, \underline{e}_A) - (D_A - D_B)\right] \, dF(q_A) \\
&\quad + \int_{r_A}^1 \left[\alpha Z(\underline{e}_B, q_A) + (1-\alpha) Z(\underline{e}_B, \bar{e}_A) + D_B\right] \, dF(q_A)
\end{aligned}$$

First, consider $\Pi_R^B(q)$: The first integral (over $q_A \leq r_A$) covers states in which the candidate A is a "low" type and therefore chooses identity. In those states B's programmatic message is revealed only with probability α: if revelation occurs the electorate evaluates B at her true q and A at $\underline{e}_A$ (hence the term $\alpha Z(q, \underline{e}_A)$); if revelation fails the electorate uses the pooling mean $\bar{e}_B$ for B (hence $(1-\alpha)Z(\bar{e}_B, e_A)$). The term D_A captures the direct vote-probability advantage that A's identity rhetoric produces. The second integral (over $q_A > r_A$) corresponds to states where A chooses programmatic politics and both qualities (revealed) enter the vote-probability $Z(\cdot,\cdot)$ directly.

Next, consider Π_{NR}^B: The first integral is the case where both candidates emphasize identity (both are below their cutoffs), so voters compare pooled means $\underline{e}_B$ and $\underline{e}_A$, and the net identity benefit differential $D_A - D_B$ matters. The second integral is the case where A reveals while B does not: with probability α the electorate observes A's realized q_A (and uses pooled $\underline{e}_B$ for B), while with probability $1-\alpha$ the revelation fails and A is evaluated at $\bar{e}_A$. Finally, B collects the identity payoff D_B in this branch.

Note that for candidate B, as $Z()$ is linear function in q, in the payoff difference, $\Pi_R^B(q) - \Pi_{NR}^B$, while $\Pi_R^B(q)$ is an increasing function of his quality, Π_{NR}^B is constant (does not depend on q, it depends on e_B, i.e. the pooling mean determined by the threshold r_B but not on the realized q). Hence, for a fixed rival cutoff r_A, there is a unique cutoff r_B solving $\Pi_R^B(q) = \Pi_{NR}^B$. Thus, we must have a best response cut-off above which candidate B reveals his quality (engages in programmatic campaign) and below, which she does not reveal (emphasis on group identity). This implicitly gives us the reaction function $\tilde{r}_B(r_A)$. Symmetrically, we obtain the reaction function $\tilde{r}_A(r_B)$.

Formally, we can write the payoff difference between $\Pi_R^B(q)\mid_{r_A}$ and $\Pi_{NR}^B\mid_{r_A}$ as

$$\Delta(q) = [\{(\alpha q + (1-\alpha)\,\overline{e}_B))F(r_A) + q(1-F(r_A))\} - \underline{e}_B] \\ - \left[(1-\alpha)\int_{r_A}^{1}(q_A - \overline{e}_A)dF(q_A)\right] - D_B \tag{7}$$

Here, the first term within square brackets is the change in payoff due to quality revelation: the term in curly brackets is the expected quality conditional on programmatic politics, and $\underline{e}_B$ is the inferred quality due to identity politics. The second term is the difference in expected quality of the rival A due to a change in the rhetoric of B. Notice that this is only conditional on A engaging in programmatic politics: when A engages in identity politics, her inferred quality is the same ($\underline{e}_A$) irrespective of the campaign choice of B. Finally, we have the change in identity benefit D_B.

We get the best response cut-off for B at the value of q satisfying $\Delta(q) = 0$. Notice that if we set $\alpha = 1$, then $\Delta(q)$ reduces to $q - \underline{e}_B - D_B$. In that case, we will still get an optimal cutoff for B, but it will be independent of the strategy function of the rival. In this case, we will get only the direct effect and not the strategic effect.

Collecting terms in 7, setting $q = r$ and explicitly expressing the expected qualities as functions of the cutoff r, we obtain

$$(\alpha r + (1-\alpha)\,\overline{e}_B(r)))F(r_A) + r(1-F(r_A)) - \underline{e}_B(r) = (1-\alpha)\int_{r_A}^{1}(q_A - \overline{e}_A)dF + D_B \tag{8}$$

It is, in general, not possible to guarantee the existence of a fixed point. To see this, let the LHS of the above equation be denoted by $f(r)$. Then,

$$f'(r) \;=\; \left(\alpha + (1-\alpha)\,\frac{d}{dr}\overline{e}_B(r)\right)F(r_A) + (1-F(r_A)) - \frac{d}{dr}\underline{e}_B(r)$$

In general, the rates of change of $\underline{e}_B(r)$ and $\bar{e}_B(r)$ may vary locally, making existence difficult. However, if we assume that F is uniform, then $\underline{e}_B(r) = \frac{r}{2}$ and $\bar{e}_B(r) = \frac{1+r}{2}$, ensuring that both derivatives are $\frac{1}{2}$. In that case, we have

$$f'(r) \;=\; \left(\alpha + (1-\alpha)\,\frac{1}{2}\right)F(r_A) + (1-F(r_A)) - \frac{1}{2} = \frac{1}{2}F(r_A)\alpha,$$

ensuring monotonicity of the LHS of equation 8 for all r_A and α. This guarantees the existence of a fixed point. Now, we formally provide the closed-form reaction functions with uniform distribution as Lemma 3.

Lemma 3 *Assume A1, A2 and A3. The reaction functions for candidate A and B are given by*

$$\begin{aligned}
\tilde{r}_A(r_B) &= 1 - \frac{1 - 2D_A}{1 - r_B(1-\alpha)} \\
\tilde{r}_B(r_A) &= 1 - \frac{1 - 2D_B}{1 - r_A(1-\alpha)}
\end{aligned}$$

Moreover, the cutoffs r_A and r_B are strategic substitutes to each other.

Proof. In appendix ■

The reaction functions make transparent the two forces that determine r_J: the direct identity incentive D_J (which raises the cutoff and induces more hiding) and the rival's frequency r_{-J} of engaging in identity politics (which, through incomplete revelation $(1-\alpha)$, affects the informativeness of programmatic messaging).

Note that we have assumed that $0 < D_B < D_A < \frac{1}{2}$. If the benefit from identity politics is very high, then all types will engage in identity politics irrespective of the other parameters. Given this parameter restriction, the reaction functions are negatively sloped, and therefore the cut-offs are *strategic substitutes*. To see why, notice that if A raises her cut-off (i.e., engages in identity politics over a larger range of quality), the "moderate types", i.e., the types below $\bar{e}_B$, have a higher benefit from engaging in identity politics since they are now *pooled up* more frequently. Since the cut-off type must always lie below $\bar{e}_B$, its indifference is broken, and the new indifference cut-off is at a lower quality level. The following figure shows the reaction functions, and monotonicity guarantees a unique equilibrium.

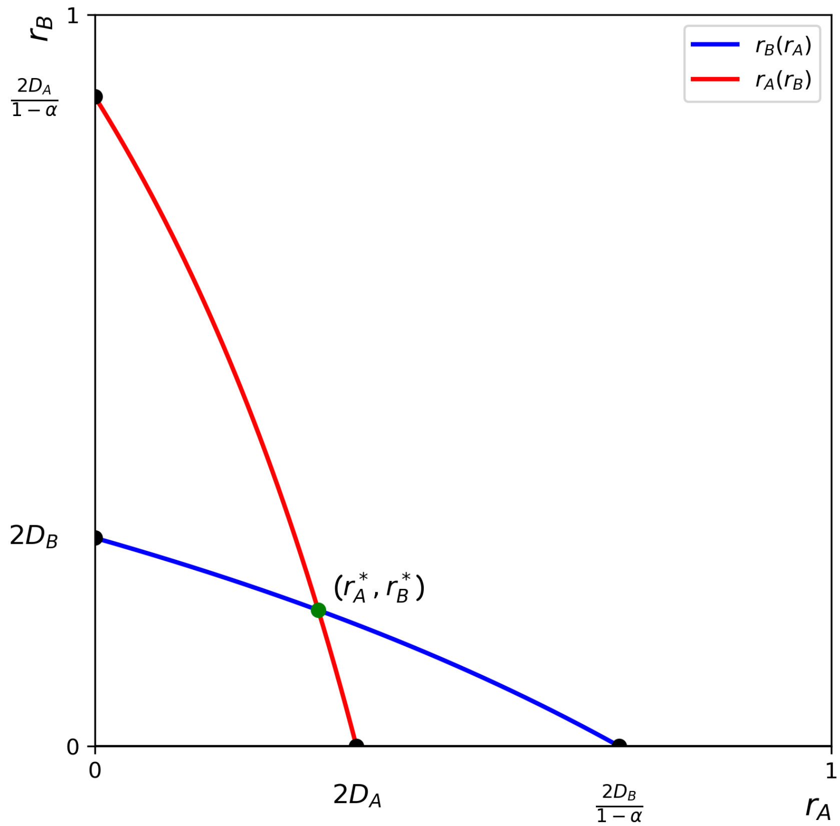

Figure 1: Reaction functions of the two candidates

We formally present our equilibrium result in the next proposition.

Proposition 2 *There exists a unique interior equilibrium cut of* (r_A^*, r_B^*) *if the following conditions hold:*
A1. Moderate Majoritarianism: $\beta < \frac{a}{a+b}$ *or equivalently* $0 < D_B$
A2. Sufficient informativeness of the campaigns: $\alpha > \max\{\frac{D_A - D_B}{D_A}, \frac{1}{2}\}$
A3. Limited Net Identity Benefit: $a - b < \frac{1}{2}$ *or equivalently* $D_A < \frac{1}{2}$

Proof. In appendix ■

Proposition 2 shows that, under reasonable assumptions like moderate majoritarianism, sufficiently informative campaigns, and moderate identity politics benefits, the game admits a unique interior equilibrium in cutoff strategies. Consequently, candidates choose to engage in identity politics when their quality is below the equilibrium threshold r_J^* and programmatic politics above the equilibrium threshold. The uniqueness result is not just technical: it ensures that the thresholds are jointly determined and that the equilibrium is well behaved, ruling out outcomes where all types always engage in identity politics and no information is revealed.

Having established this unique equilibrium, we now turn to the structure and comparative statics of these thresholds. In particular, Proposition 3 demonstrates that the majority candidate always sets a higher cutoff, thereby relying on identity more often than the minority. This comparative asymmetry in equilibrium strategies is central to our account of how majoritarianism biases campaign rhetoric.

Proposition 3 *In the equilibrium, the candidate belonging to the majority group has a higher propensity to engage in identity politics, that is* $r_B^* \leq r_A^*$.

Proof. In appendix ■

The above result follows directly from the population asymmetry in favor of candidate A, creating an advantage in identity politics. Mathematically speaking, since $D_A > D_B$, the intersection of the two reaction functions lies below the 45° line in Figure 1. For the majority candidate, the larger identity politics payoff means that even moderately high-quality types prefer to rely on an identity-based campaign rather than risk imperfect revelation.

This result shows that identity politics has a systematic majoritarian bias. Even if the two candidates are ex ante drawn from the same quality distribution, the equilibrium pattern of rhetoric ensures that the majority candidate is more likely to cloak themselves in identity politics. Consequently, voters are more likely to face less information about the majority candidate's quality than the minority's, increasing the chances that a lower-quality majority candidate is elected.

Next, we examine how the equilibrium thresholds respond to changes in the underlying primitives of the model. These comparative statics reveal how demographic and institutional parameters shape the strategic environment: as group size, identity push, or the informativeness of campaigns shift, the incentives to engage or disengage identity politics adjust in expected ways.

4.2 Comparative Statics

Proposition 4 *As the population share of the majority group rises, the majority candidate's propensity to engage in identity politics rises. Conversely, the minority candidate's propensity to engage in identity politics decreases, i.e.,* $r_A^*(r_B)$ *increases and* $r_B^*(r_A)$ *decreases with an increase in* β_A*.*

Proof. In appendix ■

The intuition behind this is this: as the size of the majority rises, it disproportionately favors the majority candidate, as his benefit of engaging in identity politics ($2D_A$) is now much higher. For the minority candidate, the mechanism is more subtle, and the result has two dimensions: First, pure majoritarianism dynamics hurt the minority candidate. Now, engaging in identity politics pays off less, and backlash from the majority is stronger, so only the lowest-quality types hide behind identity, while other types are compelled to engage in programmatic politics. Second, there is a strategic effect. When the majority candidate engages in identity politics more frequently by raising his cutoff, it is in the best interest of the minority candidate to engage in programmatic politics as $r_B(r_A)$ decreases with an increase in r_A. Moreover, the strategic effect now again feeds to the majority candidate who engages in identity politics even more. This essentially creates a self-feeding cycle.

Moreover, now even moderately good-quality majority candidates increasingly find identity appeals attractive as their group grows. This result links demographic structure to the endogenous supply of information (about candidates) in elections. As the majority grows, not only does the majority candidate hide behind identity more often, but consequently, voters also face less information about their competence. This makes electoral mistakes more likely — systematically favoring the majority candidate. This result also aligns with the empirical evidence showing that larger ethnic groups are more likely to engage in identity politics(Posner, 2005, Chandra, 2005, 2007, Eifert et al., 2010). We now turn to the informativeness aspect of the campaigns.

Proposition 5 *As programmatic campaigns become more informative (i.e. as* α *increases), both candidates raise their cutoff thresholds, and hence the propensity to engage in identity politics increases.*

The proof is an immediate consequence of the differentiation of the reaction functions, with respect to α. This result is striking because it runs counter to the conventional view that more information is beneficial to voters (Fox and Shotts, 2009). In our model, a higher α makes programmatic campaigning more revealing, which sharpens the risk for candidates of intermediate quality: if their type (quality) is revealed to be below that of their rival, they lose for sure. This reasoning is reminiscent of Prat (2005) where higher transparency reduces information revelation incentives. Hence, a more informative environment paradoxically expands the range of types who conceal quality behind identity rhetoric.

In the electoral context, Conroy-Krutz (2013) and Banerjee et al. (2010) provide evidence that voters exposed to more information sometimes rely more heavily on partisan or identity cues rather than less. Our result provides a formal mechanism that can rationalize these type of findings: when revelation becomes sharper, candidates of intermediate quality perceive a heightened risk of being exposed as weak and therefore retreat into identity politics as a safer equilibrium strategy.

Proposition 6 *When campaigns are sufficiently informative (i.e, when α is sufficiently high) an increase in the identity push, the propensity to engage in identity politics rises. Moreover, it rises more for the majority candidate. Similarly, when the backlash from identity politics increases, the propensity to reveal information increases, and it increases even more for the minority candidate.*

Proof. In appendix ■

These comparative statics show that identity rhetoric becomes especially attractive when it is electorally rewarding and when programmatic debates are less revealing. In real-world campaigns, this implies that strong identity attachments coupled with noisy or shallow policy debates create fertile ground for identity politics. Conversely, when backlash is strong - say, when civil society or institutions impose costs on exclusionary rhetoric - identity politics become less sustainable.

These comparative statics matter only because information revelation is imperfect. But with partial revelation, candidates at the margin weigh "identity benefit" against the risk of being pooled with weaker types. In figure 1, we can see that as a increases, $2D_A$ also increases and the equilibrium shifts to the upper side with higher r_J. Intuitively, as a (in-group identity push) increases, the net benefit from identity rhetoric grows. A candidate can count on a larger vote bonus or a bigger penalty imposed on the rival simply by playing identity. This tilts the calculus in favor of hiding quality, since even candidates of intermediate competence can win enough support through identity alone. As a result, the cutoff r_J shifts upward, meaning even more moderate types engage in identity politics.

This logic parallels findings that ethnic and partisan identity primes crowd out policy evaluation (Bassi et al., 2011), while institutional or societal backlash can discipline politicians (Kitschelt and Wilkinson, 2007).

We have provided a model where the ingroup identity benefit a and the outgroup backlash b are symmetric across groups. While this economizes on parameters, the symmetry is in no way necessary. In fact, for a given group J, we could define a_J as the extra utility a member receives when the ingroup member engages in identity politics and b_J as the extra reduction in utility for a member when the outgroup candidate engages in identity politics. Then we can redefine $D_J = \beta_J a_J - \beta_{-J} b_{-J}$. As long as assumptions A1, A2, and A3 are made on the identity parameters of both groups, our entire analysis will go through. Now, we may have D_A increasing without D_B decreasing, and vice versa. This will allow us to capture scenarios like identity consolidation by one group, possibly due to the arrival of a strong leader. This would imply a (and possibly, but not necessarily b) growing for only one group. Our results will continue to work through the separate effects on D_A and D_B.

5 Conclusion

We developed a model of electoral campaigning in which candidates choose between identity appeals and programmatic rhetoric when the revelation of quality is imperfect and depends on the campaign environment. In equilibrium, high-quality candidates reveal their competence, low-quality types rely on identity, and intermediate types weigh the tradeoff between mobilizing their base and pooling with stronger types. Our analysis establishes the existence and uniqueness of an interior cutoff equilibrium and shows that majority candidates systematically rely more on identity than their minority rivals, generating a majoritarian bias in equilibrium outcomes. The identity push and majoritarianism further exacerbate this situation, leading to a higher propensity of identity-based campaigns from the majority candidate and, consequently, ill-informed voting decisions from the electorate.

Moreover, we identify a novel strategic force: identity politics operates as a strategic substitute. When one candidate leans more heavily on identity politics, the rival is induced to rely on programmatic appeals. This mechanism helps explain the coexistence of identity politics and policy–based programmatic campaigning, a pattern often observed but not previously formalized. It also underscores the efficiency costs of identity mobilization, since imperfect revelation raises the risk that lower–quality majority candidates are elected, and even the moderate quality majority candidate may engage in identity politics. Beyond theory, the results suggest we should treat identity and programmatic campaigning as jointly determined strategies, and they point to institutional settings that strengthen the informativeness of campaigns as a way to reduce the distortions we highlight.

A Appendix

A.1 Proof of Lemma 3

Proof. We shall provide the proof for $\tilde{r}_B(r_A)$, then $\tilde{r}_A(r_B)$ follows similarly.

Notice that the difference Δ is increasing in q. Therefore, we get a cut-off $q^* = r_B$ above which candidate B reveals his quality (engages in programmatic campaign) and below, which she does not reveal (emphasis on group identity). Then the difference can be rewritten as,

$$
\begin{aligned}
\int_0^1 \Delta dF &= \int_{r_A}^1 \left[(q - \underline{e}_B) - D_B - (1-\alpha)(q_A - \bar{e}_A)\right] dF \\
&\quad + \int_0^{r_A} \left[[\alpha q + (1-\alpha)\bar{e}_B - \underline{e}_B] - D_B\right] dF \\
&= \left[(q - \underline{e}_B) - D_B\right]\left[1 - F(r_A)\right] - (1-\alpha)\int_{r_A}^1 (q_A - \bar{e}_A) dF \\
&\quad + F(r_A)\left([\alpha q + (1-\alpha)\bar{e}_B - \underline{e}_B] - [a\beta_B - b\beta_A]\right) \\
&= -\underline{e}_B - D_B + [1 - F(r_A)]q + F(r_A)[\alpha q] + F(r_A)[(1-\alpha)\bar{e}_B] \\
&= -\underline{e}_B - D_B + q[1 - F(r_A)(1-\alpha)] + F(r_A)(1-\alpha)\bar{e}_B
\end{aligned}
$$

Now, at the equilibrium, $q = r_B$, we must have $\int_0^1 \Delta dF = 0$. Hence,

$$r_B[1 - F(r_A)(1-\alpha)] \;=\; \underline{e}_B + D_B - F(r_A)(1-\alpha)\bar{e}_B$$

Now, with the uniform distribution we will have $F(r_A) = r_A$, $\underline{e}_B = \frac{r_B}{2}$, and $\bar{e}_B = \frac{1+r_B}{2}$. Hence, we must have:

$$\begin{aligned}
r_B[1 - r_A(1-\alpha)] &= \frac{r_B}{2} + D_B - r_A(1-\alpha)\frac{(1+r_B)}{2} \\
r_B[1 - r_A(1-\alpha)] &= D_B - \frac{r_A}{2}(1-\alpha) + \frac{r_B}{2} - r_A(1-\alpha)\frac{r_B}{2} \quad \text{(where } D_B = a\beta_B - b\beta_A\text{)} \\
\frac{r_B}{2}[1 - r_A(1-\alpha)] &= D_B - \frac{r_A}{2}(1-\alpha) \\
r_B &= \frac{2D_B - r_A(1-\alpha)}{1 - r_A(1-\alpha)} \\
r_B &= 1 + \frac{2D_B - 1}{1 - r_A(1-\alpha)}
\end{aligned}$$

Similarly, we can prove that $r_A = 1 + \frac{2D_A - 1}{1 - r_B(1-\alpha)}$. ■

A.2 Proof of Proposition 2

Proof. From, lemma 3, consider $\tilde{r}_B(r_A)$:
$\tilde{r}_B(0) = 2D_B$
$\tilde{r}_B(r_A)\mid_{r_B=0} \implies r_A = \frac{2D_B}{1-\alpha}$
Similarly, for $\tilde{r}_A(r_B)$:
$\tilde{r}_A(0) = 2D_A$
$\tilde{r}_B(r_A)\mid_{r_B=0} \implies r_A = \frac{2D_A}{1-\alpha}$.
From assumption 1, it is straightforward to see that, $0 < 2D_B < 2D_A < 1 \implies 0 < 2D_B < \frac{2D_A}{1-\alpha}$. That is, in the $r_A \times r_B$ plane, the reaction function $\tilde{r}_A(r_B)$, starts above the reaction function $\tilde{r}_B(r_A)$ on the r_B-*axis*
Now, both reaction functions are concave in $(0,1) \times (0,1)$ as we will have $2D_B < 2D_A < 1$ as a consequence of $\tilde{r}_J > 0$.
Now, from assumption 2, we have $\frac{D_A - D_B}{D_A} < \alpha \implies 2D_A < \frac{2D_B}{1-\alpha}$. Thus, we must have a point (r_A^*, r_B^*), a crossover point of the reaction functions.

Now, $2D_J < 1 \implies$, both $\frac{\partial r_B}{r_A}, \frac{\partial r_A}{r_B} < 0$. Thus, we have monotonically decreasing functions. Since, $r_B(0) = 2D_B \in (0,1)$ and $r_A(0) = 2D_A \in (0,1)$. Thus, any point that satisfies both reaction functions must be in $(0,1)$. The monotonic nature of the reaction functions ensures the uniqueness of the equilibrium.

■

A.3 Proof of Proposition 3

Proof. We know that any corner equilibrium solution has $r_A^* \geq r_B^*$.
Now, for the interior equilibrium, we know that the reaction functions are

$$\begin{aligned} r_B &= 1 + \frac{2D_B - 1}{1 - r_A(1-\alpha)} \\ r_A &= 1 + \frac{2D_A - 1}{1 - r_B(1-\alpha)} \end{aligned}$$

It is enough to prove that the diagonal line $r_A = r_B$ cuts the reaction function $\tilde{r}_A(r_B)$ above the point of intersection of the line $r_A = r_B$ and $\tilde{r}_B(r_A)$.
Substituting into either reaction function gives: $\tilde{r}_i(r_{-i})$ at point $r_A = r_B = r$.

$$\begin{aligned} r &= 1 + \frac{2D - 1}{1 - r(1-\alpha)} \\ (r-1)[1 - r(1-\alpha)] &= 2D - 1 \end{aligned}$$

Differentiating with respect to D yields

$$\begin{aligned} -(r-1)(1-\alpha)\frac{dr}{dD} + [1 - r(1-\alpha)]\frac{dr}{dD} &= 2 \\ \frac{dr}{dD} &= \frac{2}{(1-r)(1-\alpha) + 1 - r(1-\alpha)} > 0 \end{aligned}$$

That is, the equilibrium threshold is strictly increasing in the identity gain D. Since,

$D_A > D_B$, we must have the $r_A(r_B)$ line cutting the $r_A = r_B$ line above $r_B(r_A)$. Thus, the unique interior equilibrium point (the crossing point of the curves) must be below $r_A = r_B$ in the $(0,1) \times (0,1)$ space as $r_A(r_B)$ starts above $r_B(r_A)$ at $r_A = 0$. $\blacksquare$

A.4 Proof of Proposition 4

Proof. We will first prove that $\frac{dr_A}{d\beta_A}$ and $\frac{dr_B}{d\beta_A}$ have opposite signs and then prove that $\frac{\partial r_A}{\partial \beta_A} > 0$ which will imply that. $\frac{\partial r_B}{\partial \beta_A} < 0$

$$\begin{aligned}
\frac{dr_B}{d\beta_A} &= \frac{1}{[1-r_A(1-\alpha)]^2}[-2(1-r_A(1-\alpha))(a+b) + (2D_B-1)(1-\alpha)\frac{dr_A}{d\beta_A}] \\
&= \frac{-2(a+b)}{[1-r_A(1-\alpha)]} + \frac{(2D_B-1)(1-\alpha)}{[1-r_A(1-\alpha)]^2}\frac{dr_A}{d\beta_A} \\
\frac{dr_A}{d\beta_A} &= \frac{1}{[1-r_B(1-\alpha)]^2}[[2(1-r_B(1-\alpha))(a+b)] + (2D_A-1)(1-\alpha)\frac{dr_B}{d\beta_A}] \\
&= \frac{2(a+b)}{[1-r_B(1-\alpha)]} + \frac{(2D_A-1)(1-\alpha)}{[1-r_B(1-\alpha)]^2}\frac{\partial r_B}{d\beta_A}
\end{aligned}$$

We know that $0 < 1 - r_A(1-\alpha) < 1$ and $0 < 1 - r_B(1-\alpha) < 1$. Moreover, $2D_B - 1 < 0$ and $2D_A - 1 < 0$. From the derivative expressions, it is clear that $\frac{dr_A}{d\beta_A} > 0 \implies \frac{dr_B}{d\beta_A} < 0$ and $\frac{dr_B}{d\beta_A} < 0 \implies \frac{dr_A}{d\beta_A} > 0$. Thus, we have $\frac{dr_A}{d\beta_A} > 0 \iff \frac{dr_B}{d\beta_A} < 0$.
Thus, $\frac{dr_A}{d\beta_A}$ and $\frac{dr_B}{d\beta_A}$ have opposite signs.
Let us rewrite temporarily for simplification:

$$\begin{aligned}
\frac{dr_B}{d\beta_A} &= \frac{-2(a+b)}{v} + \frac{(2D_B-1)(1-\alpha)}{v^2}\frac{dr_A}{d\beta_A} \\
\frac{dr_A}{d\beta_A} &= \frac{2(a+b)}{u} + \frac{(2D_A-1)(1-\alpha)}{u^2}\frac{dr_B}{d\beta_A} \\
\frac{dr_B}{d\beta_A} &= \frac{-2(a+b)}{v} + \frac{(2D_B-1)(1-\alpha)2(a+b)}{uv^2} + \frac{(2D_B-1)(2D_A-1)(1-\alpha)^2}{u^2v^2}\frac{dr_B}{d\beta_A} \\
\frac{dr_A}{d\beta_A} &= \frac{2(a+b)}{u} - \frac{(2D_A-1)(1-\alpha)2(a+b)}{u^2v} + \frac{(2D_B-1)(2D_A-1)(1-\alpha)^2}{u^2v^2}\frac{dr_A}{d\beta_A}
\end{aligned}$$

Now, consider $\frac{dr_A}{\partial \beta_A}$, we know that $u > 0,\ v > 0 \implies uv^2 > 0,\ vu^2 > 0$. The first term is positive. In the second term, $2D_A - 1 < 0$ & $(1-\alpha) > 0 \implies$ second term is positive. In the third term $2D_B - 1 < 0$ & $2D_A - 1 < 0 \implies (2D_B - 1)(2D_1 - 1) > 0$. Thus, a sufficient condition for $\frac{dr_A}{d\beta_A} > 0$ will be $\frac{(2D_B-1)(2D_A-1)(1-\alpha)^2}{u^2v^2} < 1$. That is $\frac{2D_B-1}{1-r_A(1-\alpha)} * \frac{2D_A-1}{1-r_B(1-\alpha)} < \frac{1-r_A(1-\alpha)}{1-\alpha} * \frac{1-r_B(1-\alpha)}{1-\alpha}$. Which is true if $1 < \frac{1-r_B(1-\alpha)}{1-\alpha}$ (or equivalently $r_B < \frac{\alpha}{1-\alpha}$) which is always true if $\alpha > \frac{1}{2}$

Thus, we must have $\frac{dr_A}{d\beta_A} > 0$ and consequently $\frac{dr_B}{d\beta_A} < 0$ ∎

A.5 Proof of Proposition 6

Proof.

$$\begin{aligned}
\frac{dr_B}{da} &= \frac{2(1-\beta_A)}{1-r_A(1-\alpha)} + \frac{(2D_B-1)(1-\alpha)}{[1-r_A(1-\alpha)]^2}\frac{dr_A}{da} \\
\frac{dr_A}{da} &= \frac{2\beta_A}{1-r_B(1-\alpha)} + \frac{(2D_A-1)(1-\alpha)}{[1-r_B(1-\alpha)]^2}\frac{dr_B}{da}
\end{aligned}$$

Let $x = \frac{dr_A}{da}$ and $y = \frac{dr_B}{da}$, $\gamma = 1 - \alpha$

Now we have

$$x(1 - r_B\gamma) + y\,(1 - r_A)\,\gamma = 2\beta \quad (9)$$

$$x(1 - r_B)\gamma + y\,(1 - \gamma r_A) = 2(1 - \beta) \quad (10)$$

By subtracting (10) from (9)

$$(x - y)\,(1 - \gamma) = 2\,(2\beta - 1) \quad (11)$$

RHS of (11) is positive (but can be very small). Then we must have $x > y$.

Can we have $x < 0$? If so, $y < x < 0$. But then, in either equation (10) or (9) , the LHS will be negative since the coefficients are positive. On the other hand, the RHS is positive for both. Hence, we cannot have $x < 0$.

The interesting matter is the sign of y.

From (11), we get

$$x = y + \frac{2\,(2\beta - 1)}{1 - \gamma}$$

Using value of x in (9), we get

$$\left[y + \frac{2\,(2\beta - 1)}{1 - \gamma}\right](1 - r_B\gamma) + y\,(1 - r_A)\,\gamma = 2\beta$$

$$\begin{aligned}
(1 - \gamma r_A + \gamma - \gamma r_B)\,y &= 2\beta - \frac{2\,(2\beta - 1)}{1 - \gamma}(1 - r_B\gamma) \\
&= 2\left[\beta - (2\beta - 1)\,\frac{1 - r_B\gamma}{1 - \gamma}\right] > 2\Big[\beta - (2\beta - 1)\Big] \\
&= 2(1 - \beta) > 0
\end{aligned}$$

implying RHS > 0. Now,

$$\begin{aligned}
1 - r_A - r_B &> -1 \\
&\Rightarrow \quad 1 + \gamma(1 - r_A - r_B) > 1 - \gamma > 0
\end{aligned}$$

which implies that $y > 0$ and hence $x > y > 0$

Now, consider the backlash parameter,

$$\begin{aligned}
\frac{dr_B}{db} &= \frac{-2\beta_A}{1 - r_A(1 - \alpha)} + \frac{(2D_B - 1)(1 - \alpha)}{[1 - r_A(1 - \alpha)]^2}\frac{dr_A}{db} \\
\frac{dr_A}{db} &= \frac{-2(1 - \beta_A)}{1 - r_B(1 - \alpha)} + \frac{(2D_A - 1)(1 - \alpha)}{[1 - r_B(1 - \alpha)]^2}\frac{dr_B}{db}
\end{aligned}$$

Let $\frac{dr_A}{db} = m$ and $\frac{dr_B}{db} = n$ and $1 - \alpha = \gamma$.

$$\begin{aligned}
(1 - r_B\gamma)m &= -2(1 - \beta) + (r_A - 1)\gamma n \\
(1 - r_A\gamma)n &= -2\beta + (r_B - 1)\gamma m
\end{aligned}$$

$$(1 - r_B\gamma)m + (1 - r_A)\gamma n \quad = \quad -2(1 - \beta) \tag{12}$$

$$(1 - r_B)\gamma m + (1 - r_A\gamma)n \quad = \quad -2\beta \tag{13}$$

Subtract 13 from 12

$$(1 - \gamma)(m - n) = 2(2\beta - 1) \tag{14}$$

Note that coefficients of both m and n are positive in equation 12, so both m and n, can not be positive as RHS is negative ($-2(1 - \beta)$). So at least one is negative. Note that $m < n < 0 \implies m - n < 0$, thus we can not have $m < n$ as RHS of 14 is positive.
Similarly $m < 0 < n$ is also not feasible
We must have $m > n$
Now either $n < m < 0$ or $n < 0 < m$. From equation 14, substitute the value of n in equation 12

$$(1 - r_B)\gamma m + (1 - r_A\gamma)\left[m - \frac{2(2\beta - 1)}{1 - \gamma}\right] = -2\beta$$

$$\big[(1 - r_B)\gamma + (1 - r_A\gamma)\big]m = 2(2\beta - 1)\frac{1 - r_A\gamma}{1 - \gamma} - 2\beta$$

Now, $\frac{1 - r_A\gamma}{1 - \gamma} < 1$. Hence, for m to be positive, we need $2(2\beta - 1) > 2\beta \implies \beta > 1$ which is not feasible
Hence, we must have $m < 0$ and hence $n < m < 0$

Moreover, note that as $\alpha \to 1$, $\frac{dr_J}{da} \to 2\beta_J > 0$; and as $\alpha \to 1$, $\frac{dr_J}{db} \to -2\beta_{-J} < 0$.
■

References

Acemoglu, D., Egorov, G., and Sonin, K. (2013a). A political theory of populism. *The Quarterly Journal of Economics*, 128(2):771–805.

Acemoglu, D. and Robinson, J. A. (2005). *Economic origins of dictatorship and democracy.* Cambridge university press.

Acemoglu, D., Robinson, J. A., and Torvik, R. (2013b). Why do voters dismantle checks and balances? *Review of Economic Studies*, 80(3):845–875.

Adida, C. L. (2015). Do african voters favor coethnics? evidence from a survey experiment in benin. *Journal of Experimental Political Science*, 2(1):1–11.

Akerlof, G. A. and Kranton, R. E. (2000). Economics and identity. *The quarterly journal of economics*, 115(3):715–753.

Ansolabehere, S. and Puy, M. S. (2016). Identity voting. *Public Choice*, 169(1):77–95.

Austen-Smith, D. and Banks, J. S. (1996). Information aggregation, rationality, and the condorcet jury theorem. *American Political Science Review*, 90(1):34–45.

Banerjee, A., Green, D., Green, J., and Pande, R. (2010). Can voters be primed to choose better legislators? experimental evidence from rural india. In *Presented and the Political Economics Seminar, Stanford University*.

Bardhan, P. and Mookherjee, D. (2018). A theory of clientelistic politics versus programmatic politics. Technical report, Boston University-Department of Economics.

Bassi, A., Morton, R. B., and Williams, K. C. (2011). The effects of identities, incentives, and information on voting. *The Journal of Politics*, 73(2):558–571.

Besley, T. and Persson, T. (2019). Democratic values and institutions. *American Economic Review: Insights*, 1(1):59–76.

Bhattacharya, S. (2016). Campaign rhetoric and the hide-and-seek game. *Social Choice and Welfare*, 47:697–727.

Bratton, M. and Kimenyi, M. S. (2008). Voting in kenya: Putting ethnicity in perspective. *Journal of Eastern African Studies*, 2(2):272–289.

Budge, I. and Farlie, D. (1983). Explaining and predicting elections: Issue effects and party strategies in twenty-three democracies. *(No Title)*.

Carmines, E. G. and Stimson, J. A. (1989). *Issue evolution: Race and the transformation of American politics*. Princeton University Press.

Chandra, K. (2005). Ethnic parties and democratic stability. *Perspectives on politics*, 3(2):235–252.

Chandra, K. (2007). *Why ethnic parties succeed: Patronage and ethnic head counts in India*. Cambridge University Press.

Conroy-Krutz, J. (2013). Information and ethnic politics in africa. *British Journal of Political Science*, 43(2):345–373.

Dickson, E. S. and Scheve, K. (2006). Social identity, political speech, and electoral competition. *Journal of Theoretical Politics*, 18(1):5–39.

Egorov, G. (2015). Single-issue campaigns and multidimensional politics. Technical report, National Bureau of Economic Research.

Eifert, B., Miguel, E., and Posner, D. N. (2010). Political competition and ethnic identification in africa. *American journal of political science*, 54(2):494–510.

Fox, J. and Shotts, K. W. (2009). Delegates or trustees? a theory of political accountability. *The Journal of Politics*, 71(4):1225–1237.

Ganguly, S. (2014). India's watershed vote: The risks ahead. *Journal of Democracy*, 25(4):56–60.

Ganuthula, V. R. R. and Balaraman, K. K. (2025). The endurance of identity-based voting: Evidence from the united states and comparative democracies. *arXiv preprint arXiv:2502.16524*.

Graham, M. H. and Svolik, M. W. (2020). Democracy in america? partisanship, polarization, and the robustness of support for democracy in the united states. *American Political Science Review*, 114(2):392–409.

Green, J. and Hobolt, S. B. (2008). Owning the issue agenda: Party strategies and vote choices in british elections. *Electoral Studies*, 27(3):460–476.

Gutiérrez-Romero, R. (2024). The contrasting effects of ethnic and partisan identity on performance evaluation. *Political Behavior*, 46(2):931–959.

Harrington, Jr., J. E. and Hess, G. D. (1996). A spatial theory of positive and negative campaigning. *Games and Economic Behavior*, 17(2):209–229.

Haynes, A. A. and Rhine, S. L. (1998). Attack politics in presidential nomination campaigns: An examination of the frequency and determinants of intermediated negative messages against opponents. *Political Research Quarterly*, 51(3):691–721.

Heath, O., Verniers, G., and Kumar, S. (2015). Do muslim voters prefer muslim candidates? co-religiosity and voting behaviour in india. *Electoral Studies*, 38:10–18.

Iyengar, S., Kinder, D. R., et al. (1987). News that matters: Agenda-setting and priming in a television age. *News that Matters: Agenda-Setting and Priming in a Television Age*.

Jenke, L. and Huettel, S. A. (2016). Issues or identity? cognitive foundations of voter choice. *Trends in Cognitive Sciences*, 20(11):794–804.

Jenke, L. and Huettel, S. A. (2020). Voter preferences reflect a competition between policy and identity. *Frontiers in Psychology*, 11:566020.

Kimenyi, M. S. and Shughart, W. F. (2010). The political economy of constitutional choice: a study of the 2005 kenyan constitutional referendum. *Constitutional Political Economy*, 21(1):1–27.

Kitschelt, H. and Wilkinson, S. I. (2007). *Patrons, clients and policies: Patterns of democratic accountability and political competition*. Cambridge University Press.

Landa, D. and Duell, D. (2015). Social identity and electoral accountability. *American Journal of Political Science*, 59(3):671–689.

Lau, R. R. and Pomper, G. M. (2002). Effectiveness of negative campaigning in us senate elections. *American Journal of Political Science*, pages 47–66.

Long, J. D. and Gibson, C. C. (2015). Evaluating the roles of ethnicity and performance in african elections: Evidence from an exit poll in kenya. *Political Research Quarterly*, 68(4):830–842.

Mader, M., Pesthy, M., and Schoen, H. (2021). Conceptions of national identity, turnout and party preference: Evidence from germany. *Nations and Nationalism*, 27(3):638–655.

Mitra, A. and Ray, D. (2014). Implications of an economic theory of conflict: Hindu-muslim violence in india. *Journal of political economy*, 122(4):719–765.

Parenti, M. (1967). Ethnic politics and the persistence of ethnic identification. *American Political Science Review*, 61(3):717–726.

PBS NewsHour (2024). How key groups of americans voted in 2024, according to ap votecast. https://www.pbs.org/newshour/politics/interactive-how-key-groups-of-americans-voted-in-2024-according-to-ap-votecast. [Online; accessed 2025-09-12].

Petrocik, J. R. (1996). Issue ownership in presidential elections, with a 1980 case study. *American Journal of Political Science*, pages 825–850.

Polborn, M. K. and Yi, D. T. (2006). Informative positive and negative campaigning. *Quarterly Journal of Political Science*, 1(4):351–371.

Posner, D. N. (2005). *Institutions and ethnic politics in Africa*. Cambridge University Press.

Prat, A. (2005). The wrong kind of transparency. *American economic review*, 95(3):862–877.

Rogoff, K. S. (1987). Equilibrium political budget cycles.

Sarkar, A. (2018). Clientelism, contagious voting and governance. *Economica*, 85(339):518–531.

Shayo, M. (2009). A model of social identity with an application to political economy: Nation, class, and redistribution. *American Political science review*, 103(2):147–174.

Sridharan, E. (2014). India's watershed vote: Behind modi's victory. *Journal of Democracy*, 25(4):20–33.

Stokes, S. C., Dunning, T., and Nazareno, M. (2013). *Brokers, voters, and clientelism: The puzzle of distributive politics*. Cambridge University Press.

Strickler, R. (2018). Deliberate with the enemy? polarization, social identity, and attitudes toward disagreement. *Political Research Quarterly*, 71(1):3–18.

Svolik, M. W. (2019). Polarization versus democracy. *Journal of democracy*, 30(3):20–32.

Ticku, R. and Venkatesh, R. S. (2025). Economics of majoritarian identity politics. *Journal of comparative economics*.

Vaishnav, M. (2025). How indian voters decide. Carnegie Endowment for International Peace. Accessed: 2025-09-11.

Wolfinger, R. E. (1965). The development and persistence of ethnic voting. *American Political Science Review*, 59(4):896–908.